B. Sc. (CBCS) Botany
Semester: I - VI
Course Structure

Paper	Paper Title	No. of Instruction Hours	Max. Marks	No. of Credits
B. Sc. I yr w.e.f. 2016-2017				
Semester – I				
I	Microbial diversity of Lower Plants	60 Theory (@4 per week)	80UE+20IE	4
		45 Practicals (@2 per week)	50	1
Semester – II				
II	Bryophytes, Pteridophytes, Gymnosperms and Paleobotany	60 Theory (@4 per week)	80UE+20IE	4
		45 Practicals (@2 per week)	50	1
B. Sc. II yr w.e.f. 2017-2018				
Semester – III				
III	Taxonomy of Angiosperms and Medicinal Botany	60 Theory (@4 per week)	80UE+20IE	4
		45 Practicals (@2 per week)	50	1
Semester – IV				
IV	Plant Anatomy, Embryology and Palynology	60 Theory (@4 per week)	80UE+20IE	4
		45 Practicals (@2 per week)	50	1
B. Sc. III yr w.e.f. 2018-2019				
Semester – V				
V	Cell Biology and Genetics	45 Theory (@3 per week)	80UE+20IE	3
		45 Practicals (@2 per week)	50	1
VI & VII	Elective: I – Ecology & Biodiversity / Elective: II – Horticulture	45 Theory (@3 per week)	80UE+20IE	3
		45 Practicals (@2 per week)	50	1
Semester – VI				
VIII	Plant Physiology	45 Theory (@3 per week)	80UE+20IE	3
		45 Practicals (@2 per week)	50	1
IX & X	Elective: I – Tissue Culture & Biotechnology / Elective: II – Seed Technology	45 Theory (@3 per week)	80UE+20IE	3
		45 Practicals (@2 per week)	50	1

Syllabus for Computer Science

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

Code	Course Title	Course Type	HpW	Credits
	SEMESTER – I			
Core1	Object Oriented Programming with C++	DSC-3A	4T+2P=6	4+1=5
	SEMESTER – II			
Core2	Data Structures and File Processing	DSC-3B	4T+2P=6	4+1=5
	SEMESTER – III			
SEC1	A: SciLab - 1	SEC-1	2T	2
	B: Boolean Algebra			
Core3	Database Management Systems	DSC-3C	4T+2P	4+1=5
	SEMESTER – IV			
SEC2	C:Scilab-2	SEC-2	2T	2
	D: Digital Logic			
Core4	Design and Analysis of Algorithms	DSC-3D	4T+2P=6	4+1=5
	SEMESTER – V			
GE1	Information Technologies-1	GE-1	2T	2
SEC3	E: Discrete Structures-1	SEC-3	2T	2
	F: Computer Organization			
Core5	Web programming	DSC-3E	3T+2P=5	3+1=4
E1	Elective-A: Operating Systems	DSE-1A	3T+2P=5	3+1=4
	Elective-B: Data Mining	DSE-2A		
	Elective-C: Cryptography	DSE-3A		
	SEMESTER – VI			
GE2	Information Technologies-2	GE-2	2T	2
SEC4	G: Discrete Structures-2	SEC-4	2T	2
	H: Information Security			
Core6	Visual Programming	DSC-3F	3T+2P=5	3+1=4
E2	Elective-A: Multimedia Systems And Applications	DSE-1B	3T+2P=5	3+1=4
	Elective-B: Computer Graphics	DSE-2B		
	Elective-C: Computer Networks	DSE-3B		
			Total Number of Credits	48

