

M.Sc. (Ag.) Examination, 2016

Semester-III

Subject: Plant Protection

Course No.: NEM-501

Plant Nematology

Time: Three Hours

Full Marks: 50

Questions are of value as indicated in the margin

Answer any five questions

1. Describe the male and female reproductive systems of nematodes with suitable diagram. 10
2. What do you mean by sexual dimorphism? State the taxonomically diagnostic parts of the plant parasitic nematodes. 10
3. Write a brief essay on history, importance and scope of Plant Nematology with special reference to India. 10
4. What do you mean by nematode "brain"? Describe the nervous system of plant parasitic nematode with suitable diagram. 10
5. Define biological control of nematodes. Explain the different mechanisms involved in biological control of nematode. Give some examples of different bioagents used for nematode control. 2+6+2=10
6. Differentiate the following (**any four**) : 2.5×4=10
 - a) Ceolomate and pseudocoelomate
 - b) Criconemoid and Aphelenchoid
 - c) Amphids and Phasmids
 - d) Glandular and Canalicular excretory system
 - e) *Anguina* and *Ditylenchus*
 - f) Coelomyarian and Platymyarian
7. Classify the plant parasitic nematodes on the basis of their parasitisms with suitable examples. 10
8. Write short notes (**any four**) : 2.5×4=10
 - a) Hypodermis
 - b) Senescence
 - c) Quiescence
 - d) Cuticle
 - e) Mesenteron
 - f) Parthenogenesis
 - g) Factors affecting nematode population
 - h) Embryogenesis of plant pathogenic nematode