

**DEPARTMENT OF MATHEMATICS, OSMANIA UNIVERSITY**

(Choice Based Credit System)

(w.e.f. the academic year 2018-2019)

**M. Sc. MATHEMATICS****SEMESTER – I**

Subjects	Code	Paper	Hours/ Week	Theory	T*	Max. Marks	Credits
Core	M 101	<b>Abstract Algebra</b>	6	5	1	100	5
Core	M 102	<b>Mathematical Analysis</b>	6	5	1	100	5
Core	M 103	<b>Ordinary and Partial Differential Equations</b>	6	5	1	100	5
Core	M 104	<b>Elementary Number Theory</b>	6	5	1	100	5
Core	M 105	<b>Discrete Mathematics</b>	5	4	1	100	4
		<b>Seminar</b>	2			25	1
			31				25

T\* - Tutorial Class for problems solving session.

**SEMESTER – II**

Subjects	Code	Paper	Hours/ Week	Theory	T*	Max. Marks	Credits
Core	M 201	<b>Galois Theory</b>	6	5	1	100	5
Core	M 202	<b>Lebesgue measure &amp; Integration</b>	6	5	1	100	5
Core	M 203	<b>Complex Analysis</b>	6	5	1	100	5
Core	M 204	<b>Topology</b>	6	5	1	100	5
Core	M 205	<b>Theory of Ordinary Differential Equations</b>	5	4	1	100	4
		<b>Seminar</b>	2			25	1
			31				25

T\* - Tutorial Class for problems solving session.

**Departemnt of MATHEMATICS,OU**  
**Proposed Choice Based Credit System ( CBCS)**  
**M.Sc Mathematics**

**Semester -III**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	MM 301	I	Complex Analysis	4	20	80	100	4
2. Core	MM 302	II	Functional Analysis	4	20	80	100	4
Elective	MM 303 A MM 303 B MM 303 C	III	Discrete Mathematics Analytic Number Theory Differential Geometry	4	20	80	100	4
Elective	MM 304 A MM 304 B MM 304 C	IV	Operation Research Numerical Techniques Algebraic Number Theory	4	20	80	100	4
5. Practical	MM 351	Practical	Complex Analysis	4	....	50	50	2
6. Practical	MM 352	Practical	Functional Analysis	4	....	50	50	2
7. Practical	MM 353 A MM 353 B MM 353 C	Practical	Discrete Mathematics Analytic Number Theory Differential Geometry	4	....	50	50	2
8. Practical	MM 354 A MM 354 B MM 354 C	Practical	Operation Research Numerical Techniques Algebraic Number Theory	4	....	50	50	2
			<b>Total :</b>	<b>32</b>				<b>24</b>

**Departemnt of MATHEMATICS,OU**  
**Proposed Choice Based Credit System ( CBCS)**  
**M.Sc Mathematics**

**Semester -IV**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	MM 401	I	Advanced Complex Analysis	4	20	80	100	4
2. Core	MM 402	II	General Measure Theory	4	20	80	100	4
3. Elective	MM 403 A MM 403 B MM 403 C	III	Integral equations and Calculus of Variations Mechanics Finite Difference Method	4	20	80	100	4
4. Elective	MM 404 A MM 404 B MM 404 C	IV	Elementary Operator Theory Prime Number Theory Advanced Opeartion Research	4 OR	20	80	100	4 OR
4. Elective	MM 404 D	IV	Project	6	....	....	150	6
5. Practical	MM 451	Practical	Advanced Complex Analysis	4	....	50	50	2
6. Practical	MM 452	Practical	General Measure Theory	4	....	50	50	2
7. Practical	MM 453 A MM 453 B MM 453 C	Practical	Integral equations and Calculus of Variations Mechanics Finite Difference Method	4	....	50	50	2
8. Practical	MM 454 A MM 454 B MM 454 C	Practical	Elementary Operator Theory Prime Number Theory Advanced Opeartion Research	4	....	50	50	2
			<b>Total :</b>	<b>32</b>				<b>24</b>
9. Seminar			Seminar	2	....	.....	25	1

**DEPARTMENT OF MATHEMATICS, OSMANIA UNIVERSITY**

(Choice Based Credit System)

(w.e.f. the academic year 2018-2019)

**M. Sc. APPLIED MATHEMATICS****SEMESTER – I**

Subjects	Code	Paper	Hours/Week	Theory	T*	Max. Marks	Credits
Core	AM 101	<b>Abstract Algebra</b>	6	5	1	100	5
Core	AM 102	<b>Mathematical Analysis</b>	6	5	1	100	5
Core	AM 103	<b>Ordinary and Partial Differential Equations</b>	6	5	1	100	5
Core	AM 104	<b>Mechanics</b>	6	5	1	100	5
Core	AM 105	<b>Integral Transforms</b>	5	4	1	100	4
		<b>Seminar</b>	2			25	1
			31				25

T\* - Tutorial Class for problems solving session.

**SEMESTER – II**

Subjects	Code	Paper	Hours/Week	Theory	T*	Max. Marks	Credits
Core	AM 201	<b>Galois Theory</b>	6	5	1	100	5
Core	AM 202	<b>Lebesgue Measure &amp; Integration</b>	6	5	1	100	5
Core	AM 203	<b>Complex Analysis</b>	6	5	1	100	5
Core	AM 204	<b>Fluid Mechanics</b>	6	5	1	100	5
Core	AM 205	<b>Theory of Ordinary Differential Equations</b>	5	4	1	100	4
		<b>Seminar</b>	2			25	1
			31				25

T\* - Tutorial Class for problems solving session.

**Departemnt of MATHEMATICS,OU**  
**Proposed Choice Based Credit System ( CBCS)**  
**M.Sc Applied Mathematics**

**Semester -III**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core/Common	AM 301	I	Viscous Flows	4	20	80	100	4
2. Core/Common	AM 302	II	Finite Difference Methods	4	20	80	100	4
3. Elective	AM 303(A)	III(A)	Compressible Flows	4	20	80	100	4
	AM 303(B)	III(B)	Integral Transforms					
	AM 303(C)	III( C)	Differential Geometry					
4.Elective	AM 304(A)	IV(A)	Operations Research	4	20	80	100	4
	AM 304(B)	IV(B)	Numerical Techniques					
	AM 304 (C)	IV( C)	Dynamical Systems					
5. Practicals	AM 351	Practical	Viscous Flows	4	....	50	50	2
6. Practicals	AM 352	Practical	Finite Difference Methods	4	....	50	50	2
7. Practicals	AM 353(A)	Practical	Compressible Flows	4	....	50	50	2
	AM 353 (B)		Integral Transforms					
	AM 353 ( C)		Differential Geometry					
8. Practicals	AM 354(A)	Practical	Operations Research	4	....	50	50	2
	AM 354 (B)		Numerical Techniques					
	AM 354 ( C )		Dynamical Systems					
<b>Total :</b>				<b>32</b>	<b>80</b>	<b>520</b>	<b>625</b>	<b>24</b>

**Departemnt of MATHEMATICS,OU**  
**Proposed Choice Based Credit System ( CBCS)**  
**M.Sc Applied Mathematics**

**Semester -IV**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	AM 401	I	Advanced Complex Analysis	4	20	80	100	4
2. Core	AM 402	II	Finite Element Methods	4	20	80	100	4
3. Elective	AM 403(A)	III (A)	Integral Equations & Calculus of variations	4	20	80	100	4
	AM 403(B)	III (B)	MHD					
	AM 403(C)	III (C)	Bio-Mechanics					
4. Elective	AM 404(A)	IV(A)	Functional Analysis	4 OR 6	20 .....	80 .....	100 150	4 OR 6
	AM 404(B)	IV(B)	Discrete Mathematics					
	AM 404 (C)	IV(C)	Topology					
	AM 404 (D)	IV(D)	Project					
5. Practicals	AM 451	Practical	Advanced Complex Analysis	4	.....	50	50	2
6. Practicals	AM 452	Practical	Finite Element Methods	4	.....	50	50	2
7. Practicals	AM 453 (A)	Practical	Integral Equations & Calculus of variations	4	.....	50	50	2
	AM 453 (B)		MHD					
	AM 453 (C)		Bio - Mechanics					
8. Practicals	AM 454 (A)	Practical	Functional Analysis	4	.....	50	50	2
	AM 454 (B)		Discrete Mathematics					
	AM 454 (C)		Topology					
<b>Total :</b>				<b>32</b>	<b>80</b>	<b>520</b>	<b>600</b>	<b>24</b>
9. Seminar			Seminar	2	.....	.....	25	1



**MSc BIOTECHNOLOGY**  
**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**DEPARTMENT OF GENETICS & BIOTECHNOLOGY, OSMANIA UNIVERSITY**  
 Schedule for Instruction and Examination  
 (Proposed Scheme for Academic year 2016 onwards)

<b>SEMESTER – I</b>							
S No	Syllabus Ref No	Subject	Credits	Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 101 T	Cell Biology and Genetics	4	4	20	80	100
2.	BT 102 T	Biological chemistry	4	4	20	80	100
3.	BT 103 T	Microbiology	4	4	20	80	100
4.	BT 104 T	Statistics, laboratory management & safety, entrepreneurship	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 151 P	Cell Biology and Genetics	2	4		50	50
2.	BT 152 P	Biological chemistry	2	4		50	50
3.	BT 153 P	Microbiology	2	4		50	50
4.	BT 154 P	Biostatistics	2	4		50	50
		<b>Total</b>	<b>24</b>	<b>32</b>	<b>80</b>	<b>520</b>	<b>600</b>

<b>SEMESTER – II</b>							
S No	Syllabus Ref No	Subject	Credits	Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 201 T	Molecular Biology- The Genome	4	4	20	80	100
2.	BT 202 T	Molecular Biology- Genes to Proteins	4	4	20	80	100
3.	BT 203 T	Immunology	4	4	20	80	100
4.	BT 204 T	Microbial technology	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 251 P	Molecular Biology-The Genome	2	4		50	50
2.	BT 252 P	Molecular Biology- Genes to Proteins	2	4		50	50
3.	BT 253 P	Immunology	2	4		50	50
4.	BT 254 P	Microbial technology	2	4		50	50
		<b>Total</b>	<b>24</b>	<b>32</b>	<b>80</b>	<b>520</b>	<b>600</b>

T- Theory, P-Practical

**MSc BIOTECHNOLOGY II YEAR**  
**CBCS syllabus**

<b>SEMESTER- III</b>							
S No	Syllabus Ref No	Subject		Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 301 T	Recombinant DNA technology	4	4	20	80	100
2.	BT 302 T	Bioinformatics and its Applications	4	4	20	80	100
3.	BT 303 T	<b>Elective:</b> A. Advances in Plant Biotechnology (or) B. Food Biotechnology	4	4	20	80	100
4.	BT 304 T	<b>Elective:</b> A. Animal Biotechnology (or) B. Protein Engineering	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 351 P	Recombinant DNA technology	2	4		50	50
2.	BT 352 P	Bioinformatics and its Applications	2	4		50	50
3.	BT 353 P	A. Advances in Plant Biotechnology (or) B. Food Biotechnology	2	4		50	50
4.	BT 354 P	A. Animal Biotechnology (or) B. Protein Engineering	2	4		50	50
		<b>Total</b>	<b>24</b>	<b>32</b>			<b>600</b>

<b>SEMESTER- IV</b>							
S No	Syllabus Ref No	Subject		Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 401 T	Bioprocess Engineering	4	4	20	80	100
2.	BT 402 T	Medical Biotechnology	4	4	20	80	100
3.	BT 403 T	<b>Elective:</b> A. Environmental Biotechnology (or) B. Biopharmacology	4	4	20	80	100
4.	BT 404 T	Project Work	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 451 P	Bioprocess Engineering	2	4		50	50
2.	BT 452 P	Medical Biotechnology	2	4		50	50
3.	BT 453 P	A. Environmental Biotechnology (or) B. Biopharmacology	2	4	-	50	50
4.	BT 454 P	Project thesis presentation	2	4		50	50
		<b>Total</b>	<b>24</b>	<b>32</b>			<b>600</b>
		<b>GRAND TOTAL</b>					<b>2400</b>

T-Theory, P-Practical

**DEPARTMENT OF CHEMISTRY**  
**OSMANIA UNIVERSITY**  
 (Effective from academic year 2016-2017 for Campus and Constituent colleges  
*[UNDER CBCS Scheme]*)

**Semester I**

	<b>Hrs. /week internal assessment</b>		<b>Semester exam</b>	<b>Total</b>	<b>Credits</b>
CH101T (*)	4	20 marks	80 marks	100 marks	4
CH102T (*)	4	20 marks	80 marks	100 marks	4
CH103T (*)	4	20 marks	80 marks	100 marks	4
CH104T (*)	4	20 marks	80 marks	100 marks	4
CH151P (IC LAB*)	6			75 marks	3
CH152P (OC LAB*) (4h + 2T)				50 marks	2
CH153P (PC LAB*)	6			75 marks	3
<b>Total</b>				<b>600 marks</b>	<b>24</b>

(\*Core= compulsory papers common to all students admitted to M.Sc Chemistry, OU)

**Semester II**

	<b>Hrs. /week internal assessment</b>		<b>Semester exam</b>	<b>Total</b>	<b>Credits</b>
CH201T (*)	4	20 marks	80 marks	100 marks	4
CH202T (*)	4	20 marks	80 marks	100 marks	4
CH203T (*)	4	20 marks	80 marks	100 marks	4
CH204T (*)	4	20 marks	80 marks	100 marks	4
CH251P (IC LAB*)	6			75 marks	3
CH252P (OC LAB*)	6			75 marks	3
CH253P (PC LAB*) (4h + 2T)				50 marks	2
<b>Total</b>				<b>600 marks</b>	<b>24</b>

(\*= compulsory papers common to all students admitted to M.Sc Chemistry, OU)

## M.Sc. CHEMISTRY (ORGANIC CHEMISTRY SPECIALISATION)

Syllabus for III and IV Semesters  
(for the batches admitted in academic year 2016 & later under CBCS pattern)  
*[Under Restructured CBCS Scheme]*  
*Grand total marks and credits (all 4 semesters) 2400 marks – 96 credits*

(Approved in the P.G.BOS meeting held on 01-07-2017)

### SEMESTER-III

Paper	Instruction Hrs/Week	Internal assessment marks*	Semester marks	Total marks	Total credits
CH(OC)301T	4	20	80	100	4
CH(OC)302T	4	20	80	100	4
CH(OC)303T	4	20	80	100	4
CH(OC)304T	4	20	80	100	4
CH(OC)351P	9	-	100	100	4
CH(OC)352P	9	-	100	100	4
<b>Total</b>				<b>600</b>	<b>24</b>

### SEMESTER - IV

Paper	Instruction Hrs/Week	Internal assessment marks*	Semester marks	Total marks	Total credits
CH(OC)401T	4	20	80	100	4
CH(OC)402T	4	20	80	100	4
CH(OC)403T	4	20	80	100	4
CH(OC)404T	4	20	80	100	4
CH(OC)451P	9	-	100	100	4
CH(OC)452P	9	-	100	100	4
<b>Total</b>				<b>600</b>	<b>24</b>

*\* 15 marks for the written test and 5 marks for the assignment*

**Grand total all 4 semesters: 2400 marks and 96 credits**

*[Under Restructured CBCS Scheme]*

III SEMESTER SYLLABUS	IV SEMESTER SYLLABUS
<p><b>Paper-I CH (OC) 301T: Synthetic Reagents, Advanced NMR, Conformational Analysis and ORD</b>                      OC-09: Synthetic Reagents-I                      OC-10: Synthetic Reagents-II                      OC-11: <sup>13</sup>C NMR and 2D NMR spectroscopy                      OC-12: Conformational analysis (Cyclic systems ) and ORD</p> <p><b>Paper II– CH (OC) 302T: Modern Organic Synthesis</b>                      OC-13: Asymmetric synthesis                      OC-14: Synthetic strategies                      OC-15: New Synthetic reactions                      OC-16: New techniques and concepts in organic synthesis</p> <p><b>Elective-3A</b></p> <p><b>Paper-III CH (OC) 303T (CB1): Bioorganic Chemistry</b>                      OC(CB1)-1: Carbohydrates                      OC(CB1)-2: Nucleic acids and Lipids                      OC(CB1)-3: Proteins and Enzymes                      OC(CB1)-4: Coenzymes and Vitamins</p> <p><b>Elective-3B:</b></p> <p><b>Paper-III CH (OC) 303T (CB2): Forensic Chemistry and Toxicology</b>                      OC(CB2)-5: Forensic chemistry- I                      OC(CB2)-6: Forensic chemistry- II                      OC(CB2)-7: Forensic Toxicology-I                      OC(CB2)-8: Forensic Toxicology-II</p> <p><b>Elective-4A</b></p> <p><b>Paper-IV CH (OC) 304T (CB3): Green chemistry and Organic materials</b>                      OC (CB3) - 9: Principles of Green chemistry                      OC (CB3) -10: Green Synthesis                      OC (CB3) -11: Organic nanomaterials                      OC (CB3) -12: Supramolecular chemistry</p> <p><b>Elective-4 B</b></p> <p><b>Paper-IV CH (OC) 304T (CB4): Pesticides</b>                      OC (CB4) - 13: Introduction to pesticides                      OC (CB4) - 14: Synthetic insecticides                      OC (CB4) - 15: Natural insecticides &amp; herbicides                      OC (CB4) - 16: Fungicides, and Rodenticides</p> <p><b>LABORATORY COURSES</b></p> <p><b>Paper-V CH (OC) 351P:</b> Synthesis of organic molecules, isolation of natural products &amp; TLC.  <b>Paper-VI CH (OC) 352P:</b> Separation and identification of organic compounds &amp; Column chromatography</p>	<p><b>Paper-I CH (OC) 401T: Drug Design and Drug Discovery</b>                      OC-17: Principles of Drug design and drug discovery                      OC-18: Lead modification and SAR Studies                      OC 19: QSAR studies and computer aided drug design                      OC 20: Combinatorial Synthesis</p> <p><b>Paper-II CH (OC) 402T: Drug synthesis and mechanism of action</b>                      OC-21: Drugs acting on metabolic process, cell wall and specific enzymes                      OC-22: Drugs acting on genetic material and immune system                      OC-23: Drugs acting on receptors and ion channels                      OC-24: Chiral drugs</p> <p><b>Elective-3A</b></p> <p><b>Paper-III CH (OC)-403T (CB1): Advanced Heterocyclic Chemistry</b>                      OC (CB1) 17: Non aromatic heterocyclics &amp; aromaticity                      OC (CB1) 18: Five and six membered heterocyclics with two hetero atoms                      OC (CB1) 19: Heterocyclics with more than two hetero atoms                      OC (CB1) 20: Larger ring and other heterocycles</p> <p><b>Elective-3B</b></p> <p><b>Paper-III CH (OC)-403T (CB2): Polymers , dyes and Pigments</b>                      OC (CB2) 21: Polymers- I                      OC (CB2) 22: Polymers- II                      OC (CB2) 23: Dyes-I                      OC (CB2) 24: Dyes-II and pigments</p> <p><b>Elective-4A (ID Paper)</b></p> <p><b>Paper-IV CH (OC) 404(CB3)T: Advanced Natural Products</b>                      OC(CB3)-25: Biosynthesis of natural products                      OC(CB3)-26: Structure determination of natural products -I                      OC(CB3)--27: Structure determination of natural products-II                      OC(CB3)--28: Total stereo selective synthesis of natural products.</p> <p><b>Elective-4B (ID Paper)</b></p> <p><b>Paper-IV CH (OC) 404 (CB4) T: Biopharmaceutics and Pharmacodynamics</b>                      OC(CB4)-29 : Pharmacokinetics                      OC(CB4)-30 : Pharmacodynamics                      OC(CB4)-31 : Principles of Therapeutics                      OC(CB4)-32: Drug Interactions</p> <p><b>LABORATORY COURSES</b></p> <p><b>Paper-V CH (OC) 451P:</b> Spectroscopic identification of organic compounds &amp; practice of chemistry software programmes  <b>Paper- VI CH (OC) 452P:</b> Synthesis and analysis of drugs</p>

**M.Sc. ORGANIC CHEMISTRY SPECIALISATION  
 III SEMESTER SYLLABUS**

(Applicable to the batch of students admitted in the academic year 2016-17 and onwards)

M.Com. (CBCS)

FACULTY OF COMMERCE, OU

## DEPARTMENT OF COMMERCE, O.U.

### M.Com. COURSE STRUCTURE (CBCS)

#### FIRST SEMESTER

Sl. No.	Code	Title of the Paper	THPW	Credits	DESE	Marks			
						IA	Assign-ment	End-Sem. Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1.	Com 1 : Core – I	Managerial Economics	5	4	3 Hrs	15	5	80	100
2.	Com 2 : Core – II	Principles of Marketing	5	4	3 Hrs	15	5	80	100
3.	Com 3 : Core – III	OT & OB	5	4	3 Hrs	15	5	80	100
4.	Com 4 : Elective – I :	Specialization **	5	5	3 Hrs	15	5	80	100
5.	Com 5 : Elective–II :	Specialization **	5	5	3 Hrs	15	5	80	100
	Seminar : .....		<b>2</b>	<b>1</b>	-	-	-	25*	25
<b>Total</b>			<b>27</b>	<b>23</b>		<b>75</b>	<b>25</b>	<b>425</b>	<b>525</b>

\*25=15W+10PR

#### SECOND SEMESTER

Sl. No.	Code	Title of the Paper	THPW	Credits	DESE	Marks			
						IA	Assign-ment	End-Sem. Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
6.	Com 6: Core – I	Business Environment & Policy	5	4	3 Hrs	15	5	80	100
7.	Com 7: Core – II	Marketing Management	5	4	3 Hrs	15	5	80	100
8.	Com 8: Core – III	Human Resource Management	5	4	3 Hrs	15	5	80	100
9.	Com 9: Elective–I :	Specialization **	5	5	3 Hrs	15	5	80	100
10.	Com 10: Elective-II:	Specialization **	5	5	3 Hrs	15	5	80	100
	Seminar : .....		<b>2</b>	<b>1</b>	-	-	-	25*	25
<b>Total</b>			<b>27</b>	<b>23</b>	-	<b>75</b>	<b>25</b>	<b>425</b>	<b>525</b>

\*25=15W+10PR

*(Applicable to the batch of students admitted in the academic year 2016-17 and onwards)*

**M.Com. (CBCS)**

**FACULTY OF COMMERCE, OU**

**THIRD SEMESTER**

Sl. No.	Code	Title of the Paper	THPW	Credits	DESE	Marks			
						IA	Assignment	End-Sem. Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
11	Com: 11 Core – I	Research Methodology & Statistical Analysis	5	4	3 Hrs	15	5	80	100
12	Com: 12 Core – II	E-Commerce	5 (4T+2P)	4	3 Hrs	15 IA	35 LPE	50	100
13	Com: 13 Core – III	Cost Accounting and Control	5	4	3 Hrs	15	5	80	100
14	Com: 14 Elective-I:	Specialization **	5	5	3 Hrs	15	5	80	100
15	Com: 15 Elective - II	Specialization **	5	5	3 Hrs	15	5	80	100
16	ID Paper	Business Organization & Management	4	4	3 Hrs	15	5	80	100
	Seminar .....		<b>2</b>	<b>1</b>	-	-	-	25*	25
<b>Total</b>			<b>31</b>	<b>27</b>	-	<b>90</b>	<b>80</b>	<b>475</b>	<b>625</b>

\*25=15W+10PR

**FOURTH SEMESTER**

Sl. No.	Code	Title of the Paper	THPW	Credits	DESE	Marks			
						IA	Assignment	End-Sem. Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
17	Com:16 Core – I	Quantitative Techniques for Business Decisions	5	4	3 Hrs	15	5	80	100
18	Com:17 Core – II	Business and Corporate Taxation	5	4	3 Hrs	15	5	80	100
19	Com:18 Core – III	Strategic Management	5	4	3 Hrs	15	5	80	100
20	Com:19 Elective-I:	Specialization **	5	5	3 Hrs	15	5	80	100
21	Com:20 Elective-II:	Specialization **	5	5	3 Hrs	15	5	80	100
22	Com: 21	Project Work	8	4		-	-	50VV + 50D	100
	Seminar .....		<b>2</b>	<b>1</b>		-	-	25*	25
<b>Total</b>			<b>35</b>	<b>27</b>	-	<b>75</b>	<b>25</b>	<b>525</b>	<b>625</b>
<b>GRAND TOTAL</b>			<b>120</b>	<b>100</b>	-	<b>315</b>	<b>135</b>	<b>1850</b>	<b>2300</b>

\*25=15W+10PR

Inter Disciplinary (ID) Paper in Third Semester is offered to the Non-Commerce PG Students.

THWP= Teaching Hours Per Week; ESED=End-Semester Examination Duration; VV=Viva-Voce;

LPE = Lab Practical Examinations; D=Dissertation; T=Theory; P=Practical; W=Write-up;

PR=Presentation; DESE = Duration of End-Semester Examination.

(Applicable to the batch of students admitted in the academic year 2016-17 and onwards)

M.Com. (CBCS)

FACULTY OF COMMERCE, OU

**\*\* AREA OF SPECIALIZATION**

Sl. No.	Specialization	Semester-I	Semester-II	Semester-III	Semester-IV
I	<b>Finance (F)</b>	(1) <b>FM:</b> Financial Management (2) <b>AS:</b> Accounting Standards	(3) <b>IM:</b> Investment Management (4) <b>AMA:</b> Advanced Managerial Accounting	(5) <b>IFM:</b> International Financial Management (6) <b>SAPM:</b> Security Analysis and Portfolio Management	(7) <b>FS:</b> Financial Services (8) <b>FD:</b> Financial Derivatives
II	<b>Accounting (A)</b>	(1) <b>FM:</b> Financial Management (2) <b>AS:</b> Accounting Standards	(3) <b>IM:</b> Investment Management (4) <b>AMA:</b> Advanced Managerial Accounting	(5) <b>ACA:</b> Advanced Corporate Accounting (6) <b>FSA:</b> Financial Statement Analysis	(7) <b>ACAC:</b> Advanced Cost Accounting and Control (8) <b>M&amp;A:</b> Mergers & Acquisitions
III	<b>Marketing (M)</b>	(1) <b>RM:</b> Retail Marketing (2) <b>ASM:</b> Advertising & Sales Management	(3) <b>CRE:</b> Consumer Rights & Education (4) <b>MR:</b> Marketing Research	(5) <b>SM:</b> Services Marketing (6) <b>CB:</b> Consumer Behavior	(7) <b>SCM&amp;CRM:</b> Supply Chain Management & Customer Relationship Management (8) <b>IM:</b> International Marketing
IV	<b>Taxation (T)</b>	(1) <b>FM:</b> Financial Management (2) <b>AS:</b> Accounting Standards	(3) <b>IM:</b> Investment Management (4) <b>AMA:</b> Advanced Managerial Accounting	(5) <b>DT:</b> Direct Taxation (6) <b>IDT:</b> Indirect Taxation	(7) <b>Tax :</b> Tax planning (8) <b>IT:</b> International Taxation
V	<b>International Business (IB)</b>	(1) <b>FM:</b> Financial Management (2) <b>AS:</b> Accounting Standards	(3) <b>IM:</b> Investment Management (4) <b>AMA:</b> Advanced Managerial Accounting	(5) <b>IFM:</b> International Financial Management (6) <b>ITTP:</b> International Trade – Theory and Practice	(7) <b>IBE:</b> International Business Environment (8) <b>IM:</b> International Marketing
VI	<b>Insurance (I)</b>	(1) <b>FM:</b> Financial	(3) <b>IM:</b>	(5) <b>PPLHI:</b>	(7) <b>AS:</b> Actuarial

**MBA (Day) Structure and Syllabus As Per CBCS Guidelines Effective From 2016**  
**Year-I Semester –I**

Course Code	Course Title	Nature	Credits	HPW	Max Marks (CIE+SEE) 100
MB101	Management & Organizational Behaviour	Core	5	5	20+80
MB102	Accounting for Management	Core	5	5	20+80
MB103	Marketing Management	Core	5	5	20+80
MB104	<b>Open Elective-I</b> 1. Business Law & Ethics 2. Fundamentals of Technology Management 3. Managerial Economics	Open Elective	4	4	20+80
MB105	<b>Open Elective –II</b> 1. IT Applications for Management 2. Business Communication 3. Customer Relationship Management	Open Elective	4	4	20+80
MB106	Computer Practical	Practical	1	2	25
<b>Total credits at the end of I<sup>st</sup> Semester</b>			<b>24</b>	<b>25</b>	<b>525</b>

**Year-I Semester –II**

Course Code	Course Title	Nature	Credits	HPW	Max Marks (IA+UE) 100
MB201	Human Resources Management	Core	5	5	20+80
MB202	Financial Management	Core	5	5	20+80
MB203	Business Research Methods	Core	5	5	20+80
MB204	<b>Open Elective-III</b> 1. Economic Environment and Policy 2. Business Process Re-engineering 3. International Business 4. Financial Markets & Services	Open Elective	4	4	20+80
MB205	<b>Open Elective-IV</b> 1. Total Quality Management 2. Strategic Management Accounting 3. Start Up Management 4. Retail Management	Open Elective	4	4	20+80
MB206	Seminar	-----	1	2	Grade
<b>Semester Credits</b>			<b>24</b>	<b>25</b>	<b>500</b>
<b>Total credits at the end of II<sup>nd</sup> Semester</b>			<b>48</b>	<b>50</b>	<b>1025</b>

- HPW – Hours Per Week
- CIE – Continuous Internal Exam
- SEE – Semester End Exam

  
 CHAIRMAN  
 BOS IN BUSINESS MANAGEMENT  
 OSMANIA UNIVERSITY  
 HYDERABAD - 500 007. (A.P.)

**Revised MBA (Day) Course Structure and Syllabus As Per CBCS Guidelines with Effect From 2016  
Year-II – Semester-III**

Course Code	Course Title	Nature	Credits	HPW	Max Marks (IA+UE) 100
MB301	Operations Management	Core	5	5	20+80
MB302	E- Business	Core	5	5	20+80
MB303	Operations Research	Core	5	5	20+80
MB304	<b><u>Discipline Specific Elective- I</u></b> 1. Financial Risk Management(Finance) 2.Product & Brand Management (Marketing) 3.Compensation Management (Human Resource) 4.Decision Support Systems (System)	DSE	4	4	20+80
MB305	<b><u>Discipline Specific Elective – II</u></b> 1.International Finance(Finance) 2.Promotion & Distribution Management(Marketing) 3.Organization Development (Human Resource) 4. Business Analytics (Systems)	DSE	4	4	20+80
MB306	<b><u>Interdisciplinary Courses</u></b> Management Theory and Practice	ID	4	4	20+80
	<b>OR</b> Innovation Management (for all affiliated colleges including constituent colleges in lieu of ID Paper)	Non-ID			
MB307 *	<b><u>Tutorials</u></b> Project work Synopses		1	2	25
<b>Total credits at the end of III<sup>rd</sup> Semester</b>			<b>28</b>	<b>29</b>	<b>625</b>

**Year-II –Semester IV**

Course Code	Course Title	Nature	Credits	HPW	Max Marks (IA+UE) 100
MB401	Strategic Management	Core	5	5	20+80
MB402	Business Intelligence	Core	5	5	20+80
MB403	Supply Chain Management	Core	5	5	20+80
MB404	<b><u>DS Elective- III</u></b> 1.Investment Management (Finance) 2.Consumer Behaviour (Marketing) 3.Performance Management (Human Resource) 4.Data Base Management Systems (System)	DSE	4	4	20+80
MB405	<b><u>DS Elective- IV</u></b> 1.Banking & Insurance (Finance) 2.Services & Global Marketing (Marketing) 3.Talent & Knowledge Mgt (Human Resource) 4.Software Project Management (System)	DSE	4	4	20+80
MB406	Project Work	-----	1	2	Grade *
MB407	Comprehensive Viva - Voce	-----	1	--	Grade *
<b>Semester Credits</b>			<b>25</b>	<b>25</b>	<b>500</b>
<b>Total credits at the end of IV<sup>th</sup> and final Semester</b>			<b>49</b> <b>97</b>	<b>50</b> <b>100</b>	<b>2150</b>

- **ID – INTER DISCIPLINARY**                      \* **Evaluation will be done for 100 marks,**
- **DSE – Discipline Specific Elective**                      **which will be converted to equivalent grades.**

**\* Project Work Synopsis:- Student must present briefly the research methodology of the project topic he intends to submit in IV semester as project report.**

**SCHEME OF INSTRUCTION**  
**MCA (MASTER OF COMPUTER APPLICATIONS)**  
**Proposed from the Academic year 2016-2017 [ CBCS ]**

**MCA I Year**

**SEMESTER – I**

S. No	Course Code	Course Title	Scheme of Examination		L	T	P/Dr	Hrs/Wk	Credits
			CIE	SEE					
1.	PC 101 IT	Discrete Mathematics	30	70	3	1	-	4	3
2.	BS 101 MT	Probability & Statistics	30	70	3	1	-	4	3
3.	PC 102 IT	Computer Programming and Problem Solving	30	70	4	0	-	4	4
4.	PC 103 IT	Elements of Information Technology	30	70	3	1	-	4	3
5.	HS 101 CM	Economic Analysis	30	70	3	1	-	4	3
6.	MC 106 EG	English	30	70	3	1	-	4	3
<b>PRACTICALS</b>									
6.	PC 151 IT	Programming Lab I (C Programming Lab)	25	50	-	-	4	4	2
7.	PC 152 IT	Programming Lab II (IT Workshop)	25	50	-	-	4	4	2
<b>Total</b>			<b>230</b>	<b>520</b>	<b>16</b>	<b>4</b>	<b>8</b>	<b>32</b>	<b>23</b>

**SCHEME OF INSTRUCTION  
MCA (MASTER OF COMPUTER APPLICATIONS)  
Proposed from the Academic year 2016-2017 [ CBCS ]**

**MCA I Year**

**SEMESTER - II**

S. No	Course Code	Course Title	Scheme of Examination		L	T	P	Hrs/Wk	Credits
			CIE	SEE					
1.	HS 201 CM	Accounting & Financial Management	30	70	3	1	-	4	3
2.	PC 201 IT	Principles of Object Oriented Programming using Java	30	70	4	-	-	4	4
3.	PC 202 IT	Management Information Systems	30	70	3	1	-	4	3
4.	PC 203 IT	C++ and Data Structures	30	70	3	1	-	4	3
5.	PC 204 IT	Computer Organization	30	70	3	1	-	4	3
6.	HS 202 EG	Communication Skills	30	70	3	1	-	4	3
<b>PRACTICALS</b>									
6.	PC 251 IT	Programming Lab – III (OOP Lab)	25	50	-	-	4	4	2
7.	PC 252 IT	Programming Lab – IV (C++ Programming Lab)	25	50	-	-	4	4	2
<b>Total</b>			<b>230</b>	<b>520</b>	<b>16</b>	<b>4</b>	<b>8</b>	<b>32</b>	<b>23</b>

## SCHEME OF INSTRUCTION

### MCA (MASTER OF COMPUTER APPLICATIONS)

Proposed scheme with effect from the academic year 2017-2018

### Semester -III

S.No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P		CIE	SEE	
<b>Theory</b>									
1.	PC301IT	Software Engineering	3	1	0	4	30	70	3
2.	PC302IT	Database Management Systems	3	1	0	4	30	70	3
3.	P3303IT	Design and Analysis of Algorithms	3	1	0	4	30	70	3
4.	PC304IT	Operating Systems	3	1	0	4	30	70	3
5.	PC305CM	Operations Research	3	1	0	4	30	70	3
6.	OE#	Open Elective-I	3	0	0	3	30	70	3
<b>Practicals</b>									
7.	PC351IT	Programming Lab V (DBMS Lab)	0	0	3	3	25	50	2
8.	PC352IT	Programming Lab VI (OS Lab)	0	0	3	3	25	50	2
<b>Total</b>			<b>18</b>	<b>5</b>	<b>06</b>	<b>29</b>	<b>230</b>	<b>520</b>	<b>22</b>

**Open Elective-I:**

1. OE301BM Organizational Behavior
2. OE302BM Professional Ethics
3. OE303LA Intellectual Property Rights and Cyber Laws
4. OE304BT Environmental Science

**SCHEME OF INSTRUCTION**  
**MCA (MASTER OF COMPUTER APPLICATIONS)**  
**Proposed scheme with effect from the academic year 2017-2018**  
**Semester - IV**

S.No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P		CIE	SEE	
<b>Theory</b>									
1.	PC401CS	Data Mining	3	1	0	4	30	70	3
2.	PC402CS	Computer Networks	3	0	0	3	30	70	3
3.	PC403CS	Unix Programming	3	0	0	3	30	70	3
4.	PC404CS	Web Programming	3	0	0	3	30	70	3
5.	PC405CS	Distributed Systems	3	1	0	4	30	70	3
6.	# PE – I	Professional Elective-I	3	0	0	3	30	70	3
<b>Practicals</b>									
7.	PC451CS	Unix Programming Lab	0	0	3	3	25	50	2
8.	PC452CS	Web Programming Lab	0	0	3	3	25	50	2
9.	ITP1	Mini Project	0	0	3	3	25	50	2
<b>Total</b>			<b>21</b>	<b>02</b>	<b>09</b>	<b>32</b>	<b>255</b>	<b>570</b>	<b>24</b>

**# Professional Elective- I:**

1. PE406CS Artificial Intelligence
2. PE407CS Distributed Databases
3. PE408CS Information Retrieval Systems
4. PE409CS Theory of Computation

**SCHEME OF INSTRUCTION**  
**MCA (MASTER OF COMPUTER APPLICATIONS)**  
**Proposed scheme with effect from the academic year 2018-2019**  
**Semester -V**

S.No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P		CIE	SEE	
<b>Theory</b>									
1.	PC501IT	Information Security	3	1	0	4	30	70	3
2.	PC502IT	Object Oriented System Development	3	1	0	4	30	70	3
3.	PC503IT	Big Data Analytics	3	1	0	4	30	70	3
4.	PE#	Professional Elective-II	3	1	0	4	30	70	3
5.	PE#	Professional Elective-III	3	1	0	4	30	70	3
<b>Practicals</b>									
6.	PC551IT	Object Oriented System Development Lab	0	0	3	3	25	50	2
7.	PC552IT	Big Data Analytics Lab	0	0	3	3	25	50	2
8.	PC553IT	Project Seminar	-	-	2	2	25	-	1
<b>Total</b>			<b>15</b>	<b>5</b>	<b>08</b>	<b>28</b>	<b>225</b>	<b>450</b>	<b>20</b>

**Professional Elective-II**

PE 510 IT Electronic Commerce  
 PE 511 IT Human Computer Interaction  
 PE 512 IT Software Reuse Techniques  
 PE 513 IT XML & Web Services  
 PE 514 IT Cloud Computing  
 PE 515 IT System Administration

**Professional Elective- III**

PE 516 IT Soft Computing  
 PE 517 IT Mobile Computing  
 PE 518 IT Software Project Management  
 PE 519 IT Rich Internet Applications  
 PE 520 IT Software Quality and Testing  
 PE 521 IT Research Methodology

With affect from the academic year 2018-19

**SCHEME OF INSTRUCTION**

**MCA (MASTER OF COMPUTER APPLICATIONS)**

**Proposed scheme with effect from the academic year 2018-2019**

**SEMESTER – VI**

S.No	Course Code	Course Title	Scheme of Instruction			Contact Hrs/Wk	Scheme of Examination		Credits
			L	T	P		CIE	SEE	
1.	ITP2	Project Work	-	-	6	6	50	100	12

**Department of Mathematics**  
**Osmania University**  
**M.Sc. [Computer Science]**  
 Course under Choice Based Credit System

**SEMESTER – I**

Paper	Code	Paper Title	HpW	Marks	Credits
I	CS101T	Advanced Java Programming	4	20+80 =100	4
II	CS102T	Operating Systems	4	20+80 =100	4
III	CS103T	Software Engineering	4	20+80 =100	4
IV	CS104T	Discrete Mathematics	4	20+80 =100	4
V	CS105P	Advanced Java Lab	6	75	3
VI	CS106P	Operating Systems Lab	6	75	3
VII	CS107P	Software Engineering Lab	4	50	2
<b>Total</b>			<b>32</b>	<b>600</b>	<b>24</b>

**SEMESTER – II**

Paper	Code	Paper Title	HpW	Marks	Credits
I	CS201T	Programming in Python	4	20+80 =100	4
II	CS202T	Computer Networks	4	20+80 =100	4
III	CS203T	Design and Analysis of Algorithms	4	20+80 =100	4
IV	CS204T	Automata Theory	4	20+80 =100	4
V	CS205P	Python Lab	6	75	3
VI	CS206P	Computer Networks Lab	6	75	3
VII	CS207P	Design and Analysis of Algorithms Lab	4	50	2
<b>Total</b>			<b>32</b>	<b>600</b>	<b>24</b>

**Department of Mathematics**  
**Osmania University**  
**M.Sc. [Computer Science]**  
**Course under Choice Based Credit System**

**SEMESTER – III**

Paper	Code	Paper Title	HpW	Marks	Credits
I	CS301T	Programming in C#	4	20+80 =100	4
II	CS302T	Compiler Design	4	20+80 =100	4
III	<b>Elective</b> CS303T(A)	Network Security	4	20+80 =100	4
	CS303T(B)	Big Data Analytics			
IV	<b>Elective</b> CS304T(A)	Object Oriented Analysis and Design	4	20+80 =100	4
	CS304T(B)	Data Mining			
V	CS305P	C# Lab	6	75	3
VI	CS306P	Compiler Design Lab	6	75	3
VII	<b>Elective</b> CS307P(A)	Network Security Lab	4	50	2
	CS307P(B)	Big Data Analytics Lab			
<b>Total</b>			<b>32</b>	<b>600</b>	<b>24</b>

**SEMESTER – IV**

Paper	Code	Paper Title	HpW	Marks	Credits
I	CS401T	Computer Organization	4	20+80 =100	4
II	CS402T	Cloud Computing	4	20+80 =100	4
III	<b>Elective</b> CS403T(A)	Mobile Computing	4	20+80 =100	4
	CS403T(B)	Distributed Systems			
IV	<b>Elective</b> CS404T(A)	Artificial Intelligence	4	20+80 =100	4
	CS404T(B)	Internet of Things			
V	CS405P	Project Work	16	200	8
<b>Total</b>			<b>32</b>	<b>600</b>	<b>24</b>

**DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY, HYDERABAD**

**M. Sc. (Physics) and M.Sc. (Appl. Electronics) Courses under CBCS  
(With effect from the academic year 2018 –2019)**

**Semester – I**

S.no.	Sub. Code	Paper No.	Subject	Instructions. Hrs/week	Credits	Max. Marks
<b>THEORY</b>						
01	PAE 101T	I	Mathematical Physics	4	4	100*
02	PAE 102T	II	Classical Mechanics	4	4	100*
03	PAE 103T	III	Quantum Mechanics - I	4	4	100*
04	PAE 104T	IV	General Solid State Physics	4	4	100*
<b>PRACTICALS</b>						
05	PAE 151P+ 152P	V & VI	C – Programming lab – I & Electronics lab - I	8	4	100
06	PAE 153P +154P	VII & VIII	Heat & Acoustics lab – I & Optics lab - I	8	4	100
			Total:		24	600

**\* Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. Common Syllabus to University, Constituent Colleges and Affiliated Colleges. There shall be no internal assessment examinations for practicals. Practical Examinations will be conducted at the end of each semester.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**. Part –A consists of EIGHT short answer questions, carrying 4 marks each. The student has to answer all the questions. Part –B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks.

**DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY, HYDERABAD**

**M. Sc. (Physics) Courses under CBCS  
(With effect from the academic year 2018 –2019)**

**Semester – II**

S.no.	Sub. Code	Paper No.	Subject	Instructions. Hrs/week	Credits	Max. Marks
<b>THEORY</b>						
01	PAE 201T	I	Electromagnetic Theory	4	4	100*
02	PAE 202T	II	Statistical Mechanics	4	4	100*
03	PAE 203T	III	Quantum Mechanics - II	4	4	100*
04	PAE 204T	IV	Electronics	4	4	100*
<b>PRACTICALS</b>						
05	PAE 151P+ 152P	V & VI	C – Programming lab – I & Electronics lab - I	8	4	100
06	PAE 153P +154P	VII & VIII	Heat & Acoustics lab – I & Optics lab - I	8	4	100
			Total:		24	600

**\* Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. Common Syllabus to University, Constituent Colleges and Affiliated Colleges. There shall be no internal assessment examinations for practicals. Practical Examinations will be conducted at the end of each semester.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**. Part –A consists of EIGHT short answer questions, carrying 4 marks each. The student has to answer all the questions. Part –B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks.

**DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY**  
**REVISED SYLLABUS FOR M.Sc (PHYSICS )**  
**III SEMESTER**

With effect from the academic year 2016 -2017 onwards

S.No	Paper code	Paper	Paper title
1.	P301T	Paper I	Modern Optics
2	P302T	Paper II	Advanced solid state physics
<b>Solid state physics (SSP)</b>			
3	P303T/SSP	Paper III	Band Theory & electrical Properties
4	P304A/T/SSP	Paper IVA	Physics of phonons and structural phase transitions
5	P304B/T/SSP	Paper IVB	Crystal Physics and physical properties
<b>Materials Science (MS)</b>			
6	P303T/MS	Paper III	Mechanical Properties of materials
7	P304A/T/MS	Paper IVA	Thin films and their properties
8	P304B/T/MS	Paper IVB	Metal and Alloys
<b>Electronic Instrumentation (EI)</b>			
9	P303T/EI	Paper III	Electronic Instrumentation
10	P304A/T/EI	Paper IVA	Digital logic circuits
11	P304B/T/EI	Paper IVB	Microprocessors, DSP & interfacing
<b>Nano Science(NS)</b>			
12	P303T/NS	Paper III	Carbon nano tubes and applications
13	P304A/T/NS	Paper IVA	Synthesis and characterization of nano materials
14	P304B/T/NS	Paper IVB	Properties of nano materials
<b>Electronic communication (EC)</b>			
15	P303T/EC	Paper III	8051 Microcontroller and applications
16	P304A/T/EC	Paper IVA	Data Computer communications- I
17	P304B/T/EC	Paper IVB	Digital transmission techniques and information theory
<b>Biophysics (BP)</b>			
18	P303T/BP	Paper III	Molecular Biophysics
19	P304A/T/BP	Paper IVA	Physico-chemical techniques in Biophysics
20	P304B/T/BP	Paper IVB	Medical Biophysics
<b>Microwaves (MW)</b>			
21	P303T/MW	Paper III	Transmission lines – microwave passive devices
22	P304A/T/MW	Paper IVA	Microwave (active) devices and circuits
23	P304B/T/MW	Paper IVB	Information theory and computer communications
<b>Condensed Matter Physics (CMP)</b>			
24	P303T/CMP	Paper III	Electrical transport phenomena in solids
25	P304A/T/CMP	Paper IVA	Physics of Phonons and structural phase transitions
26	P304B/T/CMP	Paper IVB	Crystal Physics and physical properties

<b>Opto-Electronics (OE)</b>			
27	P303T/OE	Paper III	Introduction to optoelectronics
28	P304A/T/OE	Paper IVA	Optoelectronic devices
29	P304B/T/OE	Paper IVB	Laser Physics and applications
<b>Applied Electronics (AE)</b>			
30	P301T/AE	Paper I	Digital system design
31	P302T/AE	Paper II	Digital signal processing and digital signal processors
32	P303T/AE	Paper III	Data communication and networking
33	P304A/T/AE	Paper IVA	Optical fiber and mobile communications
34	P304B/T/AE	Paper IVB	Electronic instrumentation

## Practical

35	P305P	Paper V	General Physics lab-I (Common to all specializations)
36	P306P	Paper VI	General Physics lab-II (Common to all specializations)
37	P307P	Paper VII	Special Lab - I
38	P308P	Paper VIII	Special Lab - II

## Practical (Applied Electronics)

35	P305P/AE	Paper V	Lab-I
36	P306P/AE	Paper VI	Lab-II
37	P307P/AE	Paper VII	Lab-III
38	P308P/AE	Paper VIII	Lab-IV

<b>Details of credits and marks</b>	
Number instruction hours per each theory paper per week	4
Number of credits for each theory paper	4
Maximum marks for each theory paper	100( 80 semester exam + 20 internal evaluation)
Number instruction hours per each practical paper per week	16 ( 3 x 5 + 1 Tutorial )
Number credits per each practical paper	2
Total Credits per semester	24

**DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY**  
**REVISED SYLLABUS FOR M.Sc. (PHYSICS )**  
**IV SEMESTER**

**With effect from the academic year 2016 -2017 onwards**

S.No	Paper code	Paper	Paper title
1.	P401T	Paper I	Nuclear Physics
2	P402T	Paper II	Spectroscopy
<b>Solid State Physics(SSP)</b>			
3	P403T/SSP	Paper III	Optical Phenomena in solids
4	P404A/T/SSP	Paper IVA	Resonance Phenomena in solids
5	P404B/T/SSP	Paper IVB	Studies on reduced dimensionality in solids
<b>Materials Science (MS)</b>			
6	P403T/MS	Paper III	Electronic Materials and devices
7	P404A/T/MS	Paper IVA	Engineering Materials
8	P404B/T/MS	Paper IVB	Advanced Materials
<b>Electronics Instrumentation (EI)</b>			
9	P403T/EI	Paper III	Instrumentation for measurement and data transmission
10	P404A/T/EI	Paper IVA	Embedded systems and their applications
11	P04B/T/EI	Paper IVB	Process control instrumentation
<b>Nano Science (NS)</b>			
12	P403T/NS	Paper III	Nano composites
13	P404A/T/NS	Paper IVA	Nano Sensors and Nano devices
14	P404B/T/NS	Paper IVB	Nano Photonics and Nano technology in energy conversion and storage
<b>Electronics Communications (EC)</b>			
15	P403T/EC	Paper III	Mobile cellular communications
16	P404A/T/EC	Paper IVA	Data and Computer communications -II
17	P404B/T/EC	Paper IVB	Optical fiber communications
<b>Bio Physics (BP)</b>			
18	P403T/BP	Paper III	Cell and membrane biophysics
19	P404A/T/BP	Paper IVA	Radiation Biophysics
20	P404B/T/BP	Paper IVB	Biophysical Techniques in medicine
<b>Microwaves (MW)</b>			
21	P403T/MW	Paper III	Antennas and radars
22	P404A/T/MW	Paper IVA	Communication theory
23	P404B/T/MW	Paper IVB	Signal conditioning
<b>Condensed Matter Physics (CMP)</b>			
24	P403T/CMP	Paper III	Optical Phenomena on solids
25	P404A/T/CMP	Paper IVA	Resonance Phenomena in solids
26	P404B/T/CMP	Paper IVB	Semiconductor devices and nano materials

<b>Opto-Electronics (OE)</b>			
27	P403T/OE	Paper III	Fiber Optics
28	P404A/T/OE	Paper IVA	Fiber Optic communication systems
29	P404B/T/OE	Paper IVB	Fiber optic communication technology
<b>Applied Electronics (AE)</b>			
30	P401T/AE	Paper I	Digital system design using VHDL
31	P402T/AE	Paper II	Microcontroller and applications
32	P403T/AE	Paper III	Control systems
33	P404A/T/AE	Paper IVA	Microwave systems
34	P404B/T/AE	Paper IVB	Local area networks & TCP/IP protocols

## Practical

35	P405P	Paper V	General Physics lab-I (Common to all specializations)
36	P406P	Paper VI	General Physics lab-II (Common to all specializations)
37	P407P	Paper VII	Special Lab - I
38	P408P	Paper VIII	Special Lab - II

## Practical (Applied Electronics)

35	P405P/AE	Paper V	Lab-I
36	P406P/AE	Paper VI	Lab-II
37	P407P/AE	Paper VII	Lab-III
38	P408P/AE	Paper VIII	Lab-IV

<b>Details of credits and marks</b>	
Number instruction hours per each theory paper per week	4
Number of credits for each theory paper	4
Maximum marks for each theory paper	100( 80 semester exam + 20 internal evaluation)
Number instruction hours per each practical paper per week	16 ( 3 x 5 + 1 Tutorial )
Number credits per each practical paper	2
Total Credits per semester	24

# ఉస్మానియా విశ్వవిద్యాలయం, తెలుగు శాఖ

## ఎం.ఏ., (తెలుగు) పాఠ్య ప్రణాళిక

### సెమిస్టర్ - 1

101. సంప్రదాయ సాహిత్యం - పాఠ్యాంశాలు  
 102. ప్రాచీన సాహిత్య చరిత్ర (15వ శతాబ్దం వరకు)  
 103. భారతీయ అలంకార శాస్త్రం  
 104(ఎ). బాల వ్యాకరణం  
 104(బి). ప్రౌఢ వ్యాకరణం  
 105(ఎ). తెలంగాణ చరిత్ర - సంస్కృతి  
 105(బి). తెలుగు నాటకం

### సెమిస్టర్ - 3

301. ఆధునిక కవిత్వం - పాఠ్యాంశాలు  
 302. భాషాశాస్త్ర పరిచయం  
 303. జానపద విజ్ఞానం  
 304(ఎ). తెలుగు పరిశోధన  
 304(బి). కథానిక - పాఠ్యాంశాలు  
 305. ఇంటర్ డిసిప్లినరీ పేపర్  
 లేదా  
 305 (ఎ). బమ్మెర పోతన (ప్రత్యేక అధ్యయనం)  
 305 (బి). వచన సాహిత్యం

### సెమిస్టర్ - 2

201. సంప్రదాయ సాహిత్యం - పాఠ్యాంశాలు  
 202. ప్రాచీన సాహిత్య చరిత్ర (16-19వ శతాబ్దం)  
 203. ఆధునిక సాహిత్య విమర్శ  
 204(ఎ). ఛందస్సు - అలంకారాలు  
 204(బి). తెలుగు జర్నలిజం  
 205(ఎ). సంస్కృత సాహిత్య పరిచయం  
 205(బి). తెలుగు సాహిత్య ప్రక్రియలు

### సెమిస్టర్ - 4

401. ఆధునిక కవిత్వ వికాసం  
 402. తెలుగు భాషా పరిణామం  
 403. గిరిజన విజ్ఞానం  
 404(ఎ). తెలంగాణ సాహిత్య వైతాళికులు  
 404(బి). భారతీయ సాహిత్య వైతాళికులు  
 405(ఎ). నవల - పాఠ్యాంశాలు  
 405(బి). ప్రాజెక్ట్

### పరీక్షా విధానం

- + ప్రతి సెమిస్టర్లో 4,5 పేపర్లు ఐచ్ఛికాంశాలు. వీటిలో ఏదో ఒకటి విద్యార్థి ఎన్నుకోవాలి.  
 + 305 ఇంటర్ డిసిప్లినరీ పేపర్ ఎం.ఏ., (తెలుగు) కాకుండా ఇతర సబ్జెక్టు వారికి ఉద్దేశించబడింది.  
 ఎం.ఏ., తెలుగు విద్యార్థులు ఇతర సబ్జెక్టుల్లో ఏదో ఒకటి ఎన్నుకొని పరీక్ష రాయవలసి ఉంటుంది.  
 ఈ పద్ధతి అమలు చేయని చోట 305(ఎ), 305 (బి), లలో ఏదో ఒకటి ఎన్నుకోవాలి.

ప్రతి సెమిస్టర్లో మొదటి మూడు పేపర్లకు :

1. 5 సంక్షిప్త సమాధానాలు (ఛాయిస్ లేదు)  $5 \times 4 = 20$   
 2. 5 వ్యాస రూప సమాధానాలు (ఇంటర్నల్ ఛాయిస్)  $5 \times 12 = 60$

ప్రతి సెమిస్టర్లో ఐచ్ఛికాంశాలకు (4,5 పేపర్లకు) :

1. 4 సంక్షిప్త సమాధానాలు (ఛాయిస్ లేదు)  $4 \times 5 = 20$   
 2. 4 వ్యాస రూప సమాధానాలు (ఇంటర్నల్ ఛాయిస్)  $4 \times 15 = 60$

- + 15 మార్కులకు ప్రతి సెమిస్టర్లో ప్రతి పేపర్కు ఇంటర్నల్ అసైన్మెంట్ పరీక్షలు రెండు విడతలుగా ఉంటుంది.  
 వీని సరాసరిని బట్టి మార్కులు నిర్ణయిస్తారు.  
 + 5 మార్కులు ప్రతి సెమిస్టర్లో ప్రతి పేపర్కు అసైన్మెంట్స్ రాసి ఇవ్వాల్సి ఉంటుంది.  
 + 80 మార్కులకు ప్రతి సెమిస్టర్లో ప్రతి పేపర్కు పరీక్ష రాయాల్సి ఉంటుంది.

