

DEPARTMENT OF ZOOLOGY OF BERHAMPORE GIRLS COLLEGE

Module wise Syllabus distribution of 4<sup>th</sup> SEM B.Sc. Zoology GE Course  
(January to June, 2020)

Details about Teachers

Sl No	Name of the Teacher	Designation	Contact No	E mail id
1	Bhaskar Mahanayak (BM)	Assistant Professor and Head of the Dept.	6295260820	bmahanayak@gmail.com
2	Rabiul Hoque (RH)	Assistant Professor	9609268155	rhrabiulhaque486@gmail.com
3	Sarmistha Chattopadhyay (SC)	Guest Lecturer	9735602335	
4	Tania Mondal (TM)	Guest Lecturer	8900548572	mondaltania20@gmail.com
5	Sanchari Chatterjee (SCC)	Guest Lecturer	9609549056	sanchar.sylvan@gmail.com
6	Debashree Konar Chowdhury (DKC)	Guest Lecturer	7031569916	debashreekonar@gmail.com
7	Somrita Rudra (SR)	Guest Lecturer	8016549943	somritarudra8@gmail.com
8	Deepsikha Mukherjee (DM)	Guest Lecturer	6294263865	deepsikhamukherjee103@gmail.com
9	Soumima Chatteraj (SMC)	Guest Lecturer	7044108774	soumimachatteraj007@gmail.com

Details about Non-teaching staff

Sl No	Name of the Staff	Designation	Contact No	Email Id
1	Mithu Hazra	Lab Attendant	9609252150	
2	Rajesh Nabik	Lab Attendant (Casual)	7872114179	

**Module wise Syllabus distribution of B.Sc. 4<sup>th</sup> SEM ZOOLOGY GE (January to June, 2020)**

Course Code: ZOOL-H-GE-T-04		Course Title: Comparative Anatomy, Developmental Biology of Vertebrates and Ecology		
<b>Theory (Total 60 Lectures)</b>				
Unit	Name of teacher	Topic	Sub-Topics	No of Classes
1	BM	<b>Integumentary System</b>	Structure, function and derivatives of integument in mammals.	4
2	BM	<b>Skeletal System</b>	Jaw suspensions	4
3	DKC	<b>Digestive System</b>	Teeth	4
4	DKC	<b>Circulatory System</b>	Comparative account of heart and aortic arches.	4
5	SCC	<b>Urinogenital System</b>	Succession of kidney, Types of mammalian uteri.	4
6	SCC	<b>Nervous System</b>	Cranial nerves in mammals.	4
7	DM	<b>Early Embryonic Development</b>	Spermatogenesis, Oogenesis; Types of eggs, Egg membranes; Fertilization (External and Internal): Planes and patterns of cleavage; Embryonic induction and organizers.	6
8	BM	<b>Late Embryonic Development</b>	Fate of Germ Layers; Extra-embryonic membranes in birds.	4
9	BM	<b>Post Embryonic Development</b>	Regeneration: Modes of regeneration, epimorphosis, morphallaxis and compensatory regeneration (with one example each).	3
10	DM	<b>Introduction to Ecology</b>	Autecology and synecology, Levels of organization.	3
11	SCC	<b>Population and Community</b>	Geometric, exponential and logistic growth, equation, Gause's Principle with laboratory and field examples.  Community characteristics : species diversity, abundance, dominance, richness. Vertical stratification. Ecological succession with one example.	7
12	DKC	<b>Ecosystem</b>	Foodchain: Detritus and grazing food chains, Linear and Y-shaped foodchains, Foodweb, Energy flow through the ecosystem, Ecological	7

			pyramids.	
13	DM	<b>Applied Ecology</b>	Wildlife Conservation (in-situ and ex-situ conservation). Management strategies for tiger conservation; Wildlife protection act(1972)	6
<b>Practical (Total 30 Lectures)</b>				
1	SR		Study of placoid, cycloid and ctenoid scales through permanent slides/photographs	4
2	SC		Study of disarticulated skeleton of Toad/Pigeon/Guineapig.	4
3	SR		Demonstration of Carapace and plastron of turtle OR Identification of mammalian skulls: One herbivorous (Guineapig) and one carnivorous (Dog) animal	4
4	SC		Dissection of Tilapia/carp: Circulatory system/urinogenital system; brain/pituitary.	4
5	SR		Study of whole mounts of developmental stages of chick through permanent slides: 24, 48, 72, and 96 hours of incubation.	4
6	SC		Study of an aquatic ecosystem: Phytoplankton and zooplankton, determination of pH, and Dissolved Oxygen content (Winkler's method) and free CO <sub>2</sub> .	6
7	SR		Report on a one-day visit to Sanctuary/Zoo/Sericulture station/Fishery/apiculture station/pond ecosystem/agroecosystem.	4