

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester M.Sc Zoology Degree Examination, April 2023

MZL4C09 – Immunology & Cytogenetics

(2019 Admission onwards)

Time: 3 hours

Max. Weightage : 30

I. Answer any eight of the following: -(Weightage –1)

1. Define Immunogenicity and antigenicity.
2. What are the two primary roles of the thymus?
3. Where are the CDR regions located on an antibody molecule and what are their functions?
4. Cytokine and Antagonists
5. Role of Rec A protein in genetic recombination.
6. G protein linked receptors.
7. Transplantation antigens.
8. Toll like receptors
9. DNA vaccines and Synthetic peptide vaccines.
10. Holliday model.
11. Antibody Engineering.
12. Intracellular receptors.

(8 x 1 = 8)

II. Answer any four of the following: -(Weightage – 3)

13. Draw a schematic diagram of a typical IgG molecule, label the parts and describe its structure.
14. General organisation and inheritance of MHC molecules.
15. Activation and differentiation of B and T cells.
16. Briefly explain the following Immunotechniques
a) RIA b) Flow cytometry c) Western Blot
17. Different types of Hypersensitivity reactions.
18. Cell adhesion and roles of different adhesion molecules.
19. General principles of cell communication.

(4 x 3 = 12)

III. Answer any two of the following: - (Weightage – 5)

20. Write an essay on Immunodeficiency diseases.
21. Immunological basis of graft rejection and specific immunosuppressive therapy.
22. Write an essay on the process and regulation of Apoptosis.
23. Activation and regulation of different Compliment pathways.

(2 x 5 = 10)

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(Pages : 2)

Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester M.Sc Zoology Degree Examination, April 2023

MZL4E02– Wild Life Biology II – Wildlife Conservation

(2019 Admission onwards)

Time: 3 hours

Max. Weightage : 30

I. Answer any *eight of the following* questions.(Weightage-1)

1. What is flagship species? Explain with a suitable example.
2. Write notes on Red Data Book.
3. What is ecotourism?
4. Comment on Exotic animals.
5. Differentiate In situ and Ex situ conservation.
6. Explain compression hypothesis.
7. What is a National park? Give suitable examples.
8. Write a brief note on Bird sanctuaries of India.
9. Briefly explain Pet Trade in India.
10. Give an account on Indian forest act.
11. Write a note on afforestation programmes in India
12. Explain the significance of forest corridors.

(8x1=8 Weightage)

II. Answer any *four of the following* questions. (Weightage-3)

13. Comment on National River Conservation Programme.
14. Give an account on Man and Biosphere reserves in India.
15. Briefly explain the concept of sustainable development.
16. Describe Wildlife Protection Act 1972.
17. Write notes on roles of tribal groups in conservation and management of protected areas.
18. Explain sea turtle project.
19. Discuss the impacts of hydroelectric projects on wildlife.

(4x3=12Weightage)

III. Answer any two of the following questions. (Weightage-5)

20. Write an essay on the importance of tourism in wildlife conservation.
21. Describe Project Elephant with special reference to Kerala.
22. Explain the causes and consequences of man- animal conflict on wildlife
23. Briefly explain the role of Govt & voluntary organization in wildlife conservation

(2 x 5 =10 Weightage)

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(Pages : 2)

Reg. No:.....

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fourth Semester M.Sc Zoology Degree Examination, April 2023

MZL4E03– Wild Life Biology III – Wildlife Management

(2019 Admission onwards)

Time: 3 hours

Max. Weightage : 30

I. Answer any *eight of the following* questions.(Weightage-1)

1. What is Zoonosis? Explain with an example.
2. What are Ramsar sites? Give examples.
3. Explain optimal foraging theory.
4. Comment on EIA.
5. Explain the impacts of forest fire on wildlife.
6. What is habitat suitability index?
7. Write a short note on Remote sensing.
8. Briefly explain captive breeding.
9. Give an account on Endangered Indian Cranes.
10. Write notes on wetland management.
11. Mention the scope of Radio telemetry.
12. Differentiate herbivory and carnivory.

(8x1=8)

II. Answer any *four of the following* questions. (Weightage-3)

13. Comment on Wildlife Photography.
14. Write on the habit and habitats of the pheasant populations of India.
15. Explain any three wildlife management practices in Kerala.
16. Describe the capturing techniques in wildlife.
17. Write notes on nutritional deficiency diseases of wild animals.
18. Explain components of wildlife habitat.
19. Comment on prey-predator interactions in natural habitat.

(4x3=12)

III. Answer *any two of the following* questions. (Weightage-5)

20. Write an essay on the management of waterfowl.

21. Describe the different methods for estimating wildlife populations.

22. Explain the impacts of pollution on forest and wildlife.

23. Briefly explain the policies and laws in wildlife management.

(2x5=10)