**DEPARTMENT OF COMMERCE, O.U.**

*Structure of B.Com (Computer Application) (CBCS) for Osmania University, Hyderabad. (w.e.f. Academic Year 2016-17)*

**B.COM (Computer Applications) PROGRAMME****FIRST YEAR:****SEMESTER-I**

<i>Sl.No.</i>	<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
(1)	(2)	(3)	(4)	(5)	(6)
1.	BC101	A/B/C/D	AECC-1	2	2
2.	BC102	English	CC-1A	5	5
3.	BC103	Second Language	CC-2A	5	5
4.	BC104	Financial Accounting - I	DSC-1A	5	5
5.	BC105	Business Economics	DSC-2A	5	5
6.	BC106	Business Organization	DSC-3A	4	4
7.	BC107	Information Technology	DSC-4A	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>

**SEMESTER-II**

8.	BC201	A/B/C/D	AECC-2	2	2
9.	BC202	English	CC-1B	5	5
10.	BC203	Second Language	CC-2B	5	5
11.	BC204	Financial Accounting - II	DSC-1B	5	5
12.	BC205	Managerial Economics	DSC-2B	5	5
13.	BC206	Principles of Management	DSC-3B	4	4
14.	BCC207	Relational Database Management Systems	<b>DSE-4B</b>	<b>3T+2P</b>	<b>4</b>
		<b>Total</b>		<b>31</b>	<b>30</b>

**SECOND YEAR:****SEMESTER-III**

15.	BC301	Principles of Insurance	SEC-1	2	2
16.	BC302	English	CC-1C	5	5
17.	BC303	Second Language	CC-2C	5	5
18.	BC304	Advanced Accounting	DSC-1C	5	5
19.	BC305	Income Tax-I	DSC-2C	5	5
20.	BC306	Business Statistics-I	DSC-3C	4	4
21.	BCC307	Programming with C	<b>DSC-4C</b>	<b>3T+2P</b>	<b>4</b>
		<b>Total</b>		<b>31</b>	<b>30</b>

**SEMESTER-IV**

22.	BC401	Practice of Life Insurance	SEC-2	2	2
23.	BC402	English	CC -1D	5	5
24.	BC403	Second Language	CC-2D	5	5
25.	BC404	Corporate Accounting	DSC-1D	5	5
26.	BC405	Income Tax-II	DSC-2D	5	5
27.	BC406	Business Statistics-II	DSC-3D	4	4
28.	BCC407	Objective Oriented Programming with C++	<b>DSC-4D</b>	<b>3T+2P</b>	<b>4</b>
		<b>Total</b>		<b>31</b>	<b>30</b>

## DEPARTMENT OF COMMERCE, O.U.

Structure of B.Com (Computers ) (CBCS) for Osmania University, Hyderabad.

(w.e.f. Academic Year 2016-17)

**B.COM (Computers) PROGRAMME**

<b>FIRST YEAR:</b>					
<b>SEMESTER-I</b>					
Sl.No.	Code	Course Title	Course Type	HPW	Credits
(1)	(2)	(3)	(4)	(5)	(6)
1.	BC101	A/B/C/D	AECC-1	2	2
2.	BC102	English	CC-1A	5	5
3.	BC103	Second Language	CC-2A	5	5
4.	BC104	Financial Accounting - I	DSC-1A	5	5
5.	BC105	Business Economics	DSC-2A	5	5
6.	BC106	Business Organization	DSC-3A	4	4
7.	BC107	Information Technology	DSC-4A	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-II</b>					
8.	BC201	A/B/C/D	AECC-2	2	2
9.	BC202	English	CC-1B	5	5
10.	BC203	Second Language	CC-2B	5	5
11.	BC204	Financial Accounting - II	DSC-1B	5	5
12.	BC205	Managerial Economics	DSC-2B	5	5
13.	BC206	Principles of Management	DSC-3B	4	4
14.	BCC207	Management Information System	DSC-4B	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SECOND YEAR:</b>					
<b>SEMESTER-III</b>					
15.	BC301	Principles of Insurance	SEC-1	2	2
16.	BC302	English	CC-1C	5	5
17.	BC303	Second Language	CC-2C	5	5
18.	BC304	Advanced Accounting	DSC-1C	5	5
19.	BC305	Income Tax-I	DSC-2C	5	5
20.	BC306	Business Statistics-I	DSC-3C	4	4
21.	BCC307	Programming with C	DSC-4C	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-IV</b>					
22.	BC401	Practice of Life Insurance	SEC-2	2	2
23.	BC402	English	CC -1D	5	5
24.	BC403	Second Language	CC-2D	5	5
25.	BC404	Corporate Accounting	DSC-1D	5	5
26.	BC405	Income Tax-II	DSC-2D	5	5
27.	BC406	Business Statistics-II	DSC-3D	4	4
28.	BCC407	Objective Oriented Programming with C++	<b>DSE-4D</b>	<b>3T+2P</b>	<b>5</b>
		<b>Total</b>		<b>31</b>	<b>30</b>

<b>THIRD YEAR:</b>					
<b>SEMESTER-V</b>					
29.	BC501	Practice of General Insurance	SEC-3	2	2
30.	BC502	Introduction to Indian Economy	GE-1	2	2
31.	BC503	Cost Accounting	DSC	4	4
32.	BC504	Business Law	DSC	4	4
33.	BC505	Banking Theory & Practice	DSC	4	4
34.	BCC506	Excel Foundation	DSC	4	4
35.	BCC507(a)	Computerised Accounting/ Business Analytics	DSE	4T+2P	5
	BCC507(b)		DSE	5	5
36.	BCC508(a)	Web Technology/ Business Simulation	DSE	4T+2P	5
	BCC508(b)		DSE	5	5
<b>Total</b>				<b>30/32</b>	<b>30</b>
<b>SEMESTER-VI</b>					
37.	BC601	Regulation of Insurance Business	SEC-4	2	2
38.	BC602	Sectors of Indian Economy	GE-2	2	2
39.	BC603	Theory and Practice of GST	DSC	3T+2P	4
40.	BC604	Company Law	DSC	4	4
41.	BC605	Managerial Accounting	DSC	4	4
42.	BC606	Commerce Lab	DSC	2T+4P	4
43.	BCC607(a)	E-Commerce/ Business Forecasting	DSE	4T+2P	5
	BCC607(b)		DSE	5	5
44.	BCC608(a)	Relational Database Management Systems/ Business Analytics Programming	DSE	4T+2P	5
	BCC608(b)		DSE	5	5
<b>Total</b>				<b>33/35</b>	<b>30</b>
<b>GRAND TOTAL</b>				<b>187</b>	<b>180</b>

**AECC:** Ability Enhancement Compulsory Course; **SEC:** Skill Enhancement Course; **DSC:** Discipline Specific Course; **DSE:** Discipline Specific Elective; **GE:** Generic Elective; **T=Theory;**  
**P=Practicals;**

### SUMMARY OF CREDITS

Sl. No.	Course Category	No. of Courses	Credits Per Course	Credits
1	AECC	2	2	4
2	SEC	4	2	8
3	CC Language DSC	8	5	40
		8	5	40
		<b>16</b>	<b>4</b>	<b>64</b>
4	DSE	5	4	20
5	GE	2	2	4
	<b>TOTAL</b>	<b>44</b>		<b>180</b>
	<b>Commerce Total</b>	<b>28</b>		<b>124</b>

**DEPARTMENT OF COMMERCE, O.U.**  
**Structure of B.Com (General) (CBCS) for Osmania University, Hyderabad.**  
 (w.e.f. Academic Year 2016-17)

**B.COM (General) PROGRAMME**

<b>FIRST YEAR:</b>					
<b>SEMESTER-I:</b>					
Sl.No.	Code	Course Title	Course Type	HPW	Credits
(1)	(2)	(3)	(4)	(5)	(6)
1.	BC101	A/B/C/D	AECC-1	2	2
2.	BC102	English	CC-1A	5	5
3.	BC103	Second Language	CC-2A	5	5
4.	BC104	Financial Accounting - I	DSC-1A	5	5
5.	BC105	Business Economics	DSC-2A	5	5
6.	BC106	Business Organization	DSC-3A	4	4
7.	BC107	Information Technology	DSC-4A	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-II:</b>					
8.	BC201	A/B/C/D	AECC-2	2	2
9.	BC202	English	CC-1B	5	5
10.	BC203	Second Language	CC-2B	5	5
11.	BC204	Financial Accounting - II	DSC-1B	5	5
12.	BC205	Managerial Economics	DSC-2B	5	5
13.	BC206	Principles of Management	DSC-3B	4	4
14.	BC207	Foreign Trade	DSC-4B	4	4
		<b>Total</b>		<b>30</b>	<b>30</b>
<b>SECOND YEAR:</b>					
<b>SEMESTER-III:</b>					
15.	BC301	Principles of Insurance	SEC-1	2	2
16.	BC302	English	CC-1C	5	5
17.	BC303	Second Language	CC-2C	5	5
18.	BC304	Advanced Accounting	DSC-1C	5	5
19.	BC305	Income Tax-I	DSC-2C	5	5
20.	BC306	Business Statistics-I	DSC-3C	4	4
21.	BC307	Entrepreneurial Development & Business Ethics	DSC-4C	4	4
		<b>Total</b>		<b>30</b>	<b>30</b>
<b>SEMESTER-IV:</b>					
22.	BC401	Practice of Life Insurance	SEC-2	2	2
23.	BC402	English	CC -1D	5	5
24.	BC403	Second Language	CC-2D	5	5
25.	BC404	Corporate Accounting	DSC-1D	5	5
26.	BC405	Income Tax-II	DSC-2D	5	5
27.	BC406	Business Statistics-II	DSC-3D	4	4
28.	BC407	Financial Statement Analysis	DSC-4D	4	4
		<b>Total</b>		<b>30</b>	<b>30</b>

<b>THIRD YEAR:</b>					
<b>SEMESTER-V</b>					
29.	BC501	Practice of General Insurance	SEC-3	2	2
30.	BC502		GE-1	2	2
31.	BC503	Cost Accounting	DSC-1E	4	4
32.	BC504	Business Law	DSC-2E	4	4
33.	BC505	Banking Theory & Practice	DSC-3E	4	4
34.	BC506	Auditing	DSC-4E	4	4
<b>35.</b>	<b>BC507</b>	Computerised Accounting	<b>DSE-1A</b>	<b>4T+2P</b>	<b>5</b>
<b>36.</b>	<b>BC508</b>	Accounting Standards	<b>DSE-2A</b>	<b>5</b>	<b>5</b>
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-VI</b>					
37.	BC601	Regulation of Insurance Business	SEC-4	2	2
38.	BC602		GE-2	2	2
39.	BC603	Managerial Accounting	DSC-1F	4	4
40.	BC604	Company Law	DSC-2F	4	4
41.	BC605	Financial Institutions & Markets	DSC-3F	4	4
42.	BC606	Commerce Lab	DSC-4F	2T+4P	4
<b>43.</b>	<b>BC607</b>	Advanced Managerial Accounting	<b>DSE-1B</b>	<b>5</b>	<b>5</b>
<b>44.</b>	<b>BC608</b>	Advanced Corporate Accounting	<b>DSE-2B</b>	<b>5</b>	<b>5</b>
		<b>Total</b>		<b>32</b>	<b>30</b>
		<b>GRAND TOTAL</b>		<b>184</b>	<b>180</b>

AECC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course; DSC: Discipline Specific Course; DSE: Discipline Specific Elective; GE: Generic Elective; T=Theory; P=Practicals;

### SUMMARY OF CREDITS

Sl. No.	Course Category	No. of Courses	Credits Per Course	Credits
1	AECC	2	2	4
2	SEC	4	2	8
3	CC Language	8	5	40
	DSC	8	5	40
		16	4	64
4	DSE	4	5	20
5	GE	2	2	4
	<b>TOTAL</b>	<b>44</b>		<b>180</b>
	<b>Commerce Total</b>	<b>28</b>		<b>124</b>

## B.Sc.(M.P.C) Course Structure Template

B.Sc. PROGRAMME

FIRST YEAR SEMESTER-I				
Code	Course Title	Course Type	HPW	Credits
BS101	Communication	AECC-1	2	2
BS102	English	CC-1A	5	5
BS103	Second Language	CC-2A	5	5
BS104	Optional - I Differential Calculus	DSC-1A	4 T + 2P = 6	4+1=5
BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
BS106	Optional - III	DSC-3A	4 T + 2P = 6	4+1=5
			30	27
SEMESTER-II				
BS201	Environmental Studies	AECC-2	2	2
BS202	English	CC-1B	5	5
BS203	Second Language	CC-2B	5	5
BS204	Optional - I Differential Equations	DSC-1B	4 T + 2P = 6	4+1=5
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5
BS206	Optional - III	DSC-3B	4 T + 2P = 6	4+1=5
			30	27

B.Sc. PROGRAMME

SECOND YEAR SEMESTER-III				
Code	Course Title	Course Type	HPW	Credits
BS301	A/B Logic & Sets/Theory of Equations	SEC-1	2	2
BS302	English	CC-1C	5	5
BS303	Second Language	CC-2C	5	5
BS304	Optional - I Real Analysis	DSC-1C	4 T + 2P = 6	4+1=5
BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
BS306	Optional - III	DSC-3C	4 T + 2P = 6	4+1=5
			30	27
SEMESTER-IV				
BS401	C/D Transportation & Game Theory/ Number Theory	SEC-2	2	2
BS402	English	CC-1D	5	5
BS403	Second Language	CC-2D	5	5
BS404	Optional - I Algebra	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5
BS406	Optional - III	DSC-3D	4 T + 2P = 6	4+1=5
			30	27

B.Sc. PROGRAMME

THIRD YEAR SEMESTER-V				
Code	Course Title	Course Type	HPW	Credits
BS501	E/F Probability and Statistics/Mathematical Modelling	SEC-3	2	2
BS502	Lattice Theory	GE-1	2 T	2
BS503	Optional - I Linear Algebra	DSC-1E	3 T + 2P = 5	3+1=4
BS504	Optional - II	DSC-2E	3 T + 2P = 5	3+1=4
BS505	Optional - III	DSC-3E	3 T + 2P = 5	3+1=4
BS506	Optional - I A/B/C 3D Geometry/ Integral Calculus	DSE-1E	3 T + 2P = 5	3+1=4
BS507	Optional - II A/B/C	DSE-2E	3 T + 2P = 5	3+1=4
BS508	Optional - III A/B/C	DSE-3E	3 T + 2P = 5	3+1=4
			34	28
SEMESTER-VI				
BS601	G/H Boolean Algebra/Graph Theory	SEC-4	2	2
BS602	Elements of Number Theory	GE-2	2 T	2
BS603	Optional - I Numerical Analysis	DSC-1F	3 T + 2P = 5	3+1=4
BS604	Optional - II	DSC-2F	3 T + 2P = 5	3+1=4
BS605	Optional - III	DSC-3F	3 T + 2P = 5	3+1=4
BS606	Optional - I A/B/C Complex Analysis/ Vector Calculus	DSE-1F	3 T + 2P = 5	3+1=4
BS607	Optional - II A/B/C	DSE-2F	3 T + 2P = 5	3+1=4
BS608	Optional - III A/B/C	DSE-3F	3 T + 2P = 5	3+1=4
			34	28
	TOTAL Credits			164

**B.Sc. PHYSICS SYLLABUS UNDER CBCS SCHEME  
SCHEME OF INSTRUCTION**

<b>Semester</b>	<b>Paper [ Theory and Practical ]</b>	<b>Instructions Hrs/week</b>	<b>Marks</b>	<b>Credits</b>
<b>I sem</b>	<b>Paper – I : Mechanics</b>	<b>4</b>	<b>100</b>	<b>4</b>
	<b>Practicals – I : Mechanics</b>	<b>3</b>	<b>50</b>	<b>1</b>
<b>II sem</b>	<b>Paper – II: Waves and Oscillations</b>	<b>4</b>	<b>100</b>	<b>4</b>
	<b>Practicals – II : Waves and Oscillations</b>	<b>3</b>	<b>50</b>	<b>1</b>
<b>III sem</b>	<b>Paper – III : Thermodynamics</b>	<b>4</b>	<b>100</b>	<b>4</b>
	<b>Practicals – III : Thermodynamics</b>	<b>3</b>	<b>50</b>	<b>1</b>
<b>IV sem</b>	<b>Paper – IV : Optics</b>	<b>4</b>	<b>100</b>	<b>4</b>
	<b>Practicals – IV :Optics</b>	<b>3</b>	<b>50</b>	<b>1</b>
<b>V sem</b>	<b>Paper –V : Electromagnetism</b>	<b>3</b>	<b>100</b>	<b>3</b>
	<b>Practicals – V: Electromagnetism</b>	<b>3</b>	<b>50</b>	<b>1</b>
	<b>Paper – VI : Elective – I Solid state physics/ Quantum Mechanics and Applications</b>	<b>3</b>	<b>100</b>	<b>3</b>
	<b>Practicals – VI : Elective – I Practical Solid state physics/ Quantum Mechanics and Applications</b>	<b>3</b>	<b>50</b>	<b>1</b>
<b>VI sem</b>	<b>Paper – VII : Modern Physics</b>	<b>3</b>	<b>100</b>	<b>3</b>
	<b>Practical – VII : Modern Physics Lab</b>	<b>3</b>	<b>50</b>	<b>1</b>
	<b>Paper – VIII : Elective – II Basic Electronics/ Physics of Semiconductor Devices</b>	<b>3</b>	<b>100</b>	<b>3</b>
	<b>Practicals – VIII : Elective – II Practical Basic Electronics/ Physics of Semiconductor Devices</b>	<b>3</b>	<b>50</b>	<b>1</b>

**Total Credits**

**36**

**Telangana State Council of Higher Education, Govt. of Telangana B.Sc., CBCS Common  
Core Syllabi for all Universities in Telangana  
PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN  
B.Sc., Chemistry**

<b>FIRST YEAR- SEMSTER I</b>				
<b>CODE</b>	<b>COURSE TITLE</b>	<b>COURSE TYPE</b>	<b>HPW</b>	<b>CREDITS</b>
BS 101	Communication	AECC-1	2	2
BS 102	English	CC-1A	5	5
BS 103	Second language	CC-2A	5	5
BS 104	Optional I	DSC-1A	4T+2P=6	4+1=5
BS 105	Optional II	DSC-2A	4T+2P=6	4+1=5
<b>BS 106</b>	<b>Optional III- Chemistry - I</b>	<b>DSC-3A</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course – I (Qualitative Analysis – I)</b>			
<b>Total Credits</b>				<b>27</b>
<b>FIRST YEAR- SEMSTER II</b>				
BS 201	Environmental studies	AECC-2	2	2
BS 202	English	CC-1B	5	5
BS 203	Second language	CC-2B	5	5
BS 204	Optional I	DSC-1B	4T+2P=6	4+1=5
BS 205	Optional II	DSC-2B	4T+2P=6	4+1=5
<b>BS 206</b>	<b>Optional III- Chemistry - II</b>	<b>DSC-3B</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - II (Qualitative Analysis – II)</b>			
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER III</b>				
BS 301	<b>Safety Rules in Chemistry Laboratory and Lab Reagents</b>	<b>SEC-I</b>	2	2
BS 302	English	CC-1C	5	5
BS 303	Second language	CC-2C	5	5
BS 304	Optional I	DSC-1C	4T+2P=6	4+1=5
BS 305	Optional II	DSC-2C	4T+2P=6	4+1=5
<b>BS 306</b>	<b>Optional III- Chemistry - III</b>	<b>DSC-3C</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - III (Quantitative Analysis – I)</b>			
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER IV</b>				
BS 401	<b>Remedial Methods for Pollution, Drinking Water and Soil Fertility</b>	<b>SEC-2</b>	2	2
BS 402	English	CC-1D	5	5
BS 403	Second language	CC-2D	5	5
BS 404	Optional I	DSC-1D	4T+2P=6	4+1=5
BS 405	Optional II	DSC-2D	4T+2P=6	4+1=5
<b>BS 406</b>	<b>Optional III- Chemistry - IV</b>	<b>DSC-3D</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - IV (Quantitative Analysis – II)</b>			
<b>Total Credits</b>				<b>27</b>

\* **Optional III Chemistry** AECC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course; DSC: Discipline Specific Course; GE: Generic Elective;

B.Sc., Chemistry, Iii Year, Cbcs Syllabus

**Telangana State Council Of Higher Education, Govt. of Telangana,  
B.Sc., CBCS Common Core Syllabi for All Universities in Telangana  
Proposed Scheme for Choice Based Credit System in  
B.Sc., Chemistry,  
Generic Elective-I (GE-I) and Generic Elective-II (GE-II) Courses for  
B.Sc. Non Chemistry/B.A/B.Com Students**

**THIRD YEAR- SEMSTER - V**

Code	Course Title	Course Type	HPW	Credits
BS 501	<b>Materials and their Applications</b>	<b>SEC-3</b>	<b>2</b>	<b>2</b>
BS 502	<b>Pharmaceuticals</b> (For B.Sc. Non Chemistry/B.A/B.Com Students)	<b>GE-1</b>	<b>2T</b>	<b>2</b>
BS 503	Optional –I	DSC-1E	3T+2P=5	3+1=4
BS 504	Optional – II	DSC-2E	3T+2P=5	3+1=4
BS 505	<b>Optional – III Chemistry - V</b>	<b>DSC-3E</b>	<b>3T</b> } = 5 <b>2P</b> }	<b>3</b> } = 4 <b>1</b> }
	<b>Laboratory Course (Organic Synthesis and TLC)</b>			
BS 506	Elective-A/B Optional – I	DSC-1E	3T+2P=5	3+1=4
BS 507	Elective-A/B Optional – II	DSC-2E	3T+2P=5	3+1=4
BS508A	Elective-A (Chemistry–VI) <b>Instrumental Methods of Analysis</b>	<b>DSC-3E</b>	<b>3T</b> } = 5 <b>2P</b> }	<b>3</b> } = 4 <b>1</b> }
BS508B	Elective-B (Chemistry – VI) <b>Industrial Chemistry and Catalysis</b>			
	<b>Laboratory Course (Experiments in Physical Chemistry-I)</b>			
	<b>Total Credits</b>		<b>34</b>	<b>28</b>

**SEMSTER - VI**

BS 601	<b>Chemistry of Cosmetics and Food Processing</b>	<b>SEC-4</b>	<b>2</b>	<b>2</b>
BS 602	<b>Materials and Their Applications</b> (For B.Sc. Non Chemistry/B.A/B.Com Students)	<b>GE-2</b>	<b>2T</b>	<b>2</b>
BS 603	Optional – I	DSC-1F	3T+2P=5	3+1=4
BS 604	Optional – II	DSC-2F	3T+2P=5	3+1=4
BS 605	<b>Optional – III Chemistry - VII</b>	<b>DSC-3F</b>	<b>3T</b> } = 5 <b>2P</b> }	<b>3</b> } = 4 <b>1</b> }
	<b>Laboratory Course (Qualitative and Spectral Analysis of Organic Compounds)</b>			
BS 606	Elective-A/B Optional – I	DSC-1F	3T+2P=5	3+1=4
BS 607	Elective-A/B Optional – II	DSC-2F	3T+2P=5	3+1=4
BS 608A	Elective-A (Chemistry – VIII) <b>Medicinal Chemistry</b>	<b>DSC-3F</b>	<b>3T</b> } = 5 <b>2P</b> }	<b>3</b> } = 4 <b>1</b> }
BS 608B	Elective-B (Chemistry – VIII) <b>Agricultural and Fuel Chemistry</b>			
	<b>Laboratory Course (Experiments in Physical Chemistry-II)</b>			
			<b>34</b>	<b>28</b>
	<b>Total Credits</b>			<b>164</b>

\* **Optional III Chemistry,**

AECC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course; DSC: Discipline Specific Course; GE: Generic Elective

## B.Sc.(M.E.CS) Course Structure Template

B.Sc. PROGRAMME

FIRST YEAR SEMESTER-I				
Code	Course Title	Course Type	HPW	Credits
BS101	Communication	AECC-1	2	2
BS102	English	CC-1A	5	5
BS103	Second Language	CC-2A	5	5
BS104	Optional - I Differential Calculus	DSC-1A	4 T + 2P = 6	4+1=5
BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
BS106	Optional - III	DSC-3A	4 T + 2P = 6	4+1=5
			30	27
SEMESTER-II				
BS201	Environmental Studies	AECC-2	2	2
BS202	English	CC-1B	5	5
BS203	Second Language	CC-2B	5	5
BS204	Optional - I Differential Equations	DSC-1B	4 T + 2P = 6	4+1=5
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5
BS206	Optional - III	DSC-3B	4 T + 2P = 6	4+1=5
			30	27

B.Sc. PROGRAMME

SECOND YEAR SEMESTER-III				
Code	Course Title	Course Type	HPW	Credits
BS301	A/B Logic & Sets/Theory of Equations	SEC-1	2	2
BS302	English	CC-1C	5	5
BS303	Second Language	CC-2C	5	5
BS304	Optional - I Real Analysis	DSC-1C	4 T + 2P = 6	4+1=5
BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
BS306	Optional - III	DSC-3C	4 T + 2P = 6	4+1=5
			30	27
SEMESTER-IV				
BS401	C/D Transportation & Game Theory/ Number Theory	SEC-2	2	2
BS402	English	CC-1D	5	5
BS403	Second Language	CC-2D	5	5
BS404	Optional - I Algebra	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5
BS406	Optional - III	DSC-3D	4 T + 2P = 6	4+1=5
			30	27

B.Sc. PROGRAMME

THIRD YEAR SEMESTER-V				
Code	Course Title	Course Type	HPW	Credits
BS501	E/F Probability and Statistics/Mathematical Modelling	SEC-3	2	2
BS502	Lattice Theory	GE-1	2 T	2
BS503	Optional - I Linear Algebra	DSC-1E	3 T + 2P = 5	3+1=4
BS504	Optional - II	DSC-2E	3 T + 2P = 5	3+1=4
BS505	Optional - III	DSC-3E	3 T + 2P = 5	3+1=4
BS506	Optional - I A/B/C 3D Geometry/ Integral Calculus	DSE-1E	3 T + 2P = 5	3+1=4
BS507	Optional - II A/B/C	DSE-2E	3 T + 2P = 5	3+1=4
BS508	Optional - III A/B/C	DSE-3E	3 T + 2P = 5	3+1=4
			34	28
SEMESTER-VI				
BS601	G/H Boolean Algebra/Graph Theory	SEC-4	2	2
BS602	Elements of Number Theory	GE-2	2 T	2
BS603	Optional - I Numerical Analysis	DSC-1F	3 T + 2P = 5	3+1=4
BS604	Optional - II	DSC-2F	3 T + 2P = 5	3+1=4
BS605	Optional - III	DSC-3F	3 T + 2P = 5	3+1=4
BS606	Optional - I A/B/C Complex Analysis/ Vector Calculus	DSE-1F	3 T + 2P = 5	3+1=4
BS607	Optional - II A/B/C	DSE-2F	3 T + 2P = 5	3+1=4
BS608	Optional - III A/B/C	DSE-3F	3 T + 2P = 5	3+1=4
			34	28
	TOTAL Credits			164

**OSMANIA UNIVERSITY**  
**B.Sc. ELECTRONICS SYLLABUS**  
**SCHEME OF INSTRUCTIONS**  
**UNDER CBCS (w.e.f 2016-2017 academic year onwards)**

Year	Semester	Title of the Paper[ Theory and Practical ]	Instructions Hrs/week	Number of Credits	Marks
1 <sup>st</sup> Year	I Sem	Paper – I : Circuit Analysis	4	4	100
		Practical – I : Circuit Analysis Lab	3	1	25
	II Sem	Paper – II : Electronic Devices	4	4	100
		Practical – II : Electronic Devices Lab	3	1	25
2 <sup>nd</sup> Year	III Sem	Paper – III : Analog Circuits	4	4	100
		Practical – III : Analog Circuits Lab	3	1	25
	IV Sem	Paper – IV : Linear Integrated circuits and basics of Communication	4	4	100
		Practical – IV : Linear Integrated Circuits and basics of communication Lab	3	1	25
3 <sup>rd</sup> Year	V Sem	Paper –V : Digital Electronics	3	3	75
		Practical – V : Digital Electronics Lab	3	1	25
		Paper – VI : Discipline Specific Elective – i. 8085 Microprocessor and applications ii. Electronic Instrumentation	3	3	75
		Practical – VI : i. 8085 Microprocessor and applications Lab ii. Electronic Instrumentation Lab	3	1	25
	VI Sem	Paper – VII : Digital Communication	3	3	75
		Practical – VII : Digital Communication Lab	3	1	25
		Paper – VIII : Discipline Specific Elective – II: i. 8051 Micro Controller and applications ii. Digital System Design using VHDL	3	3	75
		Practical – VIII : Elective-II : i. 8051 Micro Controller and applications Lab ii. Digital System Design using VHDL Lab	3	1	25

**Total Credits: 36**

## Syllabus for Computer Science

Proposed scheme for **B.Sc.** Programme under **Choice Based Credit System**

Code	Course Title	Course Type	HpW	Credits
<b>SEMESTER - I</b>				
BS106	Programming in C	DSC-3A	4T+2P=6	4 + 1 =5
<b>SEMESTER - II</b>				
BS206	Programming in C++	DSC-3B	4T+2P=6	4 + 1 =5
<b>SEMESTER - III</b>				
BS301	A: SciLab - 1	SEC-1	2T	2
	B: Boolean Algebra			
BS306	Data Structures	DSC-3C	4T+2P=6	4 + 1 =5
<b>SEMESTER - IV</b>				
BS401	C: SciLab - 2	SEC-2	2T	2
	D: Digital Logic			
BS406	Database Management Systems	DSC-3D	4T+2P=6	4 + 1 =5
<b>SEMESTER - V</b>				
BS501	Information Technologies -1	GE-1	2	2
BS502	E: Python - 1	SEC-3	2	2
	F: Computer Organization			
BS505	Programming in Java	DSC-3E	3T+2P=5	3 + 1 =4
BS506	Elective-A: Operating Systems	DSE-1E	3T+2P=5	3 + 1 =4
	Elective-B: Software Engineering	DSE-2E		
<b>SEMESTER - VI</b>				
BS601	Information Technologies -2	GE-2	2T	2
BS602	G: Python - 2	SEC-4	2T	2
	H: Information Security			
BS605	Computer Networks	DSC-3F	3T+2P=5	3 + 1 =4
BS606	Elective-A: PHP with MySQL	DSE-1F	3T+2P=5	3 + 1 =4
	Elective-B: Web Technologies	DSE-2F		
<b>Total Number of Credits</b>				<b>48</b>

## B.Sc.(M.P.CS) Course Structure Template

B.Sc. PROGRAMME

FIRST YEAR SEMESTER-I				
Code	Course Title	Course Type	HPW	Credits
BS101	Communication	AECC-1	2	2
BS102	English	CC-1A	5	5
BS103	Second Language	CC-2A	5	5
BS104	Optional - I Differential Calculus	DSC-1A	4 T + 2P = 6	4+1=5
BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
BS106	Optional - III	DSC-3A	4 T + 2P = 6	4+1=5
			30	27
SEMESTER-II				
BS201	Environmental Studies	AECC-2	2	2
BS202	English	CC-1B	5	5
BS203	Second Language	CC-2B	5	5
BS204	Optional - I Differential Equations	DSC-1B	4 T + 2P = 6	4+1=5
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5
BS206	Optional - III	DSC-3B	4 T + 2P = 6	4+1=5
			30	27

B.Sc. PROGRAMME

SECOND YEAR SEMESTER-III				
Code	Course Title	Course Type	HPW	Credits
BS301	A/B Logic & Sets/Theory of Equations	SEC-1	2	2
BS302	English	CC-1C	5	5
BS303	Second Language	CC-2C	5	5
BS304	Optional - I Real Analysis	DSC-1C	4 T + 2P = 6	4+1=5
BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
BS306	Optional - III	DSC-3C	4 T + 2P = 6	4+1=5
			30	27
SEMESTER-IV				
BS401	C/D Transportation & Game Theory/ Number Theory	SEC-2	2	2
BS402	English	CC-1D	5	5
BS403	Second Language	CC-2D	5	5
BS404	Optional - I Algebra	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5
BS406	Optional - III	DSC-3D	4 T + 2P = 6	4+1=5
			30	27

B.Sc. PROGRAMME

THIRD YEAR SEMESTER-V				
Code	Course Title	Course Type	HPW	Credits
B5501	E/F Probability and Statistics/Mathematical Modelling	SEC-3	2	2
B5502	Lattice Theory	GE-1	2 T	2
B5503	Optional - I Linear Algebra	DSC-1E	3 T + 2P = 5	3+1=4
B5504	Optional - II	DSC-2E	3 T + 2P = 5	3+1=4
B5505	Optional - III	DSC-3E	3 T + 2P = 5	3+1=4
B5506	Optional - I A/B/C 3D Geometry/ Integral Calculus	DSE-1E	3 T + 2P = 5	3+1=4
B5507	Optional - II A/B/C	DSE-2E	3 T + 2P = 5	3+1=4
B5508	Optional - III A/B/C	DSE-3E	3 T + 2P = 5	3+1=4
			34	28
SEMESTER-VI				
B5601	G/H Boolean Algebra/Graph Theory	SEC-4	2	2
B5602	Elements of Number Theory	GE-2	2 T	2
B5603	Optional - I Numerical Analysis	DSC-1F	3 T + 2P = 5	3+1=4
B5604	Optional - II	DSC-2F	3 T + 2P = 5	3+1=4
B5605	Optional - III	DSC-3F	3 T + 2P = 5	3+1=4
B5606	Optional - I A/B/C Complex Analysis/ Vector Calculus	DSE-1F	3 T + 2P = 5	3+1=4
B5607	Optional - II A/B/C	DSE-2F	3 T + 2P = 5	3+1=4
B5608	Optional - III A/B/C	DSE-3F	3 T + 2P = 5	3+1=4
			34	28
TOTAL Credits				164

**B.Sc. PHYSICS SYLLABUS UNDER CBCS SCHEME  
SCHEME OF INSTRUCTION**

<b>Semester</b>	<b>Paper [ Theory and Practical ]</b>	<b>Instructions Hrs/week</b>	<b>Marks</b>	<b>Credits</b>
<b>I sem</b>	<b>Paper – I : Mechanics</b>	<b>4</b>	<b>100</b>	<b>4</b>
	<b>Practicals – I : Mechanics</b>	<b>3</b>	<b>50</b>	<b>1</b>
<b>II sem</b>	<b>Paper – II: Waves and Oscillations</b>	<b>4</b>	<b>100</b>	<b>4</b>
	<b>Practicals – II : Waves and Oscillations</b>	<b>3</b>	<b>50</b>	<b>1</b>
<b>III sem</b>	<b>Paper – III : Thermodynamics</b>	<b>4</b>	<b>100</b>	<b>4</b>
	<b>Practicals – III : Thermodynamics</b>	<b>3</b>	<b>50</b>	<b>1</b>
<b>IV sem</b>	<b>Paper – IV : Optics</b>	<b>4</b>	<b>100</b>	<b>4</b>
	<b>Practicals – IV :Optics</b>	<b>3</b>	<b>50</b>	<b>1</b>
<b>V sem</b>	<b>Paper –V : Electromagnetism</b>	<b>3</b>	<b>100</b>	<b>3</b>
	<b>Practicals – V: Electromagnetism</b>	<b>3</b>	<b>50</b>	<b>1</b>
	<b>Paper – VI : Elective – I Solid state physics/ Quantum Mechanics and Applications</b>	<b>3</b>	<b>100</b>	<b>3</b>
	<b>Practicals – VI : Elective – I Practical Solid state physics/ Quantum Mechanics and Applications</b>	<b>3</b>	<b>50</b>	<b>1</b>
<b>VI sem</b>	<b>Paper – VII : Modern Physics</b>	<b>3</b>	<b>100</b>	<b>3</b>
	<b>Practical – VII : Modern Physics Lab</b>	<b>3</b>	<b>50</b>	<b>1</b>
	<b>Paper – VIII : Elective – II Basic Electronics/ Physics of Semiconductor Devices</b>	<b>3</b>	<b>100</b>	<b>3</b>
	<b>Practicals – VIII : Elective – II Practical Basic Electronics/ Physics of Semiconductor Devices</b>	<b>3</b>	<b>50</b>	<b>1</b>

**Total Credits**

**36**

## Syllabus for Computer Science

Proposed scheme for **B.Sc.** Programme under **Choice Based Credit System**

Code	Course Title	Course Type	HpW	Credits
<b>SEMESTER - I</b>				
BS106	Programming in C	DSC-3A	4T+2P=6	4 + 1 =5
<b>SEMESTER - II</b>				
BS206	Programming in C++	DSC-3B	4T+2P=6	4 + 1 =5
<b>SEMESTER - III</b>				
BS301	A: SciLab - 1	SEC-1	2T	2
	B: Boolean Algebra			
BS306	Data Structures	DSC-3C	4T+2P=6	4 + 1 =5
<b>SEMESTER - IV</b>				
BS401	C: SciLab - 2	SEC-2	2T	2
	D: Digital Logic			
BS406	Database Management Systems	DSC-3D	4T+2P=6	4 + 1 =5
<b>SEMESTER - V</b>				
BS501	Information Technologies -1	GE-1	2	2
BS502	E: Python - 1	SEC-3	2	2
	F: Computer Organization			
BS505	Programming in Java	DSC-3E	3T+2P=5	3 + 1 =4
BS506	Elective-A: Operating Systems	DSE-1E	3T+2P=5	3 + 1 =4
	Elective-B: Software Engineering	DSE-2E		
<b>SEMESTER - VI</b>				
BS601	Information Technologies -2	GE-2	2T	2
BS602	G: Python - 2	SEC-4	2T	2
	H: Information Security			
BS605	Computer Networks	DSC-3F	3T+2P=5	3 + 1 =4
BS606	Elective-A: PHP with MySQL	DSE-1F	3T+2P=5	3 + 1 =4
	Elective-B: Web Technologies	DSE-2F		
<b>Total Number of Credits</b>				<b>48</b>

## B.Sc.(M.S.CS) Course Structure Template

B.Sc. PROGRAMME

FIRST YEAR SEMESTER-I				
Code	Course Title	Course Type	HPW	Credits
BS101	Communication	AECC-1	2	2
BS102	English	CC-1A	5	5
BS103	Second Language	CC-2A	5	5
BS104	Optional - I Differential Calculus	DSC-1A	4 T + 2P = 6	4+1=5
BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
BS106	Optional - III	DSC-3A	4 T + 2P = 6	4+1=5
			30	27
SEMESTER-II				
BS201	Environmental Studies	AECC-2	2	2
BS202	English	CC-1B	5	5
BS203	Second Language	CC-2B	5	5
BS204	Optional - I Differential Equations	DSC-1B	4 T + 2P = 6	4+1=5
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5
BS206	Optional - III	DSC-3B	4 T + 2P = 6	4+1=5
			30	27

B.Sc. PROGRAMME

SECOND YEAR SEMESTER-III				
Code	Course Title	Course Type	HPW	Credits
BS301	A/B Logic & Sets/Theory of Equations	SEC-1	2	2
BS302	English	CC-1C	5	5
BS303	Second Language	CC-2C	5	5
BS304	Optional - I Real Analysis	DSC-1C	4 T + 2P = 6	4+1=5
BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
BS306	Optional - III	DSC-3C	4 T + 2P = 6	4+1=5
			30	27
SEMESTER-IV				
BS401	C/D Transportation & Game Theory/ Number Theory	SEC-2	2	2
BS402	English	CC-1D	5	5
BS403	Second Language	CC-2D	5	5
BS404	Optional - I Algebra	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5
BS406	Optional - III	DSC-3D	4 T + 2P = 6	4+1=5
			30	27

B.Sc. PROGRAMME

THIRD YEAR SEMESTER-V				
Code	Course Title	Course Type	HPW	Credits
B5501	E/F Probability and Statistics/Mathematical Modelling	SEC-3	2	2
B5502	Lattice Theory	GE-1	2 T	2
B5503	Optional - I Linear Algebra	DSC-1E	3 T + 2P = 5	3+1=4
B5504	Optional - II	DSC-2E	3 T + 2P = 5	3+1=4
B5505	Optional - III	DSC-3E	3 T + 2P = 5	3+1=4
B5506	Optional - I A/B/C 3D Geometry/ Integral Calculus	DSE-1E	3 T + 2P = 5	3+1=4
B5507	Optional - II A/B/C	DSE-2E	3 T + 2P = 5	3+1=4
B5508	Optional - III A/B/C	DSE-3E	3 T + 2P = 5	3+1=4
			34	28
SEMESTER-VI				
B5601	G/H Boolean Algebra/Graph Theory	SEC-4	2	2
B5602	Elements of Number Theory	GE-2	2 T	2
B5603	Optional - I Numerical Analysis	DSC-1F	3 T + 2P = 5	3+1=4
B5604	Optional - II	DSC-2F	3 T + 2P = 5	3+1=4
B5605	Optional - III	DSC-3F	3 T + 2P = 5	3+1=4
B5606	Optional - I A/B/C Complex Analysis/ Vector Calculus	DSE-1F	3 T + 2P = 5	3+1=4
B5607	Optional - II A/B/C	DSE-2F	3 T + 2P = 5	3+1=4
B5608	Optional - III A/B/C	DSE-3F	3 T + 2P = 5	3+1=4
			34	28
	TOTAL Credits			164

## Scheme of B.Sc. Statistics Semester wise Syllabus under CBCS 2016-19

Year	Semester	Paper	Title of the Theory Paper	Title of the Practical Paper	SEC	GE
<b>I</b>	I	I	Descriptive Statistics and Probability	Descriptive Statistics and Probability	----	--
	II	II	Probability Distributions	Probability Distributions	----	--
<b>II</b>	III	III	Statistical Methods	Statistical Methods	Concepts of Sequences and Random Variables	--
	IV	IV	Inference	Inference	Statistical Psychology and Education	--
<b>III</b>	V	V	Sampling Theory, Time Series, Index Numbers and Demand Analysis	<b>Practical Paper - V</b> <b>Section –A :</b> Sampling Theory and Time Series <b>Section –B : Elective-I: A / B / C</b> Practical's	Big Data Analysis	Basic Statistics - I
		VI	<b>Elective-I: A / B / C</b> A: Statistical Quality Control and Reliability B: Bio-Statistics – I C: Actuarial Statistics – I	<b>Practical Paper - VI</b> Statistical Practical's using MS – Excel		
	VI	VII	Design of Experiments, Vital Statistics, Official Statistics and Business Forecasting	<b>Practical Paper - VII</b> <b>Section –A :</b> Design of Experiments and Vital Statistics <b>Section –B : Elective-II: A / B / C</b> Practical's	Statistical techniques in Data Mining	Basic Statistics - II
		VIII	<b>Elective – II: A / B / C</b> A: Operations Research B: Bio-Statistics – II C: Actuarial Statistics – II	<b>Practical Paper - VIII</b> Statistical Practical's using MS – Excel and TORA		

SEC: Skill Enhancement Course

GE: Generic Elective: offered by the Department for other than Statistics Students

## Syllabus for Computer Science

Proposed scheme for **B.Sc.** Programme under **Choice Based Credit System**

Code	Course Title	Course Type	HpW	Credits
<b>SEMESTER - I</b>				
BS106	Programming in C	DSC-3A	4T+2P=6	4 + 1 =5
<b>SEMESTER - II</b>				
BS206	Programming in C++	DSC-3B	4T+2P=6	4 + 1 =5
<b>SEMESTER - III</b>				
BS301	A: SciLab - 1	SEC-1	2T	2
	B: Boolean Algebra			
BS306	Data Structures	DSC-3C	4T+2P=6	4 + 1 =5
<b>SEMESTER - IV</b>				
BS401	C: SciLab - 2	SEC-2	2T	2
	D: Digital Logic			
BS406	Database Management Systems	DSC-3D	4T+2P=6	4 + 1 =5
<b>SEMESTER - V</b>				
BS501	Information Technologies -1	GE-1	2	2
BS502	E: Python - 1	SEC-3	2	2
	F: Computer Organization			
BS505	Programming in Java	DSC-3E	3T+2P=5	3 + 1 =4
BS506	Elective-A: Operating Systems	DSE-1E	3T+2P=5	3 + 1 =4
	Elective-B: Software Engineering	DSE-2E		
<b>SEMESTER - VI</b>				
BS601	Information Technologies -2	GE-2	2T	2
BS602	G: Python - 2	SEC-4	2T	2
	H: Information Security			
BS605	Computer Networks	DSC-3F	3T+2P=5	3 + 1 =4
BS606	Elective-A: PHP with MySQL	DSE-1F	3T+2P=5	3 + 1 =4
	Elective-B: Web Technologies	DSE-2F		
<b>Total Number of Credits</b>				<b>48</b>

PROPOSED SCHEME FOR B.Sc. PROGRAMME  
UNDER CHOICE BASED CREDIT SYSTEM

**FIRST YEAR**

**SEMESTER-I**

**Paper-I: Microbial Diversity of Lower Plants**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS 104	Optional I	DSC I-A	4 T 2 P = 6	4 + 1 = 5

**SEMESTER-II**

**Paper-II: Bryophytes Pteridophytes, Gymnosperms and Palaeobotany**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS 201	Environmental Studies	AECC-2	2	2
BS204	Optional-I	DSC-1B	4 T + 2P = 6	4 + 1 = 5

**SECOND YEAR**

**SEMESTER-III**

**Paper-III: Taxonomy of Angiosperms and Medicinal Botany**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS304	Optional-I	DSC-IC	4 T + 2 P = 6	4 + 1 = 5

**SEMESTER-IV**

**Paper-IV: Plant Anatomy, Embryology and Palynology**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS404	Optional - I	DSC-ID	4 T + 2P = 6	4 + 1 = 5

**THIRD YEAR**

**SEMESTER-V**

**Paper-V: Cell Biology and Genetics**

**Elective-I: Ecology and Biodiversity / Elective II: Horticulture**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS 503	Optional-I	DSC - IE	3T + 2P = 5	3 + 1 = 4
BS 506	Optional I A/B	DSE - IE	3T + 2P = 5	3 + 1 = 4
BS 502	Economic Botany	GE-1	2	2

**SEMESTER-VI**

**Paper-VI: Plant Physiology**

**Elective-III: Tissue Culture and Biotechnology / Elective-IV: Seed Technology**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS 603	Optional-I	DSC - IF	3 T + 2P = 5	3 + 1 = 4
BS 606	Optional A/B	DSE - IF	3 T + 2P = 5	3 + 1 = 4
BS 602	Biodiversity and Human Welfare	GE-2	2	2

AECC: Ability Enhancement Compulsory Course, DSC: Discipline Specific Course,  
DSE : Discipline Specific Elective, GE: Generic Elective, HPW: Hours per Week.

# ZOOLOGY

## CURRICULUM FOR ZOOLOGY IN UNDER GRADUATE DEGREE PROGRAMME CBCS SYLLABUS SCHEDULE 2016 - 2017

Year	Semester	Paper	Title of the Paper	No. of Credits	Exam Hrs.	Max. Marks		
						I.A	End Exam	Total
I	I ✓	Core-I Theory	Animal Diversity-Invertebrates	3	3	20	40	60
		Core-I Practical	Animal Diversity-Invertebrates	2	3	-	40	40
	II ✓	Core-II Theory	Ecology, Zoogeography and Animal Behavior	3	3	20	40	60
		Core-II Practical	Ecology, Zoogeography and Animal Behavior	2	3	-	40	40
II	III ✓	Core-III Theory	Animal Diversity-Vertebrates and Developmental Biology	3	3	20	40	60
		Core-III Practical	Animal Diversity- Chordates and Developmental Biology	2	3	-	40	40
	IV ✓	Core-IV Theory	Cell Biology, Genetics and Evolution	3	3	20	40	60
		Core-IV Practical	Cell Biology, Genetics and Evolution	2	3	-	40	40
	V ✓	Core-V Theory	Physiology and Biochemistry	3	3	20	40	60
		Core-V Practical	Physiology and Biochemistry	2	3	-	40	40
III	V ✓	Elect-VI Theory	Applied Zoology/Entomology ✓	3	3	20	40	60
		Elect-VI Practical	Applied Zoology/Entomology ✓	2	3	-	40	40
	VI ✓	Core-VII Theory	Immunology and Animal Biotechnology	3	3	20	40	60
		Core-VII Practical	Immunology and Animal Biotechnology	2	3	-	40	40
	VIII	Open Elective I Theory	Medical Transcription	3	3	20	40	60
	VIII	Open Elective I Practical	Medical Transcription	2	3	-	40	40
	IX ✓	Elective-VIII Theory	Public Health and Hygiene/Aquatic Biology ✓	3	3	20	40	60
		Elective-VIII Practical	Public Health and Hygiene/Aquatic Biology ✓	2	3	-	40	40
	X ✓	Open Elective II Theory	Clinical Science	3	3	20	40	60
	X ✓	Open Elective II Practical	Clinical Science	2	3	-	40	40
				50				1000

*G. H. H. H.*

**Telangana State Council of Higher Education, Govt. of Telangana B.Sc., CBCS Common  
Core Syllabi for all Universities in Telangana  
PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN  
B.Sc., Chemistry**

<b>FIRST YEAR- SEMSTER I</b>				
<b>CODE</b>	<b>COURSE TITLE</b>	<b>COURSE TYPE</b>	<b>HPW</b>	<b>CREDITS</b>
BS 101	Communication	AECC-1	2	2
BS 102	English	CC-1A	5	5
BS 103	Second language	CC-2A	5	5
BS 104	Optional I	DSC-1A	4T+2P=6	4+1=5
BS 105	Optional II	DSC-2A	4T+2P=6	4+1=5
<b>BS 106</b>	<b>Optional III- Chemistry - I</b>	<b>DSC-3A</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course – I (Qualitative Analysis – I)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>FIRST YEAR- SEMSTER II</b>				
BS 201	Environmental studies	AECC-2	2	2
BS 202	English	CC-1B	5	5
BS 203	Second language	CC-2B	5	5
BS 204	Optional I	DSC-1B	4T+2P=6	4+1=5
BS 205	Optional II	DSC-2B	4T+2P=6	4+1=5
<b>BS 206</b>	<b>Optional III- Chemistry - II</b>	<b>DSC-3B</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - II (Qualitative Analysis – II)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER III</b>				
BS 301	<b>Safety Rules in Chemistry Laboratory and Lab Reagents</b>	<b>SEC-I</b>	2	2
BS 302	English	CC-1C	5	5
BS 303	Second language	CC-2C	5	5
BS 304	Optional I	DSC-1C	4T+2P=6	4+1=5
BS 305	Optional II	DSC-2C	4T+2P=6	4+1=5
<b>BS 306</b>	<b>Optional III- Chemistry - III</b>	<b>DSC-3C</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - III (Quantitative Analysis – I)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER IV</b>				
BS 401	<b>Remedial Methods for Pollution, Drinking Water and Soil Fertility</b>	<b>SEC-2</b>	2	2
BS 402	English	CC-1D	5	5
BS 403	Second language	CC-2D	5	5
BS 404	Optional I	DSC-1D	4T+2P=6	4+1=5
BS 405	Optional II	DSC-2D	4T+2P=6	4+1=5
<b>BS 406</b>	<b>Optional III- Chemistry - IV</b>	<b>DSC-3D</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - IV (Quantitative Analysis – II)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>

\* **Optional III Chemistry** AECC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course;  
DSC: Discipline Specific Course; GE: Generic Elective;

B.Sc., Chemistry, Iii Year, Cbcs Syllabus

**Telangana State Council Of Higher Education, Govt. of Telangana,  
B.Sc., CBCS Common Core Syllabi for All Universities in Telangana  
Proposed Scheme for Choice Based Credit System in  
B.Sc., Chemistry,  
Generic Elective-I (GE-I) and Generic Elective-II (GE-II) Courses for  
B.Sc. Non Chemistry/B.A/B.Com Students**

**THIRD YEAR- SEMSTER - V**

Code	Course Title	Course Type	HPW	Credits
BS 501	<b>Materials and their Applications</b>	<b>SEC-3</b>	<b>2</b>	<b>2</b>
BS 502	<b>Pharmaceuticals</b> (For B.Sc. Non Chemistry/B.A/B.Com Students)	<b>GE-1</b>	<b>2T</b>	<b>2</b>
BS 503	Optional –I	DSC-1E	3T+2P=5	3+1=4
BS 504	Optional – II	DSC-2E	3T+2P=5	3+1=4
BS 505	<b>Optional – III Chemistry - V</b>	<b>DSC-3E</b>	3T } = 5 2P }	3 } = 4 1 }
	<b>Laboratory Course (Organic Synthesis and TLC)</b>			
BS 506	Elective-A/B Optional – I	DSC-1E	3T+2P=5	3+1=4
BS 507	Elective-A/B Optional – II	DSC-2E	3T+2P=5	3+1=4
BS508A	Elective-A (Chemistry–VI) <b>Instrumental Methods of Analysis</b>	<b>DSC-3E</b>	3T } = 5 2P }	3 } = 4 1 }
BS508B	Elective-B (Chemistry – VI ) <b>Industrial Chemistry and Catalysis</b>			
	<b>Laboratory Course (Experiments in Physical Chemistry-I)</b>			
	<b>Total Credits</b>		<b>34</b>	<b>28</b>

**SEMSTER - VI**

BS 601	<b>Chemistry of Cosmetics and Food Processing</b>	<b>SEC-4</b>	<b>2</b>	<b>2</b>
BS 602	<b>Materials and Their Applications</b> (For B.Sc. Non Chemistry/B.A/B.Com Students)	<b>GE-2</b>	<b>2T</b>	<b>2</b>
BS 603	Optional – I	DSC-1F	3T+2P=5	3+1=4
BS 604	Optional – II	DSC-2F	3T+2P=5	3+1=4
BS 605	<b>Optional – III Chemistry - VII</b>	<b>DSC-3F</b>	3T } = 5 2P }	3 } = 4 1 }
	<b>Laboratory Course (Qualitative and Spectral Analysis of Organic Compounds)</b>			
BS 606	Elective-A/B Optional – I	DSC-1F	3T+2P=5	3+1=4
BS 607	Elective-A/B Optional – II	DSC-2F	3T+2P=5	3+1=4
BS 608A	Elective-A (Chemistry – VIII) <b>Medicinal Chemistry</b>	<b>DSC-3F</b>	3T } = 5 2P }	3 } = 4 1 }
BS 608B	Elective-B (Chemistry – VIII) <b>Agricultural and Fuel Chemistry</b>			
	<b>Laboratory Course (Experiments in Physical Chemistry-II)</b>			
			<b>34</b>	<b>28</b>
	<b>Total Credits</b>			<b>164</b>

\* **Optional III Chemistry,**

AECC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course; DSC: Discipline Specific Course; GE: Generic Elective

Year	Semester	DSC/GE/ DSE/SEC	Paper	Title of the Paper	Credits	Hours PW	
I	I	DSC*101	Paper - I	Micro Economics	5	5	
		AEC	AEC	Environmental Science/ Basic Computer kills	2	2	
	II	DSC*201	Paper - II	Macro Economics	5	5	
II		AEC	AECC	Environmental Science/ Basic Computer kills	2	2	
	III	DSE-301	Paper - III	Statistics for Economics	5	5	
		SEC-1	SEC-I	Computer Applications	2	2	
		SEC-2	SEC-II	Rural Development	2	2	
	IV	DSC*401	Paper - IV	Indian Economy	5	5	
		SEC-3	SEC-III	Data Analysis	2	2	
	SEC-4	SEC-IV	Entrepreneurship and Development	2	2		
III	V	GE**	Paper - I	Telangana Economy	4	4	
		DSE*501	Elective- A	Agricultural Economics	5	5	
		DSE*501	Elective - B	Public Economics	5	5	
		DSE*501	Elective - C	Economics of Environment	5	5	
	VI		DSE*601	Paper - A	International Economics	5	5
			DSE*601	Paper B	Development Economics	5	5
			DSE*601	Paper - C	Industrial Economics	5	5
			Project/Optional	Project/Optional	Financial Economics	4	4

\* DSC (Discipline Specific Course), SEC (Skill Enhancement Course) & DSE (Discipline Specific Elective) for Students of Economics.(PW) Per week.\*\* GE (Generic Elective) or Inter-Disciplinary Course for Students of Social Sciences other than Economics.

