

## B.Sc.B.Ed COURSES

### EDUCATION

SEM	CORE COURSE			CAPACITY DEVELOPMENT	PRACTICUM
<b>I</b>	<b>BSBAEDU05</b>  School and Classroom Management				Physical Education  Co-Curricular Activities (CCA)  CCA1. Fine Arts  CCA2. Performing Arts
<b>II</b>	<b>BSBAEDU04</b>  Teaching Approaches and Strategies				Observation of 10 Teachers Lessons  Co-Curricular Activities (CCA)  CCA1. Fine Arts  CCA2. Performing Arts
<b>III</b>	<b>BSBAEDU12</b>  Action Research	<b>BSBAEDU14A</b>  Life Skills			Micro-Teaching- 5 Lessons  <b>Co-Curricular Activities (CCA)</b>  CCA1. Fine Arts  CCA2. Performing Arts  Internship (Two Weeks)
<b>IV</b>	<b>BSBAEDU03</b>  Learning Resources				Micro-Teaching- 5 Lessons and  Integration Lessons (2 Lessons)  Co-Curricular Activities (CCA)  CCA1. Fine Arts  CCA2. Performing Arts  Internship (Two Weeks)
<b>V</b>	<b>BSBAEDU01</b>	<b>BSBAEDUM07&amp;</b>	<b>BSBAEDUM</b>		Peer Teaching (5 Lessons)

	Foundation of Education	<b>08</b> Methodology Cum Content of Teaching School Subject I Science (Physical Science/ Biological Science) Any One	<b>07&amp; 08</b> Methodology Cum Content of Teaching School Subject II: Mathematics		each  in school subjects I & II)  Work Experience  Health & Physical Education  Internship (Four Weeks)
<b>VI</b>	<b>BSBAEDU09</b> Assessment and Evaluation	<b>BSBAEDUM07&amp; 08</b> Methodology Cum Content of Teaching School Subject I: Science (Same school subject I offered in Sem V)	<b>BSBAEDUM 07 &amp; 08</b> Methodology Cum Content of Teaching School Subject II: Mathematics		Practice Teaching (5 Lessons  each in school subjects I & II)  Co-Curricular Activities (Sports)  Working with Community  Health & Physical Education  Internship (Four Weeks)
<b>VII</b>	<b>BSBAEDU02</b> Learner and Learning	<b>BSBAEDUM07 &amp; 8</b> Methodology Cum Content of Teaching School Subject I: Science	<b>BSBAEDUM 07&amp; 08</b> Methodology Cum Content of Teaching School Subject II:		Practice Teaching (5 Lessons  each in school subjects I &II)  Internship (Four Weeks)

		(Same school subject I offered in Sem V & Sem VI)	Mathematics)		
<b>VIII</b>		<b>BSBAEDUM07&amp;08</b> Methodology Cum Content of Teaching School Subject I: Science (Same school subject I offered in Sem V & Sem VI)	<b>BSBAEDUM07&amp;08</b> Methodology Cum Content of Teaching School Subject II: Mathematics	Any Two i. Disaster Management ii. BSBAEDU CD02 Guidance and Counselling iii. Gender Issues in Education iv. Media Literacy v. Event Management vi. Population Education vii. Lifelong Education viii. Education for Human Rights and Peace ix. BSBAEDU11 Inclusive Education x. Life Skills	Practice Teaching (5 Lessons each in school subjects I & II)  Internship (Four Weeks)

				xi. Inclusive Education	
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## BOTANY

SEMESTER	CORE COURSE	ELECTIVES
<b>I</b>	<b>BSEDBOT 101</b> - Diversity and Classification of Plant Kingdom-I <b>BSEDBOT 101(Prac.)</b> - Diversity and classification of Plant kingdom-I <b>BSEDBOT 102</b> - Cell biology <b>BSEDBOT 102 (Prac.)</b> - Cell Biology	
<b>II</b>	<b>BSEDBOT 201</b> - Diversity and Classification of Plant Kingdom-II <b>BSEDBOT 201(Prac)</b> - Diversity and classification of plant kingdom-II <b>BSEDBOT 202</b> - Principles of Biochemistry <b>BSEDBOT 202 (Prac)</b> - Principles of Biochemistry.	
<b>III</b>	<b>BSEDBOT 301</b> - Plant Physiology-I <b>BSEDBOT 301(Prac)</b> - Plant Physiology -I <b>BSEDBOT 302</b> - Plant Ecology –I <b>BSEDBOT 302 (Prac)</b> - Plant Ecology-I	
<b>IV</b>	<b>BSEDBOT 401</b> - Plant Physiology-II <b>BSEDBOT 401 (Prac)</b> - Plant Physiology-II <b>BSEDBOT 402</b> - Plant Ecology –II <b>BSEDBOT 402(Prac)</b> - Plant Ecology-II	

