

B.Sc. ZOOLOGY SYLLABUS UNDER CBCS 2019-20

Department of Zoology (46 credits)

Structured syllabus under CBCS for 2019-20 onwards to under graduate course

I. Discipline core course: (5 credits each) (I, II, III, IV Semester)

1. Animal Diversity – Invertebrates
2. Animal Diversity – Vertebrates
3. Animal Physiology and Animal Behaviour
4. Cell Biology, Genetics, and Developmental Biology

II. Discipline specific Elective: (5 credits each – any one paper in V Semester and VI Semester)

1. Physiological Chemistry and Endocrinology
2. Immunology and Animal Biotechnology
3. Laboratory Animals Maintenance and Applications
4. Fisheries
5. Limnology
6. Ecology, Zoogeography and Evolution

III. Skill enhancement course: (2 credits) 2 paper in III Semester and 2 papers in IV Semester)

1. Sericulture
2. Apiculture
3. Public health and hygiene
4. Medical diagnostics
5. Poultry and Animal husbandry
6. Vermiculture
7. Vector biology
8. Biomaterial from Animal Source
9. Aquaculture
10. Aquarium Fish Keeping

IV. Generic elective (Open stream) – (4 credit only in V Semester)

1. Preventive Medicine
2. Integrated Pest Management

V. Project/optional paper (4 credit only in VI Semester) In case of not opting project

1. Tools and Techniques in Biology


CHAIR MEN
Board of Studies in Zoology.
Osmia University, Hyd-07.

1-10-20

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 (for the batch admitted in 2019-2020)

THIRD YEAR- SEMESTER V				
CODE	COURSE TITLE	COURSE TYPE	HPW	CREDITS
BS 501	Chemistry of Cosmetics, Food Processing, Drugs and Pharmaceuticals	GE	4	4
DS 502	English	CC-1E	3	3
BS 503	Second language	CC-2E	3	3
BS 504	Optional- I A/B	DSE -1E	-----	4+1=5
BS 505	Optional- II A/B	DSE -2E	-----	4+1=5
BS 506	Optional- III A/B	DSE -3E	4T } 3P } = 7	4 } 1 } = 5
	A. Spectroscopy and Chromatography (or)			
	B. Metallurgy, Dyes and Catalysis			
	Laboratory Course -V Experiments in Physical Chemistry-I			
	TOTAL			25
THIRD YEAR- SEMESTER VI				
BS 601	Project in Chemistry/ Advanced Chemistry			4
BS 602	English	CC-1F	3	3
BS 603	Second language	CC-2F	3	3
BS 604	Optional- I A/B	DSE-1F	-----	4+1=5
BS 605	Optional- II A/B	DSE -2F	-----	4+1=5
BS 606	Optional- III A/B	DSE -3F	4T } 3P } = 7	4 } 1 } = 5
	A. Medicinal Chemistry (or)			
	B. Agricultural and Fuel Chemistry			
	Laboratory Course -VI Experiments in Physical Chemistry-II			
	TOTAL			25
	TOTAL Credits			150