(Prof.B.Sudhakar Reddy)  
Chairman Board of Studies

## UNDERGRADUATE PROGRAMME IN PUBLIC ADMINISTRATION

### PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN B.A. PROGRAMME IN PUBLIC ADMINISTRATION

#### ***FIRST YEAR SEMESTER -I***

Code	Course Title	Course Type	HPW	Credits
BA 107	Basics of Public Administration	DSC	5	5

#### ***FIRST YEAR SEMESTER -II***

Code	Course Title	Course Type	HPW	Credits
BA 207	Development Dynamics and Emerging Trends	DSC	5	5

#### ***SECOND YEAR SEMESTER -III***

Code	Course Title	Course Type	HPW	Credits
BA 307	Union Administration	DSC	5	5

#### ***SECOND YEAR SEMESTER -IV***

Code	Course Title	Course Type	HPW	Credits
BA 407	Union Administration	DSC	5	5

#### ***THIRD YEAR SEMESTER -V***

Code	Course Title	Course Type	HPW	Credits
BA 502	Indian Constitution and Administration	GE	5+1	6
BA 507	Human Resources Management	DSC	4	4
BA508/ A	Rural Governance	DSE	4	4
BA508/ B	E-Governance- Concepts	DSE	4	4
BA 508/ C	Public Office Administration	DSE	4	4

#### ***THIRD YEAR SEMESTER -VI***

Code	Course Title	Course Type	HPW	Credits
BA602	Good Governance	GE	5+1	6
BA 607	Financial and Material Resources Management	DSC	4	4
BA608/ A	Urban Governance	DSE	4	4
BA608/ B	E-Governance- Case Studies	DSE	4	4
BA608/ C	Technology and Office Administration	DSE	4	4

# Osmania University

## Model

### Scheme of Instruction and Examination

#### B.A Political Science (Regular)

#### Choice Based Credit System (CBCS) Syllabus-w.e.f 2016-2017

Year	Semester	DSC/DSE/ GE/SEC	Paper	Title	Credits	Hours
I	I	DSC	Paper-I	Concepts, Theories and Institutions --Political Theory	5	5
	II	DSC	Paper-II	Concepts, Theories and Institutions --State Apparatus	5	5
II	III	DSC	Paper-III	Indian Government and Politics --Basic of Indian Constitution & Citizenship	5	5
		SEC	Paper-I	Communication Skills in English	2	2
	IV	DSC	Paper-IV	Indian Government and Politics --Government & Politics	5	5
		SEC	Paper-II	Disaster Management	2	2
III	V	DSC	Paper-V- (Compulsory)	Political Thought -Ancient & Medieval Political Thought	4	4
		DSE	Paper-I(A) (Optional)	International Relations -International Relations in 19 <sup>th</sup> & 20 <sup>th</sup> Century	4	4
			Paper-1 (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-III	Citizenship Rights, Duties and Laws		
		GE	Paper-I (Optional)	Contemporary Political Economy	5+1	6
	VI	DSC	Paper-VI (Compulsory)	Political Thought --Western & Indian Political Thought	4	4
		DSE	Paper-II (A) (Optional)	International Relations -International Relations in 19 <sup>th</sup> & 20 <sup>th</sup> Century	4	4
			Paper-II (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-IV	Legislative Practices and Procedures		
		GE	Paper-II (Optional)	Human Rights, Gender & Environment	5+1	6

-DSC (Discipline Specific Course)

-DSE (Discipline Specific Elective)

-GE (Generic/General Elective) or Interdisciplinary Course for Students of Social Sciences other than --  
Political Science (5 Credits + 1 Tutorial)

-SEC (Skill Enhancement Course)

**PSYCHOLOGY-CBCS –CORE COURSE STRUCTURE- 2016  
PROPOSED SCHEME FOR B.A. PROGRAMME**

YEAR	SEM-ESTER	TITLE OF THE THEORY PAPER & TYPE OF COURSE	CREDITS (Theory-T) 1 cr=1hr	PRACTICUM	CREDITS (Practicum-P) 1 cr = 2 hrs	TOTAL CREDITS
BA I Year	I	<b>General Psychology(DSC-1A)</b>	5	--	--	5
	II	<b>Cognitive and Behavioural Processes (DSC-1B)</b>	5	--	--	5
BA II Year	III	<b>Personality Theories and Assessment (DSC-1C)</b>	4	<b>Basics of Experimental Psychology</b>	1	5
		<b>Life Skills (SEC-1)</b>	2			2
	IV	<b>Statistics in Psychology (DSC-1D)</b>	4	<b>Experimentation on Behavioural Phenomenon</b>	1	5
		<b>Applications of Psychology in Professional Settings (SEC-2)</b>	2			2
BA III Year	V	<b>Social Psychology (DSC-1E)</b>	3	<b>Psychological Testing-1</b>	1	4
		<b>A. Adolescent Psychology B.Educational Psychology (DSE-1E)</b>	3	<b>Psychological Testing-2</b>	1	4
		<b>Enhancing Psychological Competencies-1 (GE-1E)</b>	2			2
		<b>Stress Management and Well Being (SEC-3)</b>	2			2
	VI	<b>Abnormal Psychology (DSC-1F)</b>	3	<b>Psychological Testing-3</b>	1	4
		<b>A.Health Psychology B. Cognitive Psychology (DSE-1F)</b>	3	<b>Psychological Testing-4</b>	1	4
		<b>Enhancing Psychological Competencies-2 (GE-1F)</b>	2			2
		<b>Health Behaviour and Lifestyle (SEC-4)</b>	2			2
		<b>PROJECT (PR-F) * (for 4 cr)</b>				
			<b>TOTAL CREDITS (excluding GE)</b>	<b>38</b>		<b>6</b>

**DSC: Discipline Specific Course- DSC 1A,1B,1C,1D,1E & 1E (includes Practicum)**

**DSE: Discipline Specific Elective- 1E & 1F**

**GE: Generic Elective: 1E & 1F**

**SEC: Skill Enhancement Course**

**PR\*: Project: PR-F ( In lieu of one theory paper from Semester VI)**

**COMMON CORE FOR UG PSYCHOLOGY- CBCS 2016**

## UNDERGRADUATE PROGRAMME IN PUBLIC ADMINISTRATION

### PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN B.A. PROGRAMME IN PUBLIC ADMINISTRATION

#### ***FIRST YEAR SEMESTER -I***

Code	Course Title	Course Type	HPW	Credits
BA 107	Basics of Public Administration	DSC	5	5

#### ***FIRST YEAR SEMESTER -II***

Code	Course Title	Course Type	HPW	Credits
BA 207	Development Dynamics and Emerging Trends	DSC	5	5

#### ***SECOND YEAR SEMESTER -III***

Code	Course Title	Course Type	HPW	Credits
BA 307	Union Administration	DSC	5	5

#### ***SECOND YEAR SEMESTER -IV***

Code	Course Title	Course Type	HPW	Credits
BA 407	Union Administration	DSC	5	5

#### ***THIRD YEAR SEMESTER -V***

Code	Course Title	Course Type	HPW	Credits
BA 502	Indian Constitution and Administration	GE	5+1	6
BA 507	Human Resources Management	DSC	4	4
BA508/ A	Rural Governance	DSE	4	4
BA508/ B	E-Governance- Concepts	DSE	4	4
BA 508/ C	Public Office Administration	DSE	4	4

#### ***THIRD YEAR SEMESTER -VI***

Code	Course Title	Course Type	HPW	Credits
BA602	Good Governance	GE	5+1	6
BA 607	Financial and Material Resources Management	DSC	4	4
BA608/ A	Urban Governance	DSE	4	4
BA608/ B	E-Governance- Case Studies	DSE	4	4
BA608/ C	Technology and Office Administration	DSE	4	4

# Osmania University

## Model

### Scheme of Instruction and Examination

#### B.A Political Science (Regular)

#### Choice Based Credit System (CBCS) Syllabus-w.e.f 2016-2017

Year	Semester	DSC/DSE/ GE/SEC	Paper	Title	Credits	Hours
I	I	DSC	Paper-I	Concepts, Theories and Institutions --Political Theory	5	5
	II	DSC	Paper-II	Concepts, Theories and Institutions --State Apparatus	5	5
II	III	DSC	Paper-III	Indian Government and Politics --Basic of Indian Constitution & Citizenship	5	5
		SEC	Paper-I	Communication Skills in English	2	2
	IV	DSC	Paper-IV	Indian Government and Politics --Government & Politics	5	5
		SEC	Paper-II	Disaster Management	2	2
III	V	DSC	Paper-V- (Compulsory)	Political Thought -Ancient & Medieval Political Thought	4	4
		DSE	Paper-I(A) (Optional)	International Relations -International Relations in 19 <sup>th</sup> & 20 <sup>th</sup> Century	4	4
			Paper-1 (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-III	Citizenship Rights, Duties and Laws		
		GE	Paper-I (Optional)	Contemporary Political Economy	5+1	6
	VI	DSC	Paper-VI (Compulsory)	Political Thought --Western & Indian Political Thought	4	4
		DSE	Paper-II (A) (Optional)	International Relations -International Relations in 19 <sup>th</sup> & 20 <sup>th</sup> Century	4	4
			Paper-II (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-IV	Legislative Practices and Procedures		
		GE	Paper-II (Optional)	Human Rights, Gender & Environment	5+1	6

-DSC (Discipline Specific Course)

-DSE (Discipline Specific Elective)

-GE (Generic/General Elective) or Interdisciplinary Course for Students of Social Sciences other than --  
Political Science (5 Credits + 1 Tutorial)

-SEC (Skill Enhancement Course)

**Departemnt of MATHEMATICS,OU**  
**Proposed Choice Based Credit System ( CBCS)**  
**M.Sc Mathematics**

**Semester -I**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	MM 101	I	Algebra	4	20	80	100	4
2. Core	MM 102	II	Analysis	4	20	80	100	4
3. Core	MM 103	III	Mathematical Methods	4	20	80	100	4
4. Core	MM 104	IV	Elementary Number Theory	4	20	80	100	4
5. Practical	MM 151	Practical	Algebra	4	....	50	50	2
6. Practical	MM 152	Practical	Analysis	4	....	50	50	2
7. Practical	MM 153	Practical	Mathematical Methods	4	....	50	50	2
8. Practical	MM 154	Practical	Elementary Number Theory	4	....	50	50	2
			<b>Total :</b>	<b>32</b>				<b>24</b>

**DEPARTMENT OF MATHEMATICS,OU**  
**Proposed Choice Based Credit System (CBCS)**  
**M.Sc Mathematics**

**Semester -II**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	MM 201	I	Advnaced Algebra	4	20	80	100	4
2. Core	MM 202	II	Advnaced Analysis	4	20	80	100	4
3. Core	MM 203	III	Theory of Ordinary differential equation	4	20	80	100	4
4. Core	MM 204	IV	Topology	4	20	80	100	4
5. Practical	MM 251	Practical	Advanced Algebra	4	....	50	50	2
6. Practical	MM 252	Practical	Advnaced Analysis	4	....	50	50	2
7. Practical	MM 253	Practical	Theory of Ordinary differential equation	4	....	50	50	2
8. Practical	MM 254	Practical	Topology	4	....	50	50	2
			<b>Total :</b>	<b>32</b>				<b>24</b>

**Departemnt of MATHEMATICS,OU**  
**Proposed Choice Based Credit System ( CBCS)**  
**M.Sc Mathematics**

**Semester -III**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	MM 301	I	Complex Analysis	4	20	80	100	4
2. Core	MM 302	II	Functional Analysis	4	20	80	100	4
Elective	MM 303 A MM 303 B MM 303 C	III	Discrete Mathematics Analytic Number Theory Differential Geometry	4	20	80	100	4
Elective	MM 304 A MM 304 B MM 304 C	IV	Operation Research Numerical Techniques Algebraic Number Theory	4	20	80	100	4
5. Practical	MM 351	Practical	Complex Analysis	4	....	50	50	2
6. Practical	MM 352	Practical	Functional Analysis	4	....	50	50	2
7. Practical	MM 353 A MM 353 B MM 353 C	Practical	Discrete Mathematics Analytic Number Theory Differential Geometry	4	....	50	50	2
8. Practical	MM 354 A MM 354 B MM 354 C	Practical	Operation Research Numerical Techniques Algebraic Number Theory	4	....	50	50	2
			<b>Total :</b>	<b>32</b>				<b>24</b>

**Departemnt of MATHEMATICS,OU**  
**Proposed Choice Based Credit System ( CBCS)**  
**M.Sc Mathematics**

**Semester -IV**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	MM 401	I	Advanced Complex Analysis	4	20	80	100	4
2. Core	MM 402	II	General Measure Theory	4	20	80	100	4
3. Elective	MM 403 A MM 403 B MM 403 C	III	Integral equations and Calculus of Variations Mechanics Finite Difference Method	4	20	80	100	4
4. Elective	MM 404 A MM 404 B MM 404 C	IV	Elementary Operator Theory Prime Number Theory Advanced Opeartion Research	4 OR	20	80	100	4 OR
4. Elective	MM 404 D	IV	Project	6	....	....	150	6
5. Practical	MM 451	Practical	Advanced Complex Analysis	4	....	50	50	2
6. Practical	MM 452	Practical	General Measure Theory	4	....	50	50	2
7. Practical	MM 453 A MM 453 B MM 453 C	Practical	Integral equations and Calculus of Variations Mechanics Finite Difference Method	4	....	50	50	2
8. Practical	MM 454 A MM 454 B MM 454 C	Practical	Elementary Operator Theory Prime Number Theory Advanced Opeartion Research	4	....	50	50	2
			<b>Total :</b>	<b>32</b>				<b>24</b>
9. Seminar			Seminar	2	....	.....	25	1

**Departemnt of MATHEMATICS,OU**  
**Proposed Choice Based Credit System ( CBCS)**  
**M.Sc Applied Mathematics**

**Semester -I**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	AM 101	I	Algebra	4	20	80	100	4
2. Core	AM 102	II	Analysis	4	20	80	100	4
3. Core	AM 103	III	Mathematical Methods	4	20	80	100	4
4. Core	AM 104	IV	Mechanics	4	20	80	100	4
5. Practical	AM 151	Practical	Algebra	4	....	50	50	2
6. Practical	AM 152	Practical	Analysis	4	....	50	50	2
7. Practical	AM 153	Practical	Mathematical Methods	4	....	50	50	2
8. Practical	AM 154	Practical	Mechanics	4	....	50	50	2
			<b>Total :</b>	<b>32</b>				<b>24</b>

**Departemnt of MATHEMATICS,OU**  
**Proposed Choice Based Credit System ( CBCS)**  
**M.Sc Applied Mathematics**

**Semester -II**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	AM 201	I	Advanced Algebra	4	20	80	100	4
2. Core	AM 202	II	Advanced Analysis	4	20	80	100	4
3. Core	AM 203	III	Complex Analysis	4	20	80	100	4
4. Core	AM 204	IV	Fluid Mechanics	4	20	80	100	4
5. Practicals	AM 251	Practical	Advanced Algebra	4	....	50	50	2
6. Practicals	AM 252	Practical	Advanced Analysis	4	....	50	50	2
7. Practicals	AM 253	Practical	Complex Analysis	4	....	50	50	2
8. Practicals	AM 254	Practical	Fluid Mechanics	4	....	50	50	2
			<b>Total :</b>	<b>32</b>				<b>24</b>

**Departemnt of MATHEMATICS,OU**  
**Proposed Choice Based Credit System ( CBCS)**  
**M.Sc Applied Mathematics**

**Semester -III**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core/Common	AM 301	I	Viscous Flows	4	20	80	100	4
2. Core/Common	AM 302	II	Finite Difference Methods	4	20	80	100	4
3. Elective	AM 303(A)	III(A)	Compressible Flows	4	20	80	100	4
	AM 303(B)	III(B)	Integral Transforms					
	AM 303(C)	III( C)	Differential Geometry					
4.Elective	AM 304(A)	IV(A)	Operations Research	4	20	80	100	4
	AM 304(B)	IV(B)	Numerical Techniques					
	AM 304 (C)	IV( C)	Dynamical Systems					
5. Practicals	AM 351	Practical	Viscous Flows	4	....	50	50	2
6. Practicals	AM 352	Practical	Finite Difference Methods	4	....	50	50	2
7. Practicals	AM 353(A)	Practical	Compressible Flows	4	....	50	50	2
	AM 353 (B)		Integral Transforms					
	AM 353 ( C)		Differential Geometry					
8. Practicals	AM 354(A)	Practical	Operations Research	4	....	50	50	2
	AM 354 (B)		Numerical Techniques					
	AM 354 ( C )		Dynamical Systems					
<b>Total :</b>				<b>32</b>	<b>80</b>	<b>520</b>	<b>625</b>	<b>24</b>

**Departemnt of MATHEMATICS,OU**  
**Proposed Choice Based Credit System ( CBCS)**  
**M.Sc Applied Mathematics**

**Semester -IV**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	AM 401	I	Advanced Complex Analysis	4	20	80	100	4
2. Core	AM 402	II	Finite Element Methods	4	20	80	100	4
3. Elective	AM 403(A)	III (A)	Integral Equations & Calculus of variations	4	20	80	100	4
	AM 403(B)	III (B)	MHD					
	AM 403(C)	III (C)	Bio-Mechanics					
4. Elective	AM 404(A)	IV(A)	Functional Analysis	4 OR 6	20 ....	80 ....	100 150	4 OR 6
	AM 404(B)	IV(B)	Discrete Mathematics					
	AM 404 (C)	IV(C)	Topology					
	AM 404 (D)	IV(D)	Project					
5. Practicals	AM 451	Practical	Advanced Complex Analysis	4	....	50	50	2
6. Practicals	AM 452	Practical	Finite Element Methods	4	....	50	50	2
7. Practicals	AM 453 (A)	Practical	Integral Equations & Calculus of variations	4	....	50	50	2
	AM 453 (B)		MHD					
	AM 453 ( C)		Bio - Mechanics					
8. Practicals	AM 454 (A)	Practical	Functional Analysis	4	....	50	50	2
	AM 454 (B)		Discrete Mathematics					
	AM 454 ( C)		Topology					
<b>Total :</b>				<b>32</b>	<b>80</b>	<b>520</b>	<b>600</b>	<b>24</b>
9. Seminar			Seminar	2	....	....	25	1



**MSc BIOTECHNOLOGY**  
**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**DEPARTMENT OF GENETICS & BIOTECHNOLOGY, OSMANIA UNIVERSITY**  
 Schedule for Instruction and Examination  
 (Proposed Scheme for Academic year 2016 onwards)

<b>SEMESTER – I</b>							
S No	Syllabus Ref No	Subject	Credits	Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 101 T	Cell Biology and Genetics	4	4	20	80	100
2.	BT 102 T	Biological chemistry	4	4	20	80	100
3.	BT 103 T	Microbiology	4	4	20	80	100
4.	BT 104 T	Statistics, laboratory management & safety, entrepreneurship	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 151 P	Cell Biology and Genetics	2	4		50	50
2.	BT 152 P	Biological chemistry	2	4		50	50
3.	BT 153 P	Microbiology	2	4		50	50
4.	BT 154 P	Biostatistics	2	4		50	50
		<b>Total</b>	<b>24</b>	<b>32</b>	<b>80</b>	<b>520</b>	<b>600</b>

<b>SEMESTER – II</b>							
S No	Syllabus Ref No	Subject	Credits	Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 201 T	Molecular Biology- The Genome	4	4	20	80	100
2.	BT 202 T	Molecular Biology- Genes to Proteins	4	4	20	80	100
3.	BT 203 T	Immunology	4	4	20	80	100
4.	BT 204 T	Microbial technology	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 251 P	Molecular Biology-The Genome	2	4		50	50
2.	BT 252 P	Molecular Biology- Genes to Proteins	2	4		50	50
3.	BT 253 P	Immunology	2	4		50	50
4.	BT 254 P	Microbial technology	2	4		50	50
		<b>Total</b>	<b>24</b>	<b>32</b>	<b>80</b>	<b>520</b>	<b>600</b>

T- Theory, P-Practical

**MSc BIOTECHNOLOGY II YEAR**  
**CBCS syllabus**

<b>SEMESTER- III</b>							
S No	Syllabus Ref No	Subject		Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 301 T	Recombinant DNA technology	4	4	20	80	100
2.	BT 302 T	Bioinformatics and its Applications	4	4	20	80	100
3.	BT 303 T	<b>Elective:</b> A. Advances in Plant Biotechnology (or) B. Food Biotechnology	4	4	20	80	100
4.	BT 304 T	<b>Elective:</b> A. Animal Biotechnology (or) B. Protein Engineering	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 351 P	Recombinant DNA technology	2	4		50	50
2.	BT 352 P	Bioinformatics and its Applications	2	4		50	50
3.	BT 353 P	A. Advances in Plant Biotechnology (or) B. Food Biotechnology	2	4		50	50
4.	BT 354 P	A. Animal Biotechnology (or) B. Protein Engineering	2	4		50	50
<b>Total</b>			<b>24</b>	<b>32</b>			<b>600</b>

<b>SEMESTER- IV</b>							
S No	Syllabus Ref No	Subject		Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 401 T	Bioprocess Engineering	4	4	20	80	100
2.	BT 402 T	Medical Biotechnology	4	4	20	80	100
3.	BT 403 T	<b>Elective:</b> A. Environmental Biotechnology (or) B. Biopharmacology	4	4	20	80	100
4.	BT 404 T	Project Work	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 451 P	Bioprocess Engineering	2	4		50	50
2.	BT 452 P	Medical Biotechnology	2	4		50	50
3.	BT 453 P	A. Environmental Biotechnology (or) B. Biopharmacology	2	4	-	50	50
4.	BT 454 P	Project thesis presentation	2	4		50	50
<b>Total</b>			<b>24</b>	<b>32</b>			<b>600</b>
<b>GRAND TOTAL</b>							<b>2400</b>

T-Theory, P-Practical

**DEPARTMENT OF CHEMISTRY**  
**OSMANIA UNIVERSITY**  
 (Effective from academic year 2016-2017 for Campus and Constituent colleges  
*[UNDER CBCS Scheme]*)

**Semester I**

	<b>Hrs. /week internal assessment</b>		<b>Semester exam</b>	<b>Total</b>	<b>Credits</b>
CH101T (*)	4	20 marks	80 marks	100 marks	4
CH102T (*)	4	20 marks	80 marks	100 marks	4
CH103T (*)	4	20 marks	80 marks	100 marks	4
CH104T (*)	4	20 marks	80 marks	100 marks	4
CH151P (IC LAB*)	6			75 marks	3
CH152P (OC LAB*) (4h + 2T)				50 marks	2
CH153P (PC LAB*)	6			75 marks	3
<b>Total</b>				<b>600 marks</b>	<b>24</b>

(\*Core= compulsory papers common to all students admitted to M.Sc Chemistry, OU)

**Semester II**

	<b>Hrs. /week internal assessment</b>		<b>Semester exam</b>	<b>Total</b>	<b>Credits</b>
CH201T (*)	4	20 marks	80 marks	100 marks	4
CH202T (*)	4	20 marks	80 marks	100 marks	4
CH203T (*)	4	20 marks	80 marks	100 marks	4
CH204T (*)	4	20 marks	80 marks	100 marks	4
CH251P (IC LAB*)	6			75 marks	3
CH252P (OC LAB*)	6			75 marks	3
CH253P (PC LAB*) (4h + 2T)				50 marks	2
<b>Total</b>				<b>600 marks</b>	<b>24</b>

(\*= compulsory papers common to all students admitted to M.Sc Chemistry, OU)

## M.Sc. CHEMISTRY (ORGANIC CHEMISTRY SPECIALISATION)

Syllabus for III and IV Semesters  
(for the batches admitted in academic year 2016 & later under CBCS pattern)  
*[Under Restructured CBCS Scheme]*  
*Grand total marks and credits (all 4 semesters) 2400 marks – 96 credits*

(Approved in the P.G.BOS meeting held on 01-07-2017)

### SEMESTER-III

Paper	Instruction Hrs/Week	Internal assessment marks*	Semester marks	Total marks	Total credits
CH(OC)301T	4	20	80	100	4
CH(OC)302T	4	20	80	100	4
CH(OC)303T	4	20	80	100	4
CH(OC)304T	4	20	80	100	4
CH(OC)351P	9	-	100	100	4
CH(OC)352P	9	-	100	100	4
<b>Total</b>				<b>600</b>	<b>24</b>

### SEMESTER - IV

Paper	Instruction Hrs/Week	Internal assessment marks*	Semester marks	Total marks	Total credits
CH(OC)401T	4	20	80	100	4
CH(OC)402T	4	20	80	100	4
CH(OC)403T	4	20	80	100	4
CH(OC)404T	4	20	80	100	4
CH(OC)451P	9	-	100	100	4
CH(OC)452P	9	-	100	100	4
<b>Total</b>				<b>600</b>	<b>24</b>

*\* 15 marks for the written test and 5 marks for the assignment*

**Grand total all 4 semesters: 2400 marks and 96 credits**

*[Under Restructured CBCS Scheme]*

III SEMESTER SYLLABUS	IV SEMESTER SYLLABUS
<p><b>Paper-I CH (OC) 301T: Synthetic Reagents, Advanced NMR, Conformational Analysis and ORD</b>                      OC-09: Synthetic Reagents-I                      OC-10: Synthetic Reagents-II                      OC-11: <sup>13</sup>C NMR and 2D NMR spectroscopy                      OC-12: Conformational analysis (Cyclic systems ) and ORD</p> <p><b>Paper II– CH (OC) 302T: Modern Organic Synthesis</b>                      OC-13: Asymmetric synthesis                      OC-14: Synthetic strategies                      OC-15: New Synthetic reactions                      OC-16: New techniques and concepts in organic synthesis</p> <p><b>Elective-3A</b></p> <p><b>Paper-III CH (OC) 303T (CB1): Bioorganic Chemistry</b>                      OC(CB1)-1: Carbohydrates                      OC(CB1)-2: Nucleic acids and Lipids                      OC(CB1)-3: Proteins and Enzymes                      OC(CB1)-4: Coenzymes and Vitamins</p> <p><b>Elective-3B:</b></p> <p><b>Paper-III CH (OC) 303T (CB2): Forensic Chemistry and Toxicology</b>                      OC(CB2)-5: Forensic chemistry- I                      OC(CB2)-6: Forensic chemistry- II                      OC(CB2)-7: Forensic Toxicology-I                      OC(CB2)-8: Forensic Toxicology-II</p> <p><b>Elective-4A</b></p> <p><b>Paper-IV CH (OC) 304T (CB3): Green chemistry and Organic materials</b>                      OC (CB3) - 9: Principles of Green chemistry                      OC (CB3) -10: Green Synthesis                      OC (CB3) -11: Organic nanomaterials                      OC (CB3) -12: Supramolecular chemistry</p> <p><b>Elective-4 B</b></p> <p><b>Paper-IV CH (OC) 304T (CB4): Pesticides</b>                      OC (CB4) - 13: Introduction to pesticides                      OC (CB4) - 14: Synthetic insecticides                      OC (CB4) - 15: Natural insecticides &amp; herbicides                      OC (CB4) - 16: Fungicides, and Rodenticides</p> <p><b>LABORATORY COURSES</b></p> <p><b>Paper-V CH (OC) 351P:</b> Synthesis of organic molecules, isolation of natural products &amp; TLC.  <b>Paper-VI CH (OC) 352P:</b> Separation and identification of organic compounds &amp; Column chromatography</p>	<p><b>Paper-I CH (OC) 401T: Drug Design and Drug Discovery</b>                      OC-17: Principles of Drug design and drug discovery                      OC-18: Lead modification and SAR Studies                      OC 19: QSAR studies and computer aided drug design                      OC 20: Combinatorial Synthesis</p> <p><b>Paper-II CH (OC) 402T: Drug synthesis and mechanism of action</b>                      OC-21: Drugs acting on metabolic process, cell wall and specific enzymes                      OC-22: Drugs acting on genetic material and immune system                      OC-23: Drugs acting on receptors and ion channels                      OC-24: Chiral drugs</p> <p><b>Elective-3A</b></p> <p><b>Paper-III CH (OC)-403T (CB1): Advanced Heterocyclic Chemistry</b>                      OC (CB1) 17: Non aromatic heterocyclics &amp; aromaticity                      OC (CB1) 18: Five and six membered heterocyclics with two hetero atoms                      OC (CB1) 19: Heterocyclics with more than two hetero atoms                      OC (CB1) 20: Larger ring and other heterocycles</p> <p><b>Elective-3B</b></p> <p><b>Paper-III CH (OC)-403T (CB2): Polymers , dyes and Pigments</b>                      OC (CB2) 21: Polymers- I                      OC (CB2) 22: Polymers- II                      OC (CB2) 23: Dyes-I                      OC (CB2) 24: Dyes-II and pigments</p> <p><b>Elective-4A (ID Paper)</b></p> <p><b>Paper-IV CH (OC) 404(CB3)T: Advanced Natural Products</b>                      OC(CB3)-25: Biosynthesis of natural products                      OC(CB3)-26: Structure determination of natural products -I                      OC(CB3)--27: Structure determination of natural products-II                      OC(CB3)--28: Total stereo selective synthesis of natural products.</p> <p><b>.Elective-4B (ID Paper)</b></p> <p><b>Paper-IV CH (OC) 404 (CB4) T: Biopharmaceutics and Pharmacodynamics</b>                      OC(CB4)-29 : Pharmacokinetics                      OC(CB4)-30 : Pharmacodynamics                      OC(CB4)-31 : Principles of Therapeutics                      OC(CB4)-32: Drug Interactions</p> <p><b>LABORATORY COURSES</b></p> <p><b>Paper-V CH (OC) 451P:</b> Spectroscopic identification of organic compounds &amp; practice of chemistry software programmes  <b>Paper- VI CH (OC) 452P:</b> Synthesis and analysis of drugs</p>

(Applicable to the batch of students admitted in the academic year 2016-17 and onwards)

M.Com. (CBCS)

FACULTY OF COMMERCE, OU

## DEPARTMENT OF COMMERCE, O.U.

### M.Com. COURSE STRUCTURE (CBCS)

#### FIRST SEMESTER

Sl. No.	Code	Title of the Paper	THPW	Credits	DESE	Marks			
						IA	Assign-ment	End-Sem. Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1.	Com 1 : Core – I	Managerial Economics	5	4	3 Hrs	15	5	80	100
2.	Com 2 : Core – II	Principles of Marketing	5	4	3 Hrs	15	5	80	100
3.	Com 3 : Core – III	OT & OB	5	4	3 Hrs	15	5	80	100
4.	Com 4 : Elective – I :	Specialization **	5	5	3 Hrs	15	5	80	100
5.	Com 5 : Elective–II :	Specialization **	5	5	3 Hrs	15	5	80	100
	Seminar : .....		<b>2</b>	<b>1</b>	-	-	-	25*	25
<b>Total</b>			<b>27</b>	<b>23</b>		<b>75</b>	<b>25</b>	<b>425</b>	<b>525</b>

\*25=15W+10PR

#### SECOND SEMESTER

Sl. No.	Code	Title of the Paper	THPW	Credits	DESE	Marks			
						IA	Assign-ment	End-Sem. Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
6.	Com 6: Core – I	Business Environment & Policy	5	4	3 Hrs	15	5	80	100
7.	Com 7: Core – II	Marketing Management	5	4	3 Hrs	15	5	80	100
8.	Com 8: Core – III	Human Resource Management	5	4	3 Hrs	15	5	80	100
9.	Com 9: Elective–I :	Specialization **	5	5	3 Hrs	15	5	80	100
10.	Com 10: Elective-II:	Specialization **	5	5	3 Hrs	15	5	80	100
	Seminar : .....		<b>2</b>	<b>1</b>	-	-	-	25*	25
<b>Total</b>			<b>27</b>	<b>23</b>	-	<b>75</b>	<b>25</b>	<b>425</b>	<b>525</b>

\*25=15W+10PR

*(Applicable to the batch of students admitted in the academic year 2016-17 and onwards)*

**M.Com. (CBCS)**

**FACULTY OF COMMERCE, OU**

**THIRD SEMESTER**

Sl. No.	Code	Title of the Paper	THPW	Credits	DESE	Marks			
						IA	Assignment	End-Sem. Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
11	Com: 11 Core – I	Research Methodology & Statistical Analysis	5	4	3 Hrs	15	5	80	100
12	Com: 12 Core – II	E-Commerce	5 (4T+2P)	4	3 Hrs	15 IA	35 LPE	50	100
13	Com: 13 Core – III	Cost Accounting and Control	5	4	3 Hrs	15	5	80	100
14	Com: 14 Elective-I:	Specialization **	5	5	3 Hrs	15	5	80	100
15	Com: 15 Elective - II	Specialization **	5	5	3 Hrs	15	5	80	100
16	ID Paper	Business Organization & Management	4	4	3 Hrs	15	5	80	100
	Seminar .....		<b>2</b>	<b>1</b>	-	-	-	25*	25
<b>Total</b>			<b>31</b>	<b>27</b>	-	<b>90</b>	<b>80</b>	<b>475</b>	<b>625</b>

\*25=15W+10PR

**FOURTH SEMESTER**

Sl. No.	Code	Title of the Paper	THPW	Credits	DESE	Marks			
						IA	Assignment	End-Sem. Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
17	Com:16 Core – I	Quantitative Techniques for Business Decisions	5	4	3 Hrs	15	5	80	100
18	Com:17 Core – II	Business and Corporate Taxation	5	4	3 Hrs	15	5	80	100
19	Com:18 Core – III	Strategic Management	5	4	3 Hrs	15	5	80	100
20	Com:19 Elective-I:	Specialization **	5	5	3 Hrs	15	5	80	100
21	Com:20 Elective-II:	Specialization **	5	5	3 Hrs	15	5	80	100
22	Com: 21	Project Work	8	4		-	-	50VV + 50D	100
	Seminar .....		<b>2</b>	<b>1</b>		-	-	25*	25
<b>Total</b>			<b>35</b>	<b>27</b>	-	<b>75</b>	<b>25</b>	<b>525</b>	<b>625</b>
<b>GRAND TOTAL</b>			<b>120</b>	<b>100</b>	-	<b>315</b>	<b>135</b>	<b>1850</b>	<b>2300</b>

\*25=15W+10PR

Inter Disciplinary (ID) Paper in Third Semester is offered to the Non-Commerce PG Students.

THWP= Teaching Hours Per Week; ESED=End-Semester Examination Duration; VV=Viva-Voce;

LPE = Lab Practical Examinations; D=Dissertation; T=Theory; P=Practical; W=Write-up;

PR=Presentation; DESE = Duration of End-Semester Examination.

(Applicable to the batch of students admitted in the academic year 2016-17 and onwards)

M.Com. (CBCS)

FACULTY OF COMMERCE, OU

**\*\* AREA OF SPECIALIZATION**

Sl. No.	Specialization	Semester-I	Semester-II	Semester-III	Semester-IV
<b>I</b>	<b>Finance (F)</b>	(1) <b>FM:</b> Financial Management (2) <b>AS:</b> Accounting Standards	(3) <b>IM:</b> Investment Management (4) <b>AMA:</b> Advanced Managerial Accounting	(5) <b>IFM:</b> International Financial Management (6) <b>SAPM:</b> Security Analysis and Portfolio Management	(7) <b>FS:</b> Financial Services (8) <b>FD:</b> Financial Derivatives
<b>II</b>	<b>Accounting (A)</b>	(1) <b>FM:</b> Financial Management (2) <b>AS:</b> Accounting Standards	(3) <b>IM:</b> Investment Management (4) <b>AMA:</b> Advanced Managerial Accounting	(5) <b>ACA:</b> Advanced Corporate Accounting (6) <b>FSA:</b> Financial Statement Analysis	(7) <b>ACAC:</b> Advanced Cost Accounting and Control (8) <b>M&amp;A:</b> Mergers & Acquisitions
<b>III</b>	<b>Marketing (M)</b>	(1) <b>RM:</b> Retail Marketing (2) <b>ASM:</b> Advertising & Sales Management	(3) <b>CRE:</b> Consumer Rights & Education (4) <b>MR:</b> Marketing Research	(5) <b>SM:</b> Services Marketing (6) <b>CB:</b> Consumer Behavior	(7) <b>SCM&amp;CRM:</b> Supply Chain Management & Customer Relationship Management (8) <b>IM:</b> International Marketing
<b>IV</b>	<b>Taxation (T)</b>	(1) <b>FM:</b> Financial Management (2) <b>AS:</b> Accounting Standards	(3) <b>IM:</b> Investment Management (4) <b>AMA:</b> Advanced Managerial Accounting	(5) <b>DT:</b> Direct Taxation (6) <b>IDT:</b> Indirect Taxation	(7) <b>Tax :</b> Tax planning (8) <b>IT:</b> International Taxation
<b>V</b>	<b>International Business (IB)</b>	(1) <b>FM:</b> Financial Management (2) <b>AS:</b> Accounting Standards	(3) <b>IM:</b> Investment Management (4) <b>AMA:</b> Advanced Managerial Accounting	(5) <b>IFM:</b> International Financial Management (6) <b>ITTP:</b> International Trade – Theory and Practice	(7) <b>IBE:</b> International Business Environment (8) <b>IM:</b> International Marketing
<b>VI</b>	<b>Insurance (I)</b>	(1) <b>FM:</b> Financial	(3) <b>IM:</b>	(5) <b>PPLHI:</b>	(7) <b>AS:</b> Actuarial

**MBA (Day) Structure and Syllabus As Per CBCS Guidelines Effective From 2016  
Year-I Semester –I**

Course Code	Course Title	Nature	Credits	HPW	Max Marks (CIE+SEE) 100
MB101	Management & Organizational Behaviour	Core	5	5	20+80
MB102	Accounting for Management	Core	5	5	20+80
MB103	Marketing Management	Core	5	5	20+80
MB104	<b>Open Elective-I</b> 1. Business Law & Ethics 2. Fundamentals of Technology Management 3. Managerial Economics	Open Elective	4	4	20+80
MB105	<b>Open Elective –II</b> 1. IT Applications for Management 2. Business Communication 3. Customer Relationship Management	Open Elective	4	4	20+80
MB106	Computer Practical	Practical	1	2	25
<b>Total credits at the end of I<sup>st</sup> Semester</b>			<b>24</b>	<b>25</b>	<b>525</b>

**Year-I Semester –II**

Course Code	Course Title	Nature	Credits	HPW	Max Marks (IA+UE) 100
MB201	Human Resources Management	Core	5	5	20+80
MB202	Financial Management	Core	5	5	20+80
MB203	Business Research Methods	Core	5	5	20+80
MB204	<b>Open Elective-III</b> 1. Economic Environment and Policy 2. Business Process Re-engineering 3. International Business 4. Financial Markets & Services	Open Elective	4	4	20+80
MB205	<b>Open Elective-IV</b> 1. Total Quality Management 2. Strategic Management Accounting 3. Start Up Management 4. Retail Management	Open Elective	4	4	20+80
MB206	Seminar	-----	1	2	Grade
<b>Semester Credits</b>			<b>24</b>	<b>25</b>	<b>500</b>
<b>Total credits at the end of II<sup>nd</sup> Semester</b>			<b>48</b>	<b>50</b>	<b>1025</b>

- HPW – Hours Per Week
- CIE – Continuous Internal Exam
- SEE – Semester End Exam

  
**CHAIRMAN**  
**BOS IN BUSINESS MANAGEMENT**  
**OSMANIA UNIVERSITY**  
**HYDERABAD - 500 007. (A.P.)**

**Revised MBA (Day) Course Structure and Syllabus As Per CBCS Guidelines with Effect From 2016  
Year-II – Semester-III**

Course Code	Course Title	Nature	Credits	HPW	Max Marks (IA+UE) 100
MB301	Operations Management	Core	5	5	20+80
MB302	E- Business	Core	5	5	20+80
MB303	Operations Research	Core	5	5	20+80
MB304	<b>Discipline Specific Elective- I</b> 1. Financial Risk Management(Finance) 2.Product & Brand Management (Marketing) 3.Compensation Management (Human Resource) 4.Decision Support Systems (System)	DSE	4	4	20+80
MB305	<b>Discipline Specific Elective – II</b> 1.International Finance(Finance) 2.Promotion & Distribution Management(Marketing) 3.Organization Development (Human Resource) 4. Business Analytics (Systems)	DSE	4	4	20+80
MB306	<b>Interdisciplinary Courses</b> Management Theory and Practice	ID	4	4	20+80
	<b>OR</b> Innovation Management (for all affiliated colleges including constituent colleges in lieu of ID Paper)	Non-ID			
MB307 *	<b>Tutorials</b> Project work Synopses		1	2	25
<b>Total credits at the end of III<sup>rd</sup> Semester</b>			<b>28</b>	<b>29</b>	<b>625</b>

**Year-II –Semester IV**

Course Code	Course Title	Nature	Credits	HPW	Max Marks (IA+UE) 100
MB401	Strategic Management	Core	5	5	20+80
MB402	Business Intelligence	Core	5	5	20+80
MB403	Supply Chain Management	Core	5	5	20+80
MB404	<b>DS Elective- III</b> 1.Investment Management (Finance) 2.Consumer Behaviour (Marketing) 3.Performance Management (Human Resource) 4.Data Base Management Systems (System)	DSE	4	4	20+80
MB405	<b>DS Elective- IV</b> 1.Banking & Insurance (Finance) 2.Services & Global Marketing (Marketing) 3.Talent & Knowledge Mgt (Human Resource) 4.Software Project Management (System)	DSE	4	4	20+80
MB406	Project Work	-----	1	2	Grade *
MB407	Comprehensive Viva - Voce	-----	1	--	Grade *
<b>Semester Credits</b>			<b>25</b>	<b>25</b>	<b>500</b>
<b>Total credits at the end of IV<sup>th</sup> and final Semester</b>			<b>49</b> <b>97</b>	<b>50</b> <b>100</b>	<b>2150</b>

- **ID – INTER DISCIPLINARY**                      \* **Evaluation will be done for 100 marks,**
- **DSE – Discipline Specific Elective**                      **which will be converted to equivalent grades.**

**\* Project Work Synopsis:- Student must present briefly the research methodology of the project topic he intends to submit in IV semester as project report.**

**SCHEME OF INSTRUCTION**  
**MCA (MASTER OF COMPUTER APPLICATIONS)**  
**Proposed from the Academic year 2016-2017 [ CBCS ]**

**MCA I Year**

**SEMESTER – I**

S. No	Course Code	Course Title	Scheme of Examination		L	T	P/Dr	Hrs/Wk	Credits
			CIE	SEE					
1.	PC 101 IT	Discrete Mathematics	30	70	3	1	-	4	3
2.	BS 101 MT	Probability & Statistics	30	70	3	1	-	4	3
3.	PC 102 IT	Computer Programming and Problem Solving	30	70	4	0	-	4	4
4.	PC 103 IT	Elements of Information Technology	30	70	3	1	-	4	3
5.	HS 101 CM	Economic Analysis	30	70	3	1	-	4	3
6.	MC 106 EG	English	30	70	3	1	-	4	3
<b>PRACTICALS</b>									
6.	PC 151 IT	Programming Lab I (C Programming Lab)	25	50	-	-	4	4	2
7.	PC 152 IT	Programming Lab II (IT Workshop)	25	50	-	-	4	4	2
<b>Total</b>			<b>230</b>	<b>520</b>	<b>16</b>	<b>4</b>	<b>8</b>	<b>32</b>	<b>23</b>

**SCHEME OF INSTRUCTION**  
**MCA (MASTER OF COMPUTER APPLICATIONS)**  
**Proposed from the Academic year 2016-2017 [ CBCS ]**

**MCA I Year**

**SEMESTER - II**

S. No	Course Code	Course Title	Scheme of Examination		L	T	P	Hrs/Wk	Credits
			CIE	SEE					
1.	HS 201 CM	Accounting & Financial Management	30	70	3	1	-	4	3
2.	PC 201 IT	Principles of Object Oriented Programming using Java	30	70	4	-	-	4	4
3.	PC 202 IT	Management Information Systems	30	70	3	1	-	4	3
4.	PC 203 IT	C++ and Data Structures	30	70	3	1	-	4	3
5.	PC 204 IT	Computer Organization	30	70	3	1	-	4	3
6.	HS 202 EG	Communication Skills	30	70	3	1	-	4	3
<b>PRACTICALS</b>									
6.	PC 251 IT	Programming Lab – III (OOP Lab)	25	50	-	-	4	4	2
7.	PC 252 IT	Programming Lab – IV (C++ Programming Lab)	25	50	-	-	4	4	2
<b>Total</b>			<b>230</b>	<b>520</b>	<b>16</b>	<b>4</b>	<b>8</b>	<b>32</b>	<b>23</b>

**SCHEME OF INSTRUCTION**  
**MCA (MASTER OF COMPUTER APPLICATIONS)**  
**With effect from the Academic year 2016-2017**

**MCA II Year**

**SEMESTER – I**

S. No	Syllabus Ref. No.	Subject	Scheme of Instruction		Scheme of Examination		
			Periods per week		Duration in Hours	Maximum Marks	
			L/T	D/P		Univ. Exam	Sessionals
1.	CS 701	Software Engineering	4	-	3	80	20
2.	CS 702	Database Management Systems	4	-	3	80	20
3.	CS 703	Design & Analysis of Algorithms	4	-	3	80	20
4.	CS 704	Operating Systems	4	-	3	80	20
5.	CS 705	Operations Research	4	-	3	80	20
<b>PRACTICALS</b>							
6.	CS 731	Programming Lab V (DBMS Lab)	-	3	3	50	25
7.	CS 732	Programming Lab VI (OS Lab)	-	3	3	50	25
<b>Total</b>			<b>20</b>	<b>6</b>	<b>-</b>	<b>500</b>	<b>150</b>

**SCHEME OF INSTRUCTION**  
**MCA (MASTER OF COMPUTER APPLICATIONS)**  
**With effect from the Academic year 2016-2017**

**MCA II Year**

**SEMESTER – II**

S. No	Syllabus Ref. No.	Subject	Scheme of Instruction		Scheme of Examination		
			Periods per week		Duration in Hours	Maximum Marks	
			L/T	D/P		Univ. Exam	Sessionals
1.	CS 751	Data Warehousing and Data Mining	4	-	3	80	20
2.	CS 752	Computer Networks	4	-	3	80	20
3.	CS 753	Unix Programming	4	-	3	80	20
4.	CS 754	Web Programming	4	-	3	80	20
5.	<b>Elective – I (Any One)</b>						
	CS 755	Computational Intelligence	4	-	3	80	20
	CS 756	Distributed Systems	4	-	3	80	20
	CS 757	Information Retrieval Systems	4	-	3	80	20
<b>PRACTICALS</b>							
6.	CS 781	Programming Lab – VII (Unix & Network Prog. Lab)	-	3	3	50	25
7.	CS 782	Programming Lab – VIII (Web Prog. & Data Mining Lab)	-	3	3	50	25
<b>Total</b>			<b>20</b>	<b>6</b>	<b>-</b>	<b>500</b>	<b>150</b>

**SCHEME OF INSTRUCTION AND EXAMINATION**  
**M.C.A III<sup>rd</sup> YEAR**  
**FACULTY OF INFORMATION TECHNOLOGY**

**SEMESTER – I**

Sl. No.	Syllabus Ref. No.	SUBJECT	Scheme of Instruction		Scheme of Examination		
			Periods per week		Duration In Hours	Maximum Marks	
			L/T	D/P		Univ. Exam	Sessionals
<b>THEORY</b>							
1	CS 801	Information Security	4	-	3	80	20
2	CS 802	Middleware Technologies	4	-	3	80	20
3	CS 803	Object Oriented System Development	4	-	3	80	20
4		<b>Elective – II (One of the following)</b>	4	-	3	80	20
	CS 804	Cloud Computing					
	CS 805	Electronic Commerce					
	CS 806	Human Computer Interaction					
	CS 807	Software Reuse Techniques					
	CS 808	Soft Computing					
	CS 809	XML & Web Services					
5		<b>Elective – II (One of the following)</b>	4	-	3	80	20
	CS 810	Mobile Computing					
	CS 811	Software Testing					
	CS 812	System Administration					
	CS 813	Rich Internet Applications					
	CS 814	Software Project Management					
	CS 815	Research Methodology					
<b>PRACTICALS</b>							
1	CS 831	Programming Lab IX- OOSD Lab	-	3	3	50	25
2	CS 832	Programming Lab X- Middleware Technologies Lab	-	3	3	50	25
3	CS 833	Seminar	-	3	3	-	25
		<b>TOTAL</b>	<b>20</b>	<b>9</b>	<b>-</b>	<b>500</b>	<b>175</b>

WITH EFFECT FROM THE ACADEMIC YEAR 2014-2015

**SCHEME OF INSTRUCTION AND EXAMINATION  
MCA III<sup>rd</sup> YEAR**

**FACULTY OF INFORMATION TECHNOLOGY**

**SEMESTER – II**

SI. No	Syllabus Ref. No	Subject	Scheme of Instruction		Scheme of Examination		
			Periods per week		Dura- tion in hrs	Maximum Marks	
			L/T	D/P		Univ- Exam	Sessi- onals
1.	CS 851	Project Seminar	-	3	-	-	25
2.	CS 852	Project	-	6	-	Gr*	50

\*Projects are evaluated with Viva Voce examination and the following grades are awarded:

**Excellent/Very Good/Good/Satisfactory/ Not Satisfactory**

In case of Not Satisfactory, the candidates has to redo the project and submit at the time of next semester examination.

**Department of Mathematics**  
**Osmania University**  
**M.Sc. [Computer Science]**  
**Course under Choice Based Credit System**

**SEMESTER – I**

Paper	Code	Paper Title	HpW	Marks	Credits
I	CS101T	Advanced Java Programming	4	20+80 =100	4
II	CS102T	Operating Systems	4	20+80 =100	4
III	CS103T	Software Engineering	4	20+80 =100	4
IV	CS104T	Discrete Mathematics	4	20+80 =100	4
V	CS105P	Advanced Java Lab	6	75	3
VI	CS106P	Operating Systems Lab	6	75	3
VII	CS107P	Software Engineering Lab	4	50	2
<b>Total</b>			<b>32</b>	<b>600</b>	<b>24</b>

**SEMESTER – II**

Paper	Code	Paper Title	HpW	Marks	Credits
I	CS201T	Programming in Python	4	20+80 =100	4
II	CS202T	Computer Networks	4	20+80 =100	4
III	CS203T	Design and Analysis of Algorithms	4	20+80 =100	4
IV	CS204T	Automata Theory	4	20+80 =100	4
V	CS205P	Python Lab	6	75	3
VI	CS206P	Computer Networks Lab	6	75	3
VII	CS207P	Design and Analysis of Algorithms Lab	4	50	2
<b>Total</b>			<b>32</b>	<b>600</b>	<b>24</b>

**Department of Mathematics**  
**Osmania University**  
**M.Sc. [Computer Science]**  
**Course under Choice Based Credit System**

**SEMESTER – III**

Paper	Code	Paper Title	HpW	Marks	Credits
I	CS301T	Programming in C#	4	20+80 =100	4
II	CS302T	Compiler Design	4	20+80 =100	4
III	<b>Elective</b> CS303T(A)	Network Security	4	20+80 =100	4
	CS303T(B)	Big Data Analytics			
IV	<b>Elective</b> CS304T(A)	Object Oriented Analysis and Design	4	20+80 =100	4
	CS304T(B)	Data Mining			
V	CS305P	C# Lab	6	75	3
VI	CS306P	Compiler Design Lab	6	75	3
VII	<b>Elective</b> CS307P(A)	Network Security Lab	4	50	2
	CS307P(B)	Big Data Analytics Lab			
<b>Total</b>			<b>32</b>	<b>600</b>	<b>24</b>

**SEMESTER – IV**

Paper	Code	Paper Title	HpW	Marks	Credits
I	CS401T	Computer Organization	4	20+80 =100	4
II	CS402T	Cloud Computing	4	20+80 =100	4
III	<b>Elective</b> CS403T(A)	Mobile Computing	4	20+80 =100	4
	CS403T(B)	Distributed Systems			
IV	<b>Elective</b> CS404T(A)	Artificial Intelligence	4	20+80 =100	4
	CS404T(B)	Internet of Things			
V	CS405P	Project Work	16	200	8
<b>Total</b>			<b>32</b>	<b>600</b>	<b>24</b>

**DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY, HYDERABAD**

**M. Sc. (Physics) and M.Sc. (Appl. Electronics) Courses under CBCS  
(with effect from the academic year 2016 –2017)**

**Semester –I**

SI.No	Sub.Code	Paper No.	Subject	Instruc-tions. Hrs/Week	Credits	Max. Marks
<b>THEORY</b>						
01	PAE 101 T	I	Mathematical Physics	4	4	100*
02	PAE 102 T	II	Classical Mechanics	4	4	100*
03	PAE 103 T	III	Quantum mechanics - I	4	4	100*
04	PAE 104 T	IV	Solid State Physics	4	4	100*
<b>PRACTICALS</b>						
05	PAE 151 P	V	C - Programming Lab	4	2	100
06	PAE 152 P	VI	Electronics Lab	4	2	100
07	PAE 153 P	VII	Heat & Acoustics Lab	4	2	100
08	PAE 154 P	VIII	Optics Lab	4	2	100
			Total:		24	800

**\* Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. There shall be no internal assessment examinations for practicals. Practical Examinations will be conducted at the end of each semester.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**. Part –A consists of EIGHT short notes questions, carrying 4 marks each. The student has to answer all the questions. Part –B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks.

**DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY, HYDERABAD**

**M. Sc. (Physics) and M.Sc. (Appl. Electronics) Courses under CBCS  
(with effect from the academic year 2016 –2017)**

**Semester –II**

Sl.No	Sub.Code	Paper No.	Subject	Instruc-tions.	Credits	Max. Marks
<b>THEORY</b>						
01	PAE 201 T	I	Electromagnetic Theory	4	4	100*
02	PAE 202 T	II	Statistical Mechanics	4	4	100*
03	PAE 203 T	III	Quantum Mechanics - II	4	4	100*
04	PAE 204 T	IV	Electronics	4	4	100*
<b>PRACTICALS</b>						
05	PAE 251 P	V	C- Programming Lab	4	2	100
06	PAE 252 P	VI	Electronics Lab	4	2	100
07	PAE 253 P	VII	Heat & Acoustics Lab	4	2	100
08	PAE 254 P	VIII	Optics Lab	4	2	100
			<b>Total:</b>		24	800

**\* Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. There shall be no internal assessment examinations for practicals. Practical Examinations will be conducted at the end of each semester.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**. Part –A consists of EIGHT short notes questions, carrying 4 marks each. The student has to answer all the questions. Part –B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks.

**DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY**  
**REVISED SYLLABUS FOR M.Sc (PHYSICS )**  
**III SEMESTER**

With effect from the academic year 2016 -2017 onwards

S.No	Paper code	Paper	Paper title
1.	P301T	Paper I	Modern Optics
2	P302T	Paper II	Advanced solid state physics
<b>Solid state physics (SSP)</b>			
3	P303T/SSP	Paper III	Band Theory & electrical Properties
4	P304A/T/SSP	Paper IVA	Physics of phonons and structural phase transitions
5	P304B/T/SSP	Paper IVB	Crystal Physics and physical properties
<b>Materials Science (MS)</b>			
6	P303T/MS	Paper III	Mechanical Properties of materials
7	P304A/T/MS	Paper IVA	Thin films and their properties
8	P304B/T/MS	Paper IVB	Metal and Alloys
<b>Electronic Instrumentation (EI)</b>			
9	P303T/EI	Paper III	Electronic Instrumentation
10	P304A/T/EI	Paper IVA	Digital logic circuits
11	P304B/T/EI	Paper IVB	Microprocessors, DSP & interfacing
<b>Nano Science(NS)</b>			
12	P303T/NS	Paper III	Carbon nano tubes and applications
13	P304A/T/NS	Paper IVA	Synthesis and characterization of nano materials
14	P304B/T/NS	Paper IVB	Properties of nano materials
<b>Electronic communication (EC)</b>			
15	P303T/EC	Paper III	8051 Microcontroller and applications
16	P304A/T/EC	Paper IVA	Data Computer communications- I
17	P304B/T/EC	Paper IVB	Digital transmission techniques and information theory
<b>Biophysics (BP)</b>			
18	P303T/BP	Paper III	Molecular Biophysics
19	P304A/T/BP	Paper IVA	Physico-chemical techniques in Biophysics
20	P304B/T/BP	Paper IVB	Medical Biophysics
<b>Microwaves (MW)</b>			
21	P303T/MW	Paper III	Transmission lines – microwave passive devices
22	P304A/T/MW	Paper IVA	Microwave (active) devices and circuits
23	P304B/T/MW	Paper IVB	Information theory and computer communications
<b>Condensed Matter Physics (CMP)</b>			
24	P303T/CMP	Paper III	Electrical transport phenomena in solids
25	P304A/T/CMP	Paper IVA	Physics of Phonons and structural phase transitions
26	P304B/T/CMP	Paper IVB	Crystal Physics and physical properties

<b>Opto-Electronics (OE)</b>			
27	P303T/OE	Paper III	Introduction to optoelectronics
28	P304A/T/OE	Paper IVA	Optoelectronic devices
29	P304B/T/OE	Paper IVB	Laser Physics and applications
<b>Applied Electronics (AE)</b>			
30	P301T/AE	Paper I	Digital system design
31	P302T/AE	Paper II	Digital signal processing and digital signal processors
32	P303T/AE	Paper III	Data communication and networking
33	P304A/T/AE	Paper IVA	Optical fiber and mobile communications
34	P304B/T/AE	Paper IVB	Electronic instrumentation

### **Practical**

35	P305P	Paper V	General Physics lab-I (Common to all specializations)
36	P306P	Paper VI	General Physics lab-II (Common to all specializations)
37	P307P	Paper VII	Special Lab - I
38	P308P	Paper VIII	Special Lab - II

### **Practical (Applied Electronics)**

35	P305P/AE	Paper V	Lab-I
36	P306P/AE	Paper VI	Lab-II
37	P307P/AE	Paper VII	Lab-III
38	P308P/AE	Paper VIII	Lab-IV

<b>Details of credits and marks</b>	
Number instruction hours per each theory paper per week	4
Number of credits for each theory paper	4
Maximum marks for each theory paper	100( 80 semester exam + 20 internal evaluation)
Number instruction hours per each practical paper per week	16 ( 3 x 5 + 1 Tutorial )
Number credits per each practical paper	2
Total Credits per semester	24

**DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY**  
**REVISED SYLLABUS FOR M.Sc. (PHYSICS )**  
**IV SEMESTER**

**With effect from the academic year 2016 -2017 onwards**

S.No	Paper code	Paper	Paper title
1.	P401T	Paper I	Nuclear Physics
2	P402T	Paper II	Spectroscopy
<b>Solid State Physics(SSP)</b>			
3	P403T/SSP	Paper III	Optical Phenomena in solids
4	P404A/T/SSP	Paper IVA	Resonance Phenomena in solids
5	P404B/T/SSP	Paper IVB	Studies on reduced dimensionality in solids
<b>Materials Science (MS)</b>			
6	P403T/MS	Paper III	Electronic Materials and devices
7	P404A/T/MS	Paper IVA	Engineering Materials
8	P404B/T/MS	Paper IVB	Advanced Materials
<b>Electronics Instrumentation (EI)</b>			
9	P403T/EI	Paper III	Instrumentation for measurement and data transmission
10	P404A/T/EI	Paper IVA	Embedded systems and their applications
11	P04B/T/EI	Paper IVB	Process control instrumentation
<b>Nano Science (NS)</b>			
12	P403T/NS	Paper III	Nano composites
13	P404A/T/NS	Paper IVA	Nano Sensors and Nano devices
14	P404B/T/NS	Paper IVB	Nano Photonics and Nano technology in energy conversion and storage
<b>Electronics Communications (EC)</b>			
15	P403T/EC	Paper III	Mobile cellular communications
16	P404A/T/EC	Paper IVA	Data and Computer communications -II
17	P404B/T/EC	Paper IVB	Optical fiber communications
<b>Bio Physics (BP)</b>			
18	P403T/BP	Paper III	Cell and membrane biophysics
19	P404A/T/BP	Paper IVA	Radiation Biophysics
20	P404B/T/BP	Paper IVB	Biophysical Techniques in medicine
<b>Microwaves (MW)</b>			
21	P403T/MW	Paper III	Antennas and radars
22	P404A/T/MW	Paper IVA	Communication theory
23	P404B/T/MW	Paper IVB	Signal conditioning
<b>Condensed Matter Physics (CMP)</b>			
24	P403T/CMP	Paper III	Optical Phenomena on solids
25	P404A/T/CMP	Paper IVA	Resonance Phenomena in solids
26	P404B/T/CMP	Paper IVB	Semiconductor devices and nano materials

<b>Opto-Electronics (OE)</b>			
27	P403T/OE	Paper III	Fiber Optics
28	P404A/T/OE	Paper IVA	Fiber Optic communication systems
29	P404B/T/OE	Paper IVB	Fiber optic communication technology
<b>Applied Electronics (AE)</b>			
30	P401T/AE	Paper I	Digital system design using VHDL
31	P402T/AE	Paper II	Microcontroller and applications
32	P403T/AE	Paper III	Control systems
33	P404A/T/AE	Paper IVA	Microwave systems
34	P404B/T/AE	Paper IVB	Local area networks & TCP/IP protocols

## Practical

35	P405P	Paper V	General Physics lab-I (Common to all specializations)
36	P406P	Paper VI	General Physics lab-II (Common to all specializations)
37	P407P	Paper VII	Special Lab - I
38	P408P	Paper VIII	Special Lab - II

## Practical (Applied Electronics)

35	P405P/AE	Paper V	Lab-I
36	P406P/AE	Paper VI	Lab-II
37	P407P/AE	Paper VII	Lab-III
38	P408P/AE	Paper VIII	Lab-IV

<b>Details of credits and marks</b>	
Number instruction hours per each theory paper per week	4
Number of credits for each theory paper	4
Maximum marks for each theory paper	100( 80 semester exam + 20 internal evaluation)
Number instruction hours per each practical paper per week	16 ( 3 x 5 + 1 Tutorial )
Number credits per each practical paper	2
Total Credits per semester	24

# ఉస్మానియా విశ్వవిద్యాలయం, తెలుగు శాఖ

## ఎం.ఏ., (తెలుగు) పాఠ్య ప్రణాళిక

### సెమిస్టర్ - 1

- 101. సంప్రదాయ సాహిత్యం - పాఠ్యాంశాలు
- 102. ప్రాచీన సాహిత్య చరిత్ర (15వ శతాబ్దం వరకు)
- 103. భారతీయ అలంకార శాస్త్రం
- 104(ఎ). బాల వ్యాకరణం
- 104(బి). ప్రౌఢ వ్యాకరణం
- 105(ఎ). తెలంగాణ చరిత్ర - సంస్కృతి
- 105(బి). తెలుగు నాటకం

### సెమిస్టర్ - 3

- 301. ఆధునిక కవిత్వం - పాఠ్యాంశాలు
- 302. భాషాశాస్త్ర పరిచయం
- 303. జానపద విజ్ఞానం
- 304(ఎ). తెలుగు పరిశోధన
- 304(బి). కథానిక - పాఠ్యాంశాలు
- 305. ఇంటర్ డిసిప్లినరీ పేపర్  
లేదా
- 305 (ఎ). బమ్మెర పోతన (ప్రత్యేక అధ్యయనం)
- 305 (బి). వచన సాహిత్యం

### సెమిస్టర్ - 2

- 201. సంప్రదాయ సాహిత్యం - పాఠ్యాంశాలు
- 202. ప్రాచీన సాహిత్య చరిత్ర (16-19వ శతాబ్దం)
- 203. ఆధునిక సాహిత్య విమర్శ
- 204(ఎ). ఛందస్సు - అలంకారాలు
- 204(బి). తెలుగు జర్నలిజం
- 205(ఎ). సంస్కృత సాహిత్య పరిచయం
- 205(బి). తెలుగు సాహిత్య ప్రక్రియలు

### సెమిస్టర్ - 4

- 401. ఆధునిక కవిత్వ వికాసం
- 402. తెలుగు భాషా పరిణామం
- 403. గిరిజన విజ్ఞానం
- 404(ఎ). తెలంగాణ సాహిత్య వైతాళికులు
- 404(బి). భారతీయ సాహిత్య వైతాళికులు
- 405(ఎ). నవల - పాఠ్యాంశాలు
- 405(బి). ప్రాజెక్ట్

### పరీక్షా విధానం

- + ప్రతి సెమిస్టర్లో 4,5 పేపర్లు ఐచ్ఛికాంశాలు. వీటిలో ఏదో ఒకటి విద్యార్థి ఎన్నుకోవాలి.
- + 305 ఇంటర్ డిసిప్లినరీ పేపర్ ఎం.ఏ., (తెలుగు) కాకుండా ఇతర సబ్జెక్టు వారికి ఉద్దేశించబడింది.
- ఎం.ఏ., తెలుగు విద్యార్థులు ఇతర సబ్జెక్టుల్లో ఏదో ఒకటి ఎన్నుకొని పరీక్ష రాయవలసి ఉంటుంది.
- ఈ పద్ధతి అమలు చేయని చోట 305(ఎ), 305 (బి), లలో ఏదో ఒకటి ఎన్నుకోవాలి.

#### ప్రతి సెమిస్టర్లో మొదటి మూడు పేపర్లకు :

- 1. 5 సంక్షిప్త సమాధానాలు (ఛాయిస్ లేదు)  $5 \times 4 = 20$
- 2. 5 వ్యాస రూప సమాధానాలు (ఇంటర్నల్ ఛాయిస్)  $5 \times 12 = 60$

#### ప్రతి సెమిస్టర్లో ఐచ్ఛికాంశాలకు (4,5 పేపర్లకు) :

- 1. 4 సంక్షిప్త సమాధానాలు (ఛాయిస్ లేదు)  $4 \times 5 = 20$
- 2. 4 వ్యాస రూప సమాధానాలు (ఇంటర్నల్ ఛాయిస్)  $4 \times 15 = 60$

- + 15 మార్కులకు ప్రతి సెమిస్టర్లో ప్రతి పేపర్కు ఇంటర్నల్ అసెస్మెంట్ పరీక్షలు రెండు విడతలుగా ఉంటుంది. వీని సరాసరిని బట్టి మార్కులు నిర్ణయిస్తారు.
- + 5 మార్కులు ప్రతి సెమిస్టర్లో ప్రతి పేపర్కు అసైన్మెంట్స్ రాసి ఇవ్వాల్సి ఉంటుంది.
- + 80 మార్కులకు ప్రతి సెమిస్టర్లో ప్రతి పేపర్కు పరీక్ష రాయాల్సి ఉంటుంది.

**DEPARTMENT OF COMMERCE, O.U.**

*Structure of B.Com (Computer Application) (CBCS) for Osmania University, Hyderabad. (w.e.f. Academic Year 2016-17)*

**B.COM (Computer Applications) PROGRAMME****FIRST YEAR:****SEMESTER-I**

Sl.No.	Code	Course Title	Course Type	HPW	Credits
(1)	(2)	(3)	(4)	(5)	(6)
1.	BC101	A/B/C/D	AECC-1	2	2
2.	BC102	English	CC-1A	5	5
3.	BC103	Second Language	CC-2A	5	5
4.	BC104	Financial Accounting - I	DSC-1A	5	5
5.	BC105	Business Economics	DSC-2A	5	5
6.	BC106	Business Organization	DSC-3A	4	4
7.	BC107	Information Technology	DSC-4A	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>

**SEMESTER-II**

8.	BC201	A/B/C/D	AECC-2	2	2
9.	BC202	English	CC-1B	5	5
10.	BC203	Second Language	CC-2B	5	5
11.	BC204	Financial Accounting - II	DSC-1B	5	5
12.	BC205	Managerial Economics	DSC-2B	5	5
13.	BC206	Principles of Management	DSC-3B	4	4
14.	BCC207	Relational Database Management Systems	<b>DSE-4B</b>	<b>3T+2P</b>	<b>4</b>
		<b>Total</b>		<b>31</b>	<b>30</b>

**SECOND YEAR:****SEMESTER-III**

15.	BC301	Principles of Insurance	SEC-1	2	2
16.	BC302	English	CC-1C	5	5
17.	BC303	Second Language	CC-2C	5	5
18.	BC304	Advanced Accounting	DSC-1C	5	5
19.	BC305	Income Tax-I	DSC-2C	5	5
20.	BC306	Business Statistics-I	DSC-3C	4	4
21.	BCC307	Programming with C	<b>DSC-4C</b>	<b>3T+2P</b>	<b>4</b>
		<b>Total</b>		<b>31</b>	<b>30</b>

**SEMESTER-IV**

22.	BC401	Practice of Life Insurance	SEC-2	2	2
23.	BC402	English	CC -1D	5	5
24.	BC403	Second Language	CC-2D	5	5
25.	BC404	Corporate Accounting	DSC-1D	5	5
26.	BC405	Income Tax-II	DSC-2D	5	5
27.	BC406	Business Statistics-II	DSC-3D	4	4
28.	BCC407	Objective Oriented Programming with C++	<b>DSC-4D</b>	<b>3T+2P</b>	<b>4</b>
		<b>Total</b>		<b>31</b>	<b>30</b>

**DEPARTMENT OF COMMERCE, O.U.**

Structure of B.Com (Computers ) (CBCS) for Osmania University, Hyderabad.

(w.e.f. Academic Year 2016-17)

**B.COM (Computers) PROGRAMME**

<b>FIRST YEAR:</b>					
<b>SEMESTER-I</b>					
Sl.No.	Code	Course Title	Course Type	HPW	Credits
(1)	(2)	(3)	(4)	(5)	(6)
1.	BC101	A/B/C/D	AECC-1	2	2
2.	BC102	English	CC-1A	5	5
3.	BC103	Second Language	CC-2A	5	5
4.	BC104	Financial Accounting - I	DSC-1A	5	5
5.	BC105	Business Economics	DSC-2A	5	5
6.	BC106	Business Organization	DSC-3A	4	4
7.	BC107	Information Technology	DSC-4A	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-II</b>					
8.	BC201	A/B/C/D	AECC-2	2	2
9.	BC202	English	CC-1B	5	5
10.	BC203	Second Language	CC-2B	5	5
11.	BC204	Financial Accounting - II	DSC-1B	5	5
12.	BC205	Managerial Economics	DSC-2B	5	5
13.	BC206	Principles of Management	DSC-3B	4	4
14.	BCC207	Management Information System	DSC-4B	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SECOND YEAR:</b>					
<b>SEMESTER-III</b>					
15.	BC301	Principles of Insurance	SEC-1	2	2
16.	BC302	English	CC-1C	5	5
17.	BC303	Second Language	CC-2C	5	5
18.	BC304	Advanced Accounting	DSC-1C	5	5
19.	BC305	Income Tax-I	DSC-2C	5	5
20.	BC306	Business Statistics-I	DSC-3C	4	4
21.	BCC307	Programming with C	DSC-4C	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-IV</b>					
22.	BC401	Practice of Life Insurance	SEC-2	2	2
23.	BC402	English	CC -1D	5	5
24.	BC403	Second Language	CC-2D	5	5
25.	BC404	Corporate Accounting	DSC-1D	5	5
26.	BC405	Income Tax-II	DSC-2D	5	5
27.	BC406	Business Statistics-II	DSC-3D	4	4
28.	BCC407	Objective Oriented Programming with C++	<b>DSE-4D</b>	<b>3T+2P</b>	<b>5</b>
		<b>Total</b>		<b>31</b>	<b>30</b>

**DEPARTMENT OF COMMERCE,  
OSMANIA UNIVERSITY, HYDERABAD.  
STRUCTURE OF **B.COM (COMPUTERS)** DEGREE COURSE  
(w.e.f. ACADEMIC YEAR 2009-'10)**

<b>FIRST YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
101	FINANCIAL ACCOUNTING	6 (5+1)	3 Hours	70T + 30P = 100
102	BUSINESS ECONOMICS	4 (3+1)	3 Hours	70T + 30P = 100
103	BUSINESS ORGANISATION & MANAGEMENT	5 (4+1)	3 Hours	70T + 30P = 100
104	FUNDAMENTALS OF INFORMATION TECHNOLOGY	5 (4+1)	3 Hours	70T + 30P = 100
105	FUNDAMENTALS OF "C"	4 (3+1)	3 Hours	70T + 30P = 100
<b>SECOND YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
201	ADVANCED ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
202	BUSINESS STATISTICS	5 (4+1)	3 Hours	70T + 30P = 100
203	FINANCIAL SERVICES – BANKING & INSURANCE	5 (4+1)	3 Hours	70T + 30P = 100
204	TAXATION	5 (4+1)	3 Hours	70T + 30P = 100
205	RELATIONAL DATABASE MANAGEMENT SYSTEMS (RDBMS)	5 (3+2)	3 Hours	70T + 30P = 100
<b>THIRD YEAR</b>				
301	CORPORATE ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
302	E-COMMERCE (wef 20011-'12)	5 (3+2)	3 Hours	70T + 30P = 100
303	BUSINESS LAW	5 (4+1)	3 Hours	70T + 30P = 100
304	AUDITING	5 (4+1)	3 Hours	70T + 30P = 100
305	ELECTIVE: PAPER – I	5 (4+1)	3 Hours	70T + 30P = 100
306	ELECTIVE: PAPER – II	5 (4+1)	3 Hours	70T + 30P = 100
307	WEB PROGRAMMING	5 (3+2)	3 Hours	70T + 30P = 100

**NOTE:**

1. 70 MARKS ARE ALLOCATED FOR THEORY EXAM AND 30 MARKS ARE ALLOCATED FOR THE COMPUTER / COMMERCE LAB PRACTICALS.
2. ONE HOUR OF THEORY CLASS IS EQUAL TO TWO COMPUTER/COMMERCE LAB HOURS.
3. PATTERN OF QUESTION PAPER FOR 70 MARKS AND 30 MARKS OF PRACTICAL EXAMINATION IS GIVEN AT THE END.
4. STRUCTURE OF ELECTIVES IS GIVEN IN THE FOLLOWING PAGE, FROM WHICH A STUDENT SHOULD OPT 2 PAPERS OF ANY ONE ELECTIVE.

**B.Com (COMPUTERS)  
THRID YEAR- ELECTIVES  
(Code 305 & 306)**

<b>Code</b>	<b>TITLE OF THE ELECTIVE</b>	<b>Papers</b>
E-I	INSURANCE	I) 305: Life Insurance II) 306: Non-Life Insurance
E-II	BANKING	I) 305: Banking in India II) 306: Computer Applications in Banking
E-III	ACCOUNTANCY - II	I) 305: Cost Accounting II) 306: Management Accounting & Control
E-IV	RETAILING	I) 305: Retail Management II) 306: Retail Marketing & CRM
E-V	TAXATION	I) 305: Direct Taxes II) 306: Indirect Taxes
E-VI	FINANCE	I) 305: Financial Management II) 306: Micro-credit and Foreign Trade Finance
E-VII	MARKETING	I) 305: Principles of Marketing II) 306: Rural Marketing
E-VIII	SECRETARIAL PRACTICE & OFFICE MANAGEMENT	I) 305: Secretarial Practice II) 306: Office Management
E-IX	COMPUTER APPLICATIONS-II	I) 305: Fundamentals of C++ II) 306: Fundamentals of Java
E-X	BUSINES MATHEMATICS	I) 305: Business Mathematics-I II) 306: Business Mathematics-II

**DEPARTMENT OF COMMERCE, O.U.**  
**Structure of B.Com (General) (CBCS) for Osmania University, Hyderabad.**  
 (w.e.f. Academic Year 2016-17)

**B.COM (General) PROGRAMME**

<b>FIRST YEAR:</b>					
<b>SEMESTER-I:</b>					
Sl.No.	Code	Course Title	Course Type	HPW	Credits
(1)	(2)	(3)	(4)	(5)	(6)
1.	BC101	A/B/C/D	AECC-1	2	2
2.	BC102	English	CC-1A	5	5
3.	BC103	Second Language	CC-2A	5	5
4.	BC104	Financial Accounting - I	DSC-1A	5	5
5.	BC105	Business Economics	DSC-2A	5	5
6.	BC106	Business Organization	DSC-3A	4	4
7.	BC107	Information Technology	DSC-4A	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-II:</b>					
8.	BC201	A/B/C/D	AECC-2	2	2
9.	BC202	English	CC-1B	5	5
10.	BC203	Second Language	CC-2B	5	5
11.	BC204	Financial Accounting - II	DSC-1B	5	5
12.	BC205	Managerial Economics	DSC-2B	5	5
13.	BC206	Principles of Management	DSC-3B	4	4
14.	BC207	Foreign Trade	DSC-4B	4	4
		<b>Total</b>		<b>30</b>	<b>30</b>
<b>SECOND YEAR:</b>					
<b>SEMESTER-III:</b>					
15.	BC301	Principles of Insurance	SEC-1	2	2
16.	BC302	English	CC-1C	5	5
17.	BC303	Second Language	CC-2C	5	5
18.	BC304	Advanced Accounting	DSC-1C	5	5
19.	BC305	Income Tax-I	DSC-2C	5	5
20.	BC306	Business Statistics-I	DSC-3C	4	4
21.	BC307	Entrepreneurial Development & Business Ethics	DSC-4C	4	4
		<b>Total</b>		<b>30</b>	<b>30</b>
<b>SEMESTER-IV:</b>					
22.	BC401	Practice of Life Insurance	SEC-2	2	2
23.	BC402	English	CC -1D	5	5
24.	BC403	Second Language	CC-2D	5	5
25.	BC404	Corporate Accounting	DSC-1D	5	5
26.	BC405	Income Tax-II	DSC-2D	5	5
27.	BC406	Business Statistics-II	DSC-3D	4	4
28.	BC407	Financial Statement Analysis	DSC-4D	4	4
		<b>Total</b>		<b>30</b>	<b>30</b>

**DEPARTMENT OF COMMERCE,  
OSMANIA UNIVERSITY, HYDERABAD.  
STRUCTURE OF **B.COM (GENERAL)** DEGREE COURSE  
w.e.f. ACADEMIC YEAR 2008-'09**

<b>FIRST YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
<del>101</del>	<del>FINANCIAL ACCOUNTING</del>	<del>6 (5+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>102</del>	<del>BUSINESS ECONOMICS</del>	<del>4 (3+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>103</del>	<del>BUSINESS ORGANISATION &amp; MANAGEMENT</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>104</del>	<del>FUNDAMENTALS OF INFORMATION TECHNOLOGY</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<b>SECOND YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
<del>201</del>	<del>ADVANCED ACCOUNTING</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>202</del>	<del>BUSINESS STATISTICS</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>203</del>	<del>FINANCIAL SERVICES - BANKING &amp; INSURANCE</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>204</del>	<del>TAXATION</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<b>THIRD YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
301	CORPORATE ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
302	COST & MANAGEMENT ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
303	BUSINESS LAW	5 (4+1)	3 Hours	70T + 30P = 100
304	AUDITING	5 (4+1)	3 Hours	70T + 30P = 100
305	ELECTIVE: PAPER - I	5 (4+1)	3 Hours	70T + 30P = 100
306	ELECTIVE: PAPER - II	5 (4+1)	3 Hours	70T + 30P = 100

**NOTE:**

1. 70 MARKS ARE ALLOCATED FOR THEORY EXAM AND 30 MARKS ARE ALLOCATED FOR THE COMPUTER / COMMERCE LAB PRACTICALS.
2. ONE HOUR OF THEORY CLASS IS EQUAL TO TWO COMPUTER/COMMERCE LAB HOURS.
3. PATTERN OF QUESTION PAPER FOR 70 MARKS AND 30 MARKS OF PRACTICAL EXAMINATION IS GIVEN AT THE END.
4. STRUCTURE OF ELECTIVES IS GIVEN IN THE FOLLOWING PAGE, FROM WHICH A STUDENT SHOULD OPT 2 PAPERS OF ANY ONE ELECTIVE.

**B.Com (GENERAL)  
THRID YEAR - ELECTIVES  
(Code 305 & 306)**

<b>Code</b>	<b>TITLE OF THE ELECTIVE</b>	<b>Papers</b>
E-I	INSURANCE	I) 305: Life Insurance II) 306: Non-Life Insurance
E-II	BANKING	I) 305: Banking in India II) 306: Computer Applications in Banking
E-III	ACCOUNTANCY - I	I) 305: Advanced Corporate Accounting II) 306: Management Accounting
E-IV	RETAILING	I) 305: Retail Management II) 306: Retail Marketing & CRM
E-V	TAXATION	I) 305: Direct Taxes II) 306: Indirect Taxes
E-VI	FINANCE	I) 305: Financial Management II) 306: Micro-credit and Foreign Trade Finance
E-VII	MARKETING	I) 305: Principles of Marketing II) 306: Rural Marketing
E-VIII	SECRETARIAL PRACTICE & OFFICE MANAGEMENT	I) 305: Secretarial Practice II) 306: Office Management
E-IX	COMPUTER APPLICATIONS-I	I) 305: Database Management System II) 306: Electronic Commerce
E-X	BUSINES MATHEMATICS	I) 305: Business Mathematics-I II) 306: Business Mathematics-II

## B.Sc. Course Structure Template

<b>B.Sc. PROGRAMME</b>	<b>FIRST YEAR SEMESTER-I</b>				
	<b>Code</b>	<b>Course Title</b>	<b>Course Type</b>	<b>HPW</b>	<b>Credits</b>
	BS101	Communication	AECC-1	2	2
	BS102	English	CC-1A	5	5
	BS103	Second Language	CC –2A	5	5
	BS104	Optional - I <b>Differential Calculus</b>	DSC-1A	4 T + 2P = 6	4+1=5
	BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
	BS106	Optional – III	DSC-3A	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-II</b>				
	BS201	Environmental Studies	AECC-2	2	2
	BS202	English	CC-1B	5	5
	BS203	Second Language	CC –2B	5	5
BS204	Optional - I <b>Differential Equations</b>	DSC-1B	4 T + 2P = 6	4+1=5	
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5	
BS206	Optional – III	DSC-3B	4 T + 2P = 6	4+1=5	
			30	27	
<b>B.Sc. PROGRAMME</b>	<b>SECOND YEAR SEMESTER-III</b>				
	BS301	A/B <b>Logic &amp; Sets/Theory of Equations</b>	SEC-1	2	2
	BS302	English	CC-1C	5	5
	BS303	Second Language	CC-2C	5	5
	BS304	Optional - I <b>Real Analysis</b>	DSC-1C	4 T + 2P = 6	4+1=5
	BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
	BS306	Optional – III	DSC-3C	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-IV</b>				
	BS401	C/D <b>Transportation &amp; Game Theory/ Number Theory</b>	SEC-2	2	2
	BS402	English	CC -1D	5	5
	BS403	Second Language	CC-2D	5	5
	BS404	Optional - I <b>Algebra</b>	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5	
BS406	Optional – III	DSC-3D	4 T + 2P = 6	4+1=5	
			30	27	

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	<del>Differential Equations &amp; Solid Geometry</del>	4	3	<del>3 hours</del>	<del>100+50</del>
2	II	<del>Abstract Algebra &amp; Real Analysis</del>	4	3	<del>3 hours</del>	<del>100+50</del>
3	III	<del>Linear Algebra and Vector Calculus</del>	3	3	<del>3 hours</del>	<del>100+50</del>
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**B.Sc. PHYSICS SYLLABUS UNDER CBCS SCHEME  
SCHEME OF INSTRUCTION**

Semester	Paper [ Theory and Practical ]	Instructions Hrs/week	Marks	Credits
I sem	Paper – I : Mechanics	4	100	4
	Practicals – I : Mechanics	3	50	1
II sem	Paper – II: Waves and Oscillations	4	100	4
	Practicals – II : Waves and Oscillations	3	50	1
III sem	Paper – III : Thermodynamics	4	100	4
	Practicals – III : Thermodynamics	3	50	1
IV sem	Paper – IV : Optics	4	100	4
	Practicals – IV :Optics	3	50	1
V-sem	<del>Paper – V : Electromagnetism</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practicals – V: Electromagnetism</del>	<del>3</del>	<del>50</del>	<del>1</del>
	<del>Paper – VI : Elective – I Solid state physics/ Quantum Mechanics and Applications</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practicals – VI : Elective – I Practical Solid state physics/ Quantum Mechanics and Applications</del>	<del>3</del>	<del>50</del>	<del>1</del>
VI sem	<del>Paper – VII : Modern Physics</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practical – VII : Modern Physics Lab</del>	<del>3</del>	<del>50</del>	<del>1</del>
	<del>Paper – VIII : Elective – II Basic Electronics/ Physics of Semiconductor Devices</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practicals – VIII : Elective – II Practical Basic Electronics/ Physics of Semiconductor Devices</del>	<del>3</del>	<del>50</del>	<del>1</del>

Total Credits

36

**DEPARTMENT OF PHYSICS**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (PHYSICS)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	<del>Theory-I</del>	<del>Mechanics and Waves and Oscillations</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-I</del>	<del>Mechanics and Waves and Oscillations</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	<del>Theory-II</del>	<del>Thermodynamics and Optics</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-II</del>	<del>Thermodynamics and Optics</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Electricity, Magnetism and Electronics	3 Hours	100
	Practical-III	Electricity, Magnetism and Electronics	3 Hours	50
	Theory-IV	Modern Physics	3 Hours	100
	Practical-IV	Modern Physics	3 Hours	50

**Telangana State Council of Higher Education, Govt. of Telangana B.Sc., CBCS Common  
Core Syllabi for all Universities in Telangana  
PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN  
B.Sc., Chemistry**

<b>FIRST YEAR- SEMSTER I</b>				
<b>CODE</b>	<b>COURSE TITLE</b>	<b>COURSE TYPE</b>	<b>HPW</b>	<b>CREDITS</b>
BS 101	Communication	AECC-1	2	2
BS 102	English	CC-1A	5	5
BS 103	Second language	CC-2A	5	5
BS 104	Optional I	DSC-1A	4T+2P=6	4+1=5
BS 105	Optional II	DSC-2A	4T+2P=6	4+1=5
<b>BS 106</b>	<b>Optional III- Chemistry - I</b>	<b>DSC-3A</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course – I (Qualitative Analysis – I)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>FIRST YEAR- SEMSTER II</b>				
BS 201	Environmental studies	AECC-2	2	2
BS 202	English	CC-1B	5	5
BS 203	Second language	CC-2B	5	5
BS 204	Optional I	DSC-1B	4T+2P=6	4+1=5
BS 205	Optional II	DSC-2B	4T+2P=6	4+1=5
<b>BS 206</b>	<b>Optional III- Chemistry - II</b>	<b>DSC-3B</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - II (Qualitative Analysis – II)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER III</b>				
BS 301	<b>Safety Rules in Chemistry Laboratory and Lab Reagents</b>	<b>SEC-I</b>	2	2
BS 302	English	CC-1C	5	5
BS 303	Second language	CC-2C	5	5
BS 304	Optional I	DSC-1C	4T+2P=6	4+1=5
BS 305	Optional II	DSC-2C	4T+2P=6	4+1=5
<b>BS 306</b>	<b>Optional III- Chemistry - III</b>	<b>DSC-3C</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - III (Quantitative Analysis – I)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER IV</b>				
BS 401	<b>Remedial Methods for Pollution, Drinking Water and Soil Fertility</b>	<b>SEC-2</b>	2	2
BS 402	English	CC-1D	5	5
BS 403	Second language	CC-2D	5	5
BS 404	Optional I	DSC-1D	4T+2P=6	4+1=5
BS 405	Optional II	DSC-2D	4T+2P=6	4+1=5
<b>BS 406</b>	<b>Optional III- Chemistry - IV</b>	<b>DSC-3D</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - IV (Quantitative Analysis – II)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>

\* **Optional III Chemistry** AECC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course; DSC: Discipline Specific Course; GE: Generic Elective;

**DEPARTMENT OF CHEMISTRY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF **B.Sc. (CHEMISTRY)**  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Chemistry-I	3 Hours	100
	Practical-I	Semi micro analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Chemistry-II	3 Hours	100
	Practical-II	Volumetric analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Chemistry-III	3 Hours	100
	Practical-III	Synthesis and Identification of Organic compounds	3 Hours	50
	Theory-IV	Chemistry-IV	3 Hours	100
	Practical-IV	Instrumentation & Kinetics	3 Hours	50

## B.Sc. Course Structure Template

<b>B.Sc. PROGRAMME</b>	<b>FIRST YEAR SEMESTER-I</b>				
	<b>Code</b>	<b>Course Title</b>	<b>Course Type</b>	<b>HPW</b>	<b>Credits</b>
	BS101	Communication	AECC-1	2	2
	BS102	English	CC-1A	5	5
	BS103	Second Language	CC –2A	5	5
	BS104	Optional - I <b>Differential Calculus</b>	DSC-1A	4 T + 2P = 6	4+1=5
	BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
	BS106	Optional – III	DSC-3A	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-II</b>				
	BS201	Environmental Studies	AECC-2	2	2
	BS202	English	CC-1B	5	5
	BS203	Second Language	CC –2B	5	5
BS204	Optional - I <b>Differential Equations</b>	DSC-1B	4 T + 2P = 6	4+1=5	
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5	
BS206	Optional – III	DSC-3B	4 T + 2P = 6	4+1=5	
			30	27	
<b>B.Sc. PROGRAMME</b>	<b>SECOND YEAR SEMESTER-III</b>				
	BS301	A/B <b>Logic &amp; Sets/Theory of Equations</b>	SEC-1	2	2
	BS302	English	CC-1C	5	5
	BS303	Second Language	CC-2C	5	5
	BS304	Optional - I <b>Real Analysis</b>	DSC-1C	4 T + 2P = 6	4+1=5
	BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
	BS306	Optional – III	DSC-3C	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-IV</b>				
	BS401	C/D <b>Transportation &amp; Game Theory/ Number Theory</b>	SEC-2	2	2
	BS402	English	CC -1D	5	5
	BS403	Second Language	CC-2D	5	5
	BS404	Optional - I <b>Algebra</b>	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5	
BS406	Optional – III	DSC-3D	4 T + 2P = 6	4+1=5	
			30	27	

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	<del>Differential Equations &amp; Solid Geometry</del>	4	3	<del>3 hours</del>	<del>100+50</del>
2	II	<del>Abstract Algebra &amp; Real Analysis</del>	4	3	<del>3 hours</del>	<del>100+50</del>
3	III	<del>Linear Algebra and Vector Calculus</del>	3	3	<del>3 hours</del>	<del>100+50</del>
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**OSMANIA UNIVERSITY**  
**B.Sc. ELECTRONICS SYLLABUS**  
**SCHEME OF INSTRUCTIONS**  
**UNDER CBCS (w.e.f 2016-2017 academic year onwards)**

Year	Semester	Title of the Paper[ Theory and Practical ]	Instructions Hrs/week	Number of Credits	Marks
1 <sup>st</sup> Year	I Sem	Paper – I : Circuit Analysis	4	4	100
		Practical – I : Circuit Analysis Lab	3	1	25
	II Sem	Paper – II : Electronic Devices	4	4	100
		Practical – II : Electronic Devices Lab	3	1	25
2 <sup>nd</sup> Year	III Sem	Paper – III : Analog Circuits	4	4	100
		Practical – III : Analog Circuits Lab	3	1	25
	IV Sem	Paper – IV : Linear Integrated circuits and basics of Communication	4	4	100
		Practical – IV : Linear Integrated Circuits and basics of communication Lab	3	1	25
3 <sup>rd</sup> Year	V Sem	<del>Paper – V : Digital Electronics</del>	<del>3</del>	<del>3</del>	<del>75</del>
		<del>Practical – V : Digital Electronics Lab</del>	<del>3</del>	<del>1</del>	<del>25</del>
		<del>Paper – VI : Discipline Specific Elective – i. 8085 Microprocessor and applications ii. Electronic Instrumentation</del>	<del>3</del>	<del>3</del>	<del>75</del>
		<del>Practical – VI : i. 8085 Microprocessor and applications Lab ii. Electronic Instrumentation Lab</del>	<del>3</del>	<del>1</del>	<del>25</del>
	VI Sem	<del>Paper – VII : Digital Communication</del>	<del>3</del>	<del>3</del>	<del>75</del>
		<del>Practical – VII : Digital Communication Lab</del>	<del>3</del>	<del>1</del>	<del>25</del>
		<del>Paper – VIII : Discipline Specific Elective – II: i. 8051 Micro Controller and applications ii. Digital System Design using VHDL</del>	<del>3</del>	<del>3</del>	<del>75</del>
		<del>Practical – VIII : Elective-II : i. 8051 Micro Controller and applications Lab ii. Digital System Design using VHDL Lab</del>	<del>3</del>	<del>1</del>	<del>25</del>

**Total Credits: 36**

**DEPARTMENT OF ELECTRONICS**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Electronics)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	<del>Theory-I</del>	<del>Circuit analysis and Electronic device s</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-I</del>	<del>Circuit analysis and Electronic device s</del>	<del>3 Hours</del>	<del>50</del>
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	<del>Theory-II</del>	<del>Analog circuit s and communication s</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-II</del>	<del>Analog circuit s and communication s</del>	<del>3 Hours</del>	<del>50</del>
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Digital electronics and microprocessor	3 Hours	100
	Practical-III	Digital electronics and microprocessor	3 Hours	50
	Theory-IV (Elective-1)	Embedded systems and Applications	3 Hours	100
	Practical-IV (Elective-1)	Embedded systems and Applications	3 Hours	50

## Syllabus for Computer Science

Proposed scheme for **B.Sc.** Programme under **Choice Based Credit System**

Code	Course Title	Course Type	HpW	Credits
<b>SEMESTER - I</b>				
BS106	Programming in C	DSC-3A	4T+2P=6	4 + 1 =5
<b>SEMESTER - II</b>				
BS206	Programming in C++	DSC-3B	4T+2P=6	4 + 1 =5
<b>SEMESTER - III</b>				
BS301	A: SciLab - 1	SEC-1	2T	2
	B: Boolean Algebra			
BS306	Data Structures	DSC-3C	4T+2P=6	4 + 1 =5
<b>SEMESTER - IV</b>				
BS401	C: SciLab - 2	SEC-2	2T	2
	D: Digital Logic			
BS406	Database Management Systems	DSC-3D	4T+2P=6	4 + 1 =5
<b>SEMESTER - V</b>				
BS501	<del>Information Technologies -1</del>	<del>GE-1</del>	<del>2</del>	<del>2</del>
BS502	<del>E: Python - 1</del>	SEC-3	2	2
	<del>F: Computer Organization</del>			
BS505	<del>Programming in Java</del>	<del>DSC-3E</del>	<del>3T+2P=5</del>	<del>3 + 1 =4</del>
BS506	<del>Elective-A: Operating Systems</del>	<del>DSE-1E</del>	3T+2P=5	3 + 1 =4
	<del>Elective-B: Software Engineering</del>	<del>DSE-2E</del>		
<b>SEMESTER - VI</b>				
BS601	<del>Information Technologies -2</del>	<del>GE-2</del>	<del>2T</del>	<del>2</del>
BS602	<del>G: Python - 2</del>	SEC-4	2T	2
	<del>H: Information Security</del>			
BS605	<del>Computer Networks</del>	<del>DSC-3F</del>	<del>3T+2P=5</del>	<del>3 + 1 =4</del>
BS606	<del>Elective-A: PHP with MySQL</del>	<del>DSE-1F</del>	3T+2P=5	3 + 1 =4
	<del>Elective-B: Web Technologies</del>	<del>DSE-2F</del>		
<b>Total Number of Credits</b>				<b>48</b>

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	<del>Theory-I</del>	<del>PC Software and 'C' Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-I</del>	<del>PC Software and C</del>	<del>3 Hours</del>	<del>50</del>
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	<del>Theory-II</del>	<del>Object Oriented Programming with Java and Data Structures</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-II</del>	<del>Java and Data Structures Lab</del>	<del>3 Hours</del>	<del>50</del>
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	<del>Theory-IV (Elective-2)</del>	<del>GUI Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-2)</del>	<del>Visual Basic Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-3)</del>	<del>Operating Systems</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-3)</del>	<del>Operating Systems Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-4)</del>	<del>PHP, MySQL, Apache and PHP</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-4)</del>	<del>PHP and MYSQL Lab</del>	<del>3 Hours</del>	<del>50</del>

## B.Sc. Course Structure Template

<b>B.Sc. PROGRAMME</b>	FIRST YEAR SEMESTER-I				
	Code	Course Title	Course Type	HPW	Credits
	BS101	Communication	AECC-1	2	2
	BS102	English	CC-1A	5	5
	BS103	Second Language	CC –2A	5	5
	BS104	Optional - I Differential Calculus	DSC-1A	4 T + 2P = 6	4+1=5
	BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
	BS106	Optional – III	DSC-3A	4 T + 2P = 6	4+1=5
				30	27
	SEMESTER-II				
	BS201	Environmental Studies	AECC-2	2	2
	BS202	English	CC-1B	5	5
	BS203	Second Language	CC –2B	5	5
BS204	Optional - I Differential Equations	DSC-1B	4 T + 2P = 6	4+1=5	
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5	
BS206	Optional – III	DSC-3B	4 T + 2P = 6	4+1=5	
			30	27	
<b>B.Sc. PROGRAMME</b>	SECOND YEAR SEMESTER-III				
	BS301	A/B Logic & Sets/Theory of Equations	SEC-1	2	2
	BS302	English	CC-1C	5	5
	BS303	Second Language	CC-2C	5	5
	BS304	Optional - I Real Analysis	DSC-1C	4 T + 2P = 6	4+1=5
	BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
	BS306	Optional – III	DSC-3C	4 T + 2P = 6	4+1=5
				30	27
	SEMESTER-IV				
	BS401	C/D Transportation & Game Theory/ Number Theory	SEC-2	2	2
	BS402	English	CC -1D	5	5
	BS403	Second Language	CC-2D	5	5
	BS404	Optional - I Algebra	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5	
BS406	Optional – III	DSC-3D	4 T + 2P = 6	4+1=5	
			30	27	

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	<del>Differential Equations &amp; Solid Geometry</del>	4	3	<del>3 hours</del>	<del>100+50</del>
2	II	<del>Abstract Algebra &amp; Real Analysis</del>	4	3	<del>3 hours</del>	<del>100+50</del>
3	III	<del>Linear Algebra and Vector Calculus</del>	3	3	<del>3 hours</del>	<del>100+50</del>
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

## Scheme of B.Sc. Statistics Semester wise Syllabus under CBCS 2016-19

Year	Semester	Paper	Title of the Theory Paper	Title of the Practical Paper	SEC	GE
<b>I</b>	I	I	Descriptive Statistics and Probability	Descriptive Statistics and Probability	----	--
	II	II	Probability Distributions	Probability Distributions	----	--
<b>II</b>	III	III	Statistical Methods	Statistical Methods	Concepts of Sequences and Random Variables	--
	IV	IV	Inference	Inference	Statistical Psychology and Education	--
<b>III</b>	V	V	<del>Sampling Theory, Time Series, Index Numbers and Demand Analysis</del>	<del><b>Practical Paper - V</b> <b>Section - A : Sampling Theory and Time Series</b> <b>Section - B : Elective-I: A / B / C</b> <b>Practical's</b></del>	Big Data Analysis	Basic Statistics - I
		VI	<del><b>Elective-I: A / B / C</b> A: <del>Statistical Quality Control and Reliability</del> B: <del>Bio-Statistics - I</del> C: <del>Actuarial Statistics - I</del></del>	<del><b>Practical Paper - VI</b> Statistical Practical's using MS - Excel</del>		
	VI	VII	<del>Design of Experiments, Vital Statistics, Official Statistics and Business Forecasting</del>	<del><b>Practical Paper - VII</b> <b>Section - A : Design of Experiments and Vital Statistics</b> <b>Section - B : Elective-II: A / B / C</b> <b>Practical's</b></del>	Statistical techniques in Data Mining	Basic Statistics - II
		VIII	<del><b>Elective - II: A / B / C</b> A: <del>Operations Research</del> B: <del>Bio-Statistics - II</del> C: <del>Actuarial Statistics - II</del></del>	<del><b>Practical Paper - VIII</b> Statistical Practical's using MS - Excel and TORA</del>		

SEC: Skill Enhancement Course

GE: Generic Elective: offered by the Department for other than Statistics Students

**Department of Statistics**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**Course Structure of B.Sc. (Statistics)**

**Year 2014-15**

YEAR	THEORY/ PRACTICAL	PAPER TITLE	EXAM DURATION	MAX. MARKS
I-YEAR	Theory-I	<del>Descriptive Statistics and Probability</del>	<del>3 hrs</del>	<del>100</del>
	PRACTICAL -I	<del>Descriptive Statistics and Probability-I</del>	<del>3 hrs</del>	<del>50</del>
II-YEAR	Theory-II	<del>Statistical Methods and Theory of Estimation</del>	<del>3 hrs</del>	<del>100</del>
	PRACTICAL -II	<del>Statistical Methods and Theory of Estimation-II</del>	<del>3 hrs</del>	<del>50</del>
III YEAR	Theory-III	<b>Applied Statistics:</b> Sampling Theory, Time series, Index Numbers and Demand Analysis	3 hrs	100
	PRACTICAL -III	Applied Statistics, QR &OR Practical's-III	3 hrs	50
III YEAR	Theory-IV	Statistical Quality Control and Reliability	3 hrs	100
	PRACTICAL -IV	Excel and TORA Practical's	3 hrs	50

## Syllabus for Computer Science

Proposed scheme for **B.Sc.** Programme under **Choice Based Credit System**

Code	Course Title	Course Type	HpW	Credits
<b>SEMESTER - I</b>				
BS106	Programming in C	DSC-3A	4T+2P=6	4 + 1 =5
<b>SEMESTER - II</b>				
BS206	Programming in C++	DSC-3B	4T+2P=6	4 + 1 =5
<b>SEMESTER - III</b>				
BS301	A: SciLab - 1	SEC-1	2T	2
	B: Boolean Algebra			
BS306	Data Structures	DSC-3C	4T+2P=6	4 + 1 =5
<b>SEMESTER - IV</b>				
BS401	C: SciLab - 2	SEC-2	2T	2
	D: Digital Logic			
BS406	Database Management Systems	DSC-3D	4T+2P=6	4 + 1 =5
<b>SEMESTER - V</b>				
BS501	<del>Information Technologies -1</del>	<del>GE-1</del>	<del>2</del>	<del>2</del>
BS502	<del>E: Python - 1</del>	SEC-3	2	2
	<del>F: Computer Organization</del>			
BS505	<del>Programming in Java</del>	<del>DSC-3E</del>	<del>3T+2P=5</del>	<del>3 + 1 =4</del>
BS506	<del>Elective-A: Operating Systems</del>	<del>DSE-1E</del>	3T+2P=5	3 + 1 =4
	<del>Elective-B: Software Engineering</del>	<del>DSE-2E</del>		
<b>SEMESTER - VI</b>				
BS601	<del>Information Technologies -2</del>	<del>GE-2</del>	<del>2T</del>	<del>2</del>
BS602	<del>G: Python - 2</del>	SEC-4	2T	2
	<del>H: Information Security</del>			
BS605	<del>Computer Networks</del>	<del>DSC-3F</del>	<del>3T+2P=5</del>	<del>3 + 1 =4</del>
BS606	<del>Elective-A: PHP with MySQL</del>	<del>DSE-1F</del>	3T+2P=5	3 + 1 =4
	<del>Elective-B: Web Technologies</del>	<del>DSE-2F</del>		
<b>Total Number of Credits</b>				<b>48</b>

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	<del>Theory-I</del>	<del>PC Software and 'C' Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-I</del>	<del>PC Software and C</del>	<del>3 Hours</del>	<del>50</del>
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	<del>Theory-II</del>	<del>Object Oriented Programming with Java and Data Structures</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-II</del>	<del>Java and Data Structures Lab</del>	<del>3 Hours</del>	<del>50</del>
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	<del>Theory-IV (Elective-2)</del>	<del>GUI Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-2)</del>	<del>Visual Basic Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-3)</del>	<del>Operating Systems</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-3)</del>	<del>Operating Systems Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-4)</del>	<del>PHP, MySQL, Apache and PHP</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-4)</del>	<del>PHP and MYSQL Lab</del>	<del>3 Hours</del>	<del>50</del>

## B.Sc. Course Structure Template

<b>B.Sc. PROGRAMME</b>	<b>FIRST YEAR SEMESTER-I</b>				
	<b>Code</b>	<b>Course Title</b>	<b>Course Type</b>	<b>HPW</b>	<b>Credits</b>
	BS101	Communication	AECC-1	2	2
	BS102	English	CC-1A	5	5
	BS103	Second Language	CC –2A	5	5
	BS104	Optional - I <b>Differential Calculus</b>	DSC-1A	4 T + 2P = 6	4+1=5
	BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
	BS106	Optional – III	DSC-3A	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-II</b>				
	BS201	Environmental Studies	AECC-2	2	2
	BS202	English	CC-1B	5	5
	BS203	Second Language	CC –2B	5	5
BS204	Optional - I <b>Differential Equations</b>	DSC-1B	4 T + 2P = 6	4+1=5	
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5	
BS206	Optional – III	DSC-3B	4 T + 2P = 6	4+1=5	
			30	27	
<b>B.Sc. PROGRAMME</b>	<b>SECOND YEAR SEMESTER-III</b>				
	BS301	A/B <b>Logic &amp; Sets/Theory of Equations</b>	SEC-1	2	2
	BS302	English	CC-1C	5	5
	BS303	Second Language	CC-2C	5	5
	BS304	Optional - I <b>Real Analysis</b>	DSC-1C	4 T + 2P = 6	4+1=5
	BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
	BS306	Optional – III	DSC-3C	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-IV</b>				
	BS401	C/D <b>Transportation &amp; Game Theory/ Number Theory</b>	SEC-2	2	2
	BS402	English	CC -1D	5	5
	BS403	Second Language	CC-2D	5	5
	BS404	Optional - I <b>Algebra</b>	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5	
BS406	Optional – III	DSC-3D	4 T + 2P = 6	4+1=5	
			30	27	

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	<del>Differential Equations &amp; Solid Geometry</del>	4	3	<del>3 hours</del>	<del>100+50</del>
2	II	<del>Abstract Algebra &amp; Real Analysis</del>	4	3	<del>3 hours</del>	<del>100+50</del>
3	III	<del>Linear Algebra and Vector Calculus</del>	3	3	<del>3 hours</del>	<del>100+50</del>
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**B.Sc. PHYSICS SYLLABUS UNDER CBCS SCHEME  
SCHEME OF INSTRUCTION**

Semester	Paper [ Theory and Practical ]	Instructions Hrs/week	Marks	Credits
I sem	Paper – I : Mechanics	4	100	4
	Practicals – I : Mechanics	3	50	1
II sem	Paper – II: Waves and Oscillations	4	100	4
	Practicals – II : Waves and Oscillations	3	50	1
III sem	Paper – III : Thermodynamics	4	100	4
	Practicals – III : Thermodynamics	3	50	1
IV sem	Paper – IV : Optics	4	100	4
	Practicals – IV :Optics	3	50	1
V-sem	<del>Paper – V : Electromagnetism</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practicals – V: Electromagnetism</del>	<del>3</del>	<del>50</del>	<del>1</del>
	<del>Paper – VI : Elective – I Solid state physics/ Quantum Mechanics and Applications</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practicals – VI : Elective – I Practical Solid state physics/ Quantum Mechanics and Applications</del>	<del>3</del>	<del>50</del>	<del>1</del>
VI sem	<del>Paper – VII : Modern Physics</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practical – VII : Modern Physics Lab</del>	<del>3</del>	<del>50</del>	<del>1</del>
	<del>Paper – VIII : Elective – II Basic Electronics/ Physics of Semiconductor Devices</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practicals – VIII : Elective – II Practical Basic Electronics/ Physics of Semiconductor Devices</del>	<del>3</del>	<del>50</del>	<del>1</del>

Total Credits

36

**DEPARTMENT OF PHYSICS**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (PHYSICS)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	<del>Theory-I</del>	<del>Mechanics and Waves and Oscillations</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-I</del>	<del>Mechanics and Waves and Oscillations</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	<del>Theory-II</del>	<del>Thermodynamics and Optics</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-II</del>	<del>Thermodynamics and Optics</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Electricity, Magnetism and Electronics	3 Hours	100
	Practical-III	Electricity, Magnetism and Electronics	3 Hours	50
	Theory-IV	Modern Physics	3 Hours	100
	Practical-IV	Modern Physics	3 Hours	50

## Syllabus for Computer Science

Proposed scheme for **B.Sc.** Programme under **Choice Based Credit System**

Code	Course Title	Course Type	HpW	Credits
<b>SEMESTER - I</b>				
BS106	Programming in C	DSC-3A	4T+2P=6	4 + 1 =5
<b>SEMESTER - II</b>				
BS206	Programming in C++	DSC-3B	4T+2P=6	4 + 1 =5
<b>SEMESTER - III</b>				
BS301	A: SciLab - 1	SEC-1	2T	2
	B: Boolean Algebra			
BS306	Data Structures	DSC-3C	4T+2P=6	4 + 1 =5
<b>SEMESTER - IV</b>				
BS401	C: SciLab - 2	SEC-2	2T	2
	D: Digital Logic			
BS406	Database Management Systems	DSC-3D	4T+2P=6	4 + 1 =5
<b>SEMESTER - V</b>				
BS501	<del>Information Technologies -1</del>	<del>GE-1</del>	<del>2</del>	<del>2</del>
BS502	<del>E: Python - 1</del>	SEC-3	2	2
	<del>F: Computer Organization</del>			
BS505	<del>Programming in Java</del>	<del>DSC-3E</del>	<del>3T+2P=5</del>	<del>3 + 1 =4</del>
BS506	<del>Elective-A: Operating Systems</del>	<del>DSE-1E</del>	3T+2P=5	3 + 1 =4
	<del>Elective-B: Software Engineering</del>	<del>DSE-2E</del>		
<b>SEMESTER - VI</b>				
BS601	<del>Information Technologies -2</del>	<del>GE-2</del>	<del>2T</del>	<del>2</del>
BS602	<del>G: Python - 2</del>	SEC-4	2T	2
	<del>H: Information Security</del>			
BS605	<del>Computer Networks</del>	<del>DSC-3F</del>	<del>3T+2P=5</del>	<del>3 + 1 =4</del>
BS606	<del>Elective-A: PHP with MySQL</del>	<del>DSE-1F</del>	3T+2P=5	3 + 1 =4
	<del>Elective-B: Web Technologies</del>	<del>DSE-2F</del>		
<b>Total Number of Credits</b>				<b>48</b>

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	<del>Theory-I</del>	<del>PC Software and 'C' Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-I</del>	<del>PC Software and C</del>	<del>3 Hours</del>	<del>50</del>
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	<del>Theory-II</del>	<del>Object Oriented Programming with Java and Data Structures</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-II</del>	<del>Java and Data Structures Lab</del>	<del>3 Hours</del>	<del>50</del>
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	<del>Theory-IV (Elective-2)</del>	<del>GUI Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-2)</del>	<del>Visual Basic Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-3)</del>	<del>Operating Systems</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-3)</del>	<del>Operating Systems Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-4)</del>	<del>PHP, MySQL, Apache and PHP</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-4)</del>	<del>PHP and MYSQL Lab</del>	<del>3 Hours</del>	<del>50</del>

**PSYCHOLOGY-CBCS –CORE COURSE STRUCTURE- 2016  
PROPOSED SCHEME FOR B.A. PROGRAMME**

YEAR	SEM-ESTER	TITLE OF THE THEORY PAPER & TYPE OF COURSE	CREDITS (Theory-T) 1 cr=1hr	PRACTICUM	CREDITS (Practicum-P) 1 cr = 2 hrs	TOTAL CREDITS
BA I Year	I	General Psychology(DSC-1A)	5	--	--	5
	II	Cognitive and Behavioural Processes (DSC-1B)	5	--	--	5
BA II Year	III	Personality Theories and Assessment (DSC-1C)	4	Basics of Experimental Psychology	1	5
		Life Skills (SEC-1)	2			2
	IV	Statistics in Psychology (DSC-1D)	4	Experimentation on Behavioural Phenomenon	1	5
		Applications of Psychology in Professional Settings (SEC-2)	2			2
BA III Year	V	Social Psychology (DSC-1E)	3	Psychological Testing-1	1	4
		A. Adolescent Psychology B. Educational Psychology (DSE-1E)	3	Psychological Testing-2	1	4
		Enhancing Psychological Competencies-1 (GE-1E)	2			2
		Stress Management and Well Being (SEC-3)	2			2
	VI	Abnormal Psychology (DSC-1F)	3	Psychological Testing-3	1	4
		A. Health Psychology B. Cognitive Psychology (DSE-1F)	3	Psychological Testing-4	1	4
		Enhancing Psychological Competencies-2 (GE-1F)	2			2
		Health Behaviour and Lifestyle (SEC-4)	2			2
		PROJECT (PR-F) * (for 4 cr)				
			<b>TOTAL CREDITS (excluding GE)</b>	<b>38</b>		<b>6</b>

**DSC: Discipline Specific Course- DSC 1A,1B,1C,1D,1E & 1E (includes Practicum)**

**DSE: Discipline Specific Elective- 1E & 1F**

**GE: Generic Elective: 1E & 1F**

**SEC: Skill Enhancement Course**

**PR\*: Project: PR-F ( In lieu of one theory paper from Semester VI)**

**COMMON CORE FOR UG PSYCHOLOGY- CBCS 2016**

**DEPARTMENT OF PSYCHOLOGY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A. (PSYCHOLOGY)  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<del><b>FIRST YEAR</b></del>	<del>Theory-I</del>	<del>General Psychology-I</del>	<del>3 Hours</del>	<del>75</del>
<b>Code</b>	<del><b>TITLE OF THE PAPER</b></del>	<b>Title</b>	<b>Exam Duration</b>	<del><b>Max. Marks</b></del>
<del><b>SECOND YEAR</b></del>	<del>Theory-II</del>	<del>Social Psychology-II</del>	<del>3 Hours</del>	<del>75</del>
	<del>Practical-II</del>	<del>Practicals</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Child and Adolescent Psychology-III	3 Hours	75
	Practical-III	Practicals	3 Hours	50
	Theory-IV	ABNORMAL PSYCHOLOGY-IV	3 Hours	75
	Practical-IV	project	3 Hours	50

# Osmania University

## Model

### Scheme of Instruction and Examination

#### B.A Political Science (Regular)

#### Choice Based Credit System (CBCS) Syllabus-w.e.f 2016-2017

Year	Semester	DSC/DSE/ GE/SEC	Paper	Title	Credits	Hours
I	I	DSC	Paper-I	Concepts, Theories and Institutions --Political Theory	5	5
	II	DSC	Paper-II	Concepts, Theories and Institutions --State Apparatus	5	5
II	III	DSC	Paper-III	Indian Government and Politics --Basic of Indian Constitution & Citizenship	5	5
		SEC	Paper-I	Communication Skills in English	2	2
	IV	DSC	Paper-IV	Indian Government and Politics --Government & Politics	5	5
		SEC	Paper-II	Disaster Management	2	2
III	V	<del>DSC</del>	<del>Paper-V (Compulsory)</del>	<del>Political Thought --Ancient &amp; Medieval Political Thought</del>	<del>4</del>	<del>4</del>
		DSE	Paper-I(A) (Optional)	International Relations <del>International Relations in 19<sup>th</sup> &amp; 20<sup>th</sup> Century</del>	4	4
			Paper-1 (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-III	Citizenship Rights, Duties and Laws		
	GE	Paper-I (Optional)	Contemporary Political Economy	5+1	6	
	VI	<del>DSC</del>	<del>Paper-VI (Compulsory)</del>	<del>Political Thought --Western &amp; Indian Political Thought</del>	<del>4</del>	<del>4</del>
		DSE	Paper-II (A) (Optional)	International Relations <del>International Relations in 19<sup>th</sup> &amp; 20<sup>th</sup> Century</del>	4	4
			Paper-II (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-IV	Legislative Practices and Procedures		
		GE	Paper-II (Optional)	Human Rights, Gender & Environment	5+1	6

-DSC (Discipline Specific Course)

-DSE (Discipline Specific Elective)

-GE (Generic/General Elective) or Interdisciplinary Course for Students of Social Sciences other than --  
Political Science (5 Credits + 1 Tutorial)

-SEC (Skill Enhancement Course)

**DEPARTMENT OF Political Science  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Political Science)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<del><b>FIRST YEAR</b></del>	<del>Theory-I</del>	<del>Concepts, Theories and Institutions</del>	<del>3 Hours</del>	<del>100</del>
<b>Code</b>	<del><b>TITLE OF THE PAPER</b></del>	<del><b>Title</b></del>	<del><b>Exam Duration</b></del>	<del><b>Max. Marks</b></del>
<del><b>SECOND YEAR</b></del>	<del>Theory-II</del>	<del>Indian Government and Politics</del>	<del>3 Hours</del>	<del>100</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Political Thought	3 Hours	100
	Theory-IV	International relations	3 Hours	100

## UNDERGRADUATE PROGRAMME IN PUBLIC ADMINISTRATION

### PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN B.A. PROGRAMME IN PUBLIC ADMINISTRATION

#### ***FIRST YEAR SEMESTER -I***

Code	Course Title	Course Type	HPW	Credits
BA 107	Basics of Public Administration	DSC	5	5

#### ***FIRST YEAR SEMESTER -II***

Code	Course Title	Course Type	HPW	Credits
BA 207	Development Dynamics and Emerging Trends	DSC	5	5

#### ***SECOND YEAR SEMESTER -III***

Code	Course Title	Course Type	HPW	Credits
BA 307	Union Administration	DSC	5	5

#### ***SECOND YEAR SEMESTER -IV***

Code	Course Title	Course Type	HPW	Credits
BA 407	Union Administration	DSC	5	5

#### ***THIRD YEAR SEMESTER -V***

Code	Course Title	Course Type	HPW	Credits
BA 502	Indian Constitution and Administration	GE	5+1	6
<del>BA 507</del>	<del>Human Resources Management</del>	<del>DSC</del>	<del>4</del>	<del>4</del>
<del>BA508/A</del>	<del>Rural Governance</del>	<del>DSE</del>	<del>4</del>	<del>4</del>
<del>BA508/B</del>	<del>E-Governance-Concepts</del>	<del>DSE</del>	<del>4</del>	<del>4</del>
<del>BA 508/C</del>	<del>Public Office Administration</del>	<del>DSE</del>	<del>4</del>	<del>4</del>

#### ***THIRD YEAR SEMESTER -VI***

Code	Course Title	Course Type	HPW	Credits
<del>BA602</del>	<del>Good Governance</del>	<del>GE</del>	<del>5+1</del>	<del>6</del>
<del>BA 607</del>	<del>Financial and Material Resources Management</del>	<del>DSC</del>	<del>4</del>	<del>4</del>
<del>BA608/A</del>	<del>Urban Governance</del>	<del>DSE</del>	<del>4</del>	<del>4</del>
<del>BA608/B</del>	<del>E-Governance-Case Studies</del>	<del>DSE</del>	<del>4</del>	<del>4</del>
<del>BA608/C</del>	<del>Technology and Office Administration</del>	<del>DSE</del>	<del>4</del>	<del>4</del>

**DEPARTMENT OF PUBLIC ADMINISTRATION  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Public Administration)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Introduction to Public Administration	3 Hours	100
<b>Code</b>				
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Public Administration in India	3 Hours	100
<b>Code</b>				
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Management Resources	3 Hours	100
	Theory-IV	Office management	3 Hours	100

Year	Semester	DSC/GE/ DSE/SEC	Paper	Title of the Paper	Credits	Hours PW
I	I	DSC*101	Paper - I	Micro Economics	5	5
		AEC	AEC	Environmental Science/ Basic Computer kills	2	2
	II	DSC*201	Paper - II	Macro Economics	5	5
II		AEC	AECC	Environmental Science/ Basic Computer kills	2	2
	III	DSE-301	Paper - III	Statistics for Economics	5	5
		SEC-1	SEC-I	Computer Applications	2	2
		SEC-2	SEC-II	Rural Development	2	2
	IV	DSC*401	Paper - IV	Indian Economy	5	5
		SEC-3	SEC-III	Data Analysis	2	2
	SEC-4	SEC-IV	Entrepreneurship and Development	2	2	
III	V	<del>GE**</del>	<del>Paper - I</del>	<del>Telangana Economy</del>	<del>4</del>	<del>4</del>
		<del>DSE*501</del>	<del>Elective - A</del>	<del>Agricultural Economics</del>	<del>5</del>	<del>5</del>
		<del>DSE*501</del>	<del>Elective - B</del>	<del>Public Economics</del>	<del>5</del>	<del>5</del>
		<del>DSE*501</del>	<del>Elective - C</del>	<del>Economics of Environment</del>	<del>5</del>	<del>5</del>
	VI	<del>DSE*601</del>	<del>Paper - A</del>	<del>International Economics</del>	<del>5</del>	<del>5</del>
		<del>DSE*601</del>	<del>Paper - B</del>	<del>Development Economics</del>	<del>5</del>	<del>5</del>
		<del>DSE*601</del>	<del>Paper - C</del>	<del>Industrial Economics</del>	<del>5</del>	<del>5</del>
		<del>Project/Optional</del>	<del>Project/Optional</del>	<del>Financial Economics</del>	<del>4</del>	<del>4</del>

\* DSC (Discipline Specific Course), SEC (Skill Enhancement Course) & DSE (Discipline Specific Elective) for Students of Economics.(PW) Per week.\*\* GE (Generic Elective) or Inter-Disciplinary Course for Students of Social Sciences other than Economics.