Syllabus for Computer Science

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

Code	Course Title	Course Type	HpW	Credits
	SEMESTER – I			
Core1	Object Oriented Programming with C++	DSC-3A	4T+2P=6	4+1=5
	SEMESTER – II			
Core2	Data Structures and File Processing	DSC-3B	4T+2P=6	4+1=5
	SEMESTER – III			
SEC1	A: SciLab - 1	SEC-1	2T	2
	B: Boolean Algebra			
Core3	Database Management Systems	DSC-3C	4T+2P	4+1=5
	SEMESTER – IV			
SEC2	C:Scilab-2	SEC-2	2T	2
	D: Digital Logic			
Core4	Design and Analysis of Algorithms	DSC-3D	4T+2P=6	4+1=5
	SEMESTER – V			
GE1	Information Technologies-1	GE-1	2T	2
SEC3	E: Discrete Structures-1	SEC-3	2T	2
	F: Computer Organization			
Core5	Web programming	DSC-3E	3T+2P=5	3+1=4
E1	Elective-A: Operating Systems	DSE-1A	3T+2P=5	3+1=4
	Elective-B: Data Mining	DSE-2A		
	Elective-C: Cryptography	DSE-3A		
	SEMESTER – VI			
GE2	Information Technologies-2	GE-2	2T	2
SEC4	G: Discrete Structures-2	SEC-4	2T	2
	H: Information Security			
Core6	Visual Programming	DSC-3F	3T+2P=5	3+1=4
E2	Elective-A: Multimedia Systems And Applications	DSE-1B	3T+2P=5	3+1=4
	Elective-B: Computer Graphics	DSE-2B		
	Elective-C: Computer Networks	DSE-3B		
			Total Number of Credits	48

Syllabus for Computer Science

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

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

TELANGANA UNIVERSITY

B.Sc. (Computer Science)

CBCS Pattern in Semester System - 2019

Semester -I			
Course Title	**H/Week**		**Credits**
Programming in C	Th 4	Pr 3	4+1 = 5
Semester –II			
Programming in C++	4	3	4+1 = 5
Semester –III			
Data Structures using C++	4	3	4+1 = 5
Semester –IV			
Data Base Management Systems (DBMS)	4	3	4+1 = 5
Semester –V			
Programme in Java	4	3	4+1 = 5
Semester –VI			
Web Technologies	4	3	4+1 = 5

AECC

Semester -I	Hours/Week	Credits
Fundamentals of Computer	Th 2	2
Semester -II	Hour/Week	
Office Automation	2	2
SEC		
Semester -III		
Python –I (Sec –I)	2	2
Operating Systems (Sec –II)	2	2
Semester -IV		
Python –II (Sec –III)	2	2
Operating Systems (Sec –IV)	2	2
Generic Elective (GE)		
Semester -IV		
Information Technologies	4	4
Project/Optional		
Semester -VI		
PHP with MY SQL	Thr 3	pr 3	3+1=4

Syllabus for Computer Science

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

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

B.Sc. 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				
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. Course Structure Template

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 Slid 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 Calcullus	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. PROGRAMME

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	8	5	40
	Language	12	5	60
	DSC	6	4	24
	DSC			
4	DSE	6	4	24
5	GE	2	2	4
	TOTAL	**40**		**164**
	Optionals Total	24		108

B. Sc. (CBCS) Botany
Semester: I - VI
Course Structure

Paper	Paper Title	No. of Instruction Hours	Max. Marks	No. of Credits
B. Sc. I yr w.e.f. 2016-2017				
Semester – I				
I	Microbial diversity of Lower Plants	60 Theory (@4 per week)	80UE+20IE	4
		45 Practicals (@2 per week)	50	1
Semester – II				
II	Bryophytes, Pteridophytes, Gymnosperms and Paleobotany	60 Theory (@4 per week)	80UE+20IE	4
		45 Practicals (@2 per week)	50	1
B. Sc. II yr w.e.f. 2017-2018				
Semester – III				
III	Taxonomy of Angiosperms and Medicinal Botany	60 Theory (@4 per week)	80UE+20IE	4
		45 Practicals (@2 per week)	50	1
Semester – IV				
IV	Plant Anatomy, Embryology and Palynology	60 Theory (@4 per week)	80UE+20IE	4
		45 Practicals (@2 per week)	50	1
B. Sc. III yr w.e.f. 2018-2019				
Semester – V				
V	Cell Biology and Genetics	45 Theory (@3 per week)	80UE+20IE	3
		45 Practicals (@2 per week)	50	1
VI & VII	Elective: I – Ecology & Biodiversity / Elective: II – Horticulture	45 Theory (@3 per week)	80UE+20IE	3
		45 Practicals (@2 per week)	50	1
Semester – VI				
VIII	Plant Physiology	45 Theory (@3 per week)	80UE+20IE	3
		45 Practicals (@2 per week)	50	1
IX & X	Elective: I – Tissue Culture & Biotechnology / Elective: II – Seed Technology	45 Theory (@3 per week)	80UE+20IE	3
		45 Practicals (@2 per week)	50	1

