



K24P 3163

Reg. No. :

Name :

III Semester M.Sc. Degree (C.B.C.S.S. – OBE – Regular)
Examination, October 2024
(2023 Admission)
ZOOLOGY
Open Elective Course
MSZGY03O03 : Medical and Forensic Entomology

Time : 3 Hours

Max. Marks : 60

PART – A

Answer **any five** of the following. **Each** question carries **3** marks. **(5×3=15)**

1. What are the symptoms and prophylaxis for Japanese Encephalitis ?
2. Define myiasis and name two insects that cause it.
3. Explain the role of habitat modification in vector management.
4. Briefly describe the life cycle of ticks and their role in disease transmission.
5. What is the function of forensic entomology in determining the place of death ?
6. List two mosquito-borne diseases and their symptoms.

PART – B

Answer **any three** of the following. **Each** question carries **6** marks. **(3×6=18)**

7. Evaluate the role of sterile insect techniques in the control of insect vector populations.
8. Discuss the use of forensic entomology in crime scene investigations, particularly in determining the time of death.
9. Describe the importance of monitoring vector populations in disease control.
10. How can source reduction be effectively implemented in the management of flyborne diseases ?
11. Explain the succession of Dipteran and Coleopteran species on a decomposing body and its significance in forensic investigations.

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PART – C

Answer **any three** of the following. **Each** question carries **9** marks. **(3×9=27)**

12. Apply your understanding of vector surveillance techniques to design a comprehensive surveillance plan for monitoring mosquito populations in a tropical region.
13. Analyze the role of forensic entomology in determining the time and mode of death in a homicide investigation, referring to specific case studies.
14. Discuss the epidemiology, symptoms and management strategies for Rocky Mountain spotted fever, with an emphasis on vector control.
15. Compare the environmental and mechanical control methods with biological control methods for managing vector-borne diseases, including their advantages and challenges.
16. Apply your knowledge of forensic entomology to investigate a case where insects are used to determine the location of a crime scene, providing examples.