

M.Sc. Sem.-1 Examination

404

Zoology

January-2024

Time : 2-30 Hours]

[Max. Marks : 70

Q-I	1	Explain Phenetics in detail.	(07)
	2	Describe molecular phylogeny.	(07)
	OR		OR
	1	Explain the classification systems Robert Whittaker and Carl Woese.	(07)
	2	Give a brief account of the recent developments in taxonomy.	(07)
Q-II	1	Explain filter feeding in invertebrates with suitable examples.	(07)
	2	Describe the respiratory organs and pigments seen in invertebrates.	(07)
	OR		OR
	1	Explain osmoregulation seen in invertebrates.	(07)
	2	Describe the neuro-endocrine system of arthropods.	(07)
Q-III	1	Briefly explain Darlington based distribution of geographical regions.	(07)
	2	Write a note: Continuous and discontinuous distribution of animals.	(07)
	OR		OR
	1	What is extinct species and endemic species? Explain in detail with examples.	(07)
	2	Write a note: Continuous and discontinuous distribution of animals.	(07)
Q-IV	1	Explain the development of metanephric kidney.	(07)
	2	Compare the anatomy of nervous system in reptiles and birds.	(07)
	OR		OR
	1	Give a comparative account of aortic arches in vertebrates.	(07)
	2	Give a comparative account of respiratory organs in amphibians and aves.	(07)
Q-V	Answer any SEVEN out of TWELVE.		
	1	What is the classification system of Ernst Haeckel?	(14)
	2	What is Parataxonomy?	02
	3	What are monophyletic and paraphyletic groups? Give an example each.	02
	4	What are the functions of Crustacean Hyperglycemic Hormone (CHH)?	02
	5	Differentiate oviparity and viviparity giving suitable examples.	02
	6	What is the principle of amoeboid movement?	02
	7	Give an example of bipolar distribution of animals.	02
	8	What is Philopatry and Homing Instinct?	02
	9	What is distribution of animals based on space? Give example.	02
	10	Write the importance of air sacs in birds.	02
	11	Write a note on Wolffian and Mullerian ducts and its functions.	02
	12	Write in brief: Peripheral nervous system.	02

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