**TELANGANA STATE COUNCIL OF HIGHER EDUCATION
PROPOSED CBCS COMMON CORE SCHEME FOR B.SC. COURSE
OPTIONAL -I: BOTANY**

CODE	PAPER TITLE	Course Type	HPW	Credits
FIRST YEAR SEMESTER - I				
BS 104	PAPER-I : Microbial Diversity and Lower Plants	DSC-1A	4T+2P=6	4+1=5
FIRST YEAR SEMESTER - II				
BS 204	PAPER-II: Gymnosperms, Taxonomy of Angiosperms and Ecology	DSC-1B	4T+2P=6	4+1=5
SECOND YEAR SEMESTER - III				
BS 301	SEC-1: Nursery and Gardening	SEC-1	2	2
BS 302	SEC-2: Biofertilizers and Organic Farming	SEC-2	2	2
BS 304	PAPER-III: Plant Anatomy and Embryology	DSC-1C	4T+2P=6	4+1=5
SECOND YEAR SEMESTER - IV				
BS 401	SEC-3: Greenhouse Technology	SEC-3	2	2
BS 402	SEC-4: Mushroom Culture Technology	SEC-4	2	2
BS 404	PAPER-IV : Cell Biology, Genetics & Plant Physiology	DSC-1D	4T+2P=6	4+1=5
THIRD YEAR SEMESTER - V				
BS 501	GE-1: Industrial Microbiology	GE-1	4T	4
BS 502	DSE -1A: Biodiversity & Conservation DSE -1B: Economic Botany DSE -1C: Seed Technology	DSE-1A / DSE-1B / DSE-1C	4+2	4+1
THIRD YEAR SEMESTER - VI				
BS 601	DSE-3: Project	PROJECT	4	4
BS 602	DSE -2A: Plant Molecular Biology DSE -2B: Tissue Culture and Biotechnology DSE -2C: Analytical Techniques in Plant Sciences	DSE-2A / DSE-2B / DSE-2C	4T+2P=6	4+1=5

AECC: Ability Enhancement Compulsory Course, SEC: Skill Enhancement Course, GE: Generic Elective, DSC: Discipline Specific Core, DSE: Discipline Specific Elective.

B.COM
CBCS COURSE STRUCTURE
w.e.f. 2019-'20

Sl.No.	Code	Course Title	HPW	Credits	Exam Hrs	Marks
(1)	(2)	(3)	(5)	(6)	(7)	(8)
SEMESTER – I						
1.	EL.S1	English (First Language)	4	4		
2.	SL.S1	Second Language	4	4		
3.	AFCC1	a)Environmental Science/ b)Basic Computer Skills	2	2		
4.	DSC101	Financial Accounting-I	5	5	3 hrs	80U+20I
5.	DSC102	Business Organization and Management	5	5	3 hrs	80U+20I
6.	DSC103	Foreign Trade	5	5	3 hrs	80U+20I
		Total	25	25		
SEMESTER – II						
7.	EL.S2	English (First Language)	4	4		
8.	SL.S2	Second Language	4	4		
9.	AFCC2	a)Basic Computer Skills/ b)Environmental Science	2	2		
10.	DSC201	Financial Accounting-II	5	5	3 hrs	80U+20I
11.	DSC202	Business Laws	5	5	3 hrs	80U+20I
12.	DSC203	Banking and Financial Services	5	5	3 hrs	80U+20I
		Total	25	25		
SEMESTER – III						
13.	EL.S3	English (First Language)	3	3		
14.	SL.S3	Second Language	3	3		
15.	SEC1	a)Principles of Insurance/ b)Foundation of Digital Marketing/ c)Fundamentals of Business Analytics	2	2	1 ½ hrs	40U+10I
16.	SEC2	a)Practice of Life Insurance/ b)Web Design & Analytics/ c)Application of Business Analytics	2	2	1 ½ hrs	40U+10I
17.	DSC301	Advanced Accounting	5	5	3 hrs	80U+20I
18.	DSC302	Business Statistics-I	5	5	3 hrs	80U+20I
19.	DSC303	Financial Institutions and Markets	5	5	3 hrs	80U+20I
		Total	25	25		
SEMESTER – IV						
20.	EL.S4	English (First Language)	3	3		
21.	SL.S4	Second Language	3	3		
22.	SEC3	a)Practice of General Insurance/ b)Social Media Marketing c)Business Intelligence	2	2	1 ½ hrs	40U+10I
23.	SEC4	a)Regulation of Insurance Business/ b)Search Engine Optimization & Online Advertising c)Data Visualisation & Storytelling	2	2	1 ½ hrs	40U+10I
24.	DSC401	Income Tax/Excel Foundation	5	5	3 hrs	80U+20I
25.	DSC402	Business Statistics-II	5	5	3 hrs	80U+20I
26.	DSC403	Corporate Accounting	5	5	3 hrs	80U+20I
		Total	25	25		

