

P.G. 1st Semester Examination-2017

BOTANY

Paper : MBOTCCT-102

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Group-A

1. Answer any five: 1×5=5
- a) What are ectomycorrhizae?
  - b) What do you mean by tetrapolar heterothallism?
  - c) What is a rhizomorph?
  - d) What is the difference between fungal toxin and enzymes?
  - e) Why penicillin can only destroy actively growing bacteria?
  - f) When recombination takes place in parasexual cycle?

[Turn over]

- g) What is Surface Spawning?
- h) Name one sex hormone in fungi with its source.

2. Answer any one: 5×1=5
- a) Discuss the spore production technique of *Pleurotus Sajor-caju*.
  - b) Industrial production of citric acid.
3. Answer any one: 10×1=10
- a) Give the ultrastructure of fungal cell with neat labelled sketch. Discuss parasexual cycle. (4+2)+4=10
  - b) What is heterothallism? Discuss bipolar and tetrapolar heterothallism in fungi. 2+4+4=10

Group-B

4. Answer any five: 1×5=5
- a) What is disease triangle?
  - b) Name a fungi which is used in biological control of fungal disease.
  - c) What is tabtoxin?
  - d) What are storage fungi?

- e) What is epidemiology?
- f) What is field fungi?
- g) Name one copper containing fungicide.
- h) State one bacterial pathogen of Paddy.

5. Answer any one: 5×1=5

- a) Discuss the sources and effects of Host specific toxins.
- b) Write short notes on plant disease forecasting.

6. Answer any one: 10×1=10

- a) What are the symptoms of aftatoxiosis? Mention the deteriorative effects on seed due to fungal invasion. 3+7=10
- b) How non-infections diseases can be prevented? Discuss the role and effect of environmental factors on plant disease development. 2+8=10

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