

**Ashoka Education foundation's**  
**ASHOKA College of Education**  
**F.Y.B.Sc.B.Ed.**

Course	Subject	Marks	
		External	Internal
		<b>100</b>	
1. 1110	Education for Development in 21 <sup>th</sup> century	80	20
<b>2.</b>	<b>Chemistry</b>	<b>300</b>	
1111	Paper I : Physical and Inorganic Chemistry	80	20
1112	Paper II : Organic Chemistry I and Organic Chemistry II	80	20
1113	Chemistry Practical Course	80	20
<b>3.</b>	<b>Mathematics</b>	<b>300</b>	
1121	Paper I : Algebra & Geometry	80	20
1122	Paper II : Calculus & Differential Equations	80	20
1123	Mathematics Practical Course	80	20
<b>4.</b>	<b>Physics</b>	<b>300</b>	
1131	Paper I : Mechanics And Heat & Thermodynamics	80	20
1132	Paper II : Physics principles & Applications and Electricity &	80	20
1133	Physics Practical Course	80	20
<b>5.</b>	<b>Botany</b>	<b>300</b>	
1141	Paper I : Plant Life and Utilization I and Plant Life and Utilization	80	20
1142	Paper II : Industrial Botany	80	20
1143	Botany Practical Course	80	20
<b>6.</b>	<b>Zoology</b>	<b>300</b>	
1151	Paper I : Animal diversity I and Animal Diversity II	80	20
1152	Paper II : Animal Ecology and Cell Biology	80	20
1153	Zoology Practical Course	80	20
<b>7. 1201</b>	<b>Education Practicum : Core training Programme</b>	<b>100</b>	
	a. Micro lesson (Five skills, two lessons per skill)	20	
	b. Integrated lesson (Four lessons)	20	
	c. Simulation lessons (Four Lessons)	30	
	d. Innovative lesson (Four Lessons)	30	

**S.Y.B.Sc.B.Ed.**

<b>Course</b>	<b>Subject</b>	<b>Marks</b>	
		<b>External</b>	<b>Internal</b>
		<b>100</b>	
<b>1.</b> 2101	Psychology Of Development & Learning	80	20
<b>2.</b>	<b>Chemistry</b>	<b>300</b>	
2111	Physical & Analytical Chemistry	80	<b>20</b>
2112	Organic & Inorganic Chemistry	80	<b>20</b>
2113	Chemistry Practical	80	<b>20</b>
<b>3.</b>	<b>Mathematics</b>	<b>300</b>	
2121	Multivariable Calculus & Linear Algebra	80	<b>20</b>
2122	Laplace transform & Fourier series, Numerical Methods & its	80	<b>20</b>
2123	Mathematics Practical	80	<b>20</b>
<b>4.</b>	<b>Physics</b>	<b>300</b>	
2131	Mathematical Methods in Physics And Oscillations, Waves &	80	<b>20</b>
2132	Electronics & Optics	80	<b>20</b>
2133	Physics Practical	80	<b>20</b>
<b>5.</b>	<b>Botany</b>	<b>300</b>	
2141	Taxonomy of Angiosperm & Plant Ecology Plant Anatomy	80	<b>20</b>
2142	Plant Physiology & Plant Biotechnology	80	<b>20</b>
2143	Botany Practical	80	<b>20</b>
<b>6.</b>	<b>Zoology</b>	<b>300</b>	
2151	Animal systematic & Diversity III & Animal systematic &	80	<b>20</b>
2152	Applied Zoology I & Applied Zoology II	80	<b>20</b>
2153	Zoology Practical	80	<b>20</b>
<b>7.</b> 2201	<b>Education Practicum : Core training Programme</b>	<b>100</b>	
a.	Team Teaching lessons (4 lessons)	20	
b.	CAM lessons (1 lessons) & ITM lesson (1 lessons)	40	
c.	Value Based lessons (2 lessons)	10	
d.	Environmental lessons (2 lessons)	10	
e.	Self Study lesson (2 lesson)	20	

