

BHARATHIAR UNIVERSITY: COIMBATORE
M.Sc., ZOOLOGY DEGREE COURSE (COLLEGES - CBCS PATTERN)
REVISED SCHEME OF EXAMINATION

(For the students admitted during the academic year 2011 – 2012 batch and onwards)

Semester	Subject and Papers		Ins. Hrs/ week	University Examinations				Credits
				Dur. Hrs.	CIA	EXT	Total	
I	Paper I	Animal Physiology & Endocrinology	6	3	25	75	100	4
	Paper II	Cell & Molecular Biology	6	3	25	75	100	4
	Paper III	Animal Biodiversity	6	3	25	75	100	4
	Paper IV	Genetics	6	3	25	75	100	4
	Practical I	(Comprises of Papers I,II, & III)	2	-	-	-	-	-
	Practical II	(Comprises of Papers IV,V, & VI)	2	-	-	-	-	-
	Practical III	(Comprises of Papers VII & VIII)	2	-	-	-	-	-
II	PaperV	Biochemistry & Bioinformatics	6	3	25	75	100	4
	PaperVI	Biophysics & Biostatistics	6	3	25	75	100	4
	Paper VII	Ecology	6	3	25	75	100	4
	Paper VIII	Developmental Biology & Immunology	6	3	25	75	100	4
	Practical I	(Comprises of Papers I,II, & III)	2	4	40	60	100	4
	Practical II	(Comprises of Papers IV,V, & VI)	2	4	40	60	100	4
	Practical III	(Comprises of Papers VII & VIII)	2	4	40	60	100	4
III	Paper IX	Microbiology	6	3	25	75	100	4
	Paper X	Animal Behavior	6	3	25	75	100	4
		Elective I – Paper I	5	3	25	75	100	4
		Elective II – Paper I	5	3	25	75	100	4
	Practical IV	(Comprises of Papers IX & X)	2	-	-	-	-	-
	Practical V	(Comprises of Papers XI & XII)	2	-	-	-	-	-
		Elective I Practical	2	-	-	-	-	-
IV	Paper XI	Biotechnology & Genetic Engineering	6	3	25	75	100	4
	Paper XII	Bioinstrumentation & Biological Techniques	6	3	25	75	100	4
		Elective I – Paper II	5	3	25	75	100	4
		Elective II – Paper II	5	3	25	75	100	4
	Practical IV	(Comprises of Papers IX & X)	2	4	20	55	75	3
	Practical V	(Comprises of Papers XI & XII)	2	4	20	55	75	3
		Elective I Practical	2	4	40	60	100	4
	Elective II Practical	2	4	40	60	100	4	
		Total					2250	90

List of Elective papers(opted by the colleges)		
Elective – I	A	Environmental Biology Paper I – III Sem. Environmental Biology Paper II – IV Sem.
	B	Toxicology Paper I – III Sem. Toxicology Paper II – IV Sem.
Elective – II	A	Entomology Paper I – III Sem. Entomology Paper II – IV Sem.

Note :

The revised syllabus for the paper Elective-I Practical – Environmental Biology of M.Sc. Zoology Degree Programme for the candidates admitted from the academic year 2011-12 are furnished below.

ELECTIVE I PRACTICAL– ENVIRONMENTAL BIOLOGY

I. Analysis of water – Determination of:-

Pond/Pool water, Canal/River water, Sewage water

1. pH
2. Total dissolved solids
3. Turbidity / light penetration
4. CO₂ and O₂
5. Hardness (Temporary and permanent)
6. Sulphates and sulphites
7. BOD and COD (Demonstration only)
8. Carbonates and Bicarbonates.

II. Analysis of soil – Determination of:-

Clayey soil, Sandy soil, Garden soil / Red soil

1. Soil Moisture
2. Chlorides
3. Sulphates
4. Nitrates
5. Total Phosphates
6. Total organic matter
7. Humous
8. Chlorophylls and Phaeopigments

III. Biological analysis (Spotters)

1. Qualitative analysis of organisms (Pollution indicator) such as diatoms / algae, flagellates, ciliates, planarians, Annelids, Rotifers, Insects and their larvae.
2. Biological analysis of sewage water and industrial effluent

Field study

1. Detailed study of Pond / Pool ecosystems
 - a. Physico-chemical parameter
 - b. Qualitative and Quantitative analysis of plankton
2. Study of an industrial effluent

Field trips

1. Visit to – Drinking water treatment plant; Industrial effluent treatment plant; Pollution control lab.

Submission at the time of Practical Examination

1. Report on the Field study and Field trips
2. A minimum of 5 whole mounts of Planktons
3. Bonafide Record