

Reg. No

Name

23P4008

M. Sc. DEGREE END SEMESTER EXAMINATION : MARCH 2023

SEMESTER 4 : ZOOLOGY

COURSE : 21P4ZOOT13 : ENVIRONMENTAL SCIENCE- CONCEPTS AND APPROACHES

(For Regular - 2021 Admission)

Duration : Three Hours

Max. Weights: 30

PART A

Answer any 8 questions

Weight: 1

1. Comment on 'natural enemy release hypothesis' for invasion success. (U, CO 7)
 2. Comment on 'Non-use Value' of biodiversity. (U, CO 5)
 3. What is the importance of watershed conservation? (U, CO 1)
 4. Differentiate National Parks and wildlife Sanctuaries. (An, CO 5)
 5. What is the importance of movement of air mass in determining climate? (U, CO 2)
 6. What is meant by the term *El-nino*? (U, CO 2)
 7. Write a note on the criticism on the 'Theory of Island Biogeography'. (An, CO 6)
 8. Define land suitability. (U, CO 4)
 9. Comment on richness index. (U, CO 5)
 10. Describe the colloidal properties of soil particles. (U, CO 1)
- (1 x 8 = 8)**

PART B

Answer any 6 questions

Weights: 2

11. Classify CRZs in India. Add a note on the activities permitted and prohibited in each zone. (U, CO 6)
 12. Comment on 'novel weapon hypothesis' for invasion success. (U, CO 7)
 13. Comment on soil erosion. (U, CO 4)
 14. Discuss, how air mass and its movement over the Earth influences global climate and precipitation patterns? Add a note on *El nino and La nina*. (E, CO 2)
 15. Discuss the effects of oceans and continents in precipitation patterns. (U, CO 3)
 16. Comment on the methodologies for the valuation of biodiversity. (An, CO 5)
 17. Discuss different types of faults in rocks. (An, CO 1)
 18. Discuss the idea of plate tectonics. (E, CO 1)
- (2 x 6 = 12)**

PART C

Answer any 2 questions

Weights: 5

19. Discuss the formation of faults in rock masses. Add a note on the ecological significance of faults. (E, CO 1)
 20. Discuss the factors that change the temperature and precipitation patterns over a geographic region. (E, CO 2)
 21. Give an account of the wildlife distribution in India. (U, CO 5)
 22. Write an account on terrestrial Biomes. (A)
- (5 x 2 = 10)**

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Examine the concepts of physical environment – Lithosphere, atmosphere and hydrosphere	U	3, 10, 17, 18, 19	11
CO 2	Explain the fundamental and advanced concepts of weather and climate	U	5, 6, 14, 20	9
CO 3	Outline the climate of India	U	15	2
CO 4	Examine the concepts of Landscape ecology	U	8, 13	3
CO 5	Explain the concepts of Biodiversity and Conservation	U	2, 4, 9, 16, 21	10
CO 6	Evaluate the major environmental and conservation laws and rules as well as illustrate the biogeography of India.	U	7, 11	3
CO 7	Examine the concepts of biological invasions	U	1, 12	3

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;