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AF-107

April-2018

B.Sc., Sem.-VI

SE-311 : Biotechnology/Environmental Science (Biology of Fungi)

[Max. Marks: 70 Time: 3 Hours Answer any **two** of the following questions: 14 1. Describe general characteristics of fungi in detail. (1)Narrate hyphal modifications in the somatic structure of fungi. (2)Explain: Features and molecular approaches applied for fungal classification. (3) Discuss classification of fungi and explain characteristics of Zygomycetes and (4) Deuteromycetes classes. 2. Answer any two of the following questions 14 Describe morphological characters and taxonomic status of Aspergillus niger. (1)Describe sexual and asexual reproduction in *Basidiomycetes*. Describe steps of sexual cycle and mating system in fungi. (3) Explain morphology and taxonomic characters of Sachharomyces. (4) 3. Answer any **two** of the following questions: 14 Describe fungi pathogenic to man and animals. (1) Write a note on human diseases caused by fungi. (2)Explain the diagnosis, control and treatment of fungal diseases. (3) Define mycosis and explain various types of mycosis in humans. (4) Answer any two of the following questions: 14 Role of yeast in preparation of food. 1) (2)Describe the importance of secondary metabolites from fungi. (3)Write note on preservation of fungal cultures. (4) Write note on role of fungi in Biodeterioration. AF-107 P.T.O. 1

5. Do as directed:

- (1) Name source and effect of Ergot alkaloid.
- (2) Draw the basic structure of Penicillin.
- (3) Enlist the stages of cheese production.
- (4) Define Terms: Conidiospore and Oospores.
- (5) Name two specific chemical constituents of fungal wall.
- (6) Name organic acid and fungal species used to produce it.
- (7) Define heterokaryosis and give its importance.



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