#### DEPARTMENT OF ZOOLOGY OF BERHAMPORE GIRLS COLLEGE

## Module wise Syllabus distribution of $2^{nd}$ SEM 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)	<b>Guest Lecturer</b>	9735602335	
4	Tania Mondal (TM)	<b>Guest Lecturer</b>	8900548572	mondaltania20@gmail.com
5	Sanchari Chatterjee (SCC)	<b>Guest Lecturer</b>	9609549056	sanchar.sylvan@gmail.com
6	Debashree Konar Chowdhury (DKC)	<b>Guest Lecturer</b>	7031569916	debashreekonar@gmail.com
7	Somrita Rudra (SR)	<b>Guest Lecturer</b>	8016549943	somritarudra8@gmail.com
8	Deepsikha Mukherjee (DM)	<b>Guest Lecturer</b>	6294263865	deepsikhamukherjee103@gmail.com
9	Soumima Chattoraj (SMC)	<b>Guest Lecturer</b>	7044108774	soumimachattoraj007@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 2<sup>nd</sup> SEM B.Sc. Zoology GE (January to June, 2020)

# To be completed before 2<sup>nd</sup> Internal Exam

C	ourse Code: Zo	OOL-H-GE-T-02	Course Title: Comparative Anatomy, Developments of Vertebrates and Ecology	al Biology
		Theo	ry (Total 60 Lectures)	
Unit	Name of teacher	Topics	Sub-Topics	No of Classes
1	SC	Integumentary System	Structure, function and derivatives of integument in mammals.	4
2	SC	Skeletal System	Jaw suspensions	4
3	BM	Digestive System	Teeth	4
4	BM	<b>Circulatory System</b>	Comparative account of heart and aortic arches.	4
5	SCC	Urinogenital System	Succession of kidney, Types of mammalian uteri.	4
6	SCC	Nervous System	Cranial nerves in mammals.	4
7	TM	Early Embryonic Development	Spermatogenesis, Oogenesis; Types of eggs, Egg membranes; Fertilization (External and Internal): Planes and patterns of cleavage; Embryonic induction and organizers.	6
8	TM	Late Embryonic Development	Fate of Germ Layers; Extra-embryonic membranes in birds.	4
9	TM	Post Embryonic Development	Regeneration: Modes of regeneration, epimorphosis, morphallaxis and compensatory regeneration (with one example each).	3
10	SCC	Introduction to Ecology	Autecology and synecology, Levelsoforganization.	3
11	SCC	Population and Community	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	SC	Ecosystem	Foodchain: Detritus and grazing food chains, Linear and Y-shaped foodchains, Foodweb, Energy flow through the	7

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