**T.Y.B.Sc. B.Ed.**

Course	Subject	Marks	
		External	Internal
		<b>400</b>	
1. 3101	Compulsory English	80	20
2. 3102	Quality and Management of School Education Issues and Concerns	80	20
3. 3103	Content cum Methodology Science Education	80	20
4. 3104	Content cum Methodology Mathematics Education	80	20
<b>5.</b>	<b>Chemistry</b>	<b>600</b>	
3111	Physical Chemistry & Physical Chemistry	80	20
3112	Inorganic Chemistry & Inorganic Chemistry	80	20
3113	Analytical Chemistry & Analytical Chemistry	80	20
3114	Industrial Chemistry & Industrial Chemistry	80	20
3115	Physical Chemistry Practical	80	20
3116	Inorganic Chemistry Practical	80	20
<b>6.</b>	<b>Mathematics</b>	<b>600</b>	
3121	Metric Spaces & Complex Analysis	80	20
3122	Real Analysis I & Real Analysis II	80	20
3123	Group Theory & Ring Theory	80	20
3124	Ordinary Differential Equations & Partial Differential Equations	80	20
3125	Practical Course	80	20
3126	Practical Course	80	20
<b>7.</b>	<b>Physics</b>	<b>600</b>	
3131	Mathematical Methods in Physics & Classical Electrodynamics	80	20
3132	Solid state physics & Quantum Mechanics	80	20
3133	Classical Mechanics & Thermodynamics and Statistical Physics	80	20
3134	Atomic and Molecular Physics & Nuclear Physics	80	20
3135	Practical Course	80	20
3136	Practical Course : PROJECT	100	
<b>8.</b>	<b>Botany</b>	<b>600</b>	
3141	Cryptogrammic Botany & Plant Physiology and Biochemistry	80	20
3142	Cell and Molecular Biology & Plant Ecology and Biodiversity	80	20
3143	Genetics and Evolution & Plant Pathology	80	20
3144	Spermatophyta and Palaeobotany & Medicinal and Economic	80	20
3145	Botany Practical Course	80	20
3146	Botany Practical Course	80	20
<b>9.</b>	<b>Zoology</b>	<b>600</b>	
3151	Animal Systematic and Biodiversity V & Biological Techniques	80	20
3152	Mammalian Histology and Mammalian Physiology &	80	20
3153	Biological Chemistry & Genetics and Molecular Biology	80	20
3154	Environmental Biology and Toxicology & Organic Evolution	80	20
3155	Zoology Practical Course	80	20
3156	Zoology Practical Course	80	20
<b>10.</b>	<b>Pedagogical Practicum</b>	<b>100</b>	
3201	Practice Teaching (16 Lessons)	100	

**Final Year B.Sc. B.Ed.**

Course	Subject	Marks	
		External	Internal
		<b>500</b>	
4101	Introduction to Guidance and counseling in school	80	20
4102	Introduction to Educational Research	80	20
4103	Advanced Pedagogy and teaching	80	20
4104	Advanced evaluation Procedure in learning	80	20
4105	Instructional design and integration of ICT in teaching and learning	80	20
	<b>Chemistry</b>	<b>300</b>	
4111	Organic Chemistry (Term I & II )	80	20
4112	Agricultural chemistry and Dairy Chemistry	80	20
4113	Organic Chemistry Practical	80	20
	<b>Mathematics</b>	<b>300</b>	
4121	Operations Research and Optimization Techniques	80	20
4122	Number Theory & Computational Geometry	80	20
4123	Practical course	80	20
	<b>Physics</b>	<b>300</b>	
4131	Computational Physics & Electronics	80	20
4132	Astronomy and Astrophysics & Lasers	80	20
4133	Practical course	80	20
	<b>Botany</b>	<b>300</b>	
4141	Biology Horticulture and Floriculture and Plant	80	20
4142	Computational Botany & Plant Breeding And Seed	80	20
4143	Practical course	80	20
	<b>Zoology</b>	<b>300</b>	
4151	Parasitology & General Embryology	80	20
4152	Cell Biology & Public health and Hygiene	80	20
4153	Practical course	80	20
	<b>Pedagogical Practicum</b>	<b>200</b>	
4201	ICT intel programme co-curricular, health & social service	100	
4202	Entrepreneurship development	40	
4303	Internship	60	