(Prof.B.Sudhakar Reddy)  
Chairman Board of Studies

**DEPARTMENT OF Economics**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.A (Economics)**  
**2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<del><b>FIRST YEAR</b></del>	<del>Theory-I</del>	<del>Micro Economics</del>	<del>3 Hours</del>	<del>100</del>
<b>Code</b>	<del><b>TITLE OF THE PAPER</b></del>	<del><b>Title</b></del>	<del><b>Exam Duration</b></del>	<del><b>Max. Marks</b></del>
<del><b>SECOND YEAR</b></del>	<del>Theory-II</del>	<del>Macro Economics</del>	<del>3 Hours</del>	<del>100</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Indian Economy	3 Hours	80
	Practicals	Indian Economy	3 Hours	20
	Theory-IV	Public Finance and International Trade	3 Hours	100

# Osmania University

## Model

### Scheme of Instruction and Examination

#### B.A Political Science (Regular)

#### Choice Based Credit System (CBCS) Syllabus-w.e.f 2016-2017

Year	Semester	DSC/DSE/ GE/SEC	Paper	Title	Credits	Hours
I	I	DSC	Paper-I	Concepts, Theories and Institutions --Political Theory	5	5
	II	DSC	Paper-II	Concepts, Theories and Institutions --State Apparatus	5	5
II	III	DSC	Paper-III	Indian Government and Politics --Basic of Indian Constitution & Citizenship	5	5
		SEC	Paper-I	Communication Skills in English	2	2
	IV	DSC	Paper-IV	Indian Government and Politics --Government & Politics	5	5
		SEC	Paper-II	Disaster Management	2	2
III	V	<del>DSC</del>	<del>Paper-V (Compulsory)</del>	<del>Political Thought --Ancient &amp; Medieval Political Thought</del>	<del>4</del>	<del>4</del>
		DSE	Paper-I(A) (Optional)	International Relations <del>International Relations in 19<sup>th</sup> &amp; 20<sup>th</sup> Century</del>	4	4
			Paper-1 (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-III	<del>Citizenship Rights, Duties and Laws</del>		
		GE	Paper-I (Optional)	Contemporary Political Economy	5+1	6
	VI	<del>DSC</del>	<del>Paper-VI (Compulsory)</del>	<del>Political Thought --Western &amp; Indian Political Thought</del>	<del>4</del>	<del>4</del>
		DSE	Paper-II (A) (Optional)	International Relations <del>International Relations in 19<sup>th</sup> &amp; 20<sup>th</sup> Century</del>	4	4
			Paper-II (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-IV	Legislative Practices and Procedures		
		GE	Paper-II (Optional)	<del>Human Rights, Gender &amp; Environment</del>	5+1	6

-DSC (Discipline Specific Course)

-DSE (Discipline Specific Elective)

-GE (Generic/General Elective) or Interdisciplinary Course for Students of Social Sciences other than --  
Political Science (5 Credits + 1 Tutorial)

-SEC (Skill Enhancement Course)

**DEPARTMENT OF Political Science  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Political Science)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<del><b>FIRST YEAR</b></del>	<del>Theory-I</del>	<del>Concepts, Theories and Institutions</del>	<del>3 Hours</del>	<del>100</del>
<b>Code</b>	<del><b>TITLE OF THE PAPER</b></del>	<del><b>Title</b></del>	<del><b>Exam Duration</b></del>	<del><b>Max. Marks</b></del>
<del><b>SECOND YEAR</b></del>	<del>Theory-II</del>	<del>Indian Government and Politics</del>	<del>3 Hours</del>	<del>100</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Political Thought	3 Hours	100
	Theory-IV	International relations	3 Hours	100

## UNDERGRADUATE PROGRAMME IN PUBLIC ADMINISTRATION

### PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN B.A. PROGRAMME IN PUBLIC ADMINISTRATION

#### ***FIRST YEAR SEMESTER -I***

Code	Course Title	Course Type	HPW	Credits
BA 107	Basics of Public Administration	DSC	5	5

#### ***FIRST YEAR SEMESTER -II***

Code	Course Title	Course Type	HPW	Credits
BA 207	Development Dynamics and Emerging Trends	DSC	5	5

#### ***SECOND YEAR SEMESTER -III***

Code	Course Title	Course Type	HPW	Credits
BA 307	Union Administration	DSC	5	5

#### ***SECOND YEAR SEMESTER -IV***

Code	Course Title	Course Type	HPW	Credits
BA 407	Union Administration	DSC	5	5

#### ***THIRD YEAR SEMESTER -V***

Code	Course Title	Course Type	HPW	Credits
BA 502	Indian Constitution and Administration	GE	5+1	6
<del>BA 507</del>	<del>Human Resources Management</del>	<del>DSC</del>	<del>4</del>	<del>4</del>
<del>BA508/A</del>	<del>Rural Governance</del>	<del>DSE</del>	<del>4</del>	<del>4</del>
<del>BA508/B</del>	<del>E-Governance-Concepts</del>	<del>DSE</del>	<del>4</del>	<del>4</del>
<del>BA 508/C</del>	<del>Public Office Administration</del>	<del>DSE</del>	<del>4</del>	<del>4</del>

#### ***THIRD YEAR SEMESTER -VI***

Code	Course Title	Course Type	HPW	Credits
<del>BA602</del>	<del>Good Governance</del>	<del>GE</del>	<del>5+1</del>	<del>6</del>
<del>BA 607</del>	<del>Financial and Material Resources Management</del>	<del>DSC</del>	<del>4</del>	<del>4</del>
<del>BA608/A</del>	<del>Urban Governance</del>	<del>DSE</del>	<del>4</del>	<del>4</del>
<del>BA608/B</del>	<del>E-Governance-Case Studies</del>	<del>DSE</del>	<del>4</del>	<del>4</del>
<del>BA608/C</del>	<del>Technology and Office Administration</del>	<del>DSE</del>	<del>4</del>	<del>4</del>

**DEPARTMENT OF PUBLIC ADMINISTRATION  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Public Administration)  
2014-15**

<del>Year</del>	<del>Theory/Practical</del>	<del>Title</del>	<del>Exam Duration</del>	<del>Max. Marks</del>
<del>FIRST YEAR</del>	<del>Theory-I</del>	<del>Introduction to Public Administration</del>	<del>3 Hours</del>	<del>100</del>
<del>Code</del>	<del>TITLE OF THE PAPER</del>	<del>Title</del>	<del>Exam Duration</del>	<del>Max. Marks</del>
<del>SECOND YEAR</del>	<del>Theory-II</del>	<del>Public Administration in India</del>	<del>3 Hours</del>	<del>100</del>
<del>Code</del>	<del>TITLE OF THE PAPER</del>	<del>Title</del>	<del>Exam Duration</del>	<del>Max. Marks</del>
<del>THIRD YEAR</del>	<del>Theory-III</del>	<del>Management Resources</del>	<del>3 Hours</del>	<del>100</del>
	<del>Theory-IV</del>	<del>Office management</del>	<del>3 Hours</del>	<del>100</del>

PROPOSED SCHEME FOR B.Sc. PROGRAMME  
 UNDER CHOICE BASED CREDIT SYSTEM

FIRST YEAR

**SEMESTER-I**

**Paper-I: Microbial Diversity of Lower Plants**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS 104	Optional I	DSC I-A	4 T 2 P = 6	4 + 1 = 5

**SEMESTER-II**

**Paper-II: Bryophytes Pteridophytes, Gymnosperms and Palaeobotany**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS 201	Environmental Studies	AECC-2	2	2
BS204	Optional-I	DSC-1B	4 T + 2P = 6	4 + 1 = 5

SECOND YEAR

**SEMESTER-III**

**Paper-III: Taxonomy of Angiosperms and Medicinal Botany**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS304	Optional-I	DSC-IC	4 T + 2 P = 6	4 + 1 = 5

**SEMESTER-IV**

**Paper-IV: Plant Anatomy, Embryology and Palynology**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS404	Optional - I	DSC-ID	4 T + 2P = 6	4 + 1 = 5

THIRD YEAR

**SEMESTER-V**

~~Paper V: Cell Biology and Genetics~~

~~Elective I: Ecology and Biodiversity / Elective II: Horticulture~~

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS-503	Optional-I	DSC-IE	3T+2P=5	3+1=4
BS-506	Optional I A/B	DSE-IE	3T+2P=5	3+1=4
BS-502	Economic Botany	GE-1	2	2

**SEMESTER-VI**

~~Paper VI: Plant Physiology~~

~~Elective-III: Tissue Culture and Biotechnology / Elective-IV: Seed Technology~~

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS-603	Optional-I	DSC-IF	3 T + 2P = 5	3 + 1 = 4
BS-606	Optional A/B	DSE-IF	3 T + 2P = 5	3 + 1 = 4
BS-602	Biodiversity and Human Welfare	GE-2	2	2

AECC: Ability Enhancement Compulsory Course, DSC: Discipline Specific Course,  
 DSE : Discipline Specific Elective, GE: Generic Elective, HPW: Hours per Week.

**DEPARTMENT OF BOTANY**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc (BOTANY)**  
**W.E.F 2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	<del>Theory-I</del>	<del>Microbial Diversity Cryptogams and Gymnosperms-I</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical -I</del>	<del>Microbial Diversity Cryptogams and Gymnosperms.</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	<del>Theory-II</del>	<del>Anatomy, Embryology, Taxonomy and Medicinal Botany-II</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-II</del>	<del>Anatomy, Embryology, Taxonomy and Medicinal Botany-II</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Cell Biology, Genetics, Ecology and Biodiversity- III	3 Hours	100
	Practical-III	Cell Biology, Genetics, Ecology and Biodiversity- III	3 Hours	50
	Theory-IV	Physiology, Tissue Culture, Biotechnology, Seed Technology and Horticulture.	3 Hours	100
	Practical-IV	Physiology, Tissue Culture, Biotechnology, Seed Technology and Horticulture.	3 Hours	50

# ZOOLOGY

## CURRICULUM FOR ZOOLOGY IN UNDER GRADUATE DEGREE PROGRAMME CBCS SYLLABUS SCHEDULE 2016 - 2017

Year	Semester	Paper	Title of the Paper	No. of Credits	Exam Hrs.	Max. Marks		
						I.A	End Exam	Total
I	I ✓	Core-I Theory	Animal Diversity-Invertebrates	3	3	20	40	60
		Core-I Practical	Animal Diversity-Invertebrates	2	3	-	40	40
	II ✓	Core-II Theory	Ecology, Zoogeography and Animal Behavior	3	3	20	40	60
		Core-II Practical	Ecology, Zoogeography and Animal Behavior	2	3	-	40	40
II	III ✓	Core-III Theory	Animal Diversity-Vertebrates and Developmental Biology	3	3	20	40	60
		Core-III Practical	Animal Diversity- Chordates and Developmental Biology	2	3	-	40	40
	IV ✓	Core-IV Theory	Cell Biology, Genetics and Evolution	3	3	20	40	60
		Core-IV Practical	Cell Biology, Genetics and Evolution	2	3	-	40	40
	V ✓	Core-V Theory	Physiology and Biochemistry	3	3	20	40	60
		Core-V Practical	Physiology and Biochemistry	2	3	-	40	40
III	V ✓	Elect-VI Theory	Applied Zoology/Entomology ✓	3	3	20	40	60
		Elect-VI Practical	Applied Zoology/Entomology ✓	2	3	-	40	40
	VI ✓	Core-VII Theory	Immunology and Animal Biotechnology	3	3	20	40	60
		Core-VII Practical	Immunology and Animal Biotechnology	2	3	-	40	40
	VIII	Open Elective I Theory	Medical Transcription	3	3	20	40	60
	VIII	Open Elective I Practical	Medical Transcription	2	3	-	40	40
	IX ✓	Elective-VIII Theory	Public Health and Hygiene/Aquatic Biology ✓	3	3	20	40	60
		Elective-VIII Practical	Public Health and Hygiene/Aquatic Biology ✓	2	3	-	40	40
	X ✓	Open Elective II Theory	Clinical Science	3	3	20	40	60
	X ✓	Open Elective II Practical	Clinical Science	2	3	-	40	40
				50				1000

*G. H. H. H.*

**DEPARTMENT OF ZOOLOGY**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc.(Zoology)**  
**2014 - 15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	<del>Theory-I</del>	<del>Biology of invertebrates and cell biology</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-I</del>	<del>Invertebrates</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	<del>Theory-II</del>	<del>Biology of Chordates, Embryology, Ecology and Zoogeography</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-II</del>	<del>Chordates, Embryology and Ecology</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Animal physiology, Genetics & Evolution	3 Hours	100
	Practical-III	Animal Physiology, Genetics Evolution	3 Hours	50
	Theory-IV	Applied Zoology	3 Hours	100
	Practical-IV	Fisheries and Aquaculture and Animal Biotechnology	3 Hours	50

**Telangana State Council of Higher Education, Govt. of Telangana B.Sc., CBCS Common  
Core Syllabi for all Universities in Telangana  
PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN  
B.Sc., Chemistry**

<b>FIRST YEAR- SEMSTER I</b>				
<b>CODE</b>	<b>COURSE TITLE</b>	<b>COURSE TYPE</b>	<b>HPW</b>	<b>CREDITS</b>
BS 101	Communication	AECC-1	2	2
BS 102	English	CC-1A	5	5
BS 103	Second language	CC-2A	5	5
BS 104	Optional I	DSC-1A	4T+2P=6	4+1=5
BS 105	Optional II	DSC-2A	4T+2P=6	4+1=5
<b>BS 106</b>	<b>Optional III- Chemistry - I</b>	<b>DSC-3A</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course – I (Qualitative Analysis – I)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>FIRST YEAR- SEMSTER II</b>				
BS 201	Environmental studies	AECC-2	2	2
BS 202	English	CC-1B	5	5
BS 203	Second language	CC-2B	5	5
BS 204	Optional I	DSC-1B	4T+2P=6	4+1=5
BS 205	Optional II	DSC-2B	4T+2P=6	4+1=5
<b>BS 206</b>	<b>Optional III- Chemistry - II</b>	<b>DSC-3B</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - II (Qualitative Analysis – II)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER III</b>				
BS 301	<b>Safety Rules in Chemistry Laboratory and Lab Reagents</b>	<b>SEC-I</b>	2	2
BS 302	English	CC-1C	5	5
BS 303	Second language	CC-2C	5	5
BS 304	Optional I	DSC-1C	4T+2P=6	4+1=5
BS 305	Optional II	DSC-2C	4T+2P=6	4+1=5
<b>BS 306</b>	<b>Optional III- Chemistry - III</b>	<b>DSC-3C</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - III (Quantitative Analysis – I)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER IV</b>				
BS 401	<b>Remedial Methods for Pollution, Drinking Water and Soil Fertility</b>	<b>SEC-2</b>	2	2
BS 402	English	CC-1D	5	5
BS 403	Second language	CC-2D	5	5
BS 404	Optional I	DSC-1D	4T+2P=6	4+1=5
BS 405	Optional II	DSC-2D	4T+2P=6	4+1=5
<b>BS 406</b>	<b>Optional III- Chemistry - IV</b>	<b>DSC-3D</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - IV (Quantitative Analysis – II)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>

\* **Optional III Chemistry** AECC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course; DSC: Discipline Specific Course; GE: Generic Elective;

**DEPARTMENT OF CHEMISTRY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF **B.Sc. (CHEMISTRY)**  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Chemistry-I	3 Hours	100
	Practical-I	Semi micro analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Chemistry-II	3 Hours	100
	Practical-II	Volumetric analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Chemistry-III	3 Hours	100
	Practical-III	Synthesis and Identification of Organic compounds	3 Hours	50
	Theory-IV	Chemistry-IV	3 Hours	100
	Practical-IV	Instrumentation & Kinetics	3 Hours	50

**Department of MATHEMATICS,OU**  
**Proposed Choice Based Credit System (CBCS)**  
**M.Sc Mathematics**

**Semester -I**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	MM 101	I	Algebra	4	20	80	100	4
2. Core	MM 102	II	Analysis	4	20	80	100	4
3. Core	MM 103	III	Mathematical Methods	4	20	80	100	4
4. Core	MM 104	IV	Elementary Number Theory	4	20	80	100	4
5. Practical	MM 151	Practical	Algebra	4	....	50	50	2
6. Practical	MM 152	Practical	Analysis	4	....	50	50	2
7. Practical	MM 153	Practical	Mathematical Methods	4	....	50	50	2
8. Practical	MM 154	Practical	Elementary Number Theory	4	....	50	50	2
			<b>Total :</b>	<b>32</b>				<b>24</b>

**DEPARTMENT OF MATHEMATICS,OU**  
**Proposed Choice Based Credit System (CBCS)**  
**M.Sc Mathematics**

**Semester -II**

S.No.	Code No	Paper	Paper Title	Hrs/Week	Internal Assessment	Semester Exam	Total Marks	Credits
1. Core	MM 201	I	Advnaced Algebra	4	20	80	100	4
2. Core	MM 202	II	Advnaced Analysis	4	20	80	100	4
3. Core	MM 203	III	Theory of Ordinary differential equation	4	20	80	100	4
4. Core	MM 204	IV	Topology	4	20	80	100	4
5. Practical	MM 251	Practical	Advanced Algebra	4	....	50	50	2
6. Practical	MM 252	Practical	Advnaced Analysis	4	....	50	50	2
7. Practical	MM 253	Practical	Theory of Ordinary differential equation	4	....	50	50	2
8. Practical	MM 254	Practical	Topology	4	....	50	50	2
			<b>Total :</b>	<b>32</b>				<b>24</b>

**Department of MATHEMATICS,OU**  
**Proposed Choice Based Credit System (CBCS)**  
**M.Sc Mathematics**

**Semester -III**

- |    |                            |        |
|----|----------------------------|--------|
| 1. | Complex Analysis           | MM301  |
| 2. | Elementary Operator Theory | MM302  |
| 3. | Operations Research        | MM303C |
| 4. | Integral Equations         | MM304B |
| 5. | Numerical Techniques       | MM305C |

**Semester -IV**

- |    |                              |        |
|----|------------------------------|--------|
| 1. | Advanced Complex Analysis    | MM401  |
| 2. | General Measure Theory       | MM402  |
| 3. | Advanced Operations Research | MM403C |
| 4. | Banach Algebra               | MM404A |
| 5. | Calculus of Variations       | MM405A |



**MSc BIOTECHNOLOGY**  
**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**DEPARTMENT OF GENETICS & BIOTECHNOLOGY, OSMANIA UNIVERSITY**  
 Schedule for Instruction and Examination  
 (Proposed Scheme for Academic year 2016 onwards)

<b>SEMESTER – I</b>							
<b>S No</b>	<b>Syllabus Ref No</b>	<b>Subject</b>	<b>Credits</b>	<b>Teaching Hours</b>	<b>Marks</b>		
					<b>Internal Assessment</b>	<b>Semester Exam</b>	<b>Total</b>
<b>THEORY</b>							
1.	BT 101 T	Cell Biology and Genetics	4	4	20	80	100
2.	BT 102 T	Biological chemistry	4	4	20	80	100
3.	BT 103 T	Microbiology	4	4	20	80	100
4.	BT 104 T	Statistics, laboratory management & safety, entrepreneurship	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 151 P	Cell Biology and Genetics	2	4		50	50
2.	BT 152 P	Biological chemistry	2	4		50	50
3.	BT 153 P	Microbiology	2	4		50	50
4.	BT 154 P	Biostatistics	2	4		50	50
<b>Total</b>			<b>24</b>	<b>32</b>	<b>80</b>	<b>520</b>	<b>600</b>

<b>SEMESTER – II</b>							
<b>S No</b>	<b>Syllabus Ref No</b>	<b>Subject</b>	<b>Credits</b>	<b>Teaching Hours</b>	<b>Marks</b>		
					<b>Internal Assessment</b>	<b>Semester Exam</b>	<b>Total</b>
<b>THEORY</b>							
1.	BT 201 T	Molecular Biology- The Genome	4	4	20	80	100
2.	BT 202 T	Molecular Biology- Genes to Proteins	4	4	20	80	100
3.	BT 203 T	Immunology	4	4	20	80	100
4.	BT 204 T	Microbial technology	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 251 P	Molecular Biology-The Genome	2	4		50	50
2.	BT 252 P	Molecular Biology- Genes to Proteins	2	4		50	50
3.	BT 253 P	Immunology	2	4		50	50
4.	BT 254 P	Microbial technology	2	4		50	50
<b>Total</b>			<b>24</b>	<b>32</b>	<b>80</b>	<b>520</b>	<b>600</b>

T- Theory, P-Practical

**SEMESTER – III**

S No	Syllabus Ref No	Subject		Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 301 U	rDNA Technology	4	4	20	80	100
2.	BT 302 U	Industrial Biotechnology	4	4	20	80	100
3.	BT 303 U	Immunology	4	4	20	80	100
4.	BT 304 U	Intellectual Property Rights, Entrepreneurship and Research Methodology	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 351 U	rDNA Technology	2	4		50	50
2.	BT 352 U	Industrial Biotechnology	2	4		50	50
3.	BT 353 U	Immunology	2	4		50	50
		<b>Total</b>	<b>20</b>	<b>28</b>	<b>80</b>	<b>470</b>	<b>550</b>

**SEMESTER – IV**

S No	Syllabus Ref No	Subject		Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 401 U	Bioinformatics	4	4	20	80	100
2.	BT 402 U	Bioprocess Engineering	4	4	20	80	100
3.	BT 403 UA BT 403 UB BT 403 UC BT 403 UD	<b>Elective -</b> A. Medical Biotechnology B. Animal Biotechnology C. Agricultural Biotechnology D. Environmental Biotechnology	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 401 U	Bioinformatics	2	4		50	50

2.	BT 402 U	Bioprocess Engineering	2	4		50	50
3.	BT 403 UA BT 403 UB BT 403 UC BT 403 UD	<b>Elective -</b> A. Medical Biotechnology B. Animal Biotechnology C. Agricultural Biotechnology D. Environmental Biotechnology	2	4		50	50
		<b>Total</b>	<b>18</b>	<b>24</b>	<b>60</b>	<b>390</b>	<b>450</b>

**DEPARTMENT OF CHEMISTRY**  
**OSMANIA UNIVERSITY**  
 (Effective from academic year 2016-2017 for Campus and Constituent colleges  
*[UNDER CBCS Scheme]*)

**Semester I**

	<b>Hrs. /week</b>	<b>internal assessment</b>	<b>Semester exam</b>	<b>Total</b>	<b>Credits</b>
CH101T (*)	4	20 marks	80 marks	100 marks	4
CH102T (*)	4	20 marks	80 marks	100 marks	4
CH103T (*)	4	20 marks	80 marks	100 marks	4
CH104T (*)	4	20 marks	80 marks	100 marks	4
CH151P (IC LAB*)	6			75 marks	3
CH152P (OC LAB*) (4h + 2T)				50 marks	2
CH153P (PC LAB*)	6			75 marks	3
<b>Total</b>				<b>600 marks</b>	<b>24</b>

(\*Core= compulsory papers common to all students admitted to M.Sc Chemistry, OU)

**Semester II**

	<b>Hrs. /week</b>	<b>internal assessment</b>	<b>Semester exam</b>	<b>Total</b>	<b>Credits</b>
CH201T (*)	4	20 marks	80 marks	100 marks	4
CH202T (*)	4	20 marks	80 marks	100 marks	4
CH203T (*)	4	20 marks	80 marks	100 marks	4
CH204T (*)	4	20 marks	80 marks	100 marks	4
CH251P (IC LAB*)	6			75 marks	3
CH252P (OC LAB*)	6			75 marks	3
CH253P (PC LAB*) (4h + 2T)				50 marks	2
<b>Total</b>				<b>600 marks</b>	<b>24</b>

(\*= compulsory papers common to all students admitted to M.Sc Chemistry, OU)

# Osmania University

## M.Sc Chemistry

Scheme of Instruction and Examination (Revised 2008) for the Batch admitted in the academic  
Year 2008-2009

### Semester –III

Sub-Code	Subject	Instruction Hrs/Week	Internal Assessment Marks	Max Marks Semester Exams	Duration of semester Exam (Hrs)
	<b>THEORY</b>				
CH (O) 301	Conformational analysis, Pericyclic reactions and enzymes	4 Hrs	20	80	3Hrs
CH(O)302	Asymmetric synthesis, synthetic strategies and heterocycles	4 Hrs	20	80	3Hrs
CH(O) 303	Modern Organic Synthesis	4 Hrs	20	80	3Hrs
CH 304	Spectroscopy and photochemistry	4 Hrs	20	80	3Hrs
	<b>PRACTICAL</b>				
CH 351	Separation and identification of organic compounds	6 Hrs/Week	-	100	6Hrs
CH 352	Spectroscopic identification of organic compounds and Chromatography	6 Hrs/Week	-	100	6Hrs
CH 399	SEMINAR	2 Hrs/Week	-		
	Total	28+2	80	520	

### Semester –IV

Sub-Code	Subject	Instruction Hrs/Week	Internal Assessment Marks	Max Marks Semester Exams	Duration of semester Exam (Hrs)
	<b>THEORY</b>				
CH(O) 401	Drug discovery	4 Hrs	20	80	3Hrs
CH(O) 402	Mechanism of action of Drugs	4 Hrs	20	80	3Hrs
CH(O) 403 (E2)	Advanced Heterocyclic chemistry (Elective)	4 Hrs	20	80	3Hrs
CH(O) 404(E1)	Advanced Natural Products (Elective)	4 Hrs	20	80	3Hrs
	<b>PRACTICAL</b>				
		6 Hrs/Week	-	100	6Hrs
		6 Hrs/Week	-	100	6Hrs
CH 499	SEMINAR	2 Hrs/Week	-		
	Total	28+2	80	520	

Note:

- Practical examination in CH 351 and CH 451 is for 100 marks held at the end of semester IV
- Practical examination in CH 352 and CH 452 is for 100 marks held at the end of semester IV

**DEPARTMENT OF COMMERCE, O.U.****M.Com. COURSE STRUCTURE (CBCS)****FIRST SEMESTER**

Sl. No.	Code	Title of the Paper	THPW	Credits	DESE	Marks			
						IA	Assign-ment	End-Sem. Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1.	Com 1 : Core – I	Managerial Economics	5	4	3 Hrs	15	5	80	100
2.	Com 2 : Core – II	Principles of Marketing	5	4	3 Hrs	15	5	80	100
3.	Com 3 : Core – III	OT & OB	5	4	3 Hrs	15	5	80	100
4.	Com 4 : Elective – I :	Specialization **	5	5	3 Hrs	15	5	80	100
5.	Com 5 : Elective–II :	Specialization **	5	5	3 Hrs	15	5	80	100
	Seminar : .....		<b>2</b>	<b>1</b>	-	-	-	25*	25
<b>Total</b>			<b>27</b>	<b>23</b>		<b>75</b>	<b>25</b>	<b>425</b>	<b>525</b>

\*25=15W+10PR

**SECOND SEMESTER**

Sl. No.	Code	Title of the Paper	THPW	Credits	DESE	Marks			
						IA	Assign-ment	End-Sem. Exam	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
6.	Com 6: Core – I	Business Environment & Policy	5	4	3 Hrs	15	5	80	100
7.	Com 7: Core – II	Marketing Management	5	4	3 Hrs	15	5	80	100
8.	Com 8: Core – III	Human Resource Management	5	4	3 Hrs	15	5	80	100
9.	Com 9: Elective–I :	Specialization **	5	5	3 Hrs	15	5	80	100
10.	Com 10: Elective-II:	Specialization **	5	5	3 Hrs	15	5	80	100
	Seminar : .....		<b>2</b>	<b>1</b>	-	-	-	25*	25
<b>Total</b>			<b>27</b>	<b>23</b>	-	<b>75</b>	<b>25</b>	<b>425</b>	<b>525</b>

\*25=15W+10PR

**THIRD SEMESTER**

Com 301	Research Methodology & Statistical Analysis	5	3	80	20	100
Com 302	Cost Accounting & Control	5	3	80	20	100
Com 303	Specialization Paper-I	5	3	80	20	100
Com 304	Specialization Paper-II	5	3	80	20	100
Com 305	E-Commerce	5(3T+2P)	3	56	14 IA 30 LB	100
	Seminar	2		15W	10PR	25
	<b>Total</b>	<b>27</b>				

**FOURTH SEMESTER**

Com 401	Quantitative Techniques for Business Decisions	5	3	80	20	100
Com 402	Tax Planning	5	3	80	20	100
Com 403	Specialization Paper-I	5	3	80	20	100
Com 404	Specialization Paper-II	5	3	80	20	100
Com 405	PROJECT WORK*	5		60D	40VV	100
	Seminar	2		15W	10PR	25
	<b>Total</b>	<b>27</b>				
	<b>GRAND TOTAL</b>	<b>104</b>				

**Notation:**

ID–Inter Disciplinary; Com–Commerce; W-Write-up (4-5 Pages); PR – Presentation; IA – Internal assessment; D–Dissertation (50-75 Pages); VV – Viva-Voce; LB – Lab Practical Exam. \* - “Project Work – Guidelines” for details, SOI – Standard of Instruction.

**M.Com (NCBCS)**

**Faculty of Commerce, OU**

**Notes:**

- i) Teachers are advised to handle/analyze at least 3 or 4 cases in the subject in the classroom on any topics outlined wherever feasible.
- ii) For each paper there will be semester examination for 80 marks and 20 marks for internal assessment [15 marks for tests (average of the two tests) and 5 marks for assignment in the subject].
- iii) In paper 305 theory examination is for 56 marks, Internal Assessment is for 14 marks and Computer Lab Practical examinations is for 30 marks.

**SPECIALIZATION**

**FINANCE**

Code	Name of the Paper	Exam Hrs	Sem Exam	IA
FIN/INB 303	International Financial Management	3	80	20
FIN 304	Securities Analysis & Portfolio Management	3	80	20
FIN 403	Financial Services	3	80	20
FIN/404	Financial Derivatives	3	80	20

**MBA (Day) Structure and Syllabus As Per CBCS Guidelines Effective From 2016**  
**Year-I Semester -I**

Course Code	Course Title	Nature	Credits	HPW	Max Marks (CIE+SEE) 100
MB101	Management & Organizational Behaviour	Core	5	5	20+80
MB102	Accounting for Management	Core	5	5	20+80
MB103	Marketing Management	Core	5	5	20+80
MB104	<b>Open Elective-I</b> 1. Business Law & Ethics 2. Fundamentals of Technology Management 3. Managerial Economics	Open Elective	4	4	20+80
MB105	<b>Open Elective -II</b> 1. IT Applications for Management 2. Business Communication 3. Customer Relationship Management	Open Elective	4	4	20+80
MB106	Computer Practical	Practical	1	2	25
<b>Total credits at the end of I<sup>st</sup> Semester</b>			<b>24</b>	<b>25</b>	<b>525</b>

**Year-I Semester -II**

Course Code	Course Title	Nature	Credits	HPW	Max Marks (IA+UE) 100
MB201	Human Resources Management	Core	5	5	20+80
MB202	Financial Management	Core	5	5	20+80
MB203	Business Research Methods	Core	5	5	20+80
MB204	<b>Open Elective-III</b> 1. Economic Environment and Policy 2. Business Process Re-engineering 3. International Business 4. Financial Markets & Services	Open Elective	4	4	20+80
MB205	<b>Open Elective-IV</b> 1. Total Quality Management 2. Strategic Management Accounting 3. Start Up Management 4. Retail Management	Open Elective	4	4	20+80
MB206	Seminar	-----	1	2	Grade
<b>Semester Credits</b>			<b>24</b>	<b>25</b>	<b>500</b>
<b>Total credits at the end of II<sup>nd</sup> Semester</b>			<b>48</b>	<b>50</b>	<b>1025</b>

- HPW – Hours Per Week
- CIE – Continuous Internal Exam
- SEE – Semester End Exam

  
 CHAIRMAN  
 BOS IN BUSINESS MANAGEMENT  
 OSMANIA UNIVERSITY  
 HYDERABAD - 500 007. (A.P.)

### 3<sup>rd</sup> Semester

Subject -Code	Subject Name	No. of teaching hours per week	Marks (IA + UE)	No. of Credits
3.1	Total Quality Management	5	20+80	4
3.2	International Business	5	20+80	4
3.3	Managerial Communication * (CBCS)	5	20+80	4
3.4	<b>Finance</b> (Students are required to select any one subject from Minor in addition to Major)			
	3.4.1 Investment Management (Major)	5	20+80	4
	3.4.2 Strategic Management Accounting (Minor)	5	20+80	4
	3.4.3 International Finance (Minor)	5	20+80	4
3.5	<b>Human Resource Management</b> (Students are required to select any one subject from Minor in addition to Major)			
	3.5.1 Compensation Management (Major)	5	20+80	4
	3.5.2 Organizational Development (Minor)	5	20+80	4
	3.5.3 Leadership and Change Management (Minor)	5	20+80	4
3.6	<b>Marketing</b> (Students are required to select any one subject from Minor in addition to Major)			
	3.6.1 Product and Brand Management (Major)	5	20+80	4
	3.6.2. Promotion and Distribution Management (Minor)	5	20+80	4
	3.6.3 Marketing Engineering (Minor)	5	20+80	4
3.7	<b>Systems</b> (Minor)			
	3.7.1. Relational Database Management Systems (RDBMS)	5	20+60	4
	3.7.1.1: RDBMS – Lab(Oracle)	2	20	--

**Note – 1:** Maximum total number of marks at the end of 3<sup>rd</sup> semester: 700+700+600=2000

**2:** The total number of credits at the end of the third semester = 28+28+24=80

**3:** \*CBCS applicable to only MBA Day Programme of UCC&BM only.

## 4<sup>th</sup> Semester

Subject -Code	Subject Name	No. of teaching hours per week	Marks (IA + UE)	No. of Credits
4.1	Strategic Management	5	20+80	4
4.2	Supply Chain Management	5	20+80	4
4.3	Entrepreneurial Development (CBCS)	5	20+80	4
4.4	<b>Finance</b> (Students are required to select any one subject from Minor in addition to Major)			
	4.4.1 Financial Risk Management (Major)	5	20+80	4
	4.4.2 Banking and Insurance (Minor)	5	20+80	4
	4.4.3 Financial Services and Systems (Minor)	5	20+80	4
4.5	<b>Human Resource Management</b> (Students are required to select any one subject from Minor in addition to Major)			
	4.5.1 Performance Management (Major)	5	20+80	4
	4.5.2 Labour Laws and Employee Relations (Minor)	5	20+80	4
	4.5.3 Talent and Knowledge Management (Minor)	5	20+80	4
4.6	<b>Marketing</b> (Students are required to select any one subject from Minor in addition to Major)			
	4.6.1 Consumer Behaviour (Major)	5	20+80	4
	4.6.2 Services and Global Marketing (Minor)	5	20+80	4
	4.6.3 Customer Relationship Management (Minor)	5	20+80	4
4.7	<b>Systems</b> (Minor)			
	4.7.1. E – Business	5	20+80	4
4.8	Mentor & Project work	5	100	4
4.9	Viva – Voce (Comprehensive)		100	4

### Note:

1. Maximum total number of marks at the end of 4<sup>th</sup> semester = 700+700+600+600 = 2600
2. The total number of credits at the end of the fourth semester = 28+28+24+32 = 112
3. The maximum pass mark for each subject shall be 40. However, student needs to secure a minimum of 40% marks in the University Examination.

**IA:** Internal Assessment

**UE:** University Examination

**SCHEME OF INSTRUCTION**  
**MCA (MASTER OF COMPUTER APPLICATIONS)**  
**Proposed from the Academic year 2016-2017 [ CBCS ]**

**MCA I Year**

**SEMESTER – I**

S. No	Course Code	Course Title	Scheme of Examination		L	T	P/Dr	Hrs/Wk	Credits
			CIE	SEE					
1.	PC 101 IT	Discrete Mathematics	30	70	3	1	-	4	3
2.	BS 101 MT	Probability & Statistics	30	70	3	1	-	4	3
3.	PC 102 IT	Computer Programming and Problem Solving	30	70	4	0	-	4	4
4.	PC 103 IT	Elements of Information Technology	30	70	3	1	-	4	3
5.	HS 101 CM	Economic Analysis	30	70	3	1	-	4	3
6.	MC 106 EG	English	30	70	3	1	-	4	3
<b>PRACTICALS</b>									
6.	PC 151 IT	Programming Lab I (C Programming Lab)	25	50	-	-	4	4	2
7.	PC 152 IT	Programming Lab II (IT Workshop)	25	50	-	-	4	4	2
<b>Total</b>			<b>230</b>	<b>520</b>	<b>16</b>	<b>4</b>	<b>8</b>	<b>32</b>	<b>23</b>

**SEMESTER - II**

S. No	Course Code	Course Title	Scheme of Examination		L	T	P	Hrs/Wk	Credits
			CIE	SEE					
1.	HS 201 CM	Accounting & Financial Management	30	70	3	1	-	4	3
2.	PC 201 IT	Principles of Object Oriented Programming using Java	30	70	4	-	-	4	4
3.	PC 202 IT	Management Information Systems	30	70	3	1	-	4	3
4.	PC 203 IT	C++ and Data Structures	30	70	3	1	-	4	3
5.	PC 204 IT	Computer Organization	30	70	3	1	-	4	3
6.	HS 202 EG	Communication Skills	30	70	3	1	-	4	3
<b>PRACTICALS</b>									
6.	PC 251 IT	Programming Lab – III (OOP Lab)	25	50	-	-	4	4	2
7.	PC 252 IT	Programming Lab – IV (C++ Programming Lab)	25	50	-	-	4	4	2
<b>Total</b>			<b>230</b>	<b>520</b>	<b>16</b>	<b>4</b>	<b>8</b>	<b>32</b>	<b>23</b>

OSMANIA UNIVERSITY  
HYDERABAD- 500 007

SCHEME OF INSTRUCTION & EXAMINATION  
M.C.A. II YEAR

2010-2011

SEMESTER – I

Sl.No	Syllabus Ref.No	SUBJECT	Scheme of Instruction		Scheme of Examination		
			Periods per Week		Duration in Hrs.	Maximum Marks	
						Univ. Exam	Sessi-onals
		THEORY					
1.	CS 701	Software Engineering	4	-	3	80	20
2.	CS 702	Database Management System	4	-	3	80	20
3.	CS 703	Design and Analysis of Algorithms	4	-	3	80	20
4.	CS 704	Operating Systems	4	-	3	80	20
5.	CS 705	Operations Research	4	-	3	80	20
		PRATICALS					
1.	CS 731	Programming Lab-V ( DBMS Programming)	-	6	3	50	25
2.	CS 732	Programming Lab-VI ( OPERATING SYSTEMS )	-	6	3	50	25
		Total	20	12		500	150

OSMANIA UNIVERSITY  
HYDERABAD- 500 007

SCHEME OF INSTRUCTION & EXAMINATION  
M.C.A. II YEAR

2010-2011

SEMESTER – II

Sl.No	Syllabus Ref.No	SUBJECT	Scheme of Instruction		Scheme of Examination		
			Periods per Week		Durati on in Hrs.	Maximum Marks	
						Univ. Exam	Sessi- onals
		THEORY					
1.	CS 751	Dataware Housing and Data Mining	4	-	3	80	20
2.	CS 752	Computer Networks	4	-	3	80	20
3.	CS 753	Unix Programming	4	-	3	80	20
4.	CS 754	Web Programming	4	-	3	80	20
		ELECTIVE I					
5.	CS 755	Artificial Intelligence	4	-	3	80	20
6.	CS 756	Distributed Systems	4	-	3	80	20
7.	CS 757	Information Retrieval Systems	4	-	3	80	20
		PRATICALS					
1.	CS 781	Programming Lab-VII ( Unix Programming Lab)	-	6	3	50	25
2.	CS 732	Programming Lab-VIII (Web Programming Lab)	-	6	3	50	25
		Total	20	12		500	150

**SCHEME OF INSTRUCTION AND EXAMINATION**  
**M.C.A III<sup>rd</sup> YEAR**  
**FACULTY OF INFORMATION TECHNOLOGY**

**SEMESTER – I**

Sl. No.	Syllabus Ref. No.	SUBJECT	Scheme of Instruction		Scheme of Examination		
			Periods per week		Duration In Hours	Maximum Marks	
			L/T	D/P		Univ. Exam	Sessionals
<b>THEORY</b>							
1	CS 801	Information Security	4	-	3	80	20
2	CS 802	Middleware Technologies	4	-	3	80	20
3	CS 803	Object Oriented System Development	4	-	3	80	20
4		<b>Elective – II (One of the following)</b>	4	-	3	80	20
	CS 804	Cloud Computing					
	CS 805	Electronic Commerce					
	CS 806	Human Computer Interaction					
	CS 807	Software Reuse Techniques					
	CS 808	Soft Computing					
	CS 809	XML & Web Services					
5		<b>Elective – II (One of the following)</b>	4	-	3	80	20
	CS 810	Mobile Computing					
	CS 811	Software Testing					
	CS 812	System Administration					
	CS 813	Rich Internet Applications					
	CS 814	Software Project Management					
	CS 815	Research Methodology					
<b>PRACTICALS</b>							
1	CS 831	Programming Lab IX- OOSD Lab	-	3	3	50	25
2	CS 832	Programming Lab X- Middleware Technologies Lab	-	3	3	50	25
3	CS 833	Seminar	-	3	3	-	25
		<b>TOTAL</b>	<b>20</b>	<b>9</b>	<b>-</b>	<b>500</b>	<b>175</b>

WITH EFFECT FROM THE ACADEMIC YEAR 2014-2015

**SCHEME OF INSTRUCTION AND EXAMINATION  
MCA III<sup>rd</sup> YEAR**

**FACULTY OF INFORMATION TECHNOLOGY**

**SEMESTER – II**

SI. No	Syllabus Ref. No	Subject	Scheme of Instruction		Scheme of Examination		
			Periods per week		Dura- tion in hrs	Maximum Marks	
			L/T	D/P		Univ- Exam	Sessi- onals
1.	CS 851	Project Seminar	-	3	-	-	25
2.	CS 852	Project	-	6	-	Gr*	50

\*Projects are evaluated with Viva Voce examination and the following grades are awarded:

**Excellent/Very Good/Good/Satisfactory/ Not Satisfactory**

In case of Not Satisfactory, the candidates has to redo the project and submit at the time of next semester examination.

With effect from the academic year 2016-2017

**Department of Mathematics**  
**Osmania University**  
**M.Sc. [Computer Science]**  
Course under Choice Based Credit System

**SEMESTER – I**

Paper	Code	Paper Title	HpW	Marks	Credits
I	CS101T	Advanced Java Programming	4	20+80 =100	4
II	CS102T	Operating Systems	4	20+80 =100	4
III	CS103T	Software Engineering	4	20+80 =100	4
IV	CS104T	Discrete Mathematics	4	20+80 =100	4
V	CS105P	Advanced Java Lab	6	75	3
VI	CS106P	Operating Systems Lab	6	75	3
VII	CS107P	Software Engineering Lab	4	50	2
<b>Total</b>			<b>32</b>	<b>600</b>	<b>24</b>

**SEMESTER – II**

Paper	Code	Paper Title	HpW	Marks	Credits
I	CS201T	Programming in Python	4	20+80 =100	4
II	CS202T	Computer Networks	4	20+80 =100	4
III	CS203T	Design and Analysis of Algorithms	4	20+80 =100	4
IV	CS204T	Automata Theory	4	20+80 =100	4
V	CS205P	Python Lab	6	75	3
VI	CS206P	Computer Networks Lab	6	75	3
VII	CS207P	Design and Analysis of Algorithms Lab	4	50	2
<b>Total</b>			<b>32</b>	<b>600</b>	<b>24</b>

III Semester:

1.	.Net	CS-301T
2.	Artificial Intelligence	CS-302T
3.	Object- Oriented System Development with UML	CS-303T
4.	Network Security	CS-304T
5	ELECTIVE:	
	a) Neural Networks and Fuzzy Logic	CS-305AT
	b) Image Processing	CS-305BT
	c) Parallel Programming	CS-305CT
Labs:		
1.	System Security	CS-306P
2.	.Net	CS-307P

IV Semester:

1.	Data ware Housing and Data Mining	CS-401T
2.	Mobile Computing	CS-402T
3.	Seminar on "Project Work"	CS-403P

**DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY, HYDERABAD**

**M. Sc. (Physics) and M.Sc. (Appl. Electronics) Courses under CBCS  
(with effect from the academic year 2016 –2017)**

**Semester –I**

Sl.No	Sub.Code	Paper No.	Subject	Instruc-tions. Hrs/Week	Credits	Max. Marks
<b>THEORY</b>						
01	PAE 101 T	I	Mathematical Physics	4	4	100*
02	PAE 102 T	II	Classical Mechanics	4	4	100*
03	PAE 103 T	III	Quantum mechanics - I	4	4	100*
04	PAE 104 T	IV	Solid State Physics	4	4	100*
<b>PRACTICALS</b>						
05	PAE 151 P	V	C - Programming Lab	4	2	100
06	PAE 152 P	VI	Electronics Lab	4	2	100
07	PAE 153 P	VII	Heat & Acoustics Lab	4	2	100
08	PAE 154 P	VIII	Optics Lab	4	2	100
			Total:		24	800

**\* Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. There shall be no internal assessment examinations for practicals. Practical Examinations will be conducted at the end of each semester.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**. Part –A consists of EIGHT short notes questions, carrying 4 marks each. The student has to answer all the questions. Part –B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks.

**DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY, HYDERABAD**

**M. Sc. (Physics) and M.Sc. (Appl. Electronics) Courses under CBCS  
(with effect from the academic year 2016 –2017)**

**Semester –II**

Sl.No	Sub.Code	Paper No.	Subject	Instruc-tions.	Credits	Max. Marks
<b>THEORY</b>						
01	PAE 201 T	I	Electromagnetic Theory	4	4	100*
02	PAE 202 T	II	Statistical Mechanics	4	4	100*
03	PAE 203 T	III	Quantum Mechanics - II	4	4	100*
04	PAE 204 T	IV	Electronics	4	4	100*
<b>PRACTICALS</b>						
05	PAE 251 P	V	C- Programming Lab	4	2	100
06	PAE 252 P	VI	Electronics Lab	4	2	100
07	PAE 253 P	VII	Heat & Acoustics Lab	4	2	100
08	PAE 254 P	VIII	Optics Lab	4	2	100
			<b>Total:</b>		24	800

**\* Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. There shall be no internal assessment examinations for practicals. Practical Examinations will be conducted at the end of each semester.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**. Part –A consists of EIGHT short notes questions, carrying 4 marks each. The student has to answer all the questions. Part –B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks.

**DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY**  
**REVISED SYLLABUS FOR M.Sc (PHYSICS )**  
**III SEMESTER**

With effect from the academic year 2016 -2017 onwards

(M. Sc. Opto-Electronics Specialization) Semester III

Sl.No.	Sub.Code	Subject	Instruction Hrs/Week	Credits	Duration of Exam. Hrs	Max. Marks
<b>THEORY</b>						
01	POE 301 T/NC	Modern Optics	4	4	3	20+80**
02	POE 302 T/NC	Advanced Solid State Physics	4	4	3	20+80**
03	POE 303 T/NC	Introduction to Opto-Electronics	4	4	3	20+80**
04	POE 304 T/NC	Semiconductor Opto-Electronics	4	4	3	20+80**
05	POE 305 T/NC	Opto-Electronic Devices-Sources-Detectors	4	4	3	20+80**
<b>PRACTICALS</b>						
06	POE 351 P/NC	Lab – 1	6	4	4	100
07	POE 352 P/NC	Lab – 2	6	4	4	100
08	POE S1/NC	Seminar	4	1	--	25
		Total	32+4	29		725

**\*\*Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. Common Syllabus to University, Constituent and Affiliated Colleges. There shall be no internal assessment examinations for practicals. Practical Examinations will be conducted at the end of each academic year.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**.

Part – A consists of EIGHT short answer questions, carrying 4 marks each. The student has to answer all the questions. Part – B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks. The student has to answer all the questions.

  
 CHAIRMAN  
 BOS in PHYSICS  
 OSMANIA UNIVERSITY  
 HYDERABAD-500007

# DEPARTMENT OF PHYSICS, OSMANIA UNIVERSITY

## REVISED SYLLABUS FOR M.Sc. (PHYSICS )

### IV SEMESTER

With effect from the academic year 2016 -2017 onwards

#### IV Semester

Sl.No.	Sub.Code	Subject	Instruction Hrs/Week	Credits	Duration of Exam. Hrs	Max. Marks
<b>THEORY</b>						
01	POE 401 T/NC	Nuclear Physics	4	4	3	20+80**
02	POE 402 T/NC	Spectroscopy	4	4	3	20+80**
03	POE 403 T/NC	Fundamentals of Optical Fibres	4	4	3	20+80**
04	POE 404 T/NC	Optical Communication Systems and Measurements	4	4	3	20+80**
05	POE 405 T/NC	Opto-Electronics systems and Integration Techniques	4	4	3	20+80**
<b>PRACTICALS</b>						
06	POE 451 P/NC	Lab – 1	6	4	4	100
07	POE 452 P/NC	Lab – 2	6	4	4	100
08	POE S2/NC	Seminar	4	1	--	25
		Total	32+4	29		725

# ఉస్మానియా విశ్వవిద్యాలయం, తెలుగు శాఖ

## ఎం.ఏ., (తెలుగు) పాఠ్య ప్రణాళిక

### సెమిస్టర్ - 1

- 101. సంప్రదాయ సాహిత్యం - పాఠ్యాంశాలు
- 102. ప్రాచీన సాహిత్య చరిత్ర (15వ శతాబ్దం వరకు)
- 103. భారతీయ అలంకార శాస్త్రం
- 104(ఎ). బాల వ్యాకరణం
- 104(బి). ప్రౌఢ వ్యాకరణం
- 105(ఎ). తెలంగాణ చరిత్ర - సంస్కృతి
- 105(బి). తెలుగు నాటకం

### సెమిస్టర్ - 3

- 301. ఆధునిక కవిత్వం - పాఠ్యాంశాలు
- 302. భాషాశాస్త్ర పరిచయం
- 303. జానపద విజ్ఞానం
- 304(ఎ). తెలుగు పరిశోధన
- 304(బి). కథానిక - పాఠ్యాంశాలు
- 305. ఇంటర్ డిసిప్లినరీ పేపర్  
లేదా
- 305 (ఎ). బమ్మెర పోతన (ప్రత్యేక అధ్యయనం)
- 305 (బి). వచన సాహిత్యం

### సెమిస్టర్ - 2

- 201. సంప్రదాయ సాహిత్యం - పాఠ్యాంశాలు
- 202. ప్రాచీన సాహిత్య చరిత్ర (16-19వ శతాబ్దం)
- 203. ఆధునిక సాహిత్య విమర్శ
- 204(ఎ). ఛందస్సు - అలంకారాలు
- 204(బి). తెలుగు జర్నలిజం
- 205(ఎ). సంస్కృత సాహిత్య పరిచయం
- 205(బి). తెలుగు సాహిత్య ప్రక్రియలు

### సెమిస్టర్ - 4

- 401. ఆధునిక కవిత్వ వికాసం
- 402. తెలుగు భాషా పరిణామం
- 403. గిరిజన విజ్ఞానం
- 404(ఎ). తెలంగాణ సాహిత్య వైతాళికులు
- 404(బి). భారతీయ సాహిత్య వైతాళికులు
- 405(ఎ). నవల - పాఠ్యాంశాలు
- 405(బి). ప్రాజెక్ట్

### పరీక్షా విధానం

- + ప్రతి సెమిస్టర్లో 4,5 పేపర్లు ఐచ్ఛికాంశాలు. వీటిలో ఏదో ఒకటి విద్యార్థి ఎన్నుకోవాలి.
- + 305 ఇంటర్ డిసిప్లినరీ పేపర్ ఎం.ఏ., (తెలుగు) కాకుండా ఇతర సబ్జెక్టు వారికి ఉద్దేశించబడింది.
- ఎం.ఏ., తెలుగు విద్యార్థులు ఇతర సబ్జెక్టుల్లో ఏదో ఒకటి ఎన్నుకొని పరీక్ష రాయవలసి ఉంటుంది.
- ఈ పద్ధతి అమలు చేయని చోట 305(ఎ), 305 (బి), లలో ఏదో ఒకటి ఎన్నుకోవాలి.

