PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023

(First Semester)

Branch - ZOOLOGY

ECOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks $(10 \times 1 = 10)$

	ADD questions carry EQUAL marks (10 x 1 - 10)							
Module No.	Question No.	Question	K Level	СО				
1	1	Trophic levels are formed by a) plants only b) Animals only c) carnivores only d) Organism linked as food chain	K1	CO1				
	2	The pyramids which are always upright? a) Pyramids of energy b) Pyramids of number c) Both d) None	K2	CO1				
2	3	Succession showing changes in communities at a place is called a) Biotic succession b) Geographical succession c) Climatic succession d) Physiographic succession	K1	CO1				
	4	Symbiosis is expressed bya) Soil b) Fungi c) Lichen d) Virus	K2	CO1				
3	5	The population of an area tends to increase by a) Mortality b) Natality c) Emigration d) All the above	K1	CO1				
	6	The population growth curve of a living being in a new habitat has a) Sigmoid shaped form b) S-shaped form c) U-shaped form d) Bell shaped form	K2	CO1				
4	7	The marshes are wetland characterized by a) Grass like vegetation b) Shrubs c) Trees d) Particularly decomposed organic matter	K1	CO1				
	8	The circulation of elements in an ecosystem is called a) Chemical cycling b) Geological cycling c) Geochemical cycling d) Bio-geochemical cycling	K2	CO1				
5	9	The species loses in tropical countries is mainly due to a) Pollution b) Deforestation c) Soil erosion d) Urbanization	K1	CO1				
	10	biodiversity in India. a) Western Ghats b) Eastern Ghats c) Sirumalai Hills d) Karanthamalai Hills	K2	CO1				

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 7 = 35)$

Module	Question	Question	K	T 60
No.	No.	Question	Level	CO
= - 1	11.a.	Summarize the trophic structure in aquatic ecosystem.		
1	(OR)			COI
	11.b.	Explain about the ecological pyramids.		
	12.a.	Analyze the relationship in predation.	K4	CO3
2		(OR)		
	12.b.	Categorize the ecological disturbances in an ecosystem community.		
	13.a.	Evaluate the human population control.		
3		(OR)		CO4
	13.b.	Discuss the impact of natality and mortality in an ecosystem.		
	14.a.	Classify the wetlands in India.		СОЗ
4		(OR)	K4	
	14.b.	Inspect the application of GIS in oceanography.		
	15.a.	Discuss about rainwater harvesting system.		CO5
5		(OR)	K6	
	15.b.	Evaluate the policies in wild life conservation.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

 $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	со
1	16	Distinguish between the hydrosphere and lithosphere.	K4	CO3
2	17	Evaluate the species richness and keystone species in an ecosystem community.	K5	CO4
3	18	Elaborate the population regulation.	K6	CO5
4	19	Assess the renewable and non-renewable resources in India.	K5	CO4
5	20	Organize the principles and methods of biodiversity conservation.	К3	CO2