



Date: 16-04-2024

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

**SECTION A - K1 (CO1)**

**Answer ALL the Questions**

**(10 x 1 = 10)**

**1. Fill in the blanks**

- a) Fungal cell wall is made up of \_\_\_\_\_.
- b) White rust disease is caused by \_\_\_\_\_.
- c) The fruiting body of *Peziza* is called as \_\_\_\_\_.
- d) \_\_\_\_\_ is called as the wonder drug.
- e) Phycobiont is the \_\_\_\_\_ partner of lichen.

**2. State whether the following are True or False**

- a) Sclerotium is a resting structure.
- b) *Rhizopus* produces tuft of sporangium.
- c) *Colletotrichum* belongs to basidiomycetes.
- d) VAM fungi is ectomycorrhizal.
- e) Soredium is a pustule like structure.

**SECTION A - K2 (CO1)**

**Answer ALL the Questions**

**(10 x 1 = 10)**

**3. Choose the correct answer**

- a) The fungal hyphae without septum and multinucleate condition
  - i) Aseptate hyphae
  - ii) Multinucleate hyphae
  - iii) Acytic hyphae
  - iv) Coenocytic hyphae
- b) One of the following species has unicellular thallus
  - i) *Saccharomyces*
  - ii) *Aspergillus*
  - iii) *Rhizopus*
  - iv) *Albugo*
- c) *Puccinia* causes
  - i) White rust of crucifers
  - ii) Red rot of sugarcane
  - iii) Tikka disease
  - iv) brown rust of wheat
- d) Which of the following is a structure associated with Mycorrhizal fungi?
  - i) Conidium
  - ii) Cephalodium
  - iii) Arbuscles
  - iv) Soredium
- e) One of the following is not a Lichen type
  - i) Crustose
  - ii) Foliose
  - iii) Fruticose
  - iv) Terriose

**4. Answer the following**

- a) Write a note on Haustorium.
- b) Recall the term phialides.
- c) Comment on Crozier formation.
- d) Show the features of baker's yeast.
- e) Define fruticose lichen with example.

**SECTION B - K3 (CO2)**

**Answer any TWO of the following each in about 500 words.**

**(2 x 10 = 20)**

- 5. Construct the various sexual apparatus and life cycle patterns in fungi.
- 6. Describe the structure and reproduction in *Rhizopus*.
- 7. Illustrate the structure of YAC vector and enlist its application.
- 8. Write notes on various types of mycorrhiza with examples.

### SECTION C – K4 (CO3)

**Answer any TWO of the following each in about 500 words. (2 x 10 = 20)**

9.	Distinguish key characters of Ascomycetes with Basidiomycetes.
10.	Compare and contrast various characters of <i>Aspergillus</i> and <i>Penicillium</i> with illustrations.
11.	Write about the economic importance of fungi.
12.	List the importance of lichens.

### SECTION D – K5 (CO4)

**Answer any ONE of the following in about 1000 words. (1 x 20 = 20)**

13.	Compile the salient features of various fungal classes according to Alexopolus 1962.
14.	Critically comment on industrial production of Penicillin with neatly labelled flowchart.

### SECTION E – K6 (CO5)

**Answer any ONE of the following in about 1000 words. (1 x 20 = 20)**

15.	Discuss about the various spore stages and lifecycle of <i>Puccinia</i> .
16.	Construct an essay on the occurrence, structure and reproduction in Lichens.

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