ప్రతి సెమిస్టర్లో మొదటి మూడు పేపర్లకు :

- 1. 5 సంక్షిప్త సమాధానాలు (ఛాయిస్ లేదు)  $5 \times 4 = 20$
- 2. 5 వ్యాస రూప సమాధానాలు (ఇంటర్నల్ ఛాయిస్)  $5 \times 12 = 60$

ప్రతి సెమిస్టర్లో ఐచ్ఛికాంశాలకు (4,5 పేపర్లకు) :

- 1. 4 సంక్షిప్త సమాధానాలు (ఛాయిస్ లేదు)  $4 \times 5 = 20$
- 2. 4 వ్యాస రూప సమాధానాలు (ఇంటర్నల్ ఛాయిస్)  $4 \times 15 = 60$

- + 15 మార్కులకు ప్రతి సెమిస్టర్లో ప్రతి పేపర్కు ఇంటర్నల్ అసెస్మెంట్ పరీక్షలు రెండు విడతలుగా ఉంటుంది. వీని సరాసరిని బట్టి మార్కులు నిర్ణయిస్తారు.
- + 5 మార్కులు ప్రతి సెమిస్టర్లో ప్రతి పేపర్కు అసైన్మెంట్స్ రాసి ఇవ్వాల్సి ఉంటుంది.
- + 80 మార్కులకు ప్రతి సెమిస్టర్లో ప్రతి పేపర్కు పరీక్ష రాయాల్సి ఉంటుంది.

**ఉస్మానియా విశ్వవిద్యాలయం**  
**ఎం.ఏ(తెలుగు) పాఠ్యప్రణాళిక**

**సెమిస్టర్-1**

1. సంప్రదాయ సాహిత్యం-పాఠ్యాంశాలు(11నుంచి 15శతాబ్దం వరకు)
2. తెలుగు వ్యాకరణం
3. ప్రాచీన సాహిత్య విమర్శ
4. తెలుగు వారి చరిత్ర సంస్కృతి
5. ప్రాచీన సాహిత్య వికాసం(11నుంచి 15శతాబ్దం వరకు)

**సెమిస్టర్-2**

1. సంప్రదాయ సాహిత్యం-పాఠ్యాంశాలు(16నుంచి 19శతాబ్దం వరకు)
2. భాషా వికాసం
3. ఆధునిక సాహిత్య విమర్శ
4. సంస్కృత సాహిత్య పరిచయం-కావ్యం
5. ప్రాచీన సాహిత్య వికాసం(16నుంచి 19శతాబ్దం వరకు)

**సెమిస్టర్-3**

1. ఆధునిక కవిత్వం-పాఠ్యాంశాలు
2. కథానిక-పాఠ్యాంశాలు
3. జానపద సాహిత్యం-గేయశాఖ
4. ప్రత్యేకాంశాలు-(ఎ) ఆధునిక భాషాశాస్త్రం (బి) నాటకం
5. ప్రత్యేకాంశాలు-(ఎ) తెలంగాణ సాహిత్యం (బి) వార్తా రచన-అనువాదం

**సెమిస్టర్-4**

1. ఆధునిక సాహిత్య వికాసం
2. నవల-పాఠ్యాంశాలు
3. జానపద సాహిత్యం-వచన, దృశ్య శాఖలు
4. ప్రత్యేకాంశాలు-(ఎ) సంస్కృత నాటకం-వ్యాకరణం(బి) ఛందస్సు అలంకారాలు
5. ప్రత్యేకాంశాలు-(ఎ) ప్రకార్య భాష (బి) వచన సాహిత్యం

**DEPARTMENT OF COMMERCE, O.U.***Structure of B.Com (Computers ) (CBCS) for Osmania University, Hyderabad.**(w.e.f. Academic Year 2016-17)***B.COM (Computers) PROGRAMME**

<b>FIRST YEAR:</b>					
<b>SEMESTER-I</b>					
<i>Sl.No.</i>	<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
(1)	(2)	(3)	(4)	(5)	(6)
1.	BC101	A/B/C/D	AECC-1	2	2
2.	BC102	English	CC-1A	5	5
3.	BC103	Second Language	CC-2A	5	5
4.	BC104	Financial Accounting - I	DSC-1A	5	5
5.	BC105	Business Economics	DSC-2A	5	5
6.	BC106	Business Organization	DSC-3A	4	4
7.	BC107	Information Technology	DSC-4A	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-II</b>					
8.	BC201	A/B/C/D	AECC-2	2	2
9.	BC202	English	CC-1B	5	5
10.	BC203	Second Language	CC-2B	5	5
11.	BC204	Financial Accounting - II	DSC-1B	5	5
12.	BC205	Managerial Economics	DSC-2B	5	5
13.	BC206	Principles of Management	DSC-3B	4	4
14.	BCC207	Management Information System	DSC-4B	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SECOND YEAR:</b>					
<b>SEMESTER-III</b>					
15.	BC301	Principles of Insurance	SEC-1	2	2
16.	BC302	English	CC-1C	5	5
17.	BC303	Second Language	CC-2C	5	5
18.	BC304	Advanced Accounting	DSC-1C	5	5
19.	BC305	Income Tax-I	DSC-2C	5	5
20.	BC306	Business Statistics-I	DSC-3C	4	4
21.	BCC307	Programming with C	DSC-4C	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-IV</b>					
22.	BC401	Practice of Life Insurance	SEC-2	2	2
23.	BC402	English	CC -1D	5	5
24.	BC403	Second Language	CC-2D	5	5
25.	BC404	Corporate Accounting	DSC-1D	5	5
26.	BC405	Income Tax-II	DSC-2D	5	5
27.	BC406	Business Statistics-II	DSC-3D	4	4
28.	BCC407	Objective Oriented Programming with C++	<b>DSE-4D</b>	<b>3T+2P</b>	<b>5</b>
		<b>Total</b>		<b>31</b>	<b>30</b>

**DEPARTMENT OF COMMERCE,  
OSMANIA UNIVERSITY, HYDERABAD.  
STRUCTURE OF **B.COM (COMPUTERS)** DEGREE COURSE  
(w.e.f. ACADEMIC YEAR 2009-'10)**

<b>FIRST YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
101	FINANCIAL ACCOUNTING	6 (5+1)	3 Hours	70T + 30P = 100
102	BUSINESS ECONOMICS	4 (3+1)	3 Hours	70T + 30P = 100
103	BUSINESS ORGANISATION & MANAGEMENT	5 (4+1)	3 Hours	70T + 30P = 100
104	FUNDAMENTALS OF INFORMATION TECHNOLOGY	5 (4+1)	3 Hours	70T + 30P = 100
105	FUNDAMENTALS OF "C"	4 (3+1)	3 Hours	70T + 30P = 100
<b>SECOND YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
201	ADVANCED ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
202	BUSINESS STATISTICS	5 (4+1)	3 Hours	70T + 30P = 100
203	FINANCIAL SERVICES – BANKING & INSURANCE	5 (4+1)	3 Hours	70T + 30P = 100
204	TAXATION	5 (4+1)	3 Hours	70T + 30P = 100
205	RELATIONAL DATABASE MANAGEMENT SYSTEMS (RDBMS)	5 (3+2)	3 Hours	70T + 30P = 100
<b>THIRD YEAR</b>				
301	CORPORATE ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
302	E-COMMERCE (wef 20011-'12)	5 (3+2)	3 Hours	70T + 30P = 100
303	BUSINESS LAW	5 (4+1)	3 Hours	70T + 30P = 100
304	AUDITING	5 (4+1)	3 Hours	70T + 30P = 100
305	ELECTIVE: PAPER – I	5 (4+1)	3 Hours	70T + 30P = 100
306	ELECTIVE: PAPER – II	5 (4+1)	3 Hours	70T + 30P = 100
307	WEB PROGRAMMING	5 (3+2)	3 Hours	70T + 30P = 100

**NOTE:**

1. 70 MARKS ARE ALLOCATED FOR THEORY EXAM AND 30 MARKS ARE ALLOCATED FOR THE COMPUTER / COMMERCE LAB PRACTICALS.
2. ONE HOUR OF THEORY CLASS IS EQUAL TO TWO COMPUTER/COMMERCE LAB HOURS.
3. PATTERN OF QUESTION PAPER FOR 70 MARKS AND 30 MARKS OF PRACTICAL EXAMINATION IS GIVEN AT THE END.
4. STRUCTURE OF ELECTIVES IS GIVEN IN THE FOLLOWING PAGE, FROM WHICH A STUDENT SHOULD OPT 2 PAPERS OF ANY ONE ELECTIVE.

**B.Com (COMPUTERS)  
THRID YEAR- ELECTIVES  
(Code 305 & 306)**

<b>Code</b>	<b>TITLE OF THE ELECTIVE</b>	<b>Papers</b>
E-I	INSURANCE	I) 305: Life Insurance II) 306: Non-Life Insurance
E-II	BANKING	I) 305: Banking in India II) 306: Computer Applications in Banking
E-III	ACCOUNTANCY - II	I) 305: Cost Accounting II) 306: Management Accounting & Control
E-IV	RETAILING	I) 305: Retail Management II) 306: Retail Marketing & CRM
E-V	TAXATION	I) 305: Direct Taxes II) 306: Indirect Taxes
E-VI	FINANCE	I) 305: Financial Management II) 306: Micro-credit and Foreign Trade Finance
E-VII	MARKETING	I) 305: Principles of Marketing II) 306: Rural Marketing
E-VIII	SECRETARIAL PRACTICE & OFFICE MANAGEMENT	I) 305: Secretarial Practice II) 306: Office Management
E-IX	COMPUTER APPLICATIONS-II	I) 305: Fundamentals of C++ II) 306: Fundamentals of Java
E-X	BUSINES MATHEMATICS	I) 305: Business Mathematics-I II) 306: Business Mathematics-II

**DEPARTMENT OF COMMERCE, O.U.**  
**Structure of B.Com (General) (CBCS) for Osmania University, Hyderabad.**  
 (w.e.f. Academic Year 2016-17)

**B.COM (General) PROGRAMME**

<b>FIRST YEAR:</b>					
<b>SEMESTER-I:</b>					
Sl.No.	Code	Course Title	Course Type	HPW	Credits
(1)	(2)	(3)	(4)	(5)	(6)
1.	BC101	A/B/C/D	AECC-1	2	2
2.	BC102	English	CC-1A	5	5
3.	BC103	Second Language	CC-2A	5	5
4.	BC104	Financial Accounting - I	DSC-1A	5	5
5.	BC105	Business Economics	DSC-2A	5	5
6.	BC106	Business Organization	DSC-3A	4	4
7.	BC107	Information Technology	DSC-4A	3T+2P	4
		<b>Total</b>		<b>31</b>	<b>30</b>
<b>SEMESTER-II:</b>					
8.	BC201	A/B/C/D	AECC-2	2	2
9.	BC202	English	CC-1B	5	5
10.	BC203	Second Language	CC-2B	5	5
11.	BC204	Financial Accounting - II	DSC-1B	5	5
12.	BC205	Managerial Economics	DSC-2B	5	5
13.	BC206	Principles of Management	DSC-3B	4	4
14.	BC207	Foreign Trade	DSC-4B	4	4
		<b>Total</b>		<b>30</b>	<b>30</b>
<b>SECOND YEAR:</b>					
<b>SEMESTER-III:</b>					
15.	BC301	Principles of Insurance	SEC-1	2	2
16.	BC302	English	CC-1C	5	5
17.	BC303	Second Language	CC-2C	5	5
18.	BC304	Advanced Accounting	DSC-1C	5	5
19.	BC305	Income Tax-I	DSC-2C	5	5
20.	BC306	Business Statistics-I	DSC-3C	4	4
21.	BC307	Entrepreneurial Development & Business Ethics	DSC-4C	4	4
		<b>Total</b>		<b>30</b>	<b>30</b>
<b>SEMESTER-IV:</b>					
22.	BC401	Practice of Life Insurance	SEC-2	2	2
23.	BC402	English	CC -1D	5	5
24.	BC403	Second Language	CC-2D	5	5
25.	BC404	Corporate Accounting	DSC-1D	5	5
26.	BC405	Income Tax-II	DSC-2D	5	5
27.	BC406	Business Statistics-II	DSC-3D	4	4
28.	BC407	Financial Statement Analysis	DSC-4D	4	4
		<b>Total</b>		<b>30</b>	<b>30</b>

**DEPARTMENT OF COMMERCE,  
OSMANIA UNIVERSITY, HYDERABAD.  
STRUCTURE OF **B.COM (GENERAL)** DEGREE COURSE  
w.e.f. ACADEMIC YEAR 2008-'09**

<b>FIRST YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
<del>101</del>	<del>FINANCIAL ACCOUNTING</del>	<del>6 (5+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>102</del>	<del>BUSINESS ECONOMICS</del>	<del>4 (3+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>103</del>	<del>BUSINESS ORGANISATION &amp; MANAGEMENT</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>104</del>	<del>FUNDAMENTALS OF INFORMATION TECHNOLOGY</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<b>SECOND YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
<del>201</del>	<del>ADVANCED ACCOUNTING</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>202</del>	<del>BUSINESS STATISTICS</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>203</del>	<del>FINANCIAL SERVICES - BANKING &amp; INSURANCE</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<del>204</del>	<del>TAXATION</del>	<del>5 (4+1)</del>	<del>3 Hours</del>	<del>70T + 30P = 100</del>
<b>THIRD YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
301	CORPORATE ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
302	COST & MANAGEMENT ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
303	BUSINESS LAW	5 (4+1)	3 Hours	70T + 30P = 100
304	AUDITING	5 (4+1)	3 Hours	70T + 30P = 100
305	ELECTIVE: PAPER - I	5 (4+1)	3 Hours	70T + 30P = 100
306	ELECTIVE: PAPER - II	5 (4+1)	3 Hours	70T + 30P = 100

**NOTE:**

1. 70 MARKS ARE ALLOCATED FOR THEORY EXAM AND 30 MARKS ARE ALLOCATED FOR THE COMPUTER / COMMERCE LAB PRACTICALS.
2. ONE HOUR OF THEORY CLASS IS EQUAL TO TWO COMPUTER/COMMERCE LAB HOURS.
3. PATTERN OF QUESTION PAPER FOR 70 MARKS AND 30 MARKS OF PRACTICAL EXAMINATION IS GIVEN AT THE END.
4. STRUCTURE OF ELECTIVES IS GIVEN IN THE FOLLOWING PAGE, FROM WHICH A STUDENT SHOULD OPT 2 PAPERS OF ANY ONE ELECTIVE.

**B.Com (GENERAL)  
THRID YEAR - ELECTIVES  
(Code 305 & 306)**

<b>Code</b>	<b>TITLE OF THE ELECTIVE</b>	<b>Papers</b>
E-I	INSURANCE	I) 305: Life Insurance II) 306: Non-Life Insurance
E-II	BANKING	I) 305: Banking in India II) 306: Computer Applications in Banking
E-III	ACCOUNTANCY - I	I) 305: Advanced Corporate Accounting II) 306: Management Accounting
E-IV	RETAILING	I) 305: Retail Management II) 306: Retail Marketing & CRM
E-V	TAXATION	I) 305: Direct Taxes II) 306: Indirect Taxes
E-VI	FINANCE	I) 305: Financial Management II) 306: Micro-credit and Foreign Trade Finance
E-VII	MARKETING	I) 305: Principles of Marketing II) 306: Rural Marketing
E-VIII	SECRETARIAL PRACTICE & OFFICE MANAGEMENT	I) 305: Secretarial Practice II) 306: Office Management
E-IX	COMPUTER APPLICATIONS-I	I) 305: Database Management System II) 306: Electronic Commerce
E-X	BUSINES MATHEMATICS	I) 305: Business Mathematics-I II) 306: Business Mathematics-II

## B.Sc. Course Structure Template

<b>B.Sc. PROGRAMME</b>	<b>FIRST YEAR SEMESTER-I</b>				
	<b>Code</b>	<b>Course Title</b>	<b>Course Type</b>	<b>HPW</b>	<b>Credits</b>
	BS101	Communication	AECC-1	2	2
	BS102	English	CC-1A	5	5
	BS103	Second Language	CC –2A	5	5
	BS104	Optional - I <b>Differential Calculus</b>	DSC-1A	4 T + 2P = 6	4+1=5
	BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
	BS106	Optional – III	DSC-3A	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-II</b>				
	BS201	Environmental Studies	AECC-2	2	2
	BS202	English	CC-1B	5	5
	BS203	Second Language	CC –2B	5	5
BS204	Optional - I <b>Differential Equations</b>	DSC-1B	4 T + 2P = 6	4+1=5	
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5	
BS206	Optional – III	DSC-3B	4 T + 2P = 6	4+1=5	
			30	27	
<b>B.Sc. PROGRAMME</b>	<b>SECOND YEAR SEMESTER-III</b>				
	BS301	A/B <b>Logic &amp; Sets/Theory of Equations</b>	SEC-1	2	2
	BS302	English	CC-1C	5	5
	BS303	Second Language	CC-2C	5	5
	BS304	Optional - I <b>Real Analysis</b>	DSC-1C	4 T + 2P = 6	4+1=5
	BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
	BS306	Optional – III	DSC-3C	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-IV</b>				
	BS401	C/D <b>Transportation &amp; Game Theory/ Number Theory</b>	SEC-2	2	2
	BS402	English	CC -1D	5	5
	BS403	Second Language	CC-2D	5	5
	BS404	Optional - I <b>Algebra</b>	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5	
BS406	Optional – III	DSC-3D	4 T + 2P = 6	4+1=5	
			30	27	

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	<del>Differential Equations &amp; Solid Geometry</del>	4	3	<del>3 hours</del>	<del>100+50</del>
2	II	<del>Abstract Algebra &amp; Real Analysis</del>	4	3	<del>3 hours</del>	<del>100+50</del>
3	III	<del>Linear Algebra and Vector Calculus</del>	3	3	<del>3 hours</del>	<del>100+50</del>
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**B.Sc. PHYSICS SYLLABUS UNDER CBCS SCHEME  
SCHEME OF INSTRUCTION**

Semester	Paper [ Theory and Practical ]	Instructions Hrs/week	Marks	Credits
I sem	Paper – I : Mechanics	4	100	4
	Practicals – I : Mechanics	3	50	1
II sem	Paper – II: Waves and Oscillations	4	100	4
	Practicals – II : Waves and Oscillations	3	50	1
III sem	Paper – III : Thermodynamics	4	100	4
	Practicals – III : Thermodynamics	3	50	1
IV sem	Paper – IV : Optics	4	100	4
	Practicals – IV :Optics	3	50	1
V-sem	<del>Paper – V : Electromagnetism</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practicals – V: Electromagnetism</del>	<del>3</del>	<del>50</del>	<del>1</del>
	<del>Paper – VI : Elective – I Solid state physics/ Quantum Mechanics and Applications</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practicals – VI : Elective – I Practical Solid state physics/ Quantum Mechanics and Applications</del>	<del>3</del>	<del>50</del>	<del>1</del>
VI sem	<del>Paper – VII : Modern Physics</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practical – VII : Modern Physics Lab</del>	<del>3</del>	<del>50</del>	<del>1</del>
	<del>Paper – VIII : Elective – II Basic Electronics/ Physics of Semiconductor Devices</del>	<del>3</del>	<del>100</del>	<del>3</del>
	<del>Practicals – VIII : Elective – II Practical Basic Electronics/ Physics of Semiconductor Devices</del>	<del>3</del>	<del>50</del>	<del>1</del>

Total Credits

36

**STRUCTURE OF MODEL CURRICULUM**  
**PHYSICS**

YEAR	THEORY/ PRACTICAL	TITLE	WORKLOAD HRS/ WEEK
<b>FIRST</b>	<del>Theory - I</del>	<del>Mechanics and Waves and Oscillations</del>	4
	<del>Practical - I</del>	---	3
<b>SECOND</b>	<del>Theory - II</del>	<del>Thermodynamics and Optics</del>	4
	<del>Practical - II</del>	---	3
<b>THIRD</b>	Theory - III	Electricity, Magnetism and Electronics	3
	Theory - IV	Modern Physics	3
	Practical - III	---	3
	Practical - IV	---	3

**Telangana State Council of Higher Education, Govt. of Telangana B.Sc., CBCS Common  
Core Syllabi for all Universities in Telangana  
PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN  
B.Sc., Chemistry**

<b>FIRST YEAR- SEMSTER I</b>				
<b>CODE</b>	<b>COURSE TITLE</b>	<b>COURSE TYPE</b>	<b>HPW</b>	<b>CREDITS</b>
BS 101	Communication	AECC-1	2	2
BS 102	English	CC-1A	5	5
BS 103	Second language	CC-2A	5	5
BS 104	Optional I	DSC-1A	4T+2P=6	4+1=5
BS 105	Optional II	DSC-2A	4T+2P=6	4+1=5
<b>BS 106</b>	<b>Optional III- Chemistry - I</b>	<b>DSC-3A</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course – I (Qualitative Analysis – I)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>FIRST YEAR- SEMSTER II</b>				
BS 201	Environmental studies	AECC-2	2	2
BS 202	English	CC-1B	5	5
BS 203	Second language	CC-2B	5	5
BS 204	Optional I	DSC-1B	4T+2P=6	4+1=5
BS 205	Optional II	DSC-2B	4T+2P=6	4+1=5
<b>BS 206</b>	<b>Optional III- Chemistry - II</b>	<b>DSC-3B</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - II (Qualitative Analysis – II)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER III</b>				
BS 301	<b>Safety Rules in Chemistry Laboratory and Lab Reagents</b>	<b>SEC-I</b>	2	2
BS 302	English	CC-1C	5	5
BS 303	Second language	CC-2C	5	5
BS 304	Optional I	DSC-1C	4T+2P=6	4+1=5
BS 305	Optional II	DSC-2C	4T+2P=6	4+1=5
<b>BS 306</b>	<b>Optional III- Chemistry - III</b>	<b>DSC-3C</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - III (Quantitative Analysis – I)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER IV</b>				
BS 401	<b>Remedial Methods for Pollution, Drinking Water and Soil Fertility</b>	<b>SEC-2</b>	2	2
BS 402	English	CC-1D	5	5
BS 403	Second language	CC-2D	5	5
BS 404	Optional I	DSC-1D	4T+2P=6	4+1=5
BS 405	Optional II	DSC-2D	4T+2P=6	4+1=5
<b>BS 406</b>	<b>Optional III- Chemistry - IV</b>	<b>DSC-3D</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - IV (Quantitative Analysis – II)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>

\* **Optional III Chemistry** AECC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course; DSC: Discipline Specific Course; GE: Generic Elective;

**DEPARTMENT OF CHEMISTRY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF **B.Sc. (CHEMISTRY)**  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Chemistry-I	3 Hours	100
	Practical-I	Semi micro analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Chemistry-II	3 Hours	100
	Practical-II	Volumetric analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Chemistry-III	3 Hours	100
	Practical-III	Synthesis and Identification of Organic compounds	3 Hours	50
	Theory-IV	Chemistry-IV	3 Hours	100
	Practical-IV	Instrumentation & Kinetics	3 Hours	50

## B.Sc. Course Structure Template

<b>B.Sc. PROGRAMME</b>	<b>FIRST YEAR SEMESTER-I</b>				
	<b>Code</b>	<b>Course Title</b>	<b>Course Type</b>	<b>HPW</b>	<b>Credits</b>
	BS101	Communication	AECC-1	2	2
	BS102	English	CC-1A	5	5
	BS103	Second Language	CC –2A	5	5
	BS104	Optional - I <b>Differential Calculus</b>	DSC-1A	4 T + 2P = 6	4+1=5
	BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
	BS106	Optional – III	DSC-3A	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-II</b>				
	BS201	Environmental Studies	AECC-2	2	2
	BS202	English	CC-1B	5	5
	BS203	Second Language	CC –2B	5	5
BS204	Optional - I <b>Differential Equations</b>	DSC-1B	4 T + 2P = 6	4+1=5	
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5	
BS206	Optional – III	DSC-3B	4 T + 2P = 6	4+1=5	
			30	27	
<b>B.Sc. PROGRAMME</b>	<b>SECOND YEAR SEMESTER-III</b>				
	BS301	A/B <b>Logic &amp; Sets/Theory of Equations</b>	SEC-1	2	2
	BS302	English	CC-1C	5	5
	BS303	Second Language	CC-2C	5	5
	BS304	Optional - I <b>Real Analysis</b>	DSC-1C	4 T + 2P = 6	4+1=5
	BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
	BS306	Optional – III	DSC-3C	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-IV</b>				
	BS401	C/D <b>Transportation &amp; Game Theory/ Number Theory</b>	SEC-2	2	2
	BS402	English	CC -1D	5	5
	BS403	Second Language	CC-2D	5	5
	BS404	Optional - I <b>Algebra</b>	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5	
BS406	Optional – III	DSC-3D	4 T + 2P = 6	4+1=5	
			30	27	

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	<del>Differential Equations &amp; Solid Geometry</del>	4	3	<del>3 hours</del>	<del>100+50</del>
2	II	<del>Abstract Algebra &amp; Real Analysis</del>	4	3	<del>3 hours</del>	<del>100+50</del>
3	III	<del>Linear Algebra and Vector Calculus</del>	3	3	<del>3 hours</del>	<del>100+50</del>
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**OSMANIA UNIVERSITY**  
**B.Sc. ELECTRONICS SYLLABUS**  
**SCHEME OF INSTRUCTIONS**  
**UNDER CBCS (w.e.f 2016-2017 academic year onwards)**

Year	Semester	Title of the Paper[ Theory and Practical ]	Instructions Hrs/week	Number of Credits	Marks
1 <sup>st</sup> Year	I Sem	Paper – I : Circuit Analysis	4	4	100
		Practical – I : Circuit Analysis Lab	3	1	25
	II Sem	Paper – II : Electronic Devices	4	4	100
		Practical – II : Electronic Devices Lab	3	1	25
2 <sup>nd</sup> Year	III Sem	Paper – III : Analog Circuits	4	4	100
		Practical – III : Analog Circuits Lab	3	1	25
	IV Sem	Paper – IV : Linear Integrated circuits and basics of Communication	4	4	100
		Practical – IV : Linear Integrated Circuits and basics of communication Lab	3	1	25
3 <sup>rd</sup> Year	V Sem	<del>Paper – V : Digital Electronics</del>	<del>3</del>	<del>3</del>	<del>75</del>
		<del>Practical – V : Digital Electronics Lab</del>	<del>3</del>	<del>1</del>	<del>25</del>
		<del>Paper – VI : Discipline Specific Elective – i. 8085 Microprocessor and applications ii. Electronic Instrumentation</del>	<del>3</del>	<del>3</del>	<del>75</del>
		<del>Practical – VI : i. 8085 Microprocessor and applications Lab ii. Electronic Instrumentation Lab</del>	<del>3</del>	<del>1</del>	<del>25</del>
	VI Sem	<del>Paper – VII : Digital Communication</del>	<del>3</del>	<del>3</del>	<del>75</del>
		<del>Practical – VII : Digital Communication Lab</del>	<del>3</del>	<del>1</del>	<del>25</del>
		<del>Paper – VIII : Discipline Specific Elective – II: i. 8051 Micro Controller and applications ii. Digital System Design using VHDL</del>	<del>3</del>	<del>3</del>	<del>75</del>
		<del>Practical – VIII : Elective-II : i. 8051 Micro Controller and applications Lab ii. Digital System Design using VHDL Lab</del>	<del>3</del>	<del>1</del>	<del>25</del>

**Total Credits: 36**

## Syllabus for Computer Science

Proposed scheme for **B.Sc.** Programme under **Choice Based Credit System**

Code	Course Title	Course Type	HpW	Credits
<b>SEMESTER - I</b>				
BS106	Programming in C	DSC-3A	4T+2P=6	4 + 1 =5
<b>SEMESTER - II</b>				
BS206	Programming in C++	DSC-3B	4T+2P=6	4 + 1 =5
<b>SEMESTER - III</b>				
BS301	A: SciLab - 1	SEC-1	2T	2
	B: Boolean Algebra			
BS306	Data Structures	DSC-3C	4T+2P=6	4 + 1 =5
<b>SEMESTER - IV</b>				
BS401	C: SciLab - 2	SEC-2	2T	2
	D: Digital Logic			
BS406	Database Management Systems	DSC-3D	4T+2P=6	4 + 1 =5
<b>SEMESTER - V</b>				
BS501	Information Technologies -1	GE-1	2	2
BS502	E: Python - 1	SEC-3	2	2
	F: Computer Organization			
BS505	Programming in Java	DSC-3E	3T+2P=5	3 + 1 =4
BS506	Elective-A: Operating Systems	DSE-1E	3T+2P=5	3 + 1 =4
	Elective-B: Software Engineering	DSE-2E		
<b>SEMESTER - VI</b>				
BS601	Information Technologies -2	GE-2	2T	2
BS602	G: Python - 2	SEC-4	2T	2
	H: Information Security			
BS605	Computer Networks	DSC-3F	3T+2P=5	3 + 1 =4
BS606	Elective-A: PHP with MySQL	DSE-1F	3T+2P=5	3 + 1 =4
	Elective-B: Web Technologies	DSE-2F		
<b>Total Number of Credits</b>				<b>48</b>

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	PC Software and 'C' Programming	3 Hours	100
	Practical-I	PC Software and C	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Object Oriented Programming with Java and Data Structures	3 Hours	100
	Practical-II	Java and Data Structures Lab	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	Theory-IV (Elective-2)	GUI Programming	3 Hours	100
	Practical-IV (Elective-2)	Visual Basic Lab	3 Hours	50
	Theory-IV (Elective-3)	Operating Systems	3 Hours	100
	Practical-IV (Elective-3)	Operating Systems Lab	3 Hours	50
	Theory-IV (Elective-4)	PHP, MySQL, Apache and PHP	3 Hours	100
	Practical-IV (Elective-4)	PHP and MYSQL Lab	3 Hours	50

## B.Sc. Course Structure Template

<b>B.Sc. PROGRAMME</b>	<b>FIRST YEAR SEMESTER-I</b>				
	<b>Code</b>	<b>Course Title</b>	<b>Course Type</b>	<b>HPW</b>	<b>Credits</b>
	BS101	Communication	AECC-1	2	2
	BS102	English	CC-1A	5	5
	BS103	Second Language	CC –2A	5	5
	BS104	Optional - I <b>Differential Calculus</b>	DSC-1A	4 T + 2P = 6	4+1=5
	BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
	BS106	Optional – III	DSC-3A	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-II</b>				
	BS201	Environmental Studies	AECC-2	2	2
	BS202	English	CC-1B	5	5
	BS203	Second Language	CC –2B	5	5
BS204	Optional - I <b>Differential Equations</b>	DSC-1B	4 T + 2P = 6	4+1=5	
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5	
BS206	Optional – III	DSC-3B	4 T + 2P = 6	4+1=5	
			30	27	
<b>B.Sc. PROGRAMME</b>	<b>SECOND YEAR SEMESTER-III</b>				
	BS301	A/B <b>Logic &amp; Sets/Theory of Equations</b>	SEC-1	2	2
	BS302	English	CC-1C	5	5
	BS303	Second Language	CC-2C	5	5
	BS304	Optional - I <b>Real Analysis</b>	DSC-1C	4 T + 2P = 6	4+1=5
	BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
	BS306	Optional – III	DSC-3C	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-IV</b>				
	BS401	C/D <b>Transportation &amp; Game Theory/ Number Theory</b>	SEC-2	2	2
	BS402	English	CC -1D	5	5
	BS403	Second Language	CC-2D	5	5
	BS404	Optional - I <b>Algebra</b>	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5	
BS406	Optional – III	DSC-3D	4 T + 2P = 6	4+1=5	
			30	27	

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	<del>Differential Equations &amp; Solid Geometry</del>	4	3	<del>3 hours</del>	<del>100+50</del>
2	II	<del>Abstract Algebra &amp; Real Analysis</del>	4	3	<del>3 hours</del>	<del>100+50</del>
3	III	<del>Linear Algebra and Vector Calculus</del>	3	3	<del>3 hours</del>	<del>100+50</del>
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

## Scheme of B.Sc. Statistics Semester wise Syllabus under CBCS 2016-19

Year	Semester	Paper	Title of the Theory Paper	Title of the Practical Paper	SEC	GE
<b>I</b>	I	I	Descriptive Statistics and Probability	Descriptive Statistics and Probability	----	--
	II	II	Probability Distributions	Probability Distributions	----	--
<b>II</b>	III	III	Statistical Methods	Statistical Methods	Concepts of Sequences and Random Variables	--
	IV	IV	Inference	Inference	Statistical Psychology and Education	--
<b>III</b>	V	V	<del>Sampling Theory, Time Series, Index Numbers and Demand Analysis</del>	<del><b>Practical Paper - V</b> <b>Section - A : Sampling Theory and Time Series</b> <b>Section - B : Elective-I: A / B / C</b> <b>Practical's</b></del>	Big Data Analysis	Basic Statistics - I
		VI	<del><b>Elective-I: A / B / C</b> A: <del>Statistical Quality Control and Reliability</del> B: <del>Bio-Statistics - I</del> C: <del>Actuarial Statistics - I</del></del>	<del><b>Practical Paper - VI</b> Statistical Practical's using MS - Excel</del>		
	VI	VII	<del>Design of Experiments, Vital Statistics, Official Statistics and Business Forecasting</del>	<del><b>Practical Paper - VII</b> <b>Section - A : Design of Experiments and Vital Statistics</b> <b>Section - B : Elective-II: A / B / C</b> <b>Practical's</b></del>	Statistical techniques in Data Mining	Basic Statistics - II
		VIII	<del><b>Elective - II: A / B / C</b> A: <del>Operations Research</del> B: <del>Bio-Statistics - II</del> C: <del>Actuarial Statistics - II</del></del>	<del><b>Practical Paper - VIII</b> Statistical Practical's using MS - Excel and TORA</del>		

SEC: Skill Enhancement Course

GE: Generic Elective: offered by the Department for other than Statistics Students

**Department of Statistics**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**Course Structure of B.Sc. (Statistics)**

**Year 2014-15**

<b>YEAR</b>	<b>THEORY/ PRACTICAL</b>	<b>PAPER TITLE</b>	<b>EXAM DURATION</b>	<b>MAX. MARKS</b>
I YEAR	Theory-I	Descriptive Statistics and Probability	3 hrs	100
	PRACTICAL -I	Descriptive Statistics and Probability -I	3 hrs	50
II YEAR	Theory-II	Statistical Methods and Theory of Estimation	3 hrs	100
	PRACTICAL -II	Statistical Methods and Theory of Estimation-II	3 hrs	50
III YEAR	Theory-III	<b>Applied Statistics:</b> Sampling Theory, Time series, Index Numbers and Demand Analysis	3 hrs	100
	PRACTICAL -III	Applied Statistics, QR &OR Practical's-III	3 hrs	50
III YEAR	Theory-IV	Statistical Quality Control and Reliability	3 hrs	100
	PRACTICAL -IV	Excel and TORA Practical's	3 hrs	50

## Syllabus for Computer Science

Proposed scheme for **B.Sc.** Programme under **Choice Based Credit System**

Code	Course Title	Course Type	HpW	Credits
<b>SEMESTER - I</b>				
BS106	Programming in C	DSC-3A	4T+2P=6	4 + 1 =5
<b>SEMESTER - II</b>				
BS206	Programming in C++	DSC-3B	4T+2P=6	4 + 1 =5
<b>SEMESTER - III</b>				
BS301	A: SciLab - 1	SEC-1	2T	2
	B: Boolean Algebra			
BS306	Data Structures	DSC-3C	4T+2P=6	4 + 1 =5
<b>SEMESTER - IV</b>				
BS401	C: SciLab - 2	SEC-2	2T	2
	D: Digital Logic			
BS406	Database Management Systems	DSC-3D	4T+2P=6	4 + 1 =5
<b>SEMESTER - V</b>				
BS501	Information Technologies -1	GE-1	2	2
BS502	E: Python - 1	SEC-3	2	2
	F: Computer Organization			
BS505	Programming in Java	DSC-3E	3T+2P=5	3 + 1 =4
BS506	Elective-A: Operating Systems	DSE-1E	3T+2P=5	3 + 1 =4
	Elective-B: Software Engineering	DSE-2E		
<b>SEMESTER - VI</b>				
BS601	Information Technologies -2	GE-2	2T	2
BS602	G: Python - 2	SEC-4	2T	2
	H: Information Security			
BS605	Computer Networks	DSC-3F	3T+2P=5	3 + 1 =4
BS606	Elective-A: PHP with MySQL	DSE-1F	3T+2P=5	3 + 1 =4
	Elective-B: Web Technologies	DSE-2F		
<b>Total Number of Credits</b>				<b>48</b>

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	PC Software and 'C' Programming	3 Hours	100
	Practical-I	PC Software and C	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Object Oriented Programming with Java and Data Structures	3 Hours	100
	Practical-II	Java and Data Structures Lab	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	Theory-IV (Elective-2)	GUI Programming	3 Hours	100
	Practical-IV (Elective-2)	Visual Basic Lab	3 Hours	50
	Theory-IV (Elective-3)	Operating Systems	3 Hours	100
	Practical-IV (Elective-3)	Operating Systems Lab	3 Hours	50
	Theory-IV (Elective-4)	PHP, MySQL, Apache and PHP	3 Hours	100
	Practical-IV (Elective-4)	PHP and MYSQL Lab	3 Hours	50

## B.Sc. Course Structure Template

<b>B.Sc. PROGRAMME</b>	<b>FIRST YEAR SEMESTER-I</b>				
	<b>Code</b>	<b>Course Title</b>	<b>Course Type</b>	<b>HPW</b>	<b>Credits</b>
	BS101	Communication	AECC-1	2	2
	BS102	English	CC-1A	5	5
	BS103	Second Language	CC –2A	5	5
	BS104	Optional - I <b>Differential Calculus</b>	DSC-1A	4 T + 2P = 6	4+1=5
	BS105	Optional - II	DSC-2A	4 T + 2P = 6	4+1=5
	BS106	Optional – III	DSC-3A	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-II</b>				
	BS201	Environmental Studies	AECC-2	2	2
	BS202	English	CC-1B	5	5
	BS203	Second Language	CC –2B	5	5
BS204	Optional - I <b>Differential Equations</b>	DSC-1B	4 T + 2P = 6	4+1=5	
BS205	Optional - II	DSC-2B	4 T + 2P = 6	4+1=5	
BS206	Optional – III	DSC-3B	4 T + 2P = 6	4+1=5	
			30	27	
<b>B.Sc. PROGRAMME</b>	<b>SECOND YEAR SEMESTER-III</b>				
	BS301	A/B <b>Logic &amp; Sets/Theory of Equations</b>	SEC-1	2	2
	BS302	English	CC-1C	5	5
	BS303	Second Language	CC-2C	5	5
	BS304	Optional - I <b>Real Analysis</b>	DSC-1C	4 T + 2P = 6	4+1=5
	BS305	Optional - II	DSC-2C	4 T + 2P = 6	4+1=5
	BS306	Optional – III	DSC-3C	4 T + 2P = 6	4+1=5
				30	27
	<b>SEMESTER-IV</b>				
	BS401	C/D <b>Transportation &amp; Game Theory/ Number Theory</b>	SEC-2	2	2
	BS402	English	CC -1D	5	5
	BS403	Second Language	CC-2D	5	5
	BS404	Optional - I <b>Algebra</b>	DSC-1D	4 T + 2P = 6	4+1=5
BS405	Optional - II	DSC-2D	4 T + 2P = 6	4+1=5	
BS406	Optional – III	DSC-3D	4 T + 2P = 6	4+1=5	
			30	27	

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	<del>Differential Equations &amp; Solid Geometry</del>	4	3	<del>3 hours</del>	<del>100+50</del>
2	II	<del>Abstract Algebra &amp; Real Analysis</del>	4	3	<del>3 hours</del>	<del>100+50</del>
3	III	<del>Linear Algebra and Vector Calculus</del>	3	3	<del>3 hours</del>	<del>100+50</del>
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

## Syllabus for Computer Science

Proposed scheme for **B.Sc.** Programme under **Choice Based Credit System**

Code	Course Title	Course Type	HpW	Credits
<b>SEMESTER - I</b>				
BS106	Programming in C	DSC-3A	4T+2P=6	4 + 1 =5
<b>SEMESTER - II</b>				
BS206	Programming in C++	DSC-3B	4T+2P=6	4 + 1 =5
<b>SEMESTER - III</b>				
BS301	A: SciLab - 1	SEC-1	2T	2
	B: Boolean Algebra			
BS306	Data Structures	DSC-3C	4T+2P=6	4 + 1 =5
<b>SEMESTER - IV</b>				
BS401	C: SciLab - 2	SEC-2	2T	2
	D: Digital Logic			
BS406	Database Management Systems	DSC-3D	4T+2P=6	4 + 1 =5
<b>SEMESTER - V</b>				
BS501	Information Technologies -1	GE-1	2	2
BS502	E: Python - 1	SEC-3	2	2
	F: Computer Organization			
BS505	Programming in Java	DSC-3E	3T+2P=5	3 + 1 =4
BS506	Elective-A: Operating Systems	DSE-1E	3T+2P=5	3 + 1 =4
	Elective-B: Software Engineering	DSE-2E		
<b>SEMESTER - VI</b>				
BS601	Information Technologies -2	GE-2	2T	2
BS602	G: Python - 2	SEC-4	2T	2
	H: Information Security			
BS605	Computer Networks	DSC-3F	3T+2P=5	3 + 1 =4
BS606	Elective-A: PHP with MySQL	DSE-1F	3T+2P=5	3 + 1 =4
	Elective-B: Web Technologies	DSE-2F		
<b>Total Number of Credits</b>				<b>48</b>

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	PC Software and 'C' Programming	3 Hours	100
	Practical-I	PC Software and C	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Object Oriented Programming with Java and Data Structures	3 Hours	100
	Practical-II	Java and Data Structures Lab	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	Theory-IV (Elective-2)	GUI Programming	3 Hours	100
	Practical-IV (Elective-2)	Visual Basic Lab	3 Hours	50
	Theory-IV (Elective-3)	Operating Systems	3 Hours	100
	Practical-IV (Elective-3)	Operating Systems Lab	3 Hours	50
	Theory-IV (Elective-4)	PHP, MySQL, Apache and PHP	3 Hours	100
	Practical-IV (Elective-4)	PHP and MYSQL Lab	3 Hours	50

**PSYCHOLOGY-CBCS –CORE COURSE STRUCTURE- 2016  
PROPOSED SCHEME FOR B.A. PROGRAMME**

YEAR	SEM-ESTER	TITLE OF THE THEORY PAPER & TYPE OF COURSE	CREDITS (Theory-T) 1 cr=1hr	PRACTICUM	CREDITS (Practicum-P) 1 cr = 2 hrs	TOTAL CREDITS
BA I Year	I	General Psychology(DSC-1A)	5	--	--	5
	II	Cognitive and Behavioural Processes (DSC-1B)	5	--	--	5
BA II Year	III	Personality Theories and Assessment (DSC-1C)	4	Basics of Experimental Psychology	1	5
		Life Skills (SEC-1)	2			2
	IV	Statistics in Psychology (DSC-1D)	4	Experimentation on Behavioural Phenomenon	1	5
		Applications of Psychology in Professional Settings (SEC-2)	2			2
BA III Year	V	Social Psychology (DSC-1E)	3	Psychological Testing-1	1	4
		A. Adolescent Psychology B. Educational Psychology (DSE-1E)	3	Psychological Testing-2	1	4
		Enhancing Psychological Competencies-1 (GE-1E)	2			2
		Stress Management and Well Being (SEC-3)	2			2
	VI	Abnormal Psychology (DSC-1F)	3	Psychological Testing-3	1	4
		A. Health Psychology B. Cognitive Psychology (DSE-1F)	3	Psychological Testing-4	1	4
		Enhancing Psychological Competencies-2 (GE-1F)	2			2
		Health Behaviour and Lifestyle (SEC-4)	2			2
		PROJECT (PR-F) * (for 4 cr)				
			<b>TOTAL CREDITS (excluding GE)</b>	<b>38</b>		<b>6</b>

DSC: Discipline Specific Course- DSC 1A,1B,1C,1D,1E & 1E (includes Practicum)

DSE: Discipline Specific Elective- 1E & 1F

GE: Generic Elective: 1E & 1F

SEC: Skill Enhancement Course

PR\*: Project: PR-F ( In lieu of one theory paper from Semester VI)

COMMON CORE FOR UG PSYCHOLOGY- CBCS 2016

**DEPARTMENT OF PSYCHOLOGY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A. (PSYCHOLOGY)  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<del><b>FIRST YEAR</b></del>	<del>Theory-I</del>	<del>General Psychology-I</del>	<del>3 Hours</del>	<del>75</del>
<b>Code</b>	<del><b>TITLE OF THE PAPER</b></del>	<b>Title</b>	<b>Exam Duration</b>	<del><b>Max. Marks</b></del>
<del><b>SECOND YEAR</b></del>	<del>Theory-II</del>	<del>Social Psychology-II</del>	<del>3 Hours</del>	<del>75</del>
	<del>Practical-II</del>	<del>Practicals</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Child and Adolescent Psychology-III	3 Hours	75
	Practical-III	Practicals	3 Hours	50
	Theory-IV	ABNORMAL PSYCHOLOGY-IV	3 Hours	75
	Practical-IV	project	3 Hours	50

# Osmania University

Model

Scheme of Instruction and Examination

B.A Political Science (Regular)

Choice Based Credit System (CBCS) Syllabus-w.e.f 2016-2017

Year	Semester	DSC/DSE/ GE/SEC	Paper	Title	Credits	Hours
I	I	DSC	Paper-I	Concepts, Theories and Institutions --Political Theory	5	5
	II	DSC	Paper-II	Concepts, Theories and Institutions --State Apparatus	5	5
II	III	DSC	Paper-III	Indian Government and Politics --Basic of Indian Constitution & Citizenship	5	5
		SEC	Paper-I	Communication Skills in English	2	2
	IV	DSC	Paper-IV	Indian Government and Politics --Government & Politics	5	5
		SEC	Paper-II	Disaster Management	2	2
III	V	<del>DSC</del>	<del>Paper-V (Compulsory)</del>	<del>Political Thought --Ancient &amp; Medieval Political Thought</del>	<del>4</del>	<del>4</del>
		DSE	Paper-I(A) (Optional)	International Relations <del>International Relations in 19<sup>th</sup> &amp; 20<sup>th</sup> Century</del>	4	4
			Paper-1 (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-III	Citizenship Rights, Duties and Laws		
	GE	Paper-I (Optional)	Contemporary Political Economy	5+1	6	
	VI	<del>DSC</del>	<del>Paper-VI (Compulsory)</del>	<del>Political Thought --Western &amp; Indian Political Thought</del>	<del>4</del>	<del>4</del>
		DSE	Paper-II (A) (Optional)	International Relations <del>International Relations in 19<sup>th</sup> &amp; 20<sup>th</sup> Century</del>	4	4
			Paper-II (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-IV	Legislative Practices and Procedures		
		GE	Paper-II (Optional)	Human Rights, Gender & Environment	5+1	6

-DSC (Discipline Specific Course)

-DSE (Discipline Specific Elective)

-GE (Generic/General Elective) or Interdisciplinary Course for Students of Social Sciences other than --  
Political Science (5 Credits + 1 Tutorial)

-SEC (Skill Enhancement Course)

**DEPARTMENT OF Political Science  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Political Science)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Concepts, Theories and Institutions	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Indian Government and Politics	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Political Thought	3 Hours	100
	Theory-IV	International relations	3 Hours	100

## UNDERGRADUATE PROGRAMME IN PUBLIC ADMINISTRATION

### PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN B.A. PROGRAMME IN PUBLIC ADMINISTRATION

#### ***FIRST YEAR SEMESTER -I***

Code	Course Title	Course Type	HPW	Credits
BA 107	Basics of Public Administration	DSC	5	5

#### ***FIRST YEAR SEMESTER -II***

Code	Course Title	Course Type	HPW	Credits
BA 207	Development Dynamics and Emerging Trends	DSC	5	5

#### ***SECOND YEAR SEMESTER -III***

Code	Course Title	Course Type	HPW	Credits
BA 307	Union Administration	DSC	5	5

#### ***SECOND YEAR SEMESTER -IV***

Code	Course Title	Course Type	HPW	Credits
BA 407	Union Administration	DSC	5	5

#### ***THIRD YEAR SEMESTER -V***

Code	Course Title	Course Type	HPW	Credits
BA 502	Indian Constitution and Administration	GE	5+1	6
BA 507	Human Resources Management	DSC	4	4
BA508/ A	Rural Governance	DSE	4	4
BA508/ B	E-Governance- Concepts	DSE	4	4
BA 508/ C	Public Office Administration	DSE	4	4

#### ***THIRD YEAR SEMESTER -VI***

Code	Course Title	Course Type	HPW	Credits
BA602	Good Governance	GE	5+1	6
BA 607	Financial and Material Resources Management	DSC	4	4
BA608/ A	Urban Governance	DSE	4	4
BA608/ B	E-Governance- Case Studies	DSE	4	4
BA608/ C	Technology and Office Administration	DSE	4	4

**DEPARTMENT OF PUBLIC ADMINISTRATION  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Public Administration)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Introduction to Public Administration	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Public Administration in India	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Management Resources	3 Hours	100
	Theory-IV	Office management	3 Hours	100

Year	Semester	DSC/GE/ DSE/SEC	Paper	Title of the Paper	Credits	Hours PW
I	I	DSC*101	Paper - I	Micro Economics	5	5
		AEC	AEC	Environmental Science/ Basic Computer kills	2	2
	II	DSC*201	Paper - II	Macro Economics	5	5
II		AEC	AECC	Environmental Science/ Basic Computer kills	2	2
	III	DSE-301	Paper - III	Statistics for Economics	5	5
		SEC-1	SEC-I	Computer Applications	2	2
		SEC-2	SEC-II	Rural Development	2	2
	IV	DSC*401	Paper - IV	Indian Economy	5	5
		SEC-3	SEC-III	Data Analysis	2	2
	SEC-4	SEC-IV	Entrepreneurship and Development	2	2	
III	V	<del>GE**</del>	<del>Paper - I</del>	<del>Telangana Economy</del>	<del>4</del>	<del>4</del>
		<del>DSE*501</del>	<del>Elective - A</del>	<del>Agricultural Economics</del>	<del>5</del>	<del>5</del>
		<del>DSE*501</del>	<del>Elective - B</del>	<del>Public Economics</del>	<del>5</del>	<del>5</del>
		<del>DSE*501</del>	<del>Elective - C</del>	<del>Economics of Environment</del>	<del>5</del>	<del>5</del>
	VI	<del>DSE*601</del>	<del>Paper - A</del>	<del>International Economics</del>	<del>5</del>	<del>5</del>
		<del>DSE*601</del>	<del>Paper - B</del>	<del>Development Economics</del>	<del>5</del>	<del>5</del>
		<del>DSE*601</del>	<del>Paper - C</del>	<del>Industrial Economics</del>	<del>5</del>	<del>5</del>
		<del>Project/Optional</del>	<del>Project/Optional</del>	<del>Financial Economics</del>	<del>4</del>	<del>4</del>

\* DSC (Discipline Specific Course), SEC (Skill Enhancement Course) & DSE (Discipline Specific Elective) for Students of Economics.(PW) Per week.\*\* GE (Generic Elective) or Inter-Disciplinary Course for Students of Social Sciences other than Economics.

(Prof.B.Sudhakar Reddy)  
Chairman Board of Studies

**DEPARTMENT OF Economics**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.A (Economics)**  
**2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Micro Economics	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Macro Economics	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Indian Economy	3 Hours	80
	Practicals	Indian Economy	3 Hours	20
	Theory-IV	Public Finance and International Trade	3 Hours	100

# Osmania University

## Model

### Scheme of Instruction and Examination

#### B.A Political Science (Regular)

#### Choice Based Credit System (CBCS) Syllabus-w.e.f 2016-2017

Year	Semester	DSC/DSE/ GE/SEC	Paper	Title	Credits	Hours
I	I	DSC	Paper-I	Concepts, Theories and Institutions --Political Theory	5	5
	II	DSC	Paper-II	Concepts, Theories and Institutions --State Apparatus	5	5
II	III	DSC	Paper-III	Indian Government and Politics --Basic of Indian Constitution & Citizenship	5	5
		SEC	Paper-I	Communication Skills in English	2	2
	IV	DSC	Paper-IV	Indian Government and Politics --Government & Politics	5	5
		SEC	Paper-II	Disaster Management	2	2
III	V	DSC	Paper-V- (Compulsory)	Political Thought -Ancient & Medieval Political Thought	4	4
		DSE	Paper-I(A) (Optional)	International Relations -International Relations in 19 <sup>th</sup> & 20 <sup>th</sup> Century	4	4
			Paper-1 (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-III	Citizenship Rights, Duties and Laws		
		GE	Paper-I (Optional)	Contemporary Political Economy	5+1	6
	VI	DSC	Paper-VI (Compulsory)	Political Thought --Western & Indian Political Thought	4	4
		DSE	Paper-II (A) (Optional)	International Relations -International Relations in 19 <sup>th</sup> & 20 <sup>th</sup> Century	4	4
			Paper-II (B)	Govt. & Politics in Telangana	2	2
		SEC	Paper-IV	Legislative Practices and Procedures		
		GE	Paper-II (Optional)	Human Rights, Gender & Environment	5+1	6

-DSC (Discipline Specific Course)

-DSE (Discipline Specific Elective)

-GE (Generic/General Elective) or Interdisciplinary Course for Students of Social Sciences other than --  
Political Science (5 Credits + 1 Tutorial)

-SEC (Skill Enhancement Course)

**DEPARTMENT OF Political Science  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Political Science)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Concepts, Theories and Institutions	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Indian Government and Politics	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Political Thought	3 Hours	100
	Theory-IV	International relations	3 Hours	100

## UNDERGRADUATE PROGRAMME IN PUBLIC ADMINISTRATION

### PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN B.A. PROGRAMME IN PUBLIC ADMINISTRATION

#### ***FIRST YEAR SEMESTER -I***

Code	Course Title	Course Type	HPW	Credits
BA 107	Basics of Public Administration	DSC	5	5

#### ***FIRST YEAR SEMESTER -II***

Code	Course Title	Course Type	HPW	Credits
BA 207	Development Dynamics and Emerging Trends	DSC	5	5

#### ***SECOND YEAR SEMESTER -III***

Code	Course Title	Course Type	HPW	Credits
BA 307	Union Administration	DSC	5	5

#### ***SECOND YEAR SEMESTER -IV***

Code	Course Title	Course Type	HPW	Credits
BA 407	Union Administration	DSC	5	5

#### ***THIRD YEAR SEMESTER -V***

Code	Course Title	Course Type	HPW	Credits
BA 502	Indian Constitution and Administration	GE	5+1	6
BA 507	Human Resources Management	DSC	4	4
BA508/ A	Rural Governance	DSE	4	4
BA508/ B	E-Governance- Concepts	DSE	4	4
BA 508/ C	Public Office Administration	DSE	4	4

#### ***THIRD YEAR SEMESTER -VI***

Code	Course Title	Course Type	HPW	Credits
BA602	Good Governance	GE	5+1	6
BA 607	Financial and Material Resources Management	DSC	4	4
BA608/ A	Urban Governance	DSE	4	4
BA608/ B	E-Governance- Case Studies	DSE	4	4
BA608/ C	Technology and Office Administration	DSE	4	4

**DEPARTMENT OF PUBLIC ADMINISTRATION  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Public Administration)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Introduction to Public Administration	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Public Administration in India	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Management Resources	3 Hours	100
	Theory-IV	Office management	3 Hours	100

PROPOSED SCHEME FOR B.Sc. PROGRAMME  
 UNDER CHOICE BASED CREDIT SYSTEM

FIRST YEAR

**SEMESTER-I**

**Paper-I: Microbial Diversity of Lower Plants**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS 104	Optional I	DSC I-A	4 T 2 P = 6	4 + 1 = 5

**SEMESTER-II**

**Paper-II: Bryophytes Pteridophytes, Gymnosperms and Palaeobotany**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS 201	Environmental Studies	AECC-2	2	2
BS204	Optional-I	DSC-1B	4 T + 2P = 6	4 + 1 = 5

SECOND YEAR

**SEMESTER-III**

**Paper-III: Taxonomy of Angiosperms and Medicinal Botany**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS304	Optional-I	DSC-IC	4 T + 2 P = 6	4 + 1 = 5

**SEMESTER-IV**

**Paper-IV: Plant Anatomy, Embryology and Palynology**

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS404	Optional - I	DSC-ID	4 T + 2P = 6	4 + 1 = 5

THIRD YEAR

**SEMESTER-V**

~~Paper V: Cell Biology and Genetics~~

~~Elective I: Ecology and Biodiversity / Elective II: Horticulture~~

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS-503	Optional-I	DSC-IE	3T+2P=5	3+1=4
BS-506	Optional I A/B	DSE-IE	3T+2P=5	3+1=4
BS-502	Economic Botany	GE-1	2	2

**SEMESTER-VI**

~~Paper VI: Plant Physiology~~

~~Elective III: Tissue Culture and Biotechnology / Elective IV: Seed Technology~~

<i>Code</i>	<i>Course Title</i>	<i>Course Type</i>	<i>HPW</i>	<i>Credits</i>
BS-603	Optional-I	DSC-IF	3 T + 2P = 5	3 + 1 = 4
BS-606	Optional A/B	DSE-IF	3 T + 2P = 5	3 + 1 = 4
BS-602	Biodiversity and Human Welfare	GE-2	2	2

AECC: Ability Enhancement Compulsory Course, DSC: Discipline Specific Course,  
 DSE : Discipline Specific Elective, GE: Generic Elective, HPW: Hours per Week.