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	Paper –V : Electromagnetism	3	75	3
	Practicals – V: Electromagnetism	3	25	1
	Paper – VI : Elective – I Solid state physics/ Quantum Mechanics and Applications	3	75	3
	Practicals – VI : Elective – I Practical Solid state physics/ Quantum Mechanics and Applications	3	25	1
VI sem	Paper – VII : Modern Physics	3	75	3
	Practical – VII : Modern Physics Lab	3	25	1
	Paper – VIII : Elective – II Basic Electronics/ Physics of Semiconductor Devices	3	75	3
	Practicals – VIII : Elective – II Practical Basic Electronics/ Physics of Semiconductor Devices	3	25	1
		Total Credits		36

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TELANGANA UNIVERSITY

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

Revised and effective from academic year 2019-2020

Semester	Paper [Theory and Practical]	Instructions Hrs/week	Marks	Credits
I	Paper – I : Mechanics	4	100	4
	Practicals – I : Mechanics	3	50	1
II	Paper – II: Thermal Physics	4	100	4
	Practicals – II : Thermal Physics	3	50	1
III	Paper – III : Electromagnetic Theory	4	100	4
	Practicals – III : Electricity &Magnetism	3	50	1
IV	Paper – IV : Optics	4	100	4
	Practicals – IV :Optics	3	50	1
V	Paper –V : A. Modern Physics B. Computational Physics using MATLAB	4	100	4
	Practicals – V: A. Modern Physics B. Computational Physics using MATLAB	3	50	1
VI	Paper – VI : A. Electronics B. Applied Optics	4	100	4
	Practicals VI: A. Electronics B. Applied Optics	3	50	1

Total credits: 30

Skill enhancement courses

1. Measurements and Errors
2. Electrical circuits and Networking
3. Basic Instrumentation
4. Biomedical Instrumentation
5. Digital Electronics

Generic Elective:

1. Renewable Energy & Harvesting

Project work /Optionals (Nano science)

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
III	V	Core-V Theory	Physiology and Biochemistry	3	3	20	40	60
		Core-V Practical	Physiology and Biochemistry	2	3	-	40	40
	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

Telangana State Council of Higher Education, Govt. of Telangana State
B.Sc. CBCS Common Core Syllabus for all Universities in Telangana
B.Sc. Biotechnology (*wef 2019-2020*)

FIRST YEAR – SEMESTER I				
CODE	**COURSE TITLE**	**COURSE TYPE**	**HPW**	**CREDITS**
BS 101	Environmental Science/Basic Computer skills	AECC-1	2	2
BS 102	English	CC-1A	4	4
BS 103	Second Language	CC-2A	4	4
BS 104	**Optional I: Cell Biology and Genetics**	**DCS-1A**	**4T+3P=7**	**4+1=5**
BS 105	Optional II	DCS-2A	4T+3P=7	4+1=5
BS 106	Optional III	DCS-3A	4T+3P=7	4+1=5
TOTAL				25

FIRST YEAR – SEMESTER II				
CODE	**COURSE TITLE**	**COURSE**	**HPW**	**CREDITS**
BS 201	Gender Sensitization	AECC-2	2	2
BS 202	English	CC-1B	4	4
BS 203	Second Language	CC-2B	4	4
BS 204	**Optional I: Microbiology and Biological Chemistry**	**DCS-1B**	**4T+3P=7**	**4+1=5**
BS 205	Optional II	DCS-2B	4T+3P=7	4+1=5
BS 206	Optional III	DCS-3B	4T+3P=7	4+1=5
TOTAL				25

