#### DEPARTMENT OF ZOOLOGY OF BERHAMPORE GIRLS COLLEGE

# Module wise Syllabus distribution of $2^{nd}$ SEM B.Sc. Zoology CCG (Program) Courses (January to June, 2020)

#### **Details about Teachers**

Sl	Name of the	Designation	Contact No	E mail id
No 1	Teacher Bhaskar	Assistant	6295260820	bmahanayak@gmail.com
1	Mahanayak (BM)	Professor and	02/3200020	binananayak@ginan.com
		Head of the		
		Dept.		
2	Rabiul Hoque	Assistant	9609268155	rhrabiulhaque486@gmail.com
	(RH)	Professor		
3	Sarmistha	Guest Lecturer	9735602335	
	Chattopadhyay			
	(SC)			
4	Tania Mondal	Guest Lecturer	8900548572	mondaltania20@gmail.com
	(TM)			
5	Sanchari	Guest Lecturer	9609549056	sanchar.sylvan@gmail.com
	Chatterjee (SCC)			
6	Debashree Konar	Guest Lecturer	7031569916	debashreekonar@gmail.com
	Chowdhury			
	(DKC)			
7	Somrita Rudra	<b>Guest Lecturer</b>	8016549943	somritarudra8@gmail.com
	(SR)			
8	Deepsikha	<b>Guest Lecturer</b>	6294263865	deepsikhamukherjee103@gmail.com
	Mukherjee (DM)			
9	Soumima	<b>Guest Lecturer</b>	7044108774	soumimachattoraj007@gmail.com
	Chattoraj (SMC)			

#### **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 ZOOLOGY CCG (Program) Course

### (January to June 2020)

	Course Code: ZOOL-CCG-T-02		Course Title: Comparative Anatomy, Developmental Biology of Vertebrates and Ecology		
		Theory (	Total 60 Lectures)		
Unit	Name of teacher	Topics	Sub-Topics	No of Classes	
1	DM	Integumentary System	Structure, function and derivatives of integument in mammals.	4	
2	DM	Skeletal System	Jaw suspensions	4	
3	SR	<b>Digestive System</b>	Teeth	4	
4	SR	Circulatory System	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	DM	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	DM	Late Embryonic Development	Fate of Germ Layers; Extra-embryonic membranes in birds.	4	
9	SR	Post Embryonic Development	Regeneration:Modes of regeneration, epimorphosis, morphallaxis and compensatory regeneration (with one example each).	3	
10	SR	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	SCC	Ecosystem	Foodchain: Detritus and grazing food chains, Linear and Y-shaped	7	

			foodchains, Foodweb, Energy flow through the ecosystem, Ecological pyramids.	
13	SR	Applied Ecology	Wildlife Conservation (in-situ and exsitu conservation).  Management strategies for tiger conservation; Wildlife protection act(1972)	6
		Practical	(Total 30 Lectures)	
1	TM		Study of placoid, cycloid and ctenoid scales through permanent slides/photographs	4
2	SCC		Study of disarticulated skeleton of Toad/Pigeon/Guineapig.	4
3	SCC		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	SCC		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 an aquatic ecosystem: Phytoplankton and zooplankton, determination of pH, and Dissolved Oxygen content (Winkler's method) and free CO <sub>2</sub> .	6
7	SCC		Report on a one-day visit to Sanctuary/Zoo/Sericulture station/Fishery/apiculture station/pond ecosystem/agroecosystem.	4