**DEPARTMENT OF BOTANY**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc (BOTANY)**  
**W.E.F 2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	<del>Theory-I</del>	<del>Microbial Diversity Cryptogams and Gymnosperms-I</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical -I</del>	<del>Microbial Diversity Cryptogams and Gymnosperms.</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	<del>Theory-II</del>	<del>Anatomy, Embryology, Taxonomy and Medicinal Botany-II</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-II</del>	<del>Anatomy, Embryology, Taxonomy and Medicinal Botany-II</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Cell Biology, Genetics, Ecology and Biodiversity- III	3 Hours	100
	Practical-III	Cell Biology, Genetics, Ecology and Biodiversity- III	3 Hours	50
	Theory-IV	Physiology, Tissue Culture, Biotechnology, Seed Technology and Horticulture.	3 Hours	100
	Practical-IV	Physiology, Tissue Culture, Biotechnology, Seed Technology and Horticulture.	3 Hours	50

# ZOOLOGY

## CURRICULUM FOR ZOOLOGY IN UNDER GRADUATE DEGREE PROGRAMME CBCS SYLLABUS SCHEDULE 2016 - 2017

Year	Semester	Paper	Title of the Paper	No. of Credits	Exam Hrs.	Max. Marks			
						I.A	End Exam	Total	
I	I ✓	Core-I Theory	Animal Diversity-Invertebrates	3	3	20	40	60	
		Core-I Practical	Animal Diversity-Invertebrates	2	3	-	40	40	
	II ✓	Core-II Theory	Ecology, Zoogeography and Animal Behavior	3	3	20	40	60	
		Core-II Practical	Ecology, Zoogeography and Animal Behavior	2	3	-	40	40	
II	III ✓	Core-III Theory	Animal Diversity-Vertebrates and Developmental Biology	3	3	20	40	60	
		Core-III Practical	Animal Diversity- Chordates and Developmental Biology	2	3	-	40	40	
	IV ✓	Core-IV Theory	Cell Biology, Genetics and Evolution	3	3	20	40	60	
		Core-IV Practical	Cell Biology, Genetics and Evolution	2	3	-	40	40	
	V ✓	Core-V Theory	Physiology and Biochemistry	3	3	20	40	60	
		Core-V Practical	Physiology and Biochemistry	2	3	-	40	40	
III	V ✓	Elect-VI Theory	Applied Zoology/Entomology ✓	3	3	20	40	60	
		Elect-VI Practical	Applied Zoology/Entomology ✓	2	3	-	40	40	
	VI ✓	Core-VII Theory	Immunology and Animal Biotechnology	3	3	20	40	60	
		Core-VII Practical	Immunology and Animal Biotechnology	2	3	-	40	40	
	VIII	Open Elective I Theory	Medical Transcription	3	3	20	40	60	
	VIII	Open Elective I Practical	Medical Transcription	2	3	-	40	40	
	IX ✓	Elective-VIII Theory	Public Health and Hygiene/Aquatic Biology ✓	3	3	20	40	60	
		Elective-VIII Practical	Public Health and Hygiene/Aquatic Biology ✓	2	3	-	40	40	
	X ✓	Open Elective II Theory	Clinical Science	3	3	20	40	60	
	X ✓	Open Elective II Practical	Clinical Science	2	3	-	40	40	
					50				1000

*G. H. H. H.*

**DEPARTMENT OF ZOOLOGY**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc.(Zoology)**  
**2014 - 15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	<del>Theory-I</del>	<del>Biology of invertebrates and cell biology</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-I</del>	<del>Invertebrates</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	<del>Theory-II</del>	<del>Biology of Chordates, Embryology, Ecology and Zoogeography</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-II</del>	<del>Chordates, Embryology and Ecology</del>	<del>3 Hours</del>	<del>50</del>
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Animal physiology, Genetics & Evolution	3 Hours	100
	Practical-III	Animal Physiology, Genetics Evolution	3 Hours	50
	Theory-IV	Applied Zoology	3 Hours	100
	Practical-IV	Fisheries and Aquaculture and Animal Biotechnology	3 Hours	50

**Telangana State Council of Higher Education, Govt. of Telangana B.Sc., CBCS Common  
Core Syllabi for all Universities in Telangana  
PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN  
B.Sc., Chemistry**

<b>FIRST YEAR- SEMSTER I</b>				
<b>CODE</b>	<b>COURSE TITLE</b>	<b>COURSE TYPE</b>	<b>HPW</b>	<b>CREDITS</b>
BS 101	Communication	AECC-1	2	2
BS 102	English	CC-1A	5	5
BS 103	Second language	CC-2A	5	5
BS 104	Optional I	DSC-1A	4T+2P=6	4+1=5
BS 105	Optional II	DSC-2A	4T+2P=6	4+1=5
<b>BS 106</b>	<b>Optional III- Chemistry - I</b>	<b>DSC-3A</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course – I (Qualitative Analysis – I)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>FIRST YEAR- SEMSTER II</b>				
BS 201	Environmental studies	AECC-2	2	2
BS 202	English	CC-1B	5	5
BS 203	Second language	CC-2B	5	5
BS 204	Optional I	DSC-1B	4T+2P=6	4+1=5
BS 205	Optional II	DSC-2B	4T+2P=6	4+1=5
<b>BS 206</b>	<b>Optional III- Chemistry - II</b>	<b>DSC-3B</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - II (Qualitative Analysis – II)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER III</b>				
BS 301	<b>Safety Rules in Chemistry Laboratory and Lab Reagents</b>	<b>SEC-I</b>	2	2
BS 302	English	CC-1C	5	5
BS 303	Second language	CC-2C	5	5
BS 304	Optional I	DSC-1C	4T+2P=6	4+1=5
BS 305	Optional II	DSC-2C	4T+2P=6	4+1=5
<b>BS 306</b>	<b>Optional III- Chemistry - III</b>	<b>DSC-3C</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - III (Quantitative Analysis – I)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>
<b>SECOND YEAR- SEMSTER IV</b>				
BS 401	<b>Remedial Methods for Pollution, Drinking Water and Soil Fertility</b>	<b>SEC-2</b>	2	2
BS 402	English	CC-1D	5	5
BS 403	Second language	CC-2D	5	5
BS 404	Optional I	DSC-1D	4T+2P=6	4+1=5
BS 405	Optional II	DSC-2D	4T+2P=6	4+1=5
<b>BS 406</b>	<b>Optional III- Chemistry - IV</b>	<b>DSC-3D</b>	<b>4T</b> } = 6	<b>4</b> } = 5
	<b>Laboratory Course - IV (Quantitative Analysis – II)</b>		<b>2P</b> }	<b>1</b> }
<b>Total Credits</b>				<b>27</b>

\* **Optional III Chemistry** AECC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course; DSC: Discipline Specific Course; GE: Generic Elective;

**DEPARTMENT OF CHEMISTRY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF **B.Sc. (CHEMISTRY)**  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Chemistry-I	3 Hours	100
	Practical-I	Semi micro analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Chemistry-II	3 Hours	100
	Practical-II	Volumetric analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Chemistry-III	3 Hours	100
	Practical-III	Synthesis and Identification of Organic compounds	3 Hours	50
	Theory-IV	Chemistry-IV	3 Hours	100
	Practical-IV	Instrumentation & Kinetics	3 Hours	50

**Department of Business Management (Faculty of Management)**

**Osmania University, Hyderabad-7**

**MBA (Day) Semester-wise structure of the syllabus**

**1<sup>st</sup> Semester**

<b>Subject -Code</b>	<b>Subject Name</b>	<b>No. of teaching hours per week</b>	<b>Max. Marks (IA + UE)</b>	<b>No. of Credits</b>
1.1	Management and Organizational Behaviour	5	20+80	4
1.2	Managerial Economics	5	20+80	4
1.3	Financial Accounting and Analysis	5	20+80	4
1.4	Marketing Management	5	20+80	4
1.5	Statistics for Management	5	20+80	4
1.6	Business Law and Environment	5	20+80	4
1.7	1.7.1. IT Applications for Business	5	20+60	4
	1.7.1.1: Information Technology – Lab	2	20	--

**Note – 1:** Maximum total number of marks = 700

**2:** The total number of credits at the end of the first semester = 28

**2<sup>nd</sup> Semester**

<b>Subject -Code</b>	<b>Subject Name</b>	<b>No. of teaching hours per week</b>	<b>Marks (IA + UE)</b>	<b>No. of Credits</b>
2.1	Human Resource Management	5	20+80	4
2.2	Business Process Reengineering	5	20+80	4
2.3	Financial Management	5	20+80	4
2.4	Research for Marketing Decisions	5	20+80	4
2.5	Operations Research	5	20+80	4
2.6	Operations Management	5	20+80	4
2.7	Decision Support Systems	5	20+80	4

**Note – 1:** Maximum total number of marks at the end of second semester= 700+700 = 1400

**2:** The total number of credits at the end of the second semester = 28+28 = 56

### 3<sup>rd</sup> Semester

Subject -Code	Subject Name	No. of teaching hours per week	Marks (IA + UE)	No. of Credits
3.1	Total Quality Management	5	20+80	4
3.2	International Business	5	20+80	4
3.3	Managerial Communication * (CBCS)	5	20+80	4
3.4	<b>Finance</b> (Students are required to select any one subject from Minor in addition to Major)			
	3.4.1 Investment Management (Major)	5	20+80	4
	3.4.2 Strategic Management Accounting (Minor)	5	20+80	4
	3.4.3 International Finance (Minor)	5	20+80	4
3.5	<b>Human Resource Management</b> (Students are required to select any one subject from Minor in addition to Major)			
	3.5.1 Compensation Management (Major)	5	20+80	4
	3.5.2 Organizational Development (Minor)	5	20+80	4
	3.5.3 Leadership and Change Management (Minor)	5	20+80	4
3.6	<b>Marketing</b> (Students are required to select any one subject from Minor in addition to Major)			
	3.6.1 Product and Brand Management (Major)	5	20+80	4
	3.6.2. Promotion and Distribution Management (Minor)	5	20+80	4
	3.6.3 Marketing Engineering (Minor)	5	20+80	4
3.7	<b>Systems</b> (Minor)			
	3.7.1. Relational Database Management Systems (RDBMS)	5	20+60	4
	3.7.1.1: RDBMS – Lab(Oracle)	2	20	--

**Note – 1:** Maximum total number of marks at the end of 3<sup>rd</sup> semester: 700+700+600=2000

**2:** The total number of credits at the end of the third semester = 28+28+24=80

**3:** \*CBCS applicable to only MBA Day Programme of UCC&BM only.

**4<sup>th</sup> Semester**

<b>Subject -Code</b>	<b>Subject Name</b>	<b>No. of teaching hours per week</b>	<b>Marks (IA + UE)</b>	<b>No. of Credits</b>
4.1	Strategic Management	5	20+80	4
4.2	Supply Chain Management	5	20+80	4
4.3	Entrepreneurial Development (CBCS)	5	20+80	4
4.4	<b>Finance</b> (Students are required to select any one subject from Minor in addition to Major)			
	4.4.1 Financial Risk Management (Major)	5	20+80	4
	4.4.2 Banking and Insurance (Minor)	5	20+80	4
	4.4.3 Financial Services and Systems (Minor)	5	20+80	4
4.5	<b>Human Resource Management</b> (Students are required to select any one subject from Minor in addition to Major)			
	4.5.1 Performance Management (Major)	5	20+80	4
	4.5.2 Labour Laws and Employee Relations (Minor)	5	20+80	4
	4.5.3 Talent and Knowledge Management (Minor)	5	20+80	4
4.6	<b>Marketing</b> (Students are required to select any one subject from Minor in addition to Major)			
	4.6.1 Consumer Behaviour (Major)	5	20+80	4
	4.6.2 Services and Global Marketing (Minor)	5	20+80	4
	4.6.3 Customer Relationship Management (Minor)	5	20+80	4
4.7	<b>Systems</b> (Minor)			
	4.7.1. E – Business	5	20+80	4
4.8	Mentor & Project work	5	100	4
4.9	Viva – Voce (Comprehensive)		100	4

**Note:**

1. Maximum total number of marks at the end of 4<sup>th</sup> semester = 700+700+600+600 = 2600
2. The total number of credits at the end of the fourth semester = 28+28+24+32 = 112
3. The maximum pass mark for each subject shall be 40. However, student needs to secure a minimum of 40% marks in the University Examination.

**IA:** Internal Assessment**UE:** University Examination

## **M.C.A I Semester**

<b>CS601</b>	<b>DISCRETE MATHEMATICS</b>
<b>CS602</b>	<b>PROBABILITY AND STATISTICS</b>
<b>CS603</b>	<b>COMPUTER PROGRAMMING AND PROBLEM SOLVING</b>
<b>CS604</b>	<b>ELEMENTS OF INFORMATION TECHNOLOGY</b>
<b>CS605</b>	<b>MODERN ECONOMIC ANALYSIS</b>
<b>CS 631</b>	<b>PROGRAMMING LAB - I (C &amp; C++ Programming)</b>
<b>CS 632</b>	<b>PROGRAMMING LAB - II (IT Workshop)</b>

## **M.C.A II Semester**

<b>CS 651</b>	<b>ACCOUNTING AND FINANCIAL MANAGEMENT</b>
<b>CS 652</b>	<b>OBJECT ORIENTED PROGRAMMING USING JAVA</b>
<b>CS653</b>	<b>MANAGEMENT INFORMATION SYSTEM</b>
<b>CS 654</b>	<b>DATA STRUCTURES USING C++</b>
<b>CS 655</b>	<b>COMPUTER ORGANIZATION</b>
<b>CS 681</b>	<b>OBJECT ORIENTED PROGRAMMING LAB</b>
<b>CS 682</b>	<b>DATA STRUCTURES USING C++ LAB</b>

OSMANIA UNIVERSITY  
HYDERABAD- 500 007

SCHEME OF INSTRUCTION & EXAMINATION  
M.C.A. II YEAR

2010-2011

SEMESTER – I

Sl.No	Syllabus Ref.No	SUBJECT	Scheme of Instruction		Scheme of Examination		
			Periods per Week		Duration in Hrs.	Maximum Marks	
						Univ. Exam	Sessi-onals
		THEORY					
1.	CS 701	Software Engineering	4	-	3	80	20
2.	CS 702	Database Management System	4	-	3	80	20
3.	CS 703	Design and Analysis of Algorithms	4	-	3	80	20
4.	CS 704	Operating Systems	4	-	3	80	20
5.	CS 705	Operations Research	4	-	3	80	20
		PRATICALS					
1.	CS 731	Programming Lab-V ( DBMS Programming)	-	6	3	50	25
2.	CS 732	Programming Lab-VI ( OPERATING SYSTEMS )	-	6	3	50	25
		Total	20	12		500	150

OSMANIA UNIVERSITY  
HYDERABAD- 500 007

SCHEME OF INSTRUCTION & EXAMINATION  
M.C.A. II YEAR

2010-2011

SEMESTER – II

Sl.No	Syllabus Ref.No	SUBJECT	Scheme of Instruction		Scheme of Examination		
			Periods per Week		Durati on in Hrs.	Maximum Marks	
						Univ. Exam	Sessi- onals
		THEORY					
1.	CS 751	Dataware Housing and Data Mining	4	-	3	80	20
2.	CS 752	Computer Networks	4	-	3	80	20
3.	CS 753	Unix Programming	4	-	3	80	20
4.	CS 754	Web Programming	4	-	3	80	20
		ELECTIVE I					
5.	CS 755	Artificial Intellilgence	4	-	3	80	20
6.	CS 756	Distributed Systems	4	-	3	80	20
7.	CS 757	Information Retrieval Systems	4	-	3	80	20
		PRATICALS					
1.	CS 781	Programming Lab-VII ( Unix Programming Lab)	-	6	3	50	25
2.	CS 732	Programming Lab-VIII (Web Programming Lab)	-	6	3	50	25
		Total	20	12		500	150

**SCHEME OF INSTRUCTION AND EXAMINATION**  
**M.C.A III<sup>rd</sup> YEAR**  
**FACULTY OF INFORMATION TECHNOLOGY**

**SEMESTER – I**

Sl. No.	Syllabus Ref. No.	SUBJECT	Scheme of Instruction		Scheme of Examination		
			Periods per week		Duration In Hours	Maximum Marks	
			L/T	D/P		Univ. Exam	Sessionals
<b>THEORY</b>							
1	CS 801	Information Security	4	-	3	80	20
2	CS 802	Middleware Technologies	4	-	3	80	20
3	CS 803	Object Oriented System Development	4	-	3	80	20
4		<b>Elective – II (One of the following)</b>	4	-	3	80	20
	CS 804	Cloud Computing					
	CS 805	Electronic Commerce					
	CS 806	Human Computer Interaction					
	CS 807	Software Reuse Techniques					
	CS 808	Soft Computing					
	CS 809	XML & Web Services					
5		<b>Elective – II (One of the following)</b>	4	-	3	80	20
	CS 810	Mobile Computing					
	CS 811	Software Testing					
	CS 812	System Administration					
	CS 813	Rich Internet Applications					
	CS 814	Software Project Management					
	CS 815	Research Methodology					
<b>PRACTICALS</b>							
1	CS 831	Programming Lab IX- OOSD Lab	-	3	3	50	25
2	CS 832	Programming Lab X- Middleware Technologies Lab	-	3	3	50	25
3	CS 833	Seminar	-	3	3	-	25
		<b>TOTAL</b>	<b>20</b>	<b>9</b>	<b>-</b>	<b>500</b>	<b>175</b>

WITH EFFECT FROM THE ACADEMIC YEAR 2014-2015

**SCHEME OF INSTRUCTION AND EXAMINATION  
MCA III<sup>rd</sup> YEAR**

**FACULTY OF INFORMATION TECHNOLOGY**

**SEMESTER – II**

SI. No	Syllabus Ref. No	Subject	Scheme of Instruction		Scheme of Examination		
			Periods per week		Dura- tion in hrs	Maximum Marks	
			L/T	D/P		Univ- Exam	Sessi- onals
1.	CS 851	Project Seminar	-	3	-	-	25
2.	CS 852	Project	-	6	-	Gr*	50

\*Projects are evaluated with Viva Voce examination and the following grades are awarded:

**Excellent/Very Good/Good/Satisfactory/ Not Satisfactory**

In case of Not Satisfactory, the candidates has to redo the project and submit at the time of next semester examination.

**DEPARTMENT OF PHYSICS  
OSMANIA UNIVERSITY**

**M. Sc. (Physics) and M.Sc. (Appl. Electronics) Courses under CBCS and Non- CBCS  
(with effect from the academic year 2012 – 2013)**

**Semester – I**

Sl.No	Sub.Code	Paper No.	Subject	Instruc-tions. Hrs/Week	Credits	Duration of exam. (hours)	Max. Marks
<b>THEORY</b>							
01	PAE 101 T	I	Mathematical Physics	4	4	3	20+80*
02	PAE 102 T	II	Classical Mechanics	4	4	3	20+80*
03	PAE 103 T	III	Quantum Mechanics - I	4	4	3	20+80*
04	PAE 104 T	IV	C Programming and Numerical methods	4	4	3	20+80*
05	PAE 105 T	V	Electronics I	4	4	3	20+80*
<b>PRACTICALS</b>							
06	PAE 151 P	VI	(a) Heat & acoustics, (b) Optics	6	4	4	100
07	PAE 152 P	VII	(a) Electronics, (b) Computer programming	6	4	4	100
08			Seminar	2	-	--	-
			<b>Total:</b>	34	28		700

**\* Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. Common Syllabus to University and Constituent Colleges.**

**There shall be no internal assessment examinations for practicals.  
Practical Examinations will be conducted at the end of each semester.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**.  
Part – A consists of EIGHT short notes questions, carrying 4 marks each. The student has to answer all the questions.  
Part – B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks.

**DEPARTMENT OF PHYSICS  
OSMANIA UNIVERSITY**

**M. Sc. (Physics) and M.Sc. (Appl. Electronics) Courses under CBCS and Non- CBCS  
(with effect from the academic year 2012 – 2013)**

**Semester – II**

Sl.No	Sub.Code	Paper No.	Subject	Instruc-tions. Hrs/Week	Credits	Duration of exam. (hours)	Max. Marks
<b>THEORY</b>							
01	PAE 201 T	I	Electromagnetic Theory	4	4	3	20+80*
02	PAE 202 T	II	Statistical Mechanics	4	4	3	20+80*
03	PAE 203 T	III	Quantum Mechanics - II	4	4	3	20+80*
04	PAE 204 T	IV	General Solid State Physics	4	4	3	20+80*
05	PAE 205 T	V	Electronics - II	4	4	3	20+80*
<b>PRACTICALS</b>							
06	PAE 251 P	VI	(c) Heat & acoustics, (d) Optics	6	4	4	100
07	PAE 252 P	VII	(c) Electronics, (d) Computer programming	6	4	4	100
08			Seminar	2	-	--	-
			<b>Total:</b>	34	28		700

**\* Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. Common Syllabus to University and Constituent Colleges.**

**There shall be no internal assessment examinations for practicals.  
Practical Examinations will be conducted at the end of each semester.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**.  
Part – A consists of EIGHT short notes questions, carrying 4 marks each. The student has to answer all the questions.  
Part – B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks.

**M.Sc. – Physics Course under Non-CBCS**  
**(w.e.f. 2013-2014 for the batch admitted in I year from the academic year 2012 – 2013)**  
**Scheme of Instruction and Examination**

**(M. Sc. Opto-Electronics Specialisation) Semester III**

Sl.No.	Sub.Code	Subject	Instruction Hrs/Week	Credits	Duration of Exam. Hrs	Max. Marks
<b>THEORY</b>						
01	POE 301 T/NC	Modern Optics	4	4	3	20+80**
02	POE 302 T/NC	Advanced Solid State Physics	4	4	3	20+80**
03	POE 303 T/NC	Introduction to Opto-Electronics	4	4	3	20+80**
04	POE 304 T/NC	Semiconductor Opto-Electronics	4	4	3	20+80**
05	POE 305 T/NC	Opto-Electronic Devices-Sources-Detectors	4	4	3	20+80**
<b>PRACTICALS</b>						
06	POE 351 P/NC	Lab – 1	6	4	4	100
07	POE 352 P/NC	Lab – 2	6	4	4	100
08	POE S1/NC	Seminar	4	1	--	25
		Total	32+4	29		725

**\*\*Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. Common Syllabus to University, Constituent and Affiliated Colleges. There shall be no internal assessment examinations for practicals. Practical Examinations will be conducted at the end of each academic year.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**.

Part – A consists of EIGHT short answer questions, carrying 4 marks each. The student has to answer all the questions. Part – B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks. The student has to answer all the questions.

  
 CHAIRMAN  
 BOS in PHYSICS  
 OSMANIA UNIVERSITY  
 HYDERABAD-500007

**M.Sc. – Physics Course under Non-CBCS**  
(w.e.f. 2013-2014 for the batch admitted in I year from the academic year 2012 – 2013)  
Scheme of Instruction and Examination

**(M. Sc. Opto-Electronics Specialisation) Semester IV**

Sl.No.	Sub.Code	Subject	Instruction Hrs/Week	Credits	Duration of Exam. Hrs	Max. Marks
<b>THEORY</b>						
01	POE 401 T/NC	Nuclear Physics	4	4	3	20+80**
02	POE 402 T/NC	Spectroscopy	4	4	3	20+80**
03	POE 403 T/NC	Fundamentals of Optical Fibres	4	4	3	20+80**
04	POE 404 T/NC	Optical Communication Systems and Measurements	4	4	3	20+80**
05	POE 405 T/NC	Opto-Electronics systems and Integration Techniques	4	4	3	20+80**
<b>PRACTICALS</b>						
06	POE 451 P/NC	Lab – 1	6	4	4	100
07	POE 452 P/NC	Lab – 2	6	4	4	100
08	POE S2/NC	Seminar	4	1	--	25
		Total	32+4	29		725

**\*\*Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. Common Syllabus to University, Constituent and Affiliated Colleges. There shall be no internal assessment examinations for practicals. Practical Examinations will be conducted at the end of each academic year.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**.

Part – A consists of EIGHT short answer questions, carrying 4 marks each. The student has to answer all the questions. Part – B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks. The student has to answer all the questions.

  
CHAIRMAN  
BOS in PHYSICS  
OSMANIA UNIVERSITY  
HYDERABAD-500007

**M.COM. COURSE STRUCTURE  
(NON CHOICE BASED CREDIT SYSTEM)**

*( w.e.f. 2014-'15)*

**FIRST SEMESTER**

Code	Name of the Paper	SOI	Exam Hrs	Sem Exam	IA	Total
Com 101	Accounting Standards & Reporting	5	3	80	20	100
Com 102	Managerial Economics	5	3	80	20	100
Com 103	Principles of Marketing	5	3	80	20	100
Com 104	Financial Management	5	3	80	20	100
Com 105	Organization Theory & Behaviour	5	3	80	20	100
	<b>Total</b>	<b>25</b>				

**SECOND SEMESTER**

Com 201	Advanced Managerial Accounting	5	3	80	20	100
Com 202	Business Environment & Policy	5	3	80	20	100
Com 203	Marketing Management	5	3	80	20	100
Com 204	Investment Management	5	3	80	20	100
Com 205	Human Resource Management	5	3	80	20	100
	<b>Total</b>	<b>25</b>				

**THIRD SEMESTER**

Com 301	Research Methodology & Statistical Analysis	5	3	80	20	100
Com 302	Cost Accounting & Control	5	3	80	20	100
Com 303	Specialization Paper-I	5	3	80	20	100
Com 304	Specialization Paper-II	5	3	80	20	100
Com 305	E-Commerce	5(3T +2P)	3	56	14 IA 30 LB	100
	Seminar	2		15W	10PR	25
	<b>Total</b>	<b>27</b>				

**FOURTH SEMESTER**

Com 401	Quantitative Techniques for Business Decisions	5	3	80	20	100
Com 402	Tax Planning	5	3	80	20	100
Com 403	Specialization Paper-I	5	3	80	20	100
Com 404	Specialization Paper-II	5	3	80	20	100
Com 405	PROJECT WORK*	5		60D	40VV	100
	Seminar	2		15W	10PR	25
	<b>Total</b>	<b>27</b>				
	<b>GRAND TOTAL</b>	<b>104</b>				

**Notation:**

ID–Inter Disciplinary; Com–Commerce; W–Write-up (4-5 Pages); PR – Presentation; IA – Internal assessment; D–Dissertation (50-75 Pages); VV – Viva-Voce; LB – Lab Practical Exam. \* - “Project Work – Guidelines” for details, SOI – Standard of Instruction.

**Notes:**

- i) Teachers are advised to handle/analyze at least 3 or 4 cases in the subject in the classroom on any topics outlined wherever feasible.
- ii) For each paper there will be semester examination for 80 marks and 20 marks for internal assessment [15 marks for tests (average of the two tests) and 5 marks for assignment in the subject].
- iii) In paper 305 theory examination is for 56 marks, Internal Assessment is for 14 marks and Computer Lab Practical examinations is for 30 marks.

**SPECIALIZATION****FINANCE**

Code	Name of the Paper	Exam Hrs	Sem Exam	IA
FIN/INB 303	International Financial Management	3	80	20
FIN 304	Securities Analysis & Portfolio Management	3	80	20
FIN 403	Financial Services	3	80	20
FIN/404	Financial Derivatives	3	80	20

**ACCOUNTING**

ACC 303	Advanced Corporate Accounting	3	80	20
ACC 304	Financial Statement Analysis	3	80	20
ACC 403	Advanced Cost Accounting and Control	3	80	20
ACC 404	Mergers and Acquisitions	3	80	20

**MARKETING**

MKG 303	Services & Retail Markets	3	80	20
MKG 304	Consumer Behavior and Marketing Research	3	80	20
MKG 403	Supply Chain Management & C R M	3	80	20
MKG/INB 404	International Marketing	3	80	20

**TAXATION**

TAX 303	Direct Taxes	3	80	20
TAX 304	Indirect Taxes	3	80	20
TAX 403	Business and Corporate Taxation	3	80	20
FIN/TAX/ ACC 404	International Taxation	3	80	20

**INTERNATIONAL BUSINESS**

INB 303	International Financial Management	3	80	20
INB 304	International Trade – Theory and Practice:	3	80	20
INB 403	International Business Environment	3	80	20
MKG/INB 404	International Marketing	3	80	20

**INSURANCE**

INS 303	Principles and Practices of Life and Health Insurance	3	80	20
INS 304	Principles and Practice of General Insurance	3	80	20
INS 403	Insurance: Actuarial Sciences	3	80	20
INS 404	Retirement Planning	3	80	20



**MSc BIOTECHNOLOGY**  
**DEPARTMENT OF GENETICS & BIOTECHNOLOGY, OSMANIA**  
**UNIVERSITY** Schedule for Instruction and Examination  
(Proposed Scheme for Academic year 2006 onwards)

<b>SEMESTER – I</b>							
<b>S No</b>	<b>Syllabus Ref No</b>	<b>Subject</b>	<b>Credits</b>	<b>Teaching Hours</b>	<b>Marks</b>		
					<b>Internal Assessment</b>	<b>Semester Exam</b>	<b>Total</b>
	<b>THEORY</b>						
1.	BT 101 U	Genetics	4	4	20	80	100
2.	BT 102 U	Cell Biology	4	4	20	80	100
3.	BT 103 U	Biological chemistry	4	4	20	80	100
4.	BT 104 U	Communication Skills, computer basics & Cyber Crime	4	4	20	80	100
	<b>PRACTICALS</b>						
1.	BT 151 P	Genetics	2	4		50	50
2.	BT 152 P	Cell Biology	2	4		50	50
3.	BT 153 P	Biological chemistry	2	4		50	50
		<b>Total</b>	<b>20</b>	<b>28</b>	<b>80</b>	<b>470</b>	<b>550</b>

SEMESTER – II							
S No	Syllabus Ref No	Subject	Credits	Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
	<b>THEORY</b>						
1.	BT 201 U	Microbiology	4	4	20	80	100
1.	BT 202 U	Molecular Biology - I	4	4	20	80	100
2.	BT 203 U	Molecular Biology - II	4	4	20	80	100
3.	BT 204 U	Statistics, Standards and Quality Management, Lab Management and safety	4	4	20	80	100
	<b>PRACTICALS</b>						
1.	BT 251 U	Microbiology	2	4		50	50
2.	BT 252 U	Molecular Biology - I	2	4		50	50
3.	BT 253 U	Molecular Biology - II	2	4		50	50
		<b>Total</b>	<b>20</b>	<b>28</b>	<b>80</b>	<b>470</b>	<b>550</b>

**SEMESTER – III**

S No	Syllabus Ref No	Subject		Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 301 U	rDNA Technology	4	4	20	80	100
2.	BT 302 U	Industrial Biotechnology	4	4	20	80	100
3.	BT 303 U	Immunology	4	4	20	80	100
4.	BT 304 U	Intellectual Property Rights, Entrepreneurship and Research Methodology	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 351 U	rDNA Technology	2	4		50	50
2.	BT 352 U	Industrial Biotechnology	2	4		50	50
3.	BT 353 U	Immunology	2	4		50	50
		<b>Total</b>	<b>20</b>	<b>28</b>	<b>80</b>	<b>470</b>	<b>550</b>

**SEMESTER – IV**

S No	Syllabus Ref No	Subject		Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 401 U	Bioinformatics	4	4	20	80	100
2.	BT 402 U	Bioprocess Engineering	4	4	20	80	100
3.	BT 403 UA BT 403 UB BT 403 UC BT 403 UD	<b>Elective -</b> A. Medical Biotechnology B. Animal Biotechnology C. Agricultural Biotechnology D. Environmental Biotechnology	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 401 U	Bioinformatics	2	4		50	50
2.	BT 402 U	Bioprocess Engineering	2	4		50	50
3.	BT 403 UA BT 403 UB BT 403 UC BT 403 UD	<b>Elective -</b> A. Medical Biotechnology B. Animal Biotechnology C. Agricultural Biotechnology D. Environmental Biotechnology	2	4		50	50
		<b>Total</b>	<b>18</b>	<b>24</b>	<b>60</b>	<b>390</b>	<b>450</b>

**A.V. College of Arts, Science & Commerce**  
**Syllabus for the Academic year 2014-15 by Osmania University**  
**M.Sc.( Computer Science - 504)**  
**Subjects & Code - Semester wise**

<b>Subjects</b>	<b>Code</b>
<b><u>I semester</u></b>	
1. Discrete Mathematical structure	CS-101T
2. Modern Operating System	CS-102T
3. Microprocessor & Micro Controllers	CS-103T
4. Software Engineering	CS-104T
5. Computer Graphics	CS-105T
Labs:	
1. Unix & Computer Graphics	CS-106P
2. Digital Systems, Microprocessor & Micro Controllers	CS-107P
<b>II Semester</b>	
1. Automata Language & Computation	CS-201T
2. Client- Server Programming (using JAVA)	CS-202T
3. Computer Networks & Internet Protocols	CS-203T
4. Design and Analysis of Algorithms	CS-204T
5. ELECTIVE:	
a) Advanced Computer Architecture	CS-205AT
b) Finite Difference and Finite Element Methods	CS-205BT
c) Embedded Systems	CS-205CT
Labs:	
1. Network Programming	CS-206P
2. Client Server Programming	CS-207P
<b>III Semester:</b>	
1. .Net	CS-301T
2. Artificial Intelligence	CS-302T
3. Object- Oriented System Development with UML	CS-303T
4. Network Security	CS-304T
5. ELECTIVE:	
a) Neural Networks and Fuzzy Logic	CS-305AT
b) Image Processing	CS-305BT
c) Parallel Programming	CS-305CT
Labs:	
1. System Security	CS-306P
2. .Net	CS-307P
<b>IV Semester:</b>	
1. Data ware Housing and Data Mining	CS-401T
2. Mobile Computing	CS-402T
3. Seminar on "Project Work"	CS-403P

**A.V. College of Arts, Science & Commerce**  
**Syllabus for the Academic year 2014-15 by Osmania University**  
**M.Sc. (Mathematics)**  
**Subjects & Code - Semester wise**

<b>Subjects</b>	<b>Code</b>
<u>I semester</u>	
1. Algebra	MM101
2. Real Analysis	MM102
3. Topology	MM103
4. Elementary Number Theory	MM104
5. Mathematical Methods	MM105
<u>II Semester</u>	
1. Advanced Algebra	MM201
2. Advanced Real Analysis	MM202
3. Functional Analysis	MM203
4. Theory of Ordinary Differential Equations	MM204
5. Discrete Mathematics	MM205
<u>III Semester</u>	
1. Complex Analysis	MM301
2. Elementary Operator Theory	MM302
3. Operations Research	MM303C
4. Integral Equations	MM304B
5. Numerical Techniques	MM305C
<u>IV Semester</u>	
1. Advanced Complex Analysis	MM401
2. General Measure Theory	MM402
3. Advanced Operations Research	MM403C
4. Banach Algebra	MM404A
5. Calculus of Variations	MM405A

**Osmania University**  
**M.Sc Chemistry**

**Scheme of Instruction and Examination (Revised 2008) for the Batch admitted  
in academic year 2008-09**

(Approved by the Board of Studies in Chemistry, PG on 7.3.2008)

**Semester - I**

Sub-Code	Subject	Instruction Hrs /Week	Internal Assessment Marks	Max Marks Semester Exams	Duration of semester Exam (Hrs)
<b>THEORY</b>					
CH-101	Inorganic Chemistry	4 Hrs	20	80	3 hrs
CH-102	Organic Chemistry	4 Hrs	20	80	3 hrs
CH-103	Physical Chemistry	4 Hrs	20	80	3 hrs
CH-104	Mathematics, Biology & Spectroscopy	4 Hrs	20	80	3 hrs
<b>PRACTICAL</b>					
CH-151	Inorganic Chemistry Lab - I	6 Hrs/week	-	-	-
CH-152	Organic Chemistry Lab - I	6 Hrs/week	-	-	-
CH-153	Physical Chemistry Lab - I	6 Hrs/week	-	-	-
CH-199	SEMINAR	2 Hrs/week	-	-	-
Total		34 + 2	80	320	

**Note:**

1. The candidate who studied B.Sc with Mathematics or Botany / Zoology as one of the three equal optionals must be allotted Roll number / Hall ticket number of different range.
  - i. Those who have studied Mathematics at B.Sc level must study Biology in paper CH104 and be allotted Roll Number / Hall ticket number from MNO-YC-42-001 to MNO-YC-42-050.
  - ii. Those who have studied Botany / Zoology at B.Sc level must study Mathematics in paper CH104 and be allotted Roll Number / Hall ticket number from MNO-YC-42-051 to MNO-YC-42-100.
2. The Controller of Examination is requested to print separate D-Form for Hall-Ticket number range MNO-YC-42-001 to MNO-YC-42-050 (for Biology & Spectroscopy) and MNO-YC-051 to MNO-YC-42-100 (for Mathematics & Spectroscopy) so that the answer booklets are packed separately in the examination centre which would facilitate smooth valuation.
3. Practical examination for papers CH 151 and CH 152 is conducted at the end of semester II along with the practical work done in semester II. ~ CH 153

S e l s

## Osmania University

## M.Sc Chemistry

Scheme of Instruction and Examination (Revised 2008) for the Batch admitted  
in academic year 2008-09

(Approved by the Board of Studies in Chemistry PG on 7.3.2008)

## Semester - II

Sub-Code	Subject	Instruction Hrs /Week	Internal Assessment Marks	Max Marks Semester Exams	Duration of semester Exam (Hrs)
<b>THEORY</b>					
CH-201	Inorganic Chemistry	4 Hrs	20	80	3 hrs
CH-202	Organic Chemistry	4 Hrs	-	80	3 hrs
CH-203	Physical Chemistry	4 Hrs	20	80	3 hrs
CH-204	(A) Computers (B) Spectroscopy	4 Hrs	20	80	3 hrs
<b>PRACTICAL</b>					
CH-251	Inorganic Chemistry Lab	6 Hrs/week	-	100	6 hrs
CH-252	Organic Chemistry Lab	6 Hrs/week	-	100	6 hrs
CH-253	Physical Chemistry Lab	6 Hrs/week	-	100	6 hrs
CH-299	SEMINAR	2 Hrs/week	-	-	
	Total	34 + 2	80	620	

## Note:

- Practical examination in CH 151 and CH 251 is for 100 marks held at the end of semester II
- Practical examination in CH 152 and CH 252 is for 100 marks held at the end of semester II
- Practical examination in CH 153 and CH 253 is for 100 marks held at the end of semester II

*Salvador*

# Osmania University

## M.Sc Chemistry

Scheme of Instruction and Examination (Revised 2008) for the Batch admitted in the academic  
Year 2008-2009

### Semester –III

Sub-Code	Subject	Instruction Hrs/Week	Internal Assessment Marks	Max Marks Semester Exams	Duration of semester Exam (Hrs)
	<b>THEORY</b>				
CH (O) 301	Conformational analysis, Pericyclic reactions and enzymes	4 Hrs	20	80	3Hrs
CH(O)302	Asymmetric synthesis, synthetic strategies and heterocycles	4 Hrs	20	80	3Hrs
CH(O) 303	Modern Organic Synthesis	4 Hrs	20	80	3Hrs
CH 304	Spectroscopy and photochemistry	4 Hrs	20	80	3Hrs
	<b>PRACTICAL</b>				
CH 351	Separation and identification of organic compounds	6 Hrs/Week	-	100	6Hrs
CH 352	Spectroscopic identification of organic compounds and Chromatography	6 Hrs/Week	-	100	6Hrs
CH 399	SEMINAR	2 Hrs/Week	-		
	Total	28+2	80	520	

Note:

- Practical examination in CH 351 and CH 451 is for 100 marks held at the end of semester IV
- Practical examination in CH 352 and CH 452 is for 100 marks held at the end of semester IV

# Osmania University

## M.Sc Chemistry

Scheme of Instruction and Examination (Revised 2008) for the Batch admitted in the academic  
Year 2008-2009

### Semester –IV

Sub-Code	Subject	Instruction Hrs/Week	Internal Assessment Marks	Max Marks Semester Exams	Duration of semester Exam (Hrs)
	<b>THEORY</b>				
CH(O) 401	Drug discovery	4 Hrs	20	80	3Hrs
CH(O) 402	Mechanism of action of Drugs	4 Hrs	20	80	3Hrs
CH(O) 403 (E2)	Advanced Heterocyclic chemistry (Elective)	4 Hrs	20	80	3Hrs
CH(O) 404(E1)	Advanced Natural Products (Elective)	4 Hrs	20	80	3Hrs
	<b>PRACTICAL</b>				
		6 Hrs/Week	-	100	6Hrs
		6 Hrs/Week	-	100	6Hrs
CH 499	SEMINAR	2 Hrs/Week	-		
	Total	28+2	80	520	

Note:

- Practical examination in CH 351 and CH 451 is for 100 marks held at the end of semester IV
- Practical examination in CH 352 and CH 452 is for 100 marks held at the end of semester IV

**ఉస్మానియా విశ్వవిద్యాలయం**  
**ఎం.ఏ(తెలుగు) పాఠ్యప్రణాళిక**

**సెమిస్టర్-1**

1. సంప్రదాయ సాహిత్యం-పాఠ్యాంశాలు(11నుంచి 15శతాబ్దం వరకు)
2. తెలుగు వ్యాకరణం
3. ప్రాచీన సాహిత్య విమర్శ
4. తెలుగు వారి చరిత్ర సంస్కృతి
5. ప్రాచీన సాహిత్య వికాసం(11నుంచి 15శతాబ్దం వరకు)

**సెమిస్టర్-2**

1. సంప్రదాయ సాహిత్యం-పాఠ్యాంశాలు(16నుంచి 19శతాబ్దం వరకు)
2. భాషా వికాసం
3. ఆధునిక సాహిత్య విమర్శ
4. సంస్కృత సాహిత్య పరిచయం-కావ్యం
5. ప్రాచీన సాహిత్య వికాసం(16నుంచి 19శతాబ్దం వరకు)

**సెమిస్టర్-3**

1. ఆధునిక కవిత్వం-పాఠ్యాంశాలు
2. కథానిక-పాఠ్యాంశాలు
3. జానపద సాహిత్యం-గేయశాఖ
4. ప్రత్యేకాంశాలు-(ఎ) ఆధునిక భాషాశాస్త్రం (బి) నాటకం
5. ప్రత్యేకాంశాలు-(ఎ) తెలంగాణ సాహిత్యం (బి) వార్తా రచన-అనువాదం

**సెమిస్టర్-4**

1. ఆధునిక సాహిత్య వికాసం
2. నవల-పాఠ్యాంశాలు
3. జానపద సాహిత్యం-వచన, దృశ్య శాఖలు
4. ప్రత్యేకాంశాలు-(ఎ) సంస్కృత నాటకం-వ్యాకరణం(బి) ఛందస్సు అలంకారాలు
5. ప్రత్యేకాంశాలు-(ఎ) ప్రకార్య భాష (బి) వచన సాహిత్యం

**DEPARTMENT OF COMMERCE,  
OSMANIA UNIVERSITY, HYDERABAD.  
STRUCTURE OF B.COM (COMPUTERS) DEGREE COURSE  
(w.e.f. ACADEMIC YEAR 2009-'10)**

<b>FIRST YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
101	FINANCIAL ACCOUNTING	6 (5+1)	3 Hours	70T + 30P = 100
102	BUSINESS ECONOMICS	4 (3+1)	3 Hours	70T + 30P = 100
103	BUSINESS ORGANISATION & MANAGEMENT	5 (4+1)	3 Hours	70T + 30P = 100
104	FUNDAMENTALS OF INFORMATION TECHNOLOGY	5 (4+1)	3 Hours	70T + 30P = 100
105	FUNDAMENTALS OF "C"	4 (3+1)	3 Hours	70T + 30P = 100
<b>SECOND YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
201	ADVANCED ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
202	BUSINESS STATISTICS	5 (4+1)	3 Hours	70T + 30P = 100
203	FINANCIAL SERVICES – BANKING & INSURANCE	5 (4+1)	3 Hours	70T + 30P = 100
204	TAXATION	5 (4+1)	3 Hours	70T + 30P = 100
205	RELATIONAL DATABASE MANAGEMENT SYSTEMS (RDBMS)	5 (3+2)	3 Hours	70T + 30P = 100
<b>THIRD YEAR</b>				
301	CORPORATE ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
302	E-COMMERCE ( <i>wef 2011-'12</i> )	5 (3+2)	3 Hours	70T + 30P = 100
303	BUSINESS LAW	5 (4+1)	3 Hours	70T + 30P = 100
304	AUDITING	5 (4+1)	3 Hours	70T + 30P = 100
305	ELECTIVE: PAPER – I	5 (4+1)	3 Hours	70T + 30P = 100
306	ELECTIVE: PAPER – II	5 (4+1)	3 Hours	70T + 30P = 100
307	WEB PROGRAMMING	5 (3+2)	3 Hours	70T + 30P = 100

**NOTE:**

1. 70 MARKS ARE ALLOCATED FOR THEORY EXAM AND 30 MARKS ARE ALLOCATED FOR THE COMPUTER / COMMERCE LAB PRACTICALS.
2. ONE HOUR OF THEORY CLASS IS EQUAL TO TWO COMPUTER/COMMERCE LAB HOURS.
3. PATTERN OF QUESTION PAPER FOR 70 MARKS AND 30 MARKS OF PRACTICAL EXAMINATION IS GIVEN AT THE END.
4. STRUCTURE OF ELECTIVES IS GIVEN IN THE FOLLOWING PAGE, FROM WHICH A STUDENT SHOULD OPT 2 PAPERS OF ANY ONE ELECTIVE.

**B.Com (COMPUTERS)  
THRID YEAR- ELECTIVES  
(Code 305 & 306)**

<b>Code</b>	<b>TITLE OF THE ELECTIVE</b>	<b>Papers</b>
E-I	INSURANCE	I) 305: Life Insurance II) 306: Non-Life Insurance
E-II	BANKING	I) 305: Banking in India II) 306: Computer Applications in Banking
E-III	ACCOUNTANCY - II	I) 305: Cost Accounting II) 306: Management Accounting & Control
E-IV	RETAILING	I) 305: Retail Management II) 306: Retail Marketing & CRM
E-V	TAXATION	I) 305: Direct Taxes II) 306: Indirect Taxes
E-VI	FINANCE	I) 305: Financial Management II) 306: Micro-credit and Foreign Trade Finance
E-VII	MARKETING	I) 305: Principles of Marketing II) 306: Rural Marketing
E-VIII	SECRETARIAL PRACTICE & OFFICE MANAGEMENT	I) 305: Secretarial Practice II) 306: Office Management
E-IX	COMPUTER APPLICATIONS-II	I) 305: Fundamentals of C++ II) 306: Fundamentals of Java
E-X	BUSINES MATHEMATICS	I) 305: Business Mathematics-I II) 306: Business Mathematics-II

**DEPARTMENT OF COMMERCE,  
OSMANIA UNIVERSITY, HYDERABAD.  
STRUCTURE OF B.COM (GENERAL) DEGREE COURSE  
w.e.f. ACADEMIC YEAR 2008-'09**

<b>FIRST YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
101	FINANCIAL ACCOUNTING	6 (5+1)	3 Hours	70T + 30P = 100
102	BUSINESS ECONOMICS	4 (3+1)	3 Hours	70T + 30P = 100
103	BUSINESS ORGANISATION & MANAGEMENT	5 (4+1)	3 Hours	70T + 30P = 100
104	FUNDAMENTALS OF INFORMATION TECHNOLOGY	5 (4+1)	3 Hours	70T + 30P = 100
<b>SECOND YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
201	ADVANCED ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
202	BUSINESS STATISTICS	5 (4+1)	3 Hours	70T + 30P = 100
203	FINANCIAL SERVICES - BANKING & INSURANCE	5 (4+1)	3 Hours	70T + 30P = 100
204	TAXATION	5 (4+1)	3 Hours	70T + 30P = 100
<b>THIRD YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
301	CORPORATE ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
302	COST & MANAGEMENT ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
303	BUSINESS LAW	5 (4+1)	3 Hours	70T + 30P = 100
304	AUDITING	5 (4+1)	3 Hours	70T + 30P = 100
305	ELECTIVE: PAPER - I	5 (4+1)	3 Hours	70T + 30P = 100
306	ELECTIVE: PAPER - II	5 (4+1)	3 Hours	70T + 30P = 100

**NOTE:**

1. 70 MARKS ARE ALLOCATED FOR THEORY EXAM AND 30 MARKS ARE ALLOCATED FOR THE COMPUTER / COMMERCE LAB PRACTICALS.
2. ONE HOUR OF THEORY CLASS IS EQUAL TO TWO COMPUTER/COMMERCE LAB HOURS.
3. PATTERN OF QUESTION PAPER FOR 70 MARKS AND 30 MARKS OF PRACTICAL EXAMINATION IS GIVEN AT THE END.
4. STRUCTURE OF ELECTIVES IS GIVEN IN THE FOLLOWING PAGE, FROM WHICH A STUDENT SHOULD OPT 2 PAPERS OF ANY ONE ELECTIVE.

**B.Com (GENERAL)  
THRID YEAR - ELECTIVES  
(Code 305 & 306)**

<b>Code</b>	<b>TITLE OF THE ELECTIVE</b>	<b>Papers</b>
E-I	INSURANCE	I) 305: Life Insurance II) 306: Non-Life Insurance
E-II	BANKING	I) 305: Banking in India II) 306: Computer Applications in Banking
E-III	ACCOUNTANCY - I	I) 305: Advanced Corporate Accounting II) 306: Management Accounting
E-IV	RETAILING	I) 305: Retail Management II) 306: Retail Marketing & CRM
E-V	TAXATION	I) 305: Direct Taxes II) 306: Indirect Taxes
E-VI	FINANCE	I) 305: Financial Management II) 306: Micro-credit and Foreign Trade Finance
E-VII	MARKETING	I) 305: Principles of Marketing II) 306: Rural Marketing
E-VIII	SECRETARIAL PRACTICE & OFFICE MANAGEMENT	I) 305: Secretarial Practice II) 306: Office Management
E-IX	COMPUTER APPLICATIONS-I	I) 305: Database Management System II) 306: Electronic Commerce
E-X	BUSINES MATHEMATICS	I) 305: Business Mathematics-I II) 306: Business Mathematics-II

**DEPARTMENT OF Economics**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.A (Economics)**  
**2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Micro Economics	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Macro Economics	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Indian Economy	3 Hours	80
	Practicals	Indian Economy	3 Hours	20
	Theory-IV	Public Finance and International Trade	3 Hours	100

**DEPARTMENT OF Political Science  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Political Science)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Concepts, Theories and Institutions	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Indian Government and Politics	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Political Thought	3 Hours	100
	Theory-IV	International relations	3 Hours	100

**DEPARTMENT OF PUBLIC ADMINISTRATION  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Public Administration)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Introduction to Public Administration	3 Hours	100
<b>Code</b>				
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Public Administration in India	3 Hours	100
<b>Code</b>				
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Management Resources	3 Hours	100
	Theory-IV	Office management	3 Hours	100

**DEPARTMENT OF PSYCHOLOGY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A. (PSYCHOLOGY)  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	General Psychology-I	3 Hours	75
<b>Code</b>				
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Social Psychology-II	3 Hours	75
	Practical-II	Practicals	3 Hours	50
<b>Code</b>				
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Child and Adolescent Psychology-III	3 Hours	75
	Practical-III	Practicals	3 Hours	50
	Theory-IV	ABNORMAL PSYCHOLOGY-IV	3 Hours	75
	Practical-IV	project	3 Hours	50

**DEPARTMENT OF Political Science  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Political Science)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Concepts, Theories and Institutions	3 Hours	100
<b>Code</b>				
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Indian Government and Politics	3 Hours	100
<b>Code</b>				
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Political Thought	3 Hours	100
	Theory-IV	International relations	3 Hours	100

**DEPARTMENT OF PUBLIC ADMINISTRATION  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Public Administration)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Introduction to Public Administration	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Public Administration in India	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Management Resources	3 Hours	100
	Theory-IV	Office management	3 Hours	100

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	Differential Equations & Solid Geometry	4	3	3 hours	100+50
2	II	Abstract Algebra & Real Analysis	4	3	3 hours	100+50
3	III	Linear Algebra and Vector Calculus	3	3	3 hours	100+50
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**DEPARTMENT OF PHYSICS**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (PHYSICS)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Mechanics and Waves and Oscillations	3 Hours	100
	Practical-I	Mechanics and Waves and Oscillations	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Thermodynamics and Optics	3 Hours	100
	Practical-II	Thermodynamics and Optics	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Electricity, Magnetism and Electronics	3 Hours	100
	Practical-III	Electricity, Magnetism and Electronics	3 Hours	50
	Theory-IV	Modern Physics	3 Hours	100
	Practical-IV	Modern Physics	3 Hours	50

**DEPARTMENT OF CHEMISTRY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.Sc. (CHEMISTRY)  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Chemistry-I	3 Hours	100
	Practical-I	Semi micro analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Chemistry-II	3 Hours	100
	Practical-II	Volumetric analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Chemistry-III	3 Hours	100
	Practical-III	Synthesis and Identification of Organic compounds	3 Hours	50
	Theory-IV	Chemistry-IV	3 Hours	100
	Practical-IV	Instrumentation & Kinetics	3 Hours	50

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	Differential Equations & Solid Geometry	4	3	3 hours	100+50
2	II	Abstract Algebra & Real Analysis	4	3	3 hours	100+50
3	III	Linear Algebra and Vector Calculus	3	3	3 hours	100+50
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**DEPARTMENT OF PHYSICS**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (PHYSICS)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Mechanics and Waves and Oscillations	3 Hours	100
	Practical-I	Mechanics and Waves and Oscillations	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Thermodynamics and Optics	3 Hours	100
	Practical-II	Thermodynamics and Optics	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Electricity, Magnetism and Electronics	3 Hours	100
	Practical-III	Electricity, Magnetism and Electronics	3 Hours	50
	Theory-IV	Modern Physics	3 Hours	100
	Practical-IV	Modern Physics	3 Hours	50

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	PC Software and 'C' Programming	3 Hours	100
	Practical-I	PC Software and C	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Object Oriented Programming with Java and Data Structures	3 Hours	100
	Practical-II	Java and Data Structures Lab	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	<del>Theory-IV (Elective-2)</del>	<del>GUI Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-2)</del>	<del>Visual Basic Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-3)</del>	<del>Operating Systems</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-3)</del>	<del>Operating Systems Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-4)</del>	<del>PHP, MySQL, Apache and PHP</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-4)</del>	<del>PHP and MYSQL Lab</del>	<del>3 Hours</del>	<del>50</del>

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	Differential Equations & Solid Geometry	4	3	3 hours	100+50
2	II	Abstract Algebra & Real Analysis	4	3	3 hours	100+50
3	III	Linear Algebra and Vector Calculus	3	3	3 hours	100+50
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**Department of Statistics**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**Course Structure of B.Sc. (Statistics)**

**Year 2014-15**

<b>YEAR</b>	<b>THEORY/ PRACTICAL</b>	<b>PAPER TITLE</b>	<b>EXAM DURATION</b>	<b>MAX. MARKS</b>
I YEAR	Theory-I	Descriptive Statistics and Probability	3 hrs	100
	PRACTICAL -I	Descriptive Statistics and Probability -I	3 hrs	50
II YEAR	Theory-II	Statistical Methods and Theory of Estimation	3 hrs	100
	PRACTICAL -II	Statistical Methods and Theory of Estimation-II	3 hrs	50
III YEAR	Theory-III	<b>Applied Statistics:</b> Sampling Theory, Time series, Index Numbers and Demand Analysis	3 hrs	100
	PRACTICAL -III	Applied Statistics, QR &OR Practical's-III	3 hrs	50
III YEAR	Theory-IV	Statistical Quality Control and Reliability	3 hrs	100
	PRACTICAL -IV	Excel and TORA Practical's	3 hrs	50

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	PC Software and 'C' Programming	3 Hours	100
	Practical-I	PC Software and C	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Object Oriented Programming with Java and Data Structures	3 Hours	100
	Practical-II	Java and Data Structures Lab	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	<del>Theory-IV (Elective-2)</del>	<del>GUI Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-2)</del>	<del>Visual Basic Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-3)</del>	<del>Operating Systems</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-3)</del>	<del>Operating Systems Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-4)</del>	<del>PHP, MySQL, Apache and PHP</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-4)</del>	<del>PHP and MYSQL Lab</del>	<del>3 Hours</del>	<del>50</del>

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	Differential Equations & Solid Geometry	4	3	3 hours	100+50
2	II	Abstract Algebra & Real Analysis	4	3	3 hours	100+50
3	III	Linear Algebra and Vector Calculus	3	3	3 hours	100+50
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**DEPARTMENT OF ELECTRONICS**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Electronics)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Circuit analysis and Electronic device s	3 Hours	100
	Practical-I	Circuit analysis and Electronic device s	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Analog circuit s and communication s	3 Hours	100
	Practical-II	Analog circuit s and communication s	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Digital electronics and microprocessor	3 Hours	100
	Practical-III	Digital electronics and microprocessor	3 Hours	50
	Theory-IV (Elective-1)	Embedded systems and Applications	3 Hours	100
	Practical-IV (Elective-1)	Embedded systems and Applications	3 Hours	50

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	PC Software and 'C' Programming	3 Hours	100
	Practical-I	PC Software and C	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Object Oriented Programming with Java and Data Structures	3 Hours	100
	Practical-II	Java and Data Structures Lab	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	<del>Theory-IV (Elective-2)</del>	<del>GUI Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-2)</del>	<del>Visual Basic Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-3)</del>	<del>Operating Systems</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-3)</del>	<del>Operating Systems Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-4)</del>	<del>PHP, MySQL, Apache and PHP</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-4)</del>	<del>PHP and MYSQL Lab</del>	<del>3 Hours</del>	<del>50</del>

**DEPARTMENT OF BOTANY**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc (BOTANY)**  
**W.E.F 2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Microbial Diversity Cryptogams and Gymnosperms-I	3 Hours	100
	Practical -I	Microbial Diversity Cryptogams and Gymnosperms.	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Anatomy, Embryology, Taxonomy and Medicinal Botany-II	3 Hours	100
	Practical-II	Anatomy, Embryology, Taxonomy and Medicinal Botany-II	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Cell Biology, Genetics, Ecology and Biodiversity- III	3 Hours	100
	Practical-III	Cell Biology, Genetics, Ecology and Biodiversity- III	3 Hours	50
	Theory-IV	Physiology, Tissue Culture, Biotechnology, Seed Technology and Horticulture.	3 Hours	100
	Practical-IV	Physiology, Tissue Culture, Biotechnology, Seed Technology and Horticulture.	3 Hours	50

**DEPARTMENT OF ZOOLOGY**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc.(Zoology)**  
**2014 - 15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Biology of invertebrates and cell biology	3 Hours	100
	Practical-I	Invertebrates	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Biology of Chordates, Embryology, Ecology and Zoogeography	3 Hours	100
	Practical-II	Chordates, Embryology and Ecology	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Animal physiology, Genetics & Evolution	3 Hours	100
	Practical-III	Animal Physiology, Genetics Evolution	3 Hours	50
	Theory-IV	Applied Zoology	3 Hours	100
	Practical-IV	Fisheries and Aquaculture and Animal Biotechnology	3 Hours	50

**DEPARTMENT OF CHEMISTRY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.Sc. (CHEMISTRY)  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Chemistry-I	3 Hours	100
	Practical-I	Semi micro analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Chemistry-II	3 Hours	100
	Practical-II	Volumetric analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Chemistry-III	3 Hours	100
	Practical-III	Synthesis and Identification of Organic compounds	3 Hours	50
	Theory-IV	Chemistry-IV	3 Hours	100
	Practical-IV	Instrumentation & Kinetics	3 Hours	50

**Department of Business Management (Faculty of Management)**

**Osmania University, Hyderabad-7**

**MBA (Day) Semester-wise structure of the syllabus**

**1<sup>st</sup> Semester**

<b>Subject -Code</b>	<b>Subject Name</b>	<b>No. of teaching hours per week</b>	<b>Max. Marks (IA + UE)</b>	<b>No. of Credits</b>
1.1	Management and Organizational Behaviour	5	20+80	4
1.2	Managerial Economics	5	20+80	4
1.3	Financial Accounting and Analysis	5	20+80	4
1.4	Marketing Management	5	20+80	4
1.5	Statistics for Management	5	20+80	4
1.6	Business Law and Environment	5	20+80	4
1.7	1.7.1. IT Applications for Business	5	20+60	4
	1.7.1.1: Information Technology – Lab	2	20	--

**Note – 1:** Maximum total number of marks = 700

**2:** The total number of credits at the end of the first semester = 28

**2<sup>nd</sup> Semester**

<b>Subject -Code</b>	<b>Subject Name</b>	<b>No. of teaching hours per week</b>	<b>Marks (IA + UE)</b>	<b>No. of Credits</b>
2.1	Human Resource Management	5	20+80	4
2.2	Business Process Reengineering	5	20+80	4
2.3	Financial Management	5	20+80	4
2.4	Research for Marketing Decisions	5	20+80	4
2.5	Operations Research	5	20+80	4
2.6	Operations Management	5	20+80	4
2.7	Decision Support Systems	5	20+80	4

**Note – 1:** Maximum total number of marks at the end of second semester= 700+700 = 1400

**2:** The total number of credits at the end of the second semester = 28+28 = 56

### 3<sup>rd</sup> Semester

Subject -Code	Subject Name	No. of teaching hours per week	Marks (IA + UE)	No. of Credits
3.1	Total Quality Management	5	20+80	4
3.2	International Business	5	20+80	4
3.3	Managerial Communication * (CBCS)	5	20+80	4
3.4	<b>Finance</b> (Students are required to select any one subject from Minor in addition to Major)			
	3.4.1 Investment Management (Major)	5	20+80	4
	3.4.2 Strategic Management Accounting (Minor)	5	20+80	4
	3.4.3 International Finance (Minor)	5	20+80	4
3.5	<b>Human Resource Management</b> (Students are required to select any one subject from Minor in addition to Major)			
	3.5.1 Compensation Management (Major)	5	20+80	4
	3.5.2 Organizational Development (Minor)	5	20+80	4
	3.5.3 Leadership and Change Management (Minor)	5	20+80	4
3.6	<b>Marketing</b> (Students are required to select any one subject from Minor in addition to Major)			
	3.6.1 Product and Brand Management (Major)	5	20+80	4
	3.6.2. Promotion and Distribution Management (Minor)	5	20+80	4
	3.6.3 Marketing Engineering (Minor)	5	20+80	4
3.7	<b>Systems</b> (Minor)			
	3.7.1. Relational Database Management Systems (RDBMS)	5	20+60	4
	3.7.1.1: RDBMS – Lab(Oracle)	2	20	--

**Note – 1:** Maximum total number of marks at the end of 3<sup>rd</sup> semester: 700+700+600=2000

**2:** The total number of credits at the end of the third semester = 28+28+24=80

**3:** \*CBCS applicable to only MBA Day Programme of UCC&BM only.

**4<sup>th</sup> Semester**

<b>Subject -Code</b>	<b>Subject Name</b>	<b>No. of teaching hours per week</b>	<b>Marks (IA + UE)</b>	<b>No. of Credits</b>
4.1	Strategic Management	5	20+80	4
4.2	Supply Chain Management	5	20+80	4
4.3	Entrepreneurial Development (CBCS)	5	20+80	4
4.4	<b>Finance</b> (Students are required to select any one subject from Minor in addition to Major)			
	4.4.1 Financial Risk Management (Major)	5	20+80	4
	4.4.2 Banking and Insurance (Minor)	5	20+80	4
	4.4.3 Financial Services and Systems (Minor)	5	20+80	4
4.5	<b>Human Resource Management</b> (Students are required to select any one subject from Minor in addition to Major)			
	4.5.1 Performance Management (Major)	5	20+80	4
	4.5.2 Labour Laws and Employee Relations (Minor)	5	20+80	4
	4.5.3 Talent and Knowledge Management (Minor)	5	20+80	4
4.6	<b>Marketing</b> (Students are required to select any one subject from Minor in addition to Major)			
	4.6.1 Consumer Behaviour (Major)	5	20+80	4
	4.6.2 Services and Global Marketing (Minor)	5	20+80	4
	4.6.3 Customer Relationship Management (Minor)	5	20+80	4
4.7	<b>Systems</b> (Minor)			
	4.7.1. E – Business	5	20+80	4
4.8	Mentor & Project work	5	100	4
4.9	Viva – Voce (Comprehensive)		100	4

**Note:**

1. Maximum total number of marks at the end of 4<sup>th</sup> semester = 700+700+600+600 = 2600
2. The total number of credits at the end of the fourth semester = 28+28+24+32 = 112
3. The maximum pass mark for each subject shall be 40. However, student needs to secure a minimum of 40% marks in the University Examination.

