

BOT - 553

Applied Mycology and Plant Pathology

M.Sc Botany (MSCBOT) (12/13/16/17)

Second Year Examination - 2019

Time: 3 Hours

Max. Marks: 40

Note:-This paper is of Eighty (80) marks containing three(03) Section A, B and C. Learners are required to attempt the questions contained in these Sections according to the detailed instructions given therein.

Section-A

(Long Answer Type Question)

Note:- Section 'A' contains four (04) long-answer-type questions of nineteen (19) marks each. Learners are required to answer any two (02) questions only.

(2×19=38)

1. Describe mushroom cultivation in detail.
2. Describe industrial production of Penicillin
3. Describe phytoplasmal diseases of plants.
4. Describe plant diseases caused by viruses

Section-B

(Short Answer Type Question)

Note:- Section 'B' contains eight (08) short answer-type questions of four (04) marks each. Learners are required to answer any four (04) questions only.

(4×8=32)

1. Describe nutritive value of edible mushrooms.
2. Describe in short about fungi as biopesticides.
3. Describe fungal enzymes in short.
4. Describe in short about the role of fungi in biodegradation
5. Describe symptoms of plant diseases caused by powdery mildews.
6. Give names and descriptions of measures of plant disease control.
7. Describe any one bacterial disease of any fruit.
8. Describe any one nematode disease of any cash crop.

Section-C

(Objective Type Questions)

Note:- Section 'C' contains Ten (10) objective type questions of one (01) mark each .All the question of this section are compulsory. (10×1=10)

Choose the correct option for each of the following questions:

1. Virus free plant can be produced by
 - (a) Anther culture
 - (b) Ovule culture
 - (c) Stem tip culture
 - (d) Leaf explants culture
2. Fungal knots in cortical cells of roots are formed in
 - (a) Ectomycorrhiza
 - (b) Endomycorrhiza
 - (c) Mycoplasma
 - (d) Phytoplasma
3. *Phytophthora infestans* is an example of.
 - (a) Facultative saprophyte
 - (b) Obligate parasite
 - (c) Facultative parasite
 - (d) None of the above

4. Nitrite is converted to nitrate by
- (a) *Nitrosomonas*
 - (b) *Nitrobacter*
 - (c) *Rhizopus*
 - (d) *Alternaria*
5. The disease caused by *Cercospora personata* is.
- (a) Leaf wilt
 - (b) Damping off
 - (c) Tikka
 - (d) Early blight

Indicate whether the following statements are true or false;

6. *Mucor* is an obligate saprophyte.
7. Ethanol is produced by *Saccharomyces cerevisiae*
8. Mycorrhiza show saprophytic habit.
9. *Saprolegnia* belongs to the Class Zygomycetes
10. *Agaricus campestris* is an edible mushroom.
