

M.Sc. (Ag.) Examination, 2016

Semester-I

Subject: Plant Protection

Course No.: PPC-502

Mycology and Fungal Physiology

Time: Three Hours

Full Marks: 50

Questions are of value as indicated in the margin

Answer any five questions

1. What do you mean by the term 'Bio-diversity' of fungi? 'Fungi are more beneficial to human being as compared to harmful activities.'—Justify the statement with suitable examples. 2+8=10
 2. Write in short about the importance of fungal classification. Give the modern classification method of fungi up to family level with suitable examples. 3+7=10
 3. What do you mean by ascocarps? Write various types of ascocarps developed by fungi. Discuss the life cycle of a fungus which releases ergotxin. 2+8=10
 4. Write the characteristics of basidiomycetes fungi. Describe the life cycle pattern of *Puccinia graminis tritici*. 3+7=10
 5. Describe the life cycle pattern of any straminopile fungi with suitable diagram. 10
 6. Enumerate a comprehensive account on fungal association with other members of the plant kingdom with special reference to algae and roots of higher plants. 10
 7. Answer in brief (**any five**) : 5×2=10
 - a) Mycotoxicoses
 - b) Aquatic fungi
 - c) Hyphal elongation
 - d) Predators of fungi
 - e) Ethnomycology
 - f) Haustoria
 - g) Aerobiology
 - h) Fungi imperfectii
 8. Distinguish between (**any five**) : 5×2=10
 - a) Pycnidia and Acervulus
 - b) Root infecting fungi and soil fungi
 - c) Pathogenic and non-pathogenic fungi
 - d) Monocyclic fungi and polycyclic fungi
 - e) Autocious rust and heterocious rust
 - f) Motile spore and non-motile spore
 - g) Primary metabolites and secondary metabolites
 - h) Monokaryotic and dikaryotic fungi
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