

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 729

B

Unique Paper Code : 32161201

Name of the Paper : Mycology and Phytopathology

Name of the Course : **Botany**

Semester : II

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Question no. 1 is compulsory.
3. Attempt any **four** questions from 2 to 7.
4. Please attempt all parts of question together.
5. Draw suitable diagrams wherever necessary.

1. (a) Fill in the blanks (**any five**) : (1×5=5)

(i) Bread mold fungus _____ .

(ii) An example of aquatic fungus _____ .

P.T.O.

- (iii) Hypha with dolipore septum is a characteristic feature of class _____ .
- (iv) Fungal cell wall is predominantly made up of _____ .
- (v) Microorganism responsible for causing Irish famine is _____ .
- (vi) Fungus causing smut _____ .

(b) Define (any five) :

(1×5=5)

- (i) Hymenium
- (ii) Cleistothecium
- (iii) Teleutospore
- (iv) Appresorium
- (v) Budding
- (vi) Chlorosis
- (vii) Annulus

(c) Match the following :

(1×5=5)

- | | |
|------------------------|-----------------------|
| (i) Holocarpic | (a) Lichen |
| (ii) Cup fungi | (b) <i>Stemonites</i> |
| (iii) Isidia | (c) Chytrids |
| (iv) Pheneroplasmodium | (d) <i>Peziza</i> |
| (v) Heteroecious | (e) <i>Puccinia</i> |

2. Draw a well labeled diagram of **any three** of the following : (5×3=15)

- (i) V.S. apothecium of *Peziza*
- (ii) Conidiophore of *Penicillium*
- (iii) V.S. *Berberis* leaf passing through Aecial cup
- (iv) L.S. of *Agaricus* gill

3. Write short notes on **any three** of the following :

(5×3=15)

- (i) Mycorrhiza
- (ii) Fungi affecting human health
- (iii) Lichen as pollution indicator
- (iv) Application of fungi in Food Industry

4. Explain any five of the following : (3×5=15)
- (i) Different forms of thalli in fungi
 - (ii) Clamp connection in Basidiomycetes
 - (iii) Slime molds
 - (iv) Black stem rust of wheat
 - (v) Parasexuality in fungi
 - (vi) Role of fungi in Biological control
5. Describe any two with the help of well labeled diagram : (7.5×2=15)
- (i) Life cycle of *Albugo*
 - (ii) Life cycle of *Peziza*
 - (iii) Life cycle of *Rhizopus*
6. Write the general characteristics of fungi? Describe their mode of nutrition. (10+5=15)
7. What are the causal organisms, symptoms, and control measures of plant diseases namely Citrus Canker and Early Blight of potato? (7.5+7.5=15)