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**2 SEM TDC BOTH (CBCS) C 3**

**2 0 2 2**

(June/July )

**BOTANY**

( Core )

Paper : C-3

**( Mycology and Phytopathology )**

Full Marks : 53

Pass Marks : 21

Time : 3 hours

*The figures in the margin indicate full marks  
for the questions*

1. (a) Choose and write the correct answer of the following : 1×3=3
- (i) *Peziza / Puccinia / Agaricus* is a polymorphic fungi.
  - (ii) In case of diseased plants, small spots or streaks of dead tissue appear. The phenomenon is referred as moulting / necrosis / chlorosis / distortion.
  - (iii) Citrus canker is a viral / fungal / bacterial / algal disease.

( 2 )

(b) Fill in the blanks of the following :  $1 \times 2 = 2$

(i) The cell wall of fungi is mostly made up of \_\_\_\_\_.

(ii) Early blight of potato is caused by \_\_\_\_\_.

2. Write short notes on any *three* of the following :  $4 \times 3 = 12$

(a) Heterothallism in *Rhizopus*

(b) Role of fungi in agriculture

(c) Conidia of *Alternaria*

(d) Fungal toxins

(e) Sexuality in fungi

3. What are heteroecious fungi? With suitable diagram, describe the life cycle of *Puccinia*.  $1+4+7=12$

Or

What are allied fungi? Mention the characters of slime moulds. Describe the life-cycle of typical cellular slime mould.

$1+4+7=12$

( 3 )

4. Name the algal and fungal components of lichen. Describe the different growth forms of lichen. Draw and describe the internal structure of homomerous and heteromerous lichen.

1+5+6=12

Or

Write about the role of fungi in food industry. How are fungi used as biofertilizers? Give examples.

6+4+2=12

5. Mention the symptoms, names of the causal organism, disease cycle and control measures of the diseases (any two) :

(1+1+2+2)×2=12

- (a) Black stem rust of wheat
- (b) Yellow vein clearing of bhindi
- (c) Angular leaf spot of cotton
- (d) White rust of crucifers

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