

### Semester-wise Titles of the Papers in B.Sc. (Botany)

Year	Sem.	Course Code	Paper Title	Theory/ Practical	Credits
<i>Certificate Course In Microbial Technology &amp; Applied Botany</i>					
FIRST YEAR	I	B040101T	<b>Microbiology &amp; Plant Pathology</b>	Theory	4
		B040102P	<b>Techniques in Microbiology &amp; Plant Pathology</b>	Practical	2
	II	B040201T	<b>Archegoniates &amp; Plant Architecture</b>	Theory	4
		B040202P	<b>Land Plants Architecture</b>	Practical	2
<i>Diploma in Plant Identification, Utilization &amp; Ethnomedicine</i>					
SECOND YEAR	III	B040301T	<b>Flowering Plants Identification &amp; Aesthetic Characteristics</b>	Theory	4
		B040302P	<b>Plant Identification technology</b>	Practical	2
	IV	B040401T	<b>Economic Botany, Ethnomedicine &amp; Phytochemistry</b>	Theory	4
		B040402P	<b>Commercial Botany &amp; Phytochemical Analysis</b>	Practical	2
<i>Bachelor of Science</i>					
THIRD YEAR	V	B040501T	<b>Plant Physiology, Metabolism &amp; Biochemistry</b>	Theory	4
		B040502T	<b>Molecular Biology &amp; Bioinformatics</b>	Theory	4
		B040503P	<b>Experiments in physiology, Biochemistry &amp; molecular biology</b>	Practical	2
		B040504R	<b>*Project-I</b>	Practical	3
	VI	B040601T	<b>Cytogenetics, Plant Breeding &amp; Nanotechnology</b>	Theory	4
		B040602T	<b>Ecology &amp; Environment</b>	Theory	4
		B040603P	<b>Cytogenetics, Conservation &amp; Environment management</b>	Practical	2
		B040604R	<b>*Project-II</b>	Practical	3

<b>SEMESTER-WISE TITLES OF THE PAPERS IN UG PHYSICS COURSE</b>					
<b>YEAR</b>	<b>SEME- STER</b>	<b>COURSE CODE</b>	<b>PAPER TITLE</b>	<b>THEORY / PRACTICAL</b>	<b>CREDIT</b>
<b>CERTIFICATE -IN BASIC PHYSICS &amp; SEMICONDUCTOR DEVICES</b>					
<b>FIRST YEAR</b>	<b>I</b>	B010101T	Mathematical Physics & Newtonian Mechanics	Theory	4
		B010102P	Mechanical Properties of Matter	Practical	2
	<b>II</b>	B010201T	Thermal Physics & Semiconductor Devices	Theory	4
		B010202P	Thermal Properties of Matter & Electronic Circuits	Practical	2
<b>DIPLOMA - IN APPLIED PHYSICS WITH ELECTRONICS</b>					
<b>SECOND YEAR</b>	<b>III</b>	B010301T	Electromagnetic Theory & Modern Optics	Theory	4
		B010302P	Demonstrative Aspects of Electricity & Magnetism	Practical	2
	<b>IV</b>	B010401T	Perspectives of Modern Physics & Basic Electronics	Theory	4
		B010402P	Basic Electronics Instrumentation	Practical	2
<b>DEGREE -IN BACHELOR OF SCIENCE</b>					
<b>THIRD YEAR</b>	<b>V</b>	B010501T	Classical & Statistical Mechanics	Theory	4
		B010502T	Quantum Mechanics & Spectroscopy	Theory	4
		B010503P	Demonstrative Aspects of Optics & Lasers	Practical	2
	<b>VI</b>	B010601T	Solid State & Nuclear Physics	Theory	4
		B010602T	Analog & Digital Principles & Applications	Theory	4
		B010603P	Analog & Digital Circuits	Practical	2

