

Roll No.

BOT–553

Applied Mycology and Plant Pathology

M. Sc. BOTANY (MSCBOT–12/13/16)

Second Year, Examination, 2017

Time : 3 Hours

Max. Marks : 80

Note : This paper is of **eighty (80)** marks containing **three (03)** Sections A, B and C. Attempt the questions contained in these Sections according to the detailed instructions given therein.

Section–A

(Long Answer Type Questions)

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

1. Describe broad classification of fungi as given by Alexopoulos and Mims.
2. Discuss fungi in relation to pollution.
3. Write in detail on control of plant diseases.
4. Describe plant diseases of vegetables.

Section–B

(Short Answer Type Questions)

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

1. Write in short about edible mushrooms.
2. Describe in brief about fungi as biopesticides.

3. Write in brief about fungal enzymes.
4. Discuss in brief about the role of fungi in biodegradation.
5. Describe symptomatology of viral diseases in brief.
6. Write in brief about host-pathogen interaction.
7. Describe any *one* plant disease of any fruit.
8. Describe *one* bacterial 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 questions of this Section are compulsory.

Choose the correct option for each of the following questions :

1. TMV contains :
 - (a) RNA and proteins
 - (b) DNA and proteins
 - (c) Both DNA and RNA
 - (d) DNA
2. Ergot is obtained from :
 - (a) *Aspergillus*
 - (b) *Claviceps*
 - (c) *Sargassum*
 - (d) *Laminaria*
3. Nitrite is converted to nitrate by :
 - (a) *Nitrobacter*
 - (b) *Nitrosomonas*
 - (c) *Mucor*
 - (d) *Bacillus*

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4. Damping-off disease is caused by :

- (a) *Aspergillus*
- (b) *Pythium*
- (c) *Bacillus*
- (d) *Cercospora*

5. Tikka disease is caused by :

- (a) *Colletotrichum*
- (b) *Cercospora*
- (c) *Phytophthora*
- (d) *Xanthomonas*

Indicate whether the following statements are true *or* false :

- 6. *Taphrina* is a facultative saprophyte.
- 7. *Polyporus* belongs to Heterobasidiomycetidae.
- 8. Amylase is produced by *Aspergillus*.
- 9. *Fusarium oxysporum* causes wilt in pulses.
- 10. Benomyl is used to effectively control as a seed treatment.

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