Department of Commerce

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SEMESTER – V						
27.	ELS5	English (First Language)	3	3		
28.	SLS5	Second Language	3	3		
29.	GE	Business Economics	4	4	3 hrs	80U+20I
30.	DSE501	a) Cost Accounting/ b) Financial Planning & Performance/ c) Financial Reporting-I	5	5	3 hrs	80U+20I
31.	DSE502	a) Computerized Accounting/ b) Financial Decision Making-II/ c) International Tax & Regulation	3T+4P/5	5	3 hrs	50T+35P + 15U 80U+20I
32.	DSE503	a) Auditing/ b) Advanced Corporate Accounting/ c) Financial Management	5	5	3 hrs	80U+20I
		Total	27/25	25		80U+20I
SEMESTER – VI						
33.	ELS6	English (First Language)	3	3		
34.	SLS6	Second Language	3	3		
35.	PR	Research Methodology and Project Report	2T+4R	4	1 ½ hrs	40U+10I 15R+15V V
36.	DSF601	a) Cost Control and Management Accounting/ b) Financial control/ c) Financial Reporting-II	5	5	3 hrs	80U+20I
37.	DSE602	a) Theory and Practice of GST/ b) Financial Decision Making-II / c) International Auditing	3T+4P/5	5	3 hrs	50T+35P + 15U 80U+20I
38.	DSF603	a) Accounting Standards/ b) Corporate Governance/ c) Investment management	5	5	3 hrs	80U+20I
		Total	29/27	25		
		GRAND TOTAL	150/152	150		

ELS: English Language Skill; SLS: Second Language Skill; AEC: Ability Enhancement Compulsory Course; SEC: Skill Enhancement Course; DSC: Discipline Specific Course; DSE: Discipline Specific Elective; GE: Generic Elective; T: Theory; P: Practical; I: Internal Exam; U: University Exam; PR: Project Report; V: Viva-Voce Examination.

Note: If a student should opt for "u" in SEC in III semester, the student has to opt for "u" only in IV semester and so is the case with "b" and "c". In the case of DSE also the rule applies.

SUMMARY OF CREDITS

Sl. No.	Course Category	No. of Courses	Credits Per Course	Credits
1	English Language	6	4/3	20
2	Second Language	6	4/3	20
3	AEC	2	2	4
4	SEC	4	2	8
5	GE	1	4	4
6	Project Report	1	4	4
7	DSC	12	5	60
8	DSE	6	5	30
	TOTAL	38		150
	Commerce	24		106
	CREDITS UNDER NON-CGPA	NSS/NCC/Sports/Extra Curricular	Up to 6 (2 in each year)	
		Summer Internship	Up to 4 (2 in each after I & II years)	

Telangana State Council of Higher Education, Govt. of Telangana
(Osmania University)
PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN B.Sc.
MICROBIOLOGY (2020-21)

Code	Course Title	Course Type	HPW	Credits
FIRST YEAR-SEMESTER-1				
BS	AEC-1			2
BS	English			4
BS	Second Language			4
BS	General Microbiology	DSC-1A	4+2	5
BS	Optional-II			5
BS	Optional-III			5
SEMESTER-2				
BS	ACC-2			2
BS	English			4
BS	Second Language			4
BS	Microbial Diversity	DSC-1B	4+2	5
BS	Optional-II			5
BS	Optional-III			5
SECOND YEAR-SEMESTER-3				
BS	Haematology	SEC-1	2	2
BS	UGC Given	SEC-2		2
BS	English			3
BS	Second Language			3
BS	Food & Environmental Microbiology	DSC-1C	4+2	5
BS	Optional-II			5
BS	Optional-III			5
SEMESTER-4				
BS	Mushroom Cultivation	SEC-3	2	2
	UGC Given	SEC-4		2
	English			3
BS	Second Language			3
BS	Medical Microbiology & Immunology	DSC-1D	4+2	5
BS	Optional-II			5
BS	Optional-III			5
THIRD YEAR-SEMESTER-5				
	English			3
	Second language			3
BS	Microbiology and Human Health	GE	4	4
BS	1A. Molecular Biology & Microbial Genetics or 1B. Microbial Omics	DSE-I	3+2	5
BS	Optional-II			5
BS	Optional-III			5