V	<p><b>BSEDBOT 501</b> - Systematics of Angiosperms.</p> <p><b>BSEDBOT503A</b> - Systematics of Angiosperms (Practical)</p> <p><b>BSEDBOT 502</b>- Genetics &amp; Plant Breeding</p> <p><b>BSEDBOT 503B</b> - Genetics &amp; Plant Breeding (Practical)</p>	
VI	<p><b>BSEDBOT 601</b>- Plant Biochemistry &amp; Molecular Biology</p> <p><b>BSEDBOT 603A</b> - Plant Biochemistry &amp; Molecular Biology (Practical)</p> <p><b>BSEDBOT 602</b> - Plant Biotechnology &amp; Genetic Engineering</p> <p><b>BSEDBOT 603B</b> - Plant Biotechnology &amp; Genetic Engineering. (Practical)</p>	
VII-	<p><b>BSEDBOT 701</b>- Plant Anatomy and Developmental Biology of Flowering Plants</p> <p><b>BSEDBOT 703A</b>- Plant Anatomy and Developmental Biology of Flowering Plants. (Practical)</p> <p><b>BSEDBOT 702</b>- Genetics, Plant Breeding and Statistical Methods</p> <p><b>BSEDBOT 703 B</b> - Genetics, Plant Breeding and Statistical Methods. (Practical).</p>	
VIII	<p><b>BSEDBOT 801</b>- Microbiology &amp; Plant Pathology</p> <p><b>BSEDBOT 803A</b>- Microbiology &amp; Plant Pathology (Practical)</p> <p><b>BSEDBOT 802</b>- Economic &amp; Applied Botany</p> <p><b>BSEDBOT 803B</b>- Economic &amp; Applied Botany. (Practical)</p>	

## CHEMISTRY

SEMESTER	CORE COURSE	ELECTIVES
<b>I</b>	<b>(BSEDCHEM</b> <b>101)</b> - Physical and Inorganic Chemistry <b>(BSEDCHEM</b> <b>103)</b> Organic and Inorganic Chemistry <b>Practical</b>	
<b>II</b>	<b>(BSEDCHEM</b> <b>102)-</b> Physical and Inorganic Chemistry <b>(BSEDCHEM</b> <b>104)</b> - Organic and Inorganic Chemistry <b>Practical</b>	
<b>III</b>	<b>(BSEDCHEM</b> <b>201)-</b> Physical and Inorganic Chemistry <b>(BSEDCHEM</b> <b>203)-</b> Organic and Inorganic Chemistry <b>Praerical</b>	
<b>IV</b>	<b>(BSEDCHEM</b> <b>202</b> Physical and Inorganic Chemistry <b>(BSEDCHEM</b> <b>204)-</b> Organic and Inorganic Chemistry <b>Practical</b>	
<b>V</b>	<b>(BSEDCHEM</b> <b>311)-</b> Physical Chemistry. <b>(BSEDCHEM</b> <b>321)</b> - Inorganic Chemistry <b>Practical</b>	
<b>VI</b>	<b>(BSEDCHEM</b> <b>331)-</b> Organic Chemistry <b>(BSEDCHEM</b>	

	<b>341)- Analytical Chemistry Practical</b>	
<b>VII-</b>	<b>(BSEDCHEM312)- Physical Chemistry (BSEDCHEM 322)- Inorganic Chemistry Practical</b>	
<b>VIII</b>	<b>(BSEDCHEM 332)- Organic Chemistry (BSEDCHEM 342)- Analytical Chemistry Practical</b>	

## MATHEMATICS

<b>SEMESTER</b>	<b>CORE COURSE</b>	<b>ELECTIVES</b>
<b>I</b>	<b>BSEDMATHS-101:</b> Calculus of one variable  <b>BSEDMATHS-102:</b> Analytical Geometry	
<b>II</b>	<b>BSEDMATHS-201:</b> Discrete Mathematical structures  <b>BSEDMATHS-202:</b> Probability & Statistics	
<b>III</b>	<b>BSEDMATHS-301:</b> Numerical Methods  <b>BSEDMATHS-302:</b> Calculus of Two variables	

