

SEAT No. _____

No. of Printed Pages: 2

SARDAR PATEL UNIVERSITY

[25]

S. Y. B.Sc. 3rd SEMESTER EXAMINATION(NC)

1st January, 2021, Friday

10.00 AM to 12.00 PM

Phytodiversity and Plant Biotechnology (US03EBOT01)

Total Marks-70

Q.1 Multiple Choice Questions (one mark each)

[10]

1. False branching is found in _____
(a) Chara (b) Scytonema (c) Ulothrix (d) Gloeotrichia
2. The _____ is always terminal in position in Gloeotrichia.
(a) akinete (b) heterocyst (c) vegetative cell (d) none of these
3. Globule is the sex organ of _____.
(a) Chara (b) Scytonema (c) Ulothrix (d) Gloeotrichia
4. Puccinia causes _____ of wheat.
(a) damping (b) rust (c) blight (d) none of the above
5. Mycorrhiza is a symbiotic association of _____ with roots of higher plants.
(a) algae (b) bacteria (c) fungi (d) None of above
6. Albugo causes white rust in the plant _____.
(a) Mustard (b) wheat (c) rice (d) none of these
7. The causal organism of late blight of potato is _____.
(a) Puccinia (b) Phytophthora (c) Albugo (d) Alternaria
8. Chlorosis means _____ of leaves.
(a) yellowing (b) spots (c) drying (d) none of these
9. The sterilization of thermolabile compounds is done by _____.
(a) autoclave (b) bacterial filter (c) mercuric chloride (d) none of these
10. Bt cotton is an example of _____ resistant plants.
(a) stress (b) insect (c) salt (d) water

Q.2 Answer as true or false

[08]

1. False branching occurs in Scytonema.
2. Agar agar is not obtained from algae.
3. Aspergillus infects citrus fruits.
4. Puccinia infects mustard plant.
5. Phytophthora infects potato plant.
6. Tikka disease occurs in groundnut plant.
7. Autoclave is not used for sterilization.
8. Laminar air flow chamber is used in tissue culture.

[1]

[P.T.O.]

Q3. Answer the questions in short (Attempt any ten)

[20]

1. What is heterocyst?
2. Discuss thallus structure of Ulothrix.
3. Describe the filament of Gloeotrichia.
4. What is endotrophic mycorrhiza?
5. Write about teleutospore.
6. Explain the role of fungi in medicine.
7. What do you mean by blight?
8. Write the symptoms of Tikka disease.
9. Explain the symptom of late blight of potato.
10. What is totipotency?
11. What is use of laminar air flow?
12. What are genetically modified organisms?

Q4. Long Answer Questions (Attempt any 4)

[32]

1. Write a detailed note on uses of algae.
2. Explain about cell structure and sex organs of Chara.
3. Give a brief account on life cycle of Albugo.
4. Explain about the economic importance of Fungi.
5. Write in brief all about pathogen, symptoms and management of Rust of Wheat.
6. Write symptoms and management of White rust of Crucifers.
7. Explain the role of Biotechnology in forestry and medicine.
8. Write a detailed note on process of Tissue Culture.

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[2]