**IA:** Internal Assessment**UE:** University Examination

## **M.C.A I Semester**

<b>CS601</b>	<b>DISCRETE MATHEMATICS</b>
<b>CS602</b>	<b>PROBABILITY AND STATISTICS</b>
<b>CS603</b>	<b>COMPUTER PROGRAMMING AND PROBLEM SOLVING</b>
<b>CS604</b>	<b>ELEMENTS OF INFORMATION TECHNOLOGY</b>
<b>CS605</b>	<b>MODERN ECONOMIC ANALYSIS</b>
<b>CS 631</b>	<b>PROGRAMMING LAB - I (C &amp; C++ Programming)</b>
<b>CS 632</b>	<b>PROGRAMMING LAB - II (IT Workshop)</b>

## **M.C.A II Semester**

<b>CS 651</b>	<b>ACCOUNTING AND FINANCIAL MANAGEMENT</b>
<b>CS 652</b>	<b>OBJECT ORIENTED PROGRAMMING USING JAVA</b>
<b>CS653</b>	<b>MANAGEMENT INFORMATION SYSTEM</b>
<b>CS 654</b>	<b>DATA STRUCTURES USING C++</b>
<b>CS 655</b>	<b>COMPUTER ORGANIZATION</b>
<b>CS 681</b>	<b>OBJECT ORIENTED PROGRAMMING LAB</b>
<b>CS 682</b>	<b>DATA STRUCTURES USING C++ LAB</b>

OSMANIA UNIVERSITY  
HYDERABAD- 500 007

SCHEME OF INSTRUCTION & EXAMINATION  
M.C.A. II YEAR

2010-2011

SEMESTER – I

Sl.No	Syllabus Ref.No	SUBJECT	Scheme of Instruction		Scheme of Examination		
			Periods per Week		Duration in Hrs.	Maximum Marks	
						Univ. Exam	Sessi-onals
		THEORY					
1.	CS 701	Software Engineering	4	-	3	80	20
2.	CS 702	Database Management System	4	-	3	80	20
3.	CS 703	Design and Analysis of Algorithms	4	-	3	80	20
4.	CS 704	Operating Systems	4	-	3	80	20
5.	CS 705	Operations Research	4	-	3	80	20
		PRATICALS					
1.	CS 731	Programming Lab-V ( DBMS Programming)	-	6	3	50	25
2.	CS 732	Programming Lab-VI ( OPERATING SYSTEMS )	-	6	3	50	25
		Total	20	12		500	150

OSMANIA UNIVERSITY  
HYDERABAD- 500 007

SCHEME OF INSTRUCTION & EXAMINATION  
M.C.A. II YEAR

2010-2011

SEMESTER – II

Sl.No	Syllabus Ref.No	SUBJECT	Scheme of Instruction		Scheme of Examination		
			Periods per Week		Durati on in Hrs.	Maximum Marks	
						Univ. Exam	Sessi- onals
		THEORY					
1.	CS 751	Dataware Housing and Data Mining	4	-	3	80	20
2.	CS 752	Computer Networks	4	-	3	80	20
3.	CS 753	Unix Programming	4	-	3	80	20
4.	CS 754	Web Programming	4	-	3	80	20
		ELECTIVE I					
5.	CS 755	Artificial Intellilgence	4	-	3	80	20
6.	CS 756	Distributed Systems	4	-	3	80	20
7.	CS 757	Information Retrieval Systems	4	-	3	80	20
		PRATICALS					
1.	CS 781	Programming Lab-VII ( Unix Programming Lab)	-	6	3	50	25
2.	CS 732	Programming Lab-VIII (Web Programming Lab)	-	6	3	50	25
		Total	20	12		500	150

**SCHEME OF INSTRUCTION AND EXAMINATION**  
**M.C.A III<sup>rd</sup> YEAR**  
**FACULTY OF INFORMATION TECHNOLOGY**

**SEMESTER – I**

Sl. No.	Syllabus Ref. No.	SUBJECT	Scheme of Instruction		Scheme of Examination		
			Periods per week		Duration In Hours	Maximum Marks	
			L/T	D/P		Univ. Exam	Sessionals
<b>THEORY</b>							
1	CS 801	Information Security	4	-	3	80	20
2	CS 802	Middleware Technologies	4	-	3	80	20
3	CS 803	Object Oriented System Development	4	-	3	80	20
4		<b>Elective – II (One of the following)</b>	4	-	3	80	20
	CS 804	Cloud Computing					
	CS 805	Electronic Commerce					
	CS 806	Human Computer Interaction					
	CS 807	Software Reuse Techniques					
	CS 808	Soft Computing					
	CS 809	XML & Web Services					
5		<b>Elective – II (One of the following)</b>	4	-	3	80	20
	CS 810	Mobile Computing					
	CS 811	Software Testing					
	CS 812	System Administration					
	CS 813	Rich Internet Applications					
	CS 814	Software Project Management					
	CS 815	Research Methodology					
<b>PRACTICALS</b>							
1	CS 831	Programming Lab IX- OOSD Lab	-	3	3	50	25
2	CS 832	Programming Lab X- Middleware Technologies Lab	-	3	3	50	25
3	CS 833	Seminar	-	3	3	-	25
		<b>TOTAL</b>	<b>20</b>	<b>9</b>	<b>-</b>	<b>500</b>	<b>175</b>

WITH EFFECT FROM THE ACADEMIC YEAR 2014-2015

**SCHEME OF INSTRUCTION AND EXAMINATION  
MCA III<sup>rd</sup> YEAR**

**FACULTY OF INFORMATION TECHNOLOGY**

**SEMESTER – II**

SI. No	Syllabus Ref. No	Subject	Scheme of Instruction		Scheme of Examination		
			Periods per week		Dura- tion in hrs	Maximum Marks	
			L/T	D/P		Univ- Exam	Sessi- onals
1.	CS 851	Project Seminar	-	3	-	-	25
2.	CS 852	Project	-	6	-	Gr*	50

\*Projects are evaluated with Viva Voce examination and the following grades are awarded:

**Excellent/Very Good/Good/Satisfactory/ Not Satisfactory**

In case of Not Satisfactory, the candidates has to redo the project and submit at the time of next semester examination.

**DEPARTMENT OF PHYSICS  
OSMANIA UNIVERSITY**

**M. Sc. (Physics) and M.Sc. (Appl. Electronics) Courses under CBCS and Non- CBCS  
(with effect from the academic year 2012 – 2013)**

**Semester – I**

Sl.No	Sub.Code	Paper No.	Subject	Instruc-tions. Hrs/Week	Credits	Duration of exam. (hours)	Max. Marks
<b>THEORY</b>							
01	PAE 101 T	I	Mathematical Physics	4	4	3	20+80*
02	PAE 102 T	II	Classical Mechanics	4	4	3	20+80*
03	PAE 103 T	III	Quantum Mechanics - I	4	4	3	20+80*
04	PAE 104 T	IV	C Programming and Numerical methods	4	4	3	20+80*
05	PAE 105 T	V	Electronics I	4	4	3	20+80*
<b>PRACTICALS</b>							
06	PAE 151 P	VI	(a) Heat & acoustics, (b) Optics	6	4	4	100
07	PAE 152 P	VII	(a) Electronics, (b) Computer programming	6	4	4	100
08			Seminar	2	-	--	-
			<b>Total:</b>	34	28		700

**\* Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. Common Syllabus to University and Constituent Colleges.**

**There shall be no internal assessment examinations for practicals.  
Practical Examinations will be conducted at the end of each semester.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**.  
Part – A consists of EIGHT short notes questions, carrying 4 marks each. The student has to answer all the questions.  
Part – B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks.

**DEPARTMENT OF PHYSICS  
OSMANIA UNIVERSITY**

**M. Sc. (Physics) and M.Sc. (Appl. Electronics) Courses under CBCS and Non- CBCS  
(with effect from the academic year 2012 – 2013)**

**Semester – II**

Sl.No	Sub.Code	Paper No.	Subject	Instruc-tions. Hrs/Week	Credits	Duration of exam. (hours)	Max. Marks
<b>THEORY</b>							
01	PAE 201 T	I	Electromagnetic Theory	4	4	3	20+80*
02	PAE 202 T	II	Statistical Mechanics	4	4	3	20+80*
03	PAE 203 T	III	Quantum Mechanics - II	4	4	3	20+80*
04	PAE 204 T	IV	General Solid State Physics	4	4	3	20+80*
05	PAE 205 T	V	Electronics - II	4	4	3	20+80*
<b>PRACTICALS</b>							
06	PAE 251 P	VI	(c) Heat & acoustics, (d) Optics	6	4	4	100
07	PAE 252 P	VII	(c) Electronics, (d) Computer programming	6	4	4	100
08			Seminar	2	-	--	-
			<b>Total:</b>	34	28		700

**\* Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. Common Syllabus to University and Constituent Colleges.**

**There shall be no internal assessment examinations for practicals.  
Practical Examinations will be conducted at the end of each semester.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**.

Part – A consists of EIGHT short notes questions, carrying 4 marks each. The student has to answer all the questions.  
Part – B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks.

**M.Sc. – Physics Course under Non-CBCS**  
**(w.e.f. 2013-2014 for the batch admitted in I year from the academic year 2012 – 2013)**  
**Scheme of Instruction and Examination**

**(M. Sc. Opto-Electronics Specialisation) Semester III**

Sl.No.	Sub.Code	Subject	Instruction Hrs/Week	Credits	Duration of Exam. Hrs	Max. Marks
<b>THEORY</b>						
01	POE 301 T/NC	Modern Optics	4	4	3	20+80**
02	POE 302 T/NC	Advanced Solid State Physics	4	4	3	20+80**
03	POE 303 T/NC	Introduction to Opto-Electronics	4	4	3	20+80**
04	POE 304 T/NC	Semiconductor Opto-Electronics	4	4	3	20+80**
05	POE 305 T/NC	Opto-Electronic Devices-Sources-Detectors	4	4	3	20+80**
<b>PRACTICALS</b>						
06	POE 351 P/NC	Lab – 1	6	4	4	100
07	POE 352 P/NC	Lab – 2	6	4	4	100
08	POE S1/NC	Seminar	4	1	--	25
		Total	32+4	29		725

**\*\*Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. Common Syllabus to University, Constituent and Affiliated Colleges. There shall be no internal assessment examinations for practicals. Practical Examinations will be conducted at the end of each academic year.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**.

Part – A consists of EIGHT short answer questions, carrying 4 marks each. The student has to answer all the questions. Part – B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks. The student has to answer all the questions.

  
 CHAIRMAN  
 BOS in PHYSICS  
 OSMANIA UNIVERSITY  
 HYDERABAD-500007

**M.Sc. – Physics Course under Non-CBCS**  
(w.e.f. 2013-2014 for the batch admitted in I year from the academic year 2012 – 2013)  
Scheme of Instruction and Examination

**(M. Sc. Opto-Electronics Specialisation) Semester IV**

Sl.No.	Sub.Code	Subject	Instruction Hrs/Week	Credits	Duration of Exam. Hrs	Max. Marks
<b>THEORY</b>						
01	POE 401 T/NC	Nuclear Physics	4	4	3	20+80**
02	POE 402 T/NC	Spectroscopy	4	4	3	20+80**
03	POE 403 T/NC	Fundamentals of Optical Fibres	4	4	3	20+80**
04	POE 404 T/NC	Optical Communication Systems and Measurements	4	4	3	20+80**
05	POE 405 T/NC	Opto-Electronics systems and Integration Techniques	4	4	3	20+80**
<b>PRACTICALS</b>						
06	POE 451 P/NC	Lab – 1	6	4	4	100
07	POE 452 P/NC	Lab – 2	6	4	4	100
08	POE S2/NC	Seminar	4	1	--	25
		Total	32+4	29		725

**\*\*Out of 100 Marks for each theory paper 20 Marks are allotted for internals and 80 for University exam. Common Syllabus to University, Constituent and Affiliated Colleges. There shall be no internal assessment examinations for practicals. Practical Examinations will be conducted at the end of each academic year.**

**Pattern of Question Paper:** The question paper consists of two parts, each covering all the **four units**.

Part – A consists of EIGHT short answer questions, carrying 4 marks each. The student has to answer all the questions. Part – B consists of FOUR essay type questions with an internal choice. Each question carries 12 marks. The student has to answer all the questions.

  
CHAIRMAN  
BOS IN PHYSICS  
OSMANIA UNIVERSITY  
HYDERABAD-500007

**M.COM. COURSE STRUCTURE  
(NON CHOICE BASED CREDIT SYSTEM)**

*( w.e.f. 2014-'15)*

**FIRST SEMESTER**

Code	Name of the Paper	SOI	Exam Hrs	Sem Exam	IA	Total
Com 101	Accounting Standards & Reporting	5	3	80	20	100
Com 102	Managerial Economics	5	3	80	20	100
Com 103	Principles of Marketing	5	3	80	20	100
Com 104	Financial Management	5	3	80	20	100
Com 105	Organization Theory & Behaviour	5	3	80	20	100
	<b>Total</b>	<b>25</b>				

**SECOND SEMESTER**

Com 201	Advanced Managerial Accounting	5	3	80	20	100
Com 202	Business Environment & Policy	5	3	80	20	100
Com 203	Marketing Management	5	3	80	20	100
Com 204	Investment Management	5	3	80	20	100
Com 205	Human Resource Management	5	3	80	20	100
	<b>Total</b>	<b>25</b>				

**THIRD SEMESTER**

Com 301	Research Methodology & Statistical Analysis	5	3	80	20	100
Com 302	Cost Accounting & Control	5	3	80	20	100
Com 303	Specialization Paper-I	5	3	80	20	100
Com 304	Specialization Paper-II	5	3	80	20	100
Com 305	E-Commerce	5(3T +2P)	3	56	14 IA 30 LB	100
	Seminar	2		15W	10PR	25
	<b>Total</b>	<b>27</b>				

**FOURTH SEMESTER**

Com 401	Quantitative Techniques for Business Decisions	5	3	80	20	100
Com 402	Tax Planning	5	3	80	20	100
Com 403	Specialization Paper-I	5	3	80	20	100
Com 404	Specialization Paper-II	5	3	80	20	100
Com 405	PROJECT WORK*	5		60D	40VV	100
	Seminar	2		15W	10PR	25
	<b>Total</b>	<b>27</b>				
	<b>GRAND TOTAL</b>	<b>104</b>				

**Notation:**

ID–Inter Disciplinary; Com–Commerce; W–Write-up (4-5 Pages); PR – Presentation; IA – Internal assessment; D–Dissertation (50-75 Pages); VV – Viva-Voce; LB – Lab Practical Exam. \* - “Project Work – Guidelines” for details, SOI – Standard of Instruction.

**Notes:**

- i) Teachers are advised to handle/analyze at least 3 or 4 cases in the subject in the classroom on any topics outlined wherever feasible.
- ii) For each paper there will be semester examination for 80 marks and 20 marks for internal assessment [15 marks for tests (average of the two tests) and 5 marks for assignment in the subject].
- iii) In paper 305 theory examination is for 56 marks, Internal Assessment is for 14 marks and Computer Lab Practical examinations is for 30 marks.

**SPECIALIZATION****FINANCE**

Code	Name of the Paper	Exam Hrs	Sem Exam	IA
FIN/INB 303	International Financial Management	3	80	20
FIN 304	Securities Analysis & Portfolio Management	3	80	20
FIN 403	Financial Services	3	80	20
FIN/404	Financial Derivatives	3	80	20

**ACCOUNTING**

ACC 303	Advanced Corporate Accounting	3	80	20
ACC 304	Financial Statement Analysis	3	80	20
ACC 403	Advanced Cost Accounting and Control	3	80	20
ACC 404	Mergers and Acquisitions	3	80	20

**MARKETING**

MKG 303	Services & Retail Markets	3	80	20
MKG 304	Consumer Behavior and Marketing Research	3	80	20
MKG 403	Supply Chain Management & C R M	3	80	20
MKG/INB 404	International Marketing	3	80	20

**TAXATION**

TAX 303	Direct Taxes	3	80	20
TAX 304	Indirect Taxes	3	80	20
TAX 403	Business and Corporate Taxation	3	80	20
FIN/TAX/ACC 404	International Taxation	3	80	20

**INTERNATIONAL BUSINESS**

INB 303	International Financial Management	3	80	20
INB 304	International Trade – Theory and Practice:	3	80	20
INB 403	International Business Environment	3	80	20
MKG/INB 404	International Marketing	3	80	20

**INSURANCE**

INS 303	Principles and Practices of Life and Health Insurance	3	80	20
INS 304	Principles and Practice of General Insurance	3	80	20
INS 403	Insurance: Actuarial Sciences	3	80	20
INS 404	Retirement Planning	3	80	20



**MSc BIOTECHNOLOGY**  
**DEPARTMENT OF GENETICS & BIOTECHNOLOGY, OSMANIA**  
**UNIVERSITY** Schedule for Instruction and Examination  
(Proposed Scheme for Academic year 2006 onwards)

<b>SEMESTER – I</b>							
<b>S No</b>	<b>Syllabus Ref No</b>	<b>Subject</b>	<b>Credits</b>	<b>Teaching Hours</b>	<b>Marks</b>		
					<b>Internal Assessment</b>	<b>Semester Exam</b>	<b>Total</b>
	<b>THEORY</b>						
1.	BT 101 U	Genetics	4	4	20	80	100
2.	BT 102 U	Cell Biology	4	4	20	80	100
3.	BT 103 U	Biological chemistry	4	4	20	80	100
4.	BT 104 U	Communication Skills, computer basics & Cyber Crime	4	4	20	80	100
	<b>PRACTICALS</b>						
1.	BT 151 P	Genetics	2	4		50	50
2.	BT 152 P	Cell Biology	2	4		50	50
3.	BT 153 P	Biological chemistry	2	4		50	50
		<b>Total</b>	<b>20</b>	<b>28</b>	<b>80</b>	<b>470</b>	<b>550</b>

SEMESTER – II							
S No	Syllabus Ref No	Subject	Credits	Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
	<b>THEORY</b>						
1.	BT 201 U	Microbiology	4	4	20	80	100
1.	BT 202 U	Molecular Biology - I	4	4	20	80	100
2.	BT 203 U	Molecular Biology - II	4	4	20	80	100
3.	BT 204 U	Statistics, Standards and Quality Management, Lab Management and safety	4	4	20	80	100
	<b>PRACTICALS</b>						
1.	BT 251 U	Microbiology	2	4		50	50
2.	BT 252 U	Molecular Biology - I	2	4		50	50
3.	BT 253 U	Molecular Biology - II	2	4		50	50
		<b>Total</b>	<b>20</b>	<b>28</b>	<b>80</b>	<b>470</b>	<b>550</b>

**SEMESTER – III**

S No	Syllabus Ref No	Subject		Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 301 U	rDNA Technology	4	4	20	80	100
2.	BT 302 U	Industrial Biotechnology	4	4	20	80	100
3.	BT 303 U	Immunology	4	4	20	80	100
4.	BT 304 U	Intellectual Property Rights, Entrepreneurship and Research Methodology	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 351 U	rDNA Technology	2	4		50	50
2.	BT 352 U	Industrial Biotechnology	2	4		50	50
3.	BT 353 U	Immunology	2	4		50	50
		<b>Total</b>	<b>20</b>	<b>28</b>	<b>80</b>	<b>470</b>	<b>550</b>

**SEMESTER – IV**

S No	Syllabus Ref No	Subject		Teaching Hours	Marks		
					Internal Assessment	Semester Exam	Total
<b>THEORY</b>							
1.	BT 401 U	Bioinformatics	4	4	20	80	100
2.	BT 402 U	Bioprocess Engineering	4	4	20	80	100
3.	BT 403 UA BT 403 UB BT 403 UC BT 403 UD	<b>Elective -</b> A. Medical Biotechnology B. Animal Biotechnology C. Agricultural Biotechnology D. Environmental Biotechnology	4	4	20	80	100
<b>PRACTICALS</b>							
1.	BT 401 U	Bioinformatics	2	4		50	50
2.	BT 402 U	Bioprocess Engineering	2	4		50	50
3.	BT 403 UA BT 403 UB BT 403 UC BT 403 UD	<b>Elective -</b> A. Medical Biotechnology B. Animal Biotechnology C. Agricultural Biotechnology D. Environmental Biotechnology	2	4		50	50
		<b>Total</b>	<b>18</b>	<b>24</b>	<b>60</b>	<b>390</b>	<b>450</b>

**A.V. College of Arts, Science & Commerce**  
**Syllabus for the Academic year 2014-15 by Osmania University**  
**M.Sc.( Computer Science - 504)**  
**Subjects & Code - Semester wise**

<b>Subjects</b>	<b>Code</b>
<b><u>I semester</u></b>	
1. Discrete Mathematical structure	CS-101T
2. Modern Operating System	CS-102T
3. Microprocessor & Micro Controllers	CS-103T
4. Software Engineering	CS-104T
5. Computer Graphics	CS-105T
Labs:	
1. Unix & Computer Graphics	CS-106P
2. Digital Systems, Microprocessor & Micro Controllers	CS-107P
<b>II Semester</b>	
1. Automata Language & Computation	CS-201T
2. Client- Server Programming (using JAVA)	CS-202T
3. Computer Networks & Internet Protocols	CS-203T
4. Design and Analysis of Algorithms	CS-204T
5. ELECTIVE:	
a) Advanced Computer Architecture	CS-205AT
b) Finite Difference and Finite Element Methods	CS-205BT
c) Embedded Systems	CS-205CT
Labs:	
1. Network Programming	CS-206P
2. Client Server Programming	CS-207P
<b>III Semester:</b>	
1. .Net	CS-301T
2. Artificial Intelligence	CS-302T
3. Object- Oriented System Development with UML	CS-303T
4. Network Security	CS-304T
5. ELECTIVE:	
a) Neural Networks and Fuzzy Logic	CS-305AT
b) Image Processing	CS-305BT
c) Parallel Programming	CS-305CT
Labs:	
1. System Security	CS-306P
2. .Net	CS-307P
<b>IV Semester:</b>	
1. Data ware Housing and Data Mining	CS-401T
2. Mobile Computing	CS-402T
3. Seminar on "Project Work"	CS-403P

**A.V. College of Arts, Science & Commerce**  
**Syllabus for the Academic year 2014-15 by Osmania University**  
**M.Sc. (Mathematics)**  
**Subjects & Code - Semester wise**

<b>Subjects</b>	<b>Code</b>
<u>I semester</u>	
1. Algebra	MM101
2. Real Analysis	MM102
3. Topology	MM103
4. Elementary Number Theory	MM104
5. Mathematical Methods	MM105
<u>II Semester</u>	
1. Advanced Algebra	MM201
2. Advanced Real Analysis	MM202
3. Functional Analysis	MM203
4. Theory of Ordinary Differential Equations	MM204
5. Discrete Mathematics	MM205
<u>III Semester</u>	
1. Complex Analysis	MM301
2. Elementary Operator Theory	MM302
3. Operations Research	MM303C
4. Integral Equations	MM304B
5. Numerical Techniques	MM305C
<u>IV Semester</u>	
1. Advanced Complex Analysis	MM401
2. General Measure Theory	MM402
3. Advanced Operations Research	MM403C
4. Banach Algebra	MM404A
5. Calculus of Variations	MM405A

**Osmania University**  
**M.Sc Chemistry**

**Scheme of Instruction and Examination (Revised 2008) for the Batch admitted  
in academic year 2008-09**

(Approved by the Board of Studies in Chemistry, PG on 7.3.2008)

**Semester – I**

Sub-Code	Subject	Instruction Hrs /Week	Internal Assessment Marks	Max Marks Semester Exams	Duration of semester Exam (Hrs)
<b>THEORY</b>					
CH-101	Inorganic Chemistry	4 Hrs	20	80	3 hrs
CH-102	Organic Chemistry	4 Hrs	20	80	3 hrs
CH-103	Physical Chemistry	4 Hrs	20	80	3 hrs
CH-104	Mathematics, Biology & Spectroscopy	4 Hrs	20	80	3 hrs
<b>PRACTICAL</b>					
CH-151	Inorganic Chemistry Lab – I	6 Hrs/week	-	-	-
CH-152	Organic Chemistry Lab – I	6 Hrs/week	-	-	-
CH-153	Physical Chemistry Lab – I	6 Hrs/week	-	-	-
CH-199	SEMINAR	2 Hrs/week	-	-	-
Total		34 + 2	80	320	

**Note:**

1. The candidate who studied B.Sc with Mathematics or Botany / Zoology as one of the three equal optionals must be allotted Roll number / Hall ticket number of different range.
  - i. Those who have studied Mathematics at B.Sc level must study Biology in paper CH104 and be allotted Roll Number / Hall ticket number from MNO-YC-42-001 to MNO-YC-42-050.
  - ii. Those who have studied Botany / Zoology at B.Sc level must study Mathematics in paper CH104 and be allotted Roll Number / Hall ticket number from MNO-YC-42-051 to MNO-YC-42-100.
2. The Controller of Examination is requested to print separate D-Form for Hall-Ticket number range MNO-YC-42-001 to MNO-YC-42-050 (for Biology & Spectroscopy) and MNO-YC-051 to MNO-YC-42-100 (for Mathematics & Spectroscopy) so that the answer booklets are packed separately in the examination centre which would facilitate smooth valuation.
3. Practical examination for papers CH 151 and CH 152 is conducted at the end of semester II along with the practical work done in semester II. ~ CH 153

*Handwritten signature*

## Osmania University

## M.Sc Chemistry

Scheme of Instruction and Examination (Revised 2008) for the Batch admitted  
in academic year 2008-09

(Approved by the Board of Studies in Chemistry PG on 7.3.2008)

## Semester - II

Sub-Code	Subject	Instruction Hrs /Week	Internal Assessment Marks	Max Marks Semester Exams	Duration of semester Exam (Hrs)
<b>THEORY</b>					
CH-201	Inorganic Chemistry	4 Hrs	20	80	3 hrs
CH-202	Organic Chemistry	4 Hrs	-	80	3 hrs
CH-203	Physical Chemistry	4 Hrs	20	80	3 hrs
CH-204	(A) Computers (B) Spectroscopy	4 Hrs	20	80	3 hrs
<b>PRACTICAL</b>					
CH-251	Inorganic Chemistry Lab	6 Hrs/week	-	100	6 hrs
CH-252	Organic Chemistry Lab	6 Hrs/week	-	100	6 hrs
CH-253	Physical Chemistry Lab	6 Hrs/week	-	100	6 hrs
CH-299	SEMINAR	2 Hrs/week	-	-	
Total		34 + 2	80	620	

## Note:

- Practical examination in CH 151 and CH 251 is for 100 marks held at the end of semester II
- Practical examination in CH 152 and CH 252 is for 100 marks held at the end of semester II
- Practical examination in CH 153 and CH 253 is for 100 marks held at the end of semester II

*S. S. S.*

# Osmania University

## M.Sc Chemistry

Scheme of Instruction and Examination (Revised 2008) for the Batch admitted in the academic  
Year 2008-2009

### Semester –III

Sub-Code	Subject	Instruction Hrs/Week	Internal Assessment Marks	Max Marks Semester Exams	Duration of semester Exam (Hrs)
	<b>THEORY</b>				
CH (O) 301	Conformational analysis, Pericyclic reactions and enzymes	4 Hrs	20	80	3Hrs
CH(O)302	Asymmetric synthesis, synthetic strategies and heterocycles	4 Hrs	20	80	3Hrs
CH(O) 303	Modern Organic Synthesis	4 Hrs	20	80	3Hrs
CH 304	Spectroscopy and photochemistry	4 Hrs	20	80	3Hrs
	<b>PRACTICAL</b>				
CH 351	Separation and identification of organic compounds	6 Hrs/Week	-	100	6Hrs
CH 352	Spectroscopic identification of organic compounds and Chromatography	6 Hrs/Week	-	100	6Hrs
CH 399	SEMINAR	2 Hrs/Week	-		
	Total	28+2	80	520	

Note:

- Practical examination in CH 351 and CH 451 is for 100 marks held at the end of semester IV
- Practical examination in CH 352 and CH 452 is for 100 marks held at the end of semester IV

# Osmania University

## M.Sc Chemistry

Scheme of Instruction and Examination (Revised 2008) for the Batch admitted in the academic  
Year 2008-2009

### Semester –IV

Sub-Code	Subject	Instruction Hrs/Week	Internal Assessment Marks	Max Marks Semester Exams	Duration of semester Exam (Hrs)
	<b>THEORY</b>				
CH(O) 401	Drug discovery	4 Hrs	20	80	3Hrs
CH(O) 402	Mechanism of action of Drugs	4 Hrs	20	80	3Hrs
CH(O) 403 (E2)	Advanced Heterocyclic chemistry (Elective)	4 Hrs	20	80	3Hrs
CH(O) 404(E1)	Advanced Natural Products (Elective)	4 Hrs	20	80	3Hrs
	<b>PRACTICAL</b>				
		6 Hrs/Week	-	100	6Hrs
		6 Hrs/Week	-	100	6Hrs
CH 499	SEMINAR	2 Hrs/Week	-		
	Total	28+2	80	520	

Note:

- Practical examination in CH 351 and CH 451 is for 100 marks held at the end of semester IV
- Practical examination in CH 352 and CH 452 is for 100 marks held at the end of semester IV

**ఉస్మానియా విశ్వవిద్యాలయం**  
**ఎం.ఏ(తెలుగు) పాఠ్యప్రణాళిక**

**సెమిస్టర్-1**

1. సంప్రదాయ సాహిత్యం-పాఠ్యాంశాలు(11నుంచి 15శతాబ్దం వరకు)
2. తెలుగు వ్యాకరణం
3. ప్రాచీన సాహిత్య విమర్శ
4. తెలుగు వారి చరిత్ర సంస్కృతి
5. ప్రాచీన సాహిత్య వికాసం(11నుంచి 15శతాబ్దం వరకు)

**సెమిస్టర్-2**

1. సంప్రదాయ సాహిత్యం-పాఠ్యాంశాలు(16నుంచి 19శతాబ్దం వరకు)
2. భాషా వికాసం
3. ఆధునిక సాహిత్య విమర్శ
4. సంస్కృత సాహిత్య పరిచయం-కావ్యం
5. ప్రాచీన సాహిత్య వికాసం(16నుంచి 19శతాబ్దం వరకు)

**సెమిస్టర్-3**

1. ఆధునిక కవిత్వం-పాఠ్యాంశాలు
2. కథానిక-పాఠ్యాంశాలు
3. జానపద సాహిత్యం-గేయశాఖ
4. ప్రత్యేకాంశాలు-(ఎ) ఆధునిక భాషాశాస్త్రం (బి) నాటకం
5. ప్రత్యేకాంశాలు-(ఎ) తెలంగాణ సాహిత్యం (బి) వార్తా రచన-అనువాదం

**సెమిస్టర్-4**

1. ఆధునిక సాహిత్య వికాసం
2. నవల-పాఠ్యాంశాలు
3. జానపద సాహిత్యం-వచన, దృశ్య శాఖలు
4. ప్రత్యేకాంశాలు-(ఎ) సంస్కృత నాటకం-వ్యాకరణం(బి) ఛందస్సు అలంకారాలు
5. ప్రత్యేకాంశాలు-(ఎ) ప్రకార్య భాష (బి) వచన సాహిత్యం

**DEPARTMENT OF COMMERCE,  
OSMANIA UNIVERSITY, HYDERABAD.  
STRUCTURE OF B.COM (COMPUTERS) DEGREE COURSE  
(w.e.f. ACADEMIC YEAR 2009-'10)**

<b>FIRST YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
101	FINANCIAL ACCOUNTING	6 (5+1)	3 Hours	70T + 30P = 100
102	BUSINESS ECONOMICS	4 (3+1)	3 Hours	70T + 30P = 100
103	BUSINESS ORGANISATION & MANAGEMENT	5 (4+1)	3 Hours	70T + 30P = 100
104	FUNDAMENTALS OF INFORMATION TECHNOLOGY	5 (4+1)	3 Hours	70T + 30P = 100
105	FUNDAMENTALS OF "C"	4 (3+1)	3 Hours	70T + 30P = 100
<b>SECOND YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
201	ADVANCED ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
202	BUSINESS STATISTICS	5 (4+1)	3 Hours	70T + 30P = 100
203	FINANCIAL SERVICES - BANKING & INSURANCE	5 (4+1)	3 Hours	70T + 30P = 100
204	TAXATION	5 (4+1)	3 Hours	70T + 30P = 100
205	RELATIONAL DATABASE MANAGEMENT SYSTEMS (RDBMS)	5 (3+2)	3 Hours	70T + 30P = 100
<b>THIRD YEAR</b>				
301	CORPORATE ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
302	E-COMMERCE ( <i>wef 2011-'12</i> )	5 (3+2)	3 Hours	70T + 30P = 100
303	BUSINESS LAW	5 (4+1)	3 Hours	70T + 30P = 100
304	AUDITING	5 (4+1)	3 Hours	70T + 30P = 100
305	ELECTIVE: PAPER - I	5 (4+1)	3 Hours	70T + 30P = 100
306	ELECTIVE: PAPER - II	5 (4+1)	3 Hours	70T + 30P = 100
307	WEB PROGRAMMING	5 (3+2)	3 Hours	70T + 30P = 100

**NOTE:**

1. 70 MARKS ARE ALLOCATED FOR THEORY EXAM AND 30 MARKS ARE ALLOCATED FOR THE COMPUTER / COMMERCE LAB PRACTICALS.
2. ONE HOUR OF THEORY CLASS IS EQUAL TO TWO COMPUTER/COMMERCE LAB HOURS.
3. PATTERN OF QUESTION PAPER FOR 70 MARKS AND 30 MARKS OF PRACTICAL EXAMINATION IS GIVEN AT THE END.
4. STRUCTURE OF ELECTIVES IS GIVEN IN THE FOLLOWING PAGE, FROM WHICH A STUDENT SHOULD OPT 2 PAPERS OF ANY ONE ELECTIVE.

**B.Com (COMPUTERS)  
THRID YEAR- ELECTIVES  
(Code 305 & 306)**

<b>Code</b>	<b>TITLE OF THE ELECTIVE</b>	<b>Papers</b>
E-I	INSURANCE	I) 305: Life Insurance II) 306: Non-Life Insurance
E-II	BANKING	I) 305: Banking in India II) 306: Computer Applications in Banking
E-III	ACCOUNTANCY - II	I) 305: Cost Accounting II) 306: Management Accounting & Control
E-IV	RETAILING	I) 305: Retail Management II) 306: Retail Marketing & CRM
E-V	TAXATION	I) 305: Direct Taxes II) 306: Indirect Taxes
E-VI	FINANCE	I) 305: Financial Management II) 306: Micro-credit and Foreign Trade Finance
E-VII	MARKETING	I) 305: Principles of Marketing II) 306: Rural Marketing
E-VIII	SECRETARIAL PRACTICE & OFFICE MANAGEMENT	I) 305: Secretarial Practice II) 306: Office Management
E-IX	COMPUTER APPLICATIONS-II	I) 305: Fundamentals of C++ II) 306: Fundamentals of Java
E-X	BUSINES MATHEMATICS	I) 305: Business Mathematics-I II) 306: Business Mathematics-II

**DEPARTMENT OF COMMERCE,  
OSMANIA UNIVERSITY, HYDERABAD.  
STRUCTURE OF B.COM (GENERAL) DEGREE COURSE  
w.e.f. ACADEMIC YEAR 2008-'09**

<b>FIRST YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
101	FINANCIAL ACCOUNTING	6 (5+1)	3 Hours	70T + 30P = 100
102	BUSINESS ECONOMICS	4 (3+1)	3 Hours	70T + 30P = 100
103	BUSINESS ORGANISATION & MANAGEMENT	5 (4+1)	3 Hours	70T + 30P = 100
104	FUNDAMENTALS OF INFORMATION TECHNOLOGY	5 (4+1)	3 Hours	70T + 30P = 100
<b>SECOND YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
201	ADVANCED ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
202	BUSINESS STATISTICS	5 (4+1)	3 Hours	70T + 30P = 100
203	FINANCIAL SERVICES - BANKING & INSURANCE	5 (4+1)	3 Hours	70T + 30P = 100
204	TAXATION	5 (4+1)	3 Hours	70T + 30P = 100
<b>THIRD YEAR</b>				
Code	TITLE OF THE PAPER	PPW	Exam Duration	Max. Marks
301	CORPORATE ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
302	COST & MANAGEMENT ACCOUNTING	5 (4+1)	3 Hours	70T + 30P = 100
303	BUSINESS LAW	5 (4+1)	3 Hours	70T + 30P = 100
304	AUDITING	5 (4+1)	3 Hours	70T + 30P = 100
305	ELECTIVE: PAPER - I	5 (4+1)	3 Hours	70T + 30P = 100
306	ELECTIVE: PAPER - II	5 (4+1)	3 Hours	70T + 30P = 100

**NOTE:**

1. 70 MARKS ARE ALLOCATED FOR THEORY EXAM AND 30 MARKS ARE ALLOCATED FOR THE COMPUTER / COMMERCE LAB PRACTICALS.
2. ONE HOUR OF THEORY CLASS IS EQUAL TO TWO COMPUTER/COMMERCE LAB HOURS.
3. PATTERN OF QUESTION PAPER FOR 70 MARKS AND 30 MARKS OF PRACTICAL EXAMINATION IS GIVEN AT THE END.
4. STRUCTURE OF ELECTIVES IS GIVEN IN THE FOLLOWING PAGE, FROM WHICH A STUDENT SHOULD OPT 2 PAPERS OF ANY ONE ELECTIVE.

**B.Com (GENERAL)  
THRID YEAR - ELECTIVES  
(Code 305 & 306)**

<b>Code</b>	<b>TITLE OF THE ELECTIVE</b>	<b>Papers</b>
E-I	INSURANCE	I) 305: Life Insurance II) 306: Non-Life Insurance
E-II	BANKING	I) 305: Banking in India II) 306: Computer Applications in Banking
E-III	ACCOUNTANCY - I	I) 305: Advanced Corporate Accounting II) 306: Management Accounting
E-IV	RETAILING	I) 305: Retail Management II) 306: Retail Marketing & CRM
E-V	TAXATION	I) 305: Direct Taxes II) 306: Indirect Taxes
E-VI	FINANCE	I) 305: Financial Management II) 306: Micro-credit and Foreign Trade Finance
E-VII	MARKETING	I) 305: Principles of Marketing II) 306: Rural Marketing
E-VIII	SECRETARIAL PRACTICE & OFFICE MANAGEMENT	I) 305: Secretarial Practice II) 306: Office Management
E-IX	COMPUTER APPLICATIONS-I	I) 305: Database Management System II) 306: Electronic Commerce
E-X	BUSINES MATHEMATICS	I) 305: Business Mathematics-I II) 306: Business Mathematics-II

**DEPARTMENT OF Economics**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.A (Economics)**  
**2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Micro Economics	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Macro Economics	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Indian Economy	3 Hours	80
	Practicals	Indian Economy	3 Hours	20
	Theory-IV	Public Finance and International Trade	3 Hours	100

**DEPARTMENT OF Political Science  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Political Science)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Concepts, Theories and Institutions	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Indian Government and Politics	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Political Thought	3 Hours	100
	Theory-IV	International relations	3 Hours	100

**DEPARTMENT OF PUBLIC ADMINISTRATION  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Public Administration)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Introduction to Public Administration	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Public Administration in India	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Management Resources	3 Hours	100
	Theory-IV	Office management	3 Hours	100

**DEPARTMENT OF PSYCHOLOGY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A. (PSYCHOLOGY)  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	General Psychology-I	3 Hours	75
<b>Code</b>				
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Social Psychology-II	3 Hours	75
	Practical-II	Practicals	3 Hours	50
<b>Code</b>				
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Child and Adolescent Psychology-III	3 Hours	75
	Practical-III	Practicals	3 Hours	50
	Theory-IV	ABNORMAL PSYCHOLOGY-IV	3 Hours	75
	Practical-IV	project	3 Hours	50

**DEPARTMENT OF Political Science  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Political Science)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Concepts, Theories and Institutions	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Indian Government and Politics	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Political Thought	3 Hours	100
	Theory-IV	International relations	3 Hours	100

**DEPARTMENT OF PUBLIC ADMINISTRATION  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.A (Public Administration)  
2014-15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Introduction to Public Administration	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Public Administration in India	3 Hours	100
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Management Resources	3 Hours	100
	Theory-IV	Office management	3 Hours	100

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	Differential Equations & Solid Geometry	4	3	3 hours	100+50
2	II	Abstract Algebra & Real Analysis	4	3	3 hours	100+50
3	III	Linear Algebra and Vector Calculus	3	3	3 hours	100+50
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**DEPARTMENT OF PHYSICS**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (PHYSICS)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Mechanics and Waves and Oscillations	3 Hours	100
	Practical-I	Mechanics and Waves and Oscillations	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Thermodynamics and Optics	3 Hours	100
	Practical-II	Thermodynamics and Optics	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Electricity, Magnetism and Electronics	3 Hours	100
	Practical-III	Electricity, Magnetism and Electronics	3 Hours	50
	Theory-IV	Modern Physics	3 Hours	100
	Practical-IV	Modern Physics	3 Hours	50

**DEPARTMENT OF CHEMISTRY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.Sc. (CHEMISTRY)  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Chemistry-I	3 Hours	100
	Practical-I	Semi micro analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Chemistry-II	3 Hours	100
	Practical-II	Volumetric analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Chemistry-III	3 Hours	100
	Practical-III	Synthesis and Identification of Organic compounds	3 Hours	50
	Theory-IV	Chemistry-IV	3 Hours	100
	Practical-IV	Instrumentation & Kinetics	3 Hours	50

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	Differential Equations & Solid Geometry	4	3	3 hours	100+50
2	II	Abstract Algebra & Real Analysis	4	3	3 hours	100+50
3	III	Linear Algebra and Vector Calculus	3	3	3 hours	100+50
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**DEPARTMENT OF PHYSICS**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (PHYSICS)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Mechanics and Waves and Oscillations	3 Hours	100
	Practical-I	Mechanics and Waves and Oscillations	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Thermodynamics and Optics	3 Hours	100
	Practical-II	Thermodynamics and Optics	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Electricity, Magnetism and Electronics	3 Hours	100
	Practical-III	Electricity, Magnetism and Electronics	3 Hours	50
	Theory-IV	Modern Physics	3 Hours	100
	Practical-IV	Modern Physics	3 Hours	50

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	PC Software and 'C' Programming	3 Hours	100
	Practical-I	PC Software and C	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Object Oriented Programming with Java and Data Structures	3 Hours	100
	Practical-II	Java and Data Structures Lab	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	<del>Theory-IV (Elective-2)</del>	<del>GUI Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-2)</del>	<del>Visual Basic Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-3)</del>	<del>Operating Systems</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-3)</del>	<del>Operating Systems Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-4)</del>	<del>PHP, MySQL, Apache and PHP</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-4)</del>	<del>PHP and MYSQL Lab</del>	<del>3 Hours</del>	<del>50</del>

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	Differential Equations & Solid Geometry	4	3	3 hours	100+50
2	II	Abstract Algebra & Real Analysis	4	3	3 hours	100+50
3	III	Linear Algebra and Vector Calculus	3	3	3 hours	100+50
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**Department of Statistics**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**Course Structure of B.Sc. (Statistics)**

**Year 2014-15**

<b>YEAR</b>	<b>THEORY/ PRACTICAL</b>	<b>PAPER TITLE</b>	<b>EXAM DURATION</b>	<b>MAX. MARKS</b>
I YEAR	Theory-I	Descriptive Statistics and Probability	3 hrs	100
	PRACTICAL -I	Descriptive Statistics and Probability -I	3 hrs	50
II YEAR	Theory-II	Statistical Methods and Theory of Estimation	3 hrs	100
	PRACTICAL -II	Statistical Methods and Theory of Estimation-II	3 hrs	50
III YEAR	Theory-III	<b>Applied Statistics:</b> Sampling Theory, Time series, Index Numbers and Demand Analysis	3 hrs	100
	PRACTICAL -III	Applied Statistics, QR &OR Practical's-III	3 hrs	50
III YEAR	Theory-IV	Statistical Quality Control and Reliability	3 hrs	100
	PRACTICAL -IV	Excel and TORA Practical's	3 hrs	50

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	PC Software and 'C' Programming	3 Hours	100
	Practical-I	PC Software and C	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Object Oriented Programming with Java and Data Structures	3 Hours	100
	Practical-II	Java and Data Structures Lab	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	<del>Theory-IV (Elective-2)</del>	<del>GUI Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-2)</del>	<del>Visual Basic Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-3)</del>	<del>Operating Systems</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-3)</del>	<del>Operating Systems Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-4)</del>	<del>PHP, MySQL, Apache and PHP</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-4)</del>	<del>PHP and MYSQL Lab</del>	<del>3 Hours</del>	<del>50</del>

DEPARTMENT OF MATHEMATICS  
OSMANIA UNIVERSITY

Scheme of instructions and Examination  
(w.e.f. the academic year 2008 -2009)

B.A. / B.Sc. MATHEMATICS

Sl. No.	Paper	Subject	Theory Hrs/week	Practical Hrs/week	Duration of Exam Theory/Practical	Maximum Marks Theory/practical
1	I	Differential Equations & Solid Geometry	4	3	3 hours	100+50
2	II	Abstract Algebra & Real Analysis	4	3	3 hours	100+50
3	III	Linear Algebra and Vector Calculus	3	3	3 hours	100+50
4		Elective	3	3	3 hours	100+50
	IV(a)	Numerical Analysis				
	IV(b)	<b>Fourier Series and Integral Transforms</b>				
	IV(c)	Mechanics				
	IV(d)	Discrete Mathematics				
	IV(e)	Number Theory				
		Total	14	12		600

**DEPARTMENT OF ELECTRONICS**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Electronics)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Circuit analysis and Electronic device s	3 Hours	100
	Practical-I	Circuit analysis and Electronic device s	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Analog circuit s and communication s	3 Hours	100
	Practical-II	Analog circuit s and communication s	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Digital electronics and microprocessor	3 Hours	100
	Practical-III	Digital electronics and microprocessor	3 Hours	50
	Theory-IV (Elective-1)	Embedded systems and Applications	3 Hours	100
	Practical-IV (Elective-1)	Embedded systems and Applications	3 Hours	50

**DEPARTMENT OF COMPUTER SCIENCE**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc. (Computer Science)**  
**2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	PC Software and 'C' Programming	3 Hours	100
	Practical-I	PC Software and C	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Object Oriented Programming with Java and Data Structures	3 Hours	100
	Practical-II	Java and Data Structures Lab	3 Hours	50
<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Database Management System	3 Hours	100
	Practical-III	DBMS Lab	3 Hours	50
	Theory-IV (Elective-1)	Web Technologies	3 Hours	100
	Practical-IV (Elective-1)	Web Technologies Lab	3 Hours	50
	<del>Theory-IV (Elective-2)</del>	<del>GUI Programming</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-2)</del>	<del>Visual Basic Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-3)</del>	<del>Operating Systems</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-3)</del>	<del>Operating Systems Lab</del>	<del>3 Hours</del>	<del>50</del>
	<del>Theory-IV (Elective-4)</del>	<del>PHP, MySQL, Apache and PHP</del>	<del>3 Hours</del>	<del>100</del>
	<del>Practical-IV (Elective-4)</del>	<del>PHP and MYSQL Lab</del>	<del>3 Hours</del>	<del>50</del>

**DEPARTMENT OF BOTANY**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc (BOTANY)**  
**W.E.F 2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Microbial Diversity Cryptogams and Gymnosperms-I	3 Hours	100
	Practical -I	Microbial Diversity Cryptogams and Gymnosperms.	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Anatomy, Embryology, Taxonomy and Medicinal Botany-II	3 Hours	100
	Practical-II	Anatomy, Embryology, Taxonomy and Medicinal Botany-II	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Cell Biology, Genetics, Ecology and Biodiversity- III	3 Hours	100
	Practical-III	Cell Biology, Genetics, Ecology and Biodiversity- III	3 Hours	50
	Theory-IV	Physiology, Tissue Culture, Biotechnology, Seed Technology and Horticulture.	3 Hours	100
	Practical-IV	Physiology, Tissue Culture, Biotechnology, Seed Technology and Horticulture.	3 Hours	50

**DEPARTMENT OF ZOOLOGY**  
**OSMANIA UNIVERSITY, HYDERABAD.**  
**COURSE STRUCTURE OF B.Sc.(Zoology)**  
**2014 - 15**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Biology of invertebrates and cell biology	3 Hours	100
	Practical-I	Invertebrates	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Biology of Chordates, Embryology, Ecology and Zoogeography	3 Hours	100
	Practical-II	Chordates, Embryology and Ecology	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Animal physiology, Genetics & Evolution	3 Hours	100
	Practical-III	Animal Physiology, Genetics Evolution	3 Hours	50
	Theory-IV	Applied Zoology	3 Hours	100
	Practical-IV	Fisheries and Aquaculture and Animal Biotechnology	3 Hours	50

**DEPARTMENT OF CHEMISTRY  
OSMANIA UNIVERSITY, HYDERABAD.  
COURSE STRUCTURE OF B.Sc. (CHEMISTRY)  
2008-09**

<b>Year</b>	<b>Theory/Practical</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>FIRST YEAR</b>	Theory-I	Chemistry-I	3 Hours	100
	Practical-I	Semi micro analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>SECOND YEAR</b>	Theory-II	Chemistry-II	3 Hours	100
	Practical-II	Volumetric analysis	3 Hours	50
<b>Code</b>	<b>TITLE OF THE PAPER</b>	<b>Title</b>	<b>Exam Duration</b>	<b>Max. Marks</b>
<b>THIRD YEAR</b>	Theory-III	Chemistry-III	3 Hours	100
	Practical-III	Synthesis and Identification of Organic compounds	3 Hours	50
	Theory-IV	Chemistry-IV	3 Hours	100
	Practical-IV	Instrumentation & Kinetics	3 Hours	50