SECOND YEAR – SEMESTER III				
CODE	**COURSE TITLE**	**COURSE TYPE**	**HPW**	**CREDITS**
BS 301	**SEC 1: ENZYME TECHNOLOGY**	**SEC-1**	**2**	**2**
BS 302	**SEC2: IMMUNOTECHNOLOGY**	**SEC-2**	**2**	**2**
BS 303	English	CC-1C	3	3
BS 304	Second Language	CC-2C	3	3
BS 305	**Optional I: Molecular Biology and r-DNA technology**	**DCS-1C**	**4T+3P=7**	**4+1=5**
BS 306	Optional II	DCS-2C	4T+3P=7	4+1=5
BS 307	Optional III	DCS-3C	4T+3P=7	4+1=5
TOTAL				25

SECOND YEAR – SEMESTER IV				
CODE	**COURSE TITLE**	**COURSE TYPE**	**HPW**	**CREDITS**
BS 401	**SEC 3: MOLECULAR PLANT BREEDING**	**SEC-3**	**2**	**2**
BS 402	**SEC 4: INTELLECTUAL PROPERTY RIGHTS**	**SEC-4**	**2**	**2**
BS 403	English	CC-1D	3	3
BS 404	Second Language	CC-2D	3	3
BS 405	**Optional I: Bioinformatics and Biostatistics**	**DCS-1D**	**4T+3P=7**	**4+1=5**
BS 406	Optional II	DCS-2D	4T+3P=7	4+1=5
BS 407	Optional III	DCS-3D	4T+3P=7	4+1=5
TOTAL				25

Chairman Board of Studies
Dept.of Biotechnology
Telangana University
Dichpally, Nizamabad-503 322

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THIRD YEAR – SEMESTER V				
CODE	COURSE TITLE	COURSE TYPE	HPW	CREDITS
BS 501	English	CC-1E	3	3
BS 502	Second Language	CC-2E	3	3
BS 503	**FUNDAMENTALS AND APPLICATIONS OF BIOTECHNOLOGY**	**GE**	**4**	**4**
BS 504	**Optional I: A/B** **(A) PLANT BIOTECHNOLOGY** **or** **(B) MEDICAL BIOTECHNOLOGY**	**DSC-1E**	**4T+3P=7**	**4+1=5**
BS 505	Optional II A/B	DCS-2E	4T+3P=7	4+1=5
BS 506	Optional III A/B	DCS-3E	4T+3P=7	4+1=5
TOTAL				25

THIRD YEAR – SEMESTER VI				
CODE	COURSE TITLE	COURSE TYPE	HPW	CREDITS
BS 601	**PROJECT IN GENETICS/OPTIONAL PAPER**	**Project work /opt.P**		**4**
BS 602	English	CC-1F	3	3
BS 603	Second Language	CC-2F	3	3
BS 604	**Optional I: A/B** **(A) ANIMAL BIOTECCHNOLOGY** **or** **(B) ENVIRONMENTAL BIOTECHNOLOGY**	**DCS-1F**	**4T+3P=7**	**4+1=5**
BS 605	Optional II A/B	DCS-2F	4T+3P=7	4+1=5
BS 606	Optional III A/B	DCS-3F	4T+3P=7	4+1=5
TOTAL				25
TOTAL CREDITS				**150**

AECC: Ability Enhancement Compulsory Course

SEC: Skill Enhancement Course

DSC: Discipline Specific Core

DSE: Discipline Specific Elective

GE: Generic Elective

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Dept.of Biotechnology
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Dichpally, Nizamabad-503 322