	<b>BSEDMATHS PRAC-</b> Numerical methods	
<b>IV</b>	<b>BSEDMATHS-401:</b> Matrix Algebra <b>BSEDMATHS-402:</b> Differential Equations I  <b>BSEDMATHS PRAC-</b> Matrix Algebra	
<b>V</b>	<b>MAT-501:</b> Analysis I  <b>MAT-502:</b> Analysis II  <b>MAT-503:</b> Algebra	
<b>VI</b>	<b>MAT-601:</b> Linear Algebra  <b>MAT-602:</b> Metric Spaces  <b>MAT-603:</b> Complex Analysis)	
<b>VII-</b>	<b>MAT-701:</b> Vector Calculus <b>MAT-702:</b> Number Theory <b>MAT-703:</b> Operations Research I	
<b>VIII</b>	<b>MAT-801:</b> Analysis III <b>MAT-802:</b> Differential Equations	



## PHYSICS

SEMESTER	CORE COURSE	ELECTIVES
<b>I</b>	<b>BSEDPHY 101: Mechanics and Properties of Matter</b> <b>BSEDPHY 102: ELECTRICITY</b> <b>Practical</b>	
<b>II</b>	<b>BSEDPHY201: WAVES AND ACOUSTICS</b> <b>BSEDPHY202: Optics</b> <b>Practical</b>	
<b>III</b>	<b>BSEDPHY 301: MECHANICS II</b> <b>BSEDPHY 302: ELECTRONICS</b> <b>Practical</b>	
<b>IV</b>	<b>BSEDPHY 401: Heat &amp; Thermodynamics</b> <b>BSEDPHY402: Modern Physics</b> <b>Practical</b>	
<b>V</b>	<b>BSEDPHY502: Wave Mechanics</b> <b>BSEDPHY 601: Electromagnetic Theory Practical (Section I &amp; Section 2)</b>	
<b>VI</b>	<b>BSEDPHY 702: Atomic and Molecular Physics</b> <b>BSEDPHY 801: Electromagnetic Theory II and Relativity</b> <b>Practical (Section I &amp; Section 2)</b>	
<b>VII-</b>	<b>BSEDPHY503: Nuclear Physics</b> <b>BSEDPHY501: Electronics</b> <b>Practical (Section I &amp; Section 2)</b>	
<b>VIII</b>	<b>BSEDPHY701: Solid State Devices and Instrumentation</b> <b>BSEDPHY703: Thermodynamics and Statistical Mechanics</b> <b>Practical (Section I &amp; Section 2)</b>	

## ZOOLOGY

SEMESTER	CORE COURSE	ELECTIVES
<b>I</b>	<b>(BSEDZOO 101)-</b> Diversity of Lower Non-Chordates <b>(BSEDZOO 102)-</b> Cell Biology <b>Practical ( 101 &amp; 102)</b>	
<b>II</b>	<b>BSEDZOO 201-</b> Diversity and Higher Non _ Chordates <b>BSEDZOO 202-</b> Genetics and Molecular Biology <b>Practical.( 201 &amp; 202)</b>	
<b>III</b>	<b>BSEDZOO301-</b> Diversity of Lower Chordates <b>BSEDZOO302-</b> Animal Physiology <b>Practical ( 301 &amp; 302)</b>	
<b>IV</b>	<b>BSEDZOO 401-</b> Diversity og Higher Chordates <b>BSEDZOO 402-</b> Ecology & Animal Behaviour <b>Practical ( 401 &amp; 402)</b>	
<b>V</b>	<b>BSEDZOO501 -</b> Comparative Anatomy of Vertebrates <b>BSEDZOO503 A</b> Practical <b>BSEDZOO 502-</b> Human Physiology and Biochemistry <b>BSEDZOO503 B</b> Practical	
<b>VI</b>	<b>BSEDZOO 601-</b> Applied Genetics & Evolution <b>BSEDZOO603 A</b> Practical <b>BSEDZOO602 –</b> Fundamentals of Biotechnology <b>BSEDZOO603 B</b> Practical	
<b>VII-</b>	<b>BSEDZOO701-</b> Developmental Biology <b>BSEDZOO703A-</b> Practical <b>BSEDZOO702-</b> Endocrinology <b>BSEDZOO 703 B -</b> Practical	
<b>VIII</b>	<b>BSEDZOO801-</b> Environmental Biology & Toxicology	

	<b>BSEDZOO 803A- Practical</b> <b>BSEDZOO802- Animal Biotechnology Applications</b> <b>BSEDZOO 803B- Practical</b>	
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