

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE  
Fourth Semester M.Sc Degree Examination, March/April 2020  
MZOL4E03(5) – Wild Life Biology II- Wild Life Management  
(2018 Admission onwards)

Time: 3 hours

Max. Weightage : 36

**I. Answer all the following****Write short notes**

1. HSI
2. Herbivory
3. Vegetation profile
4. Remote sensing
5. Radio telemetry
6. Group foraging
7. Depredation
8. Endangered cranes
9. Ramsar convention
10. Moonlit zoo
11. Safari park
12. Chemical immobilisation
13. Peterson index
14. Drive count.

(14 x 1 =14 weightage)

**II. Answer any seven of the following**

15. Prepare a protocol for analysing the gut content of a frugivorous bird
16. List down Indian pheasants and their habitat specificities.
17. Discuss water pollution with waterfowl management
18. Comment on the habitat utilisation of kerala elephants
19. Construct a table showing infectious diseases of wild fauna
20. Explain the sanitary procedure of a zoo

21. Give a brief account of GIS
22. What are the criteria for captive breeding?
23. Discuss the major laws of forest conservation
24. Make a protocol for the estimation of Macaques.

(7 x 2 = 14 weightage)

**III. Answer any two questions.**

25. Make an account of the consequences of forest fire and its management practices
26. Explain the role of photography in wild life management
27. Describe different methods of estimating wild fauna
28. Locate Ramsar sites with a sketch of Indian map and point out their aquatic significance

(2 x 4 = 8 weightage)

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(Pages : 2)

Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE  
Fourth Semester M.Sc Degree Examination, March/April 2020  
MZOL4E02(5) – Wild Life Biology II- Wild Life Conservation  
(2018 Admission onwards)

Time: 3 hours

Max. Weightage : 36

**I. Answer the following:-Weightage-1**

1. Gene banking
2. Eco development projects
3. Gir lion project
4. Mention the significance of wild life corridor
5. Philosophic reasoning of conservation.
6. Role of BNHS in Wildlife conservation
7. Concept of minimum viable area
8. Indian forest Act
9. Demographic Stochasticity
10. Describe various Afforestation programmes
11. Explain Compression Hypothesis
12. Shifting cultivation
13. Ethical values of Wildlife
14. National River Conservation programme(NRCP)

(14x1=14 weightage)

**II. Answer any seven of the following:-Weightage-2**

15. Briefly explain Joint Forest Management
16. Principles and problems of introduction of Exotic animals in India
17. Describe the importance and characteristic features of Bharatpur Bird Sanctuary
18. Wildlife (Protection) Act-1972 and latest Amendments
19. Describe the role of Ecotourism in Sustainable development
20. Red Data Book on animals
21. Explain with examples the impacts of Hydel Projects in Kerala
22. Explain Man and Wildlife conflict and its impacts.
23. Describe the conservation strategies of Sacred groves
24. Briefly describe Ex situ conservation of Wildlife

(7x2=14 weightage)

**III. Answer any two of the following:-Weightage-4.**

25. Write an essay on illegal Wildlife Trade and Pet Trade in India
26. Role of Government and Voluntary organizations in Wildlife conservation
27. Essay on Wildlife Laws and Regulation
28. Write an essay on Indian Forest types

**(2x4=8 weightage)**

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE  
Fourth Semester M.Sc Degree Examination, March/April 2020  
MZOL4B09 – Immunology & Cytogenetics  
(2018 Admission onwards)

Time: 3 hours

Max. Weightage : 36

**I. Answer all the following questions.**

1. Write note on APCs in innate immunity.
2. What is active immunization?
3. Write note on Haptens.
4. Explain cross reactivity with example.
5. Write note on the application of Flow cytometry
6. What is agglutinin? Give examples.
7. What is C3 convertase?
8. Differentiate between  $T_H1$  and  $T_H2$ .
9. Write note on cellular distribution of class I & class II MHC.
10. Write notes on ITAMs.
11. Differentiate cell necrosis & apoptosis.
12. Write notes on second messengers.
13. Give the general structure of G-protein coupled receptors.
14. Write notes on any two cell adhesion molecules.

**(14x 1 =14weightage)****II. Answer Any Seven questions of the following questions**

15. Write notes on the structure and functions of Class I & class II MHC
16. Explain the mechanisms of generation of antibody diversity.
17. Write notes on classical pathway of complement system.
18. Explain the mechanism of inflammatory response.
19. Explain the processing of a foreign antigen and its presentation.
20. Provide the detailed structure of HIV.
21. Write notes on Nitric oxide pathway of cell signaling.

22. Write notes on  $\text{Ca}^{2+}$ /Calmodulin system in signal transduction.
23. Explain different methods of cell-cell interaction.
24. Explain the composition of extra cellular matrix.

(7x 2 = 14 weightag

**III. Answer Any two of the following**

25. Give in detail about structure of Antibody and its classification.
26. Explain the process of B-cell activation, proliferation & differentiation.
27. Explain the process of apoptosis and its regulation.
28. Explain different types of immunotechniques.

(2x 4 = 8 weightag