### Semester-wise Titles of the Papers in B.Sc. Chemistry

Year	Sem.	Course Code	Paper Title	Theory/Practical	Credits
<b>Certificate in Bioorganic and Medicinal Chemistry</b>					
1	I	B020101T	Fundamentals of Chemistry	Theory	4
		B020102P	Quantitative Analysis	Practical	2
	II	B020201T	Bioorganic and Medicinal Chemistry	Theory	4
		B020202P	Biochemical Analysis	Practical	2
<b>Diploma in Chemical Dynamics and Analytical Techniques</b>					
2	III	B020301T	Chemical Dynamics & Coordination Chemistry	Theory	4
		B020302P	Physical Analysis	Practical	2
	IV	B020401T	Quantum Mechanics and Analytical Techniques	Theory	4
		B020402P	Instrumental Analysis	Practical	2
<b>Degree in Bachelor of Science</b>					
3	V	B020501T	Organic Synthesis-A	Theory	4
		B020502T	Rearrangements and Chemistry of Group Elements	Theory	4
		B020503P	Qualitative Analysis	Practical	2
		B020504R	Research Project	Project	3
	VI	B020601T	Organic Synthesis-B	Theory	4
		B020602T	Chemical Energetics and Radiochemistry	Theory	4
		B020603P	Analytical Methods	Practical	2
		B020604R	Research Project	Project	3

**SEMESTER WISE TITLES OF THE PAPER IN UG MATHEMATICS COURSE**

YEAR	SEMESTER	COURSE CODE	PAPER TITLE	THEORY/PRACTICAL	CREDIT
<b>CERTIFICATE COURSE IN APPLIED MATHEMATICS</b>					
<b>FIRST YEAR</b>	<b>I</b>	B030101T	Differential Calculus & Integral Calculus	THEORY	<b>4</b>
		B030102P	PRACTICAL	PRACTICAL	<b>2</b>
	<b>II</b>	B030201T	Matrices and Differential Equations & Geometry	THEORY	<b>6</b>
<b>DIPLOMA IN MATHEMATICS</b>					
<b>SECOND YEAR</b>	<b>III</b>	B030301T	Algebra & Mathematical Methods	THEORY	<b>6</b>
	<b>IV</b>	B030401T	Differential Equation & Mechanic	THEORY	<b>6</b>
<b>DEGREE IN MATHEMATICS</b>					
<b>THIRD YEAR</b>	<b>V</b>	B030501T	Group and Ring Theory & Linear Algebra	THEORY	<b>5</b>
		B030502T	Any One of The Following (i) Number Theory & Game Theory (ii) Graph Theory & Discrete Mathematics (iii) Differential Geometry & Tensor Analysis	THEORY	<b>5</b>
	<b>VI</b>	B030601T	Metric Space & Complex Analysis	THEORY	<b>4</b>
		B030602T	Numerical Analysis & Operations Research	THEORY	<b>4</b>
		B030603P	PRACTICAL	PRACTICAL	<b>2</b>

### Semester-wise Titles of the Papers in B.Sc (Zoology)

Year	Sem.	Course Code	Paper Title	Theory/Practical	Credits
1	I	B050101T	Cytology, Genetics and Infectious Diseases	Theory	04
		B050102P	Cell Biology and Cytogenetics Lab	Practical	02
	II	B050201T	Biochemistry and Physiology	Theory	04
		B050202P/R	Physiological, Biochemical & Hematology Lab	Practical/Field work	02
2	III	B050301T	Molecular Biology, Bioinstrumentation & Biotechniques	Theory	04
		B050302P	Bioinstrumentation & Molecular Biology Lab	Practical	02
	IV	B050401T	Gene Technology, Immunology and Computational Biology	Theory	04
		B050402P/R	Genetic Engineering and Counselling Lab	Practical/Field work	02
3	V	B050501T	Diversity of Non-Chordates, Parasitology and Economic Zoology	Theory	04
		B050502T	Diversity of Chordates and Comparative Anatomy	Theory	04
		B050503P	Lab on Virtual Dissection, Anatomy, Economic Zoology and Parasitology	Practical	02
	VI	B050601T	Evolutionary and Developmental Biology	Theory	04
		B050602T	Ecology, Ethology, Environmental Science and Wildlife	Theory	04
		B050603P	Lab on Environmental Science, Behavioral Ecology, Developmental Biology, Wildlife, Ethology	Practical	02