



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 2nd Semester Examination, 2023

BOTACOR03T-BOTANY (CC3)
MYCOLOGY AND PHYTOPATHOLOGY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

1. Answer **all** the questions in brief: 1×6 = 6
- (a) What do you mean by holocarpic fungi? 1
- (b) What is epidemic disease? 1
- (c) Write the plant disease caused by *Albugo* species. 1
- (d) What is dolipore septum? 1
- (e) What do you mean by coprophilous fungi? 1
- (f) Name two dikaryotic spore forms of *Puccinia graminis*. 1
2. Answer any **eight** questions from the following: 3×8 = 24
- (a) Write the affinities of fungi with plants and animals. 1½+1½
- (b) How is zygospore formed in *Rhizopus* sp.? 3
- (c) Compare the symptoms of the loose smut and covered smut diseases. 3
- (d) Draw and label any three spore forming bodies in deuteromycetes. 1+1+1
- (e) What are the salient features of Oomycota? 3
- (f) What is fairy ring? Give example of a poisonous mushroom. 2+1
- (g) Write down the ecological importance of lichen. Name one drug yielding lichen. 2+1
- (h) What are secondary metabolites? Explain the role of fungi in baking industries and biotechnology. 1+1+1
- (i) Differentiate between pandemic and sporadic diseases. 3
- (j) Distinguish between primary inoculum and secondary inoculum. 3
3. Answer any **two** questions from the following: 5×2 = 10
- (a) Write the role of herbicides and insecticides. Name two fungi used to produce mycoprotein. 2+2+1
- (b) Name the causal organism of Black stem rust of wheat disease. Mention its symptoms and control measures. 1+2+2
- (c) What is clamp connection? Illustrate the stages in the formation of clamp connection. 1+4
- (d) Write short notes on: 2+1+2
- (i) Biological control (ii) Disease triangle (iii) Quarantine

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