

M.Sc. Examination, 2019
Semester-IV
Zoology
Paper – MZET-401 (vi)
(Parasitology-I)

Time: 4 Hours

Full Marks: 80

Questions are of value as indicated in the margin.

Answer ***any eight*** questions.

1. Define parasitism. Describe in detail the pathogenicity caused by the parasite during parasitism. 2+8=10
 2. What is microecology and macroecology in the context of parasitism? Give an account of the various macroecological factors involved in the survival of the parasite. (1+1)+8=10
 3. Describe the structure of different types of stomatodaeum present in Nematoda with suitable diagram and examples. Add a note on the mechanism of feeding of plant parasites. 6+4=10
 4. Give an account on the carbohydrate metabolism in apicomplexa. 10
 5. Describe in detail the epidemiology, prevalence, pathogenicity and control of any one of the parasitic diseases; (a) elephantiasis **or** (b) trypanosomiasis. 2+2+4+2=10
 6. What is a Giant cell? Describe the host-parasite interaction in the root-knot nematode. 2+8=10
 7. Describe the morphology, life cycle and pathogenicity of *Tylenchussempipenetrans*. Define citrus decline. (2+4+2)+2=10
 8. What is systemic acquired resistance? Discuss the role of salicylic acid, nitric oxide and ROS as inducer of plant defense response. 2+(2½+2½+3)=10
 9. Describe the mechanism of uptake, processing and presenting the pathogens in the context of MHC class II to CD4+T cells. Explain in brief how does DNA elicits both humoral and cell mediated immune responses. 5+5=10
 10. Write notes on ***two*** of the following: 5×2=10
 - (a) Malignant malaria.
 - (b) Life cycle, biology and control of *Anguinatritici*.
 - (c) Tropicalpulmonary eosinophilia.
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