Dr. B. Bhima
BoS

SEMESTER-6				
BS	English			3
BS	Second language			3
BS	2.A Industrial Microbiology 2.B Pharmaceutical Microbiology	DSE-2	4+2	5
BS	PROJECT WORK / Applied Microbiology		3+2	4
BS	Optional-II-A/B/C			5
BS	Optional-III-A/B/C			5
Total				130

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With Effect from the Academic Year 2019-2020

Mahatma Gandhi University

Faculty of Science

B.Sc. (Computer Science)

CBCS Pattern With effect from the Academic Year 2019-2020

Code	Course Title	Course Type	HpW	Credits
Semester -I				
BS106	Programming in C	DSC-3A	4T + 3P = 7	4 + 1 = 5
Semester -II				
BS206	Programming in C++	DSC-3B	4T + 3P = 7	4 + 1 = 5
AECC				
BS107	Fundamentals of Computers	AECC	2T	2
Semester -III				
BS301	Python -1	SEC-1	2T	2
BS302	Operating System -1	SEC-2	2T	2
BS306	Data Structure using C++	DSC-3C	4T + 3P = 7	4 + 1 = 5
Semester -IV				
BS401	Python -2	SEC-3	2T	2
BS402	Operating System-2	SEC-4	2T	2
BS406	Data Base Management Systems (DBMS)	DSC-3D	4T + 3P = 7	4 + 1 = 5
Semester -V				
BS501	Information Technologies	GE	4T	4
BS502	Programming in Java	DSE-3E	4T + 3P = 7	4 + 1 = 5
Semester -VI				
BS605	Web Technologies	DSE-3F	4T + 3P = 7	4 + 1 = 5
Project/Optional				
BS606	PHP with MySQL	P/O	3T + 3P = 3	3 + 1 = 4
Total Number of Credits				48

Telangana State Council of Higher Education
B.A/B.Sc. Mathematics Course Structure

(Common Core Syllabus for All Universities in Telangana State with effect from 2019-20)

Year	Paper	Semester	Subject	Hours/ per week	Hours/per week		Credits
					Theory	Tutorials*	
1	DSC I	I	Differential & Integral Calculus	6	5	1	5
	DSC II	II	Differential Equations	6	5	1	5
2	DSC III	III	Real Analysis	6	5	1	5
	DSC IV	IV	Algebra	6	5	1	5
3	DSC V	V	Linear Algebra	6	5	1	5
	DSE VI	VI-A	Numerical Analysis	6	5	1	5
		VI-B	Integral Transforms	6	5	1	5
		VI-C	Analytical Solid Geometry	6	5	1	5
2	SEC-I	III	Theory of Equations	2	2	-	2
2	SEC-II	III	Logic & Sets	2	2	-	2
2	SEC-III	IV	Number Theory	2	2	-	2
2	SEC-IV	IV	Vector Calculus	2	2	-	2
3	Generic Elective	V-A*	1. Basic Mathematics or 2. Mathematics of Finance & Insurance	4	4	-	4
3	Project/Optional	VI*	Mathematical Modelling	4	4	-	4

†Tutorials: Problems solving session for each 20 student's one batch.

*The syllabus for 1. Generic Elective and 2. Optional in place of project is open to respective universities to frame the syllabus as per local convenience.

