## M.Sc. BOTANY FOURTH SEMESTER MYCOLOGY & PLANT PATHOLOGY MSB-402 F

(Use separate answer scripts for Objective & Descriptive)

Duration: 3 hrs. Full Marks: 70

[ PART-A: Objective ]

Time: 20 min. Marks: 20

Choose the correct answer from the following:

1x20 = 20

- 1. Pier Antonio Micheli was the author of which of the following book?
  - a. Nova Plantarum Genera

b. Fungi Delight of Curiosity

c. Mushrooms and Toadstools

d. Biology of Fungi

- 2. A.F. Blackeslee the discoverer of heterothallism in fungi was a:
  - a. Genetist

b. Ecologist

c. Pathologist

d. Physiologist

- 3. Which of the following fungi is known as 'Death cap'?
  - a. Amanita phalloids

**b.** Lentinus edodes

c. Psalliota campestris

d. Pycnoporus sanguinee

- 4. The cellwall of fungus is comprising of:
  - a. Chitin

b. Cellulose

c. Lignin

d. IPectin

5. Which of the following scientists is said to be the Father of Indian Mycology and Plant Pathology?

a. E.J. Butler

b. C. J. Alexopoulos

c. E.A. Bessey

d. Dodge

6. Which of the following Fungi produces an alkaloid named 'Ergotamine'?

a. Claviceps purpurea

b. Taphrina deformans

c. Aspergillus tereus

d. Cercospora personata

7. 'Aspergiliosis' a human disease is caused by which one of the following fungi?

Aspergillus niger

**b.** Erysiphe graminis

c. Peronospora pisi

d. Glomerella cingulata

8. Which one of the following is a bioluminescent fungi?

a. Armillariella mellea

b. Ganoderma lucidum

c. Clavaria cristata

d. Fomes fomentarius

Haplobiontic, Diplobiontic and Haplodiplobiontic life cycle pattern of yeast was discovered by:

a. A. Guilliermond

b. C. Holtermann

c. C.L. Kramer

d. P.A. Dixon

- 10. Which of the following fungi is known as 'Bird's nest fungi'?
  - a. Cyathus sriatus

**b.** Pleuratus osreatus

c. Xylaria polymorphe

d. Polyprus squamosa

11. The bakery and brewery industry is utilizing which of the following fungal species? b. Saccharomyces cerevisiae a. Aspergillus tereus d. Cerocospora musae c. Helminthosporium oryzae 12. 'Victorin'-a mycotoxin is produced during the infection of oats by which of the following b. Taleromyces vermiculatus a. Helminthosporium victoriae d. Nectria gloeocladioides c. Dightoniella torulosa 13. Clamp connection is produced in case of: b. Phycomycota a. Myxomycota d. Ascomycota c. Basidiomycota 14. Parasexuality was first discovered in which of the following fungi? b. Tilletia carries a. Aspergillus nidulans c. Trichoderma viridae d. Trichothecium roseum 15. Colletotrichum falcatum belons to which order? a. Melanconiales b. Moniliales c. Sphaeropsidales d. Agonomycetales 16. Polymorphism is found in which of the following fungi? b. Usilago tritici a. Puccinia graminis tritici c. Uromices fabae d. Plasmopara viticola 17. Cleistothecium is a fructification which is found in: b. Mucor species a. Penicillium species c. Peziza species d. Auricularia species 18. The zoospore production in Phytophthora infestans is favoured by which of the following conditions? a. Low temperature. b. Very high temperature. c. Too high temperature followed by low temperature. d. Extreme cold temperature. 19. Appressorium is developed in which of the following? b. Pythium de Baryanum a. Erysiphe polygonii d. Protomyces macrosporus c. Phytophthora colocasiae 20. Crozier is formed in case of:

## PART-B: Descriptive

Time: 2 hrs. 40 min. Marks: 50

## [Answer question no.1 & any four (4) from the rest]

1.	Write a note on the origin of Ascomycetes.	10
2.	Write notes on:  a. Apothecium  b. Spermogonium	5+5=10
3.	What is meant by Penicillus? Describe the life history of <i>Penicillium</i> . Add diagram.	4+6=10
4.	Draw and describe the phiallides of <i>Aspergillus</i> and also write a note on the economic importance of this fungus.	6+4=10
5.	<ul><li>Write notes on:</li><li>a. Different conidiophore and conidia of the genus <i>Erysiphe</i>.</li><li>b. What is meant by heteroecious fungi? Exemplify it with a brief description.</li></ul>	5+5=10
6.	What is meant by parasexual phenomenon-discuss.	2+8=10
7.	Write note on the classification of fungi.	10
8.	Write an account on conidial ontogeny in Deuteromycota.	2+8=10

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a. Asconiy cetous fungi

c. Myxomycetous fungi

b. Basidiomycetous fungi

d. Phycomycetous fungi