TELANGANA UNIVERSITY

DICHPALLY, NIZAMABAD

B.Sc. ZOOLOGY SYLLABUS UNDER CBCS 2019

CURRICULUM FOR ZOOLOGY
IN UNDER GRADUATE DEGREE PROGRAMME
CBCS SYLLABUS SCHEDULE 2019

Year	Semester	Paper		Title of the Paper	No. of Credits	Exam Hrs.	Max. Marks		
							I.A	End Exam	Total
I	I	Paper - I	Core-I Theory	Animal Diversity- Invertebrates	4	2	20	80	100
			Core-I Practical	Animal Diversity- Invertebrates	1	2	-	25	25
	II	Paper – II	Core-II Theory	Animal Diversity- Vertebrates	4	2	20	80	100
			Core-II Practical	Animal Diversity- Vertebrates	1	2	-	25	25
II	III	Paper – III	Core-III Theory	Animal Physiology, Animal Behaviour and Developmental Biology	4	2	20	80	100
			Core-III Practical	Animal Physiology, Animal Behaviour and Developmental Biology	1	2	-	25	25
			SEC-1	Sericulture / Aquaculture	2	2	10	40	50
			SEC-2	Clinical Science / Health and Hygiene	2	2	10	40	50
	IV	Paper - IV	Core-IV Theory	Cell Biology, Genetics, Evolution and Zoogeography.	4	2	20	80	100
			Core-IV Practical	Cell Biology, Genetics, Evolution and Zoogeography	1	2	-	25	25
			SEC-3	Apiculture / Poultry and Animal Husbandry	2	2	10	40	50
			SEC-4	Vermiculture / Biomaterials from Animals sources	2	2	10	40	50
III	V	Paper - V	DSE-I Theory	Physiological Chemistry / Immunology / Diagnostic Methods of Parasites / Animal Biotechnology	4	2	20	80	100
			DSE -I Practical	Physiological Chemistry / Immunology / Diagnostic Methods of Parasites / Animal Biotechnology	1	2	-	25	25
			GE – I Theory	Preventive Medicine / Integrated Pest Management / Health and Hygiene	4	2	20	80	100
		Paper - VI	DSE-II Theory	Fisheries / Limnology / Vector Biology / Laboratory Animals Maintenance and Applications	4	2	20	80	100
			DSE-II Practical	/ Fisheries / Limnology / Vector Biology / Laboratory Animals Maintenance and Applications	1	2	-	25	25
				Project / Tools and Techniques in Biology	4				

Practical One Credit equal to 3hrs

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
III	V	Core-V Theory	Physiology and Biochemistry	3	3	20	40	60
		Core-V Practical	Physiology and Biochemistry	2	3	-	40	40
	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

TELANGANA UNIVERSITY, NIZAMABAD

B.A/B.Sc. Mathematics Course Structure

(From the Academic Year 2019-20 Batch onwards)

Paper	Semester	Subject	Hours/ per week	Hours/per week		Max. Marks	Credits
				Theory	*Tutorials		
DSC - I	I	Differential & Integral Calculus	6	5	1	100	5
DSC - II	II	Differential Equations	6	5	1	100	5
DSC - III	III	Real Analysis	6	5	1	100	5
DSC - IV	IV	Algebra	6	5	1	100	5
DSC - V	V	Linear Algebra	6	5	1	100	5
DSE – VI(A)	VI	(A) Numerical Analysis	6	5	1	100	5
DSE – VI(B)	VI	(B) Integral Transforms	6	5	1	100	5
DSE – VI(C)	VI	(C) Analytical Solid Geometry	6	5	1	100	5
SEC-I	III	Theory of Equations	2	2	-	50	2
SEC-II	III	Logic & Sets	2	2	-	50	2
SEC-III	IV	Number Theory	2	2	-	50	2
SEC-IV	IV	Vector Calculus	2	2	-	50	2
Generic Elective	V-A*	1. Basic Mathematics **or** 2. Mathematics of Finance & Insurance	4	4	-	100	4
Project/ Optional	VI*	Mathematical Modelling	4	4	-	100	4

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