B.Sc. (Physics) Syllabus, Mahatma Gandhi University
(w.e.f 2019-2020)

MAHATMA GANDHI UNIVERSITY
B.Sc. (Physics)
SCHEME FOR CHOICE BASED CREDIT SYSTEM
(YEAR & SEMESTER - WISE SCHEME OF IPW, CREDITS & MARKS)

Y E A R	SEM	Course/Paper	Course Type*	Hrs / Week	No. of Credits	Marks			
						Internal	SEM End	Total	
F I R S T	I	Mechanics & Oscillations	DSC-1	4	4	20	80	100	
		Mechanics & Oscillations Lab (Practicals)	DSC-1(P)	3	1	-	25	25	
	II	Thermal Physics	DSC-2	4	4	20	80	100	
		Thermal Physics Lab (Practicals)	DSC-2(P)	3	1	-	25	25	
	S E C O N D	III	Electromagnetic Theory	DSC-3	4	4	20	80	100
			Electromagnetic Theory Lab (Practicals)	DSC-3(P)	3	1	-	25	25
		1) Experimental methods & Error analysis	SEC-1	2	2	10	40	50	
		2) Electrical circuits & Networking	SEC-2	2	2	10	40	50	
IV		Waves & Optics	DSC-4	4	4	20	80	100	
		Waves & Optics Lab (Practicals)	DSC-4(P)	3	1	-	25	25	
		1) Basic Instrumentation	SEC-3	2	2	10	40	50	
		2) Digital Electronics	SEC-4	2	2	10	40	50	
T H I R D		V	(A) Modern Physics Or (B) Computational Physics	DSE-1	4	4	20	80	100
			(A) Modern Physics Lab (Practicals) Or (B) Computational Physics Lab (Practicals)	DSE-1 (Pr)	3	1	-	25	25
	Renewable energy & Energy harvesting	GE	4	4	20	80	100		
	VI	(A) Electronics Or (B) Applied Optics	DSE-2	4	4	20	80	100	
		(A) Electronics Lab (Practicals) Or (B) Applied Optics Lab (Practicals)	DSE-2 (Pr)	3	1	-	25	25	
		Nanoscience	Project / Course in lieu of project	4	4	20	80	100	
Total				30 + 16	120+80	630+320	750 + 400		

*DSC: Discipline Specific Course (Core);
DSE: Discipline Specific Elective (Elective);
Pr: Practical;
SEC: Skill Enhancement Course;
GE: Generic Elective

Department of Economics
Mahatma Gandhi University, Nalgonda – 508 254 (T.S)

B.A. (Economics) Syllabus
Choice Based Credit System - w.e.f. 2019-20

Year	Semester	DSC/GE/ DSE/SEC	Paper	Title of the paper	Credits	PPW (Periods per Week)
I	I	DSC*101	Paper - I	Micro Economics	5	6
		AECC***	AECC	Environmental Science/ Basic Computer Skills	2	2
II	II	DSC*201	Paper - II	Macro Economics	5	6
		AECC	AECC	Environmental Science/ Basic Computer Skills	2	2
	III	DSC*301	Paper - III	Statistics for Economics	5	6
		SEC-1	SEC-I	Basic Computer Applications in Economics	2	2
		SEC-2	SFC-II	Economics of Rural Development	2	2
	IV	DSC*401	Paper - IV	Indian Economy	5	6
	SEC-3	SEC-III	Data Analysis	2	2	
		SEC-4	SFC-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. * AECC(Ability Enhancement Compulsory Course

Dr.K Anji Reddy
 Chairperson, BOS

BA Political Science

Courses offered under CBCS system from 2019-20 onwards as per TSCHE guidelines (Applicable to all the Telangana State Universities)

Discipline specific courses (DSC)

Ist Semester

Understanding Political Theory

IInd Semester

Western Political Thought

IIIrd Semester

Indian Political Thought

IVth Semester

Constitution and Politics of India

Discipline specific Electives (DSE)

Vth Semester

I. International Relations

Or

II. Government and Politics in Telangana

VI Semester

I. Global Politics

Or

II. Contemporary social movements

Generic Elective (GE)

Vth Semester

Politics of Development

Project Work / Optional Paper

VIth Semester

Contemporary Political Theory