2021/TDC(CBCS)/EVEN/SEM/ BOTSEC-601T/115

TDC (CBCS) Even Semester Exam., September—2021

BOTANY

(6th Semester)

Course No.: BOTSEC-601T

Full Marks: 50
Pass Marks: 20

Time: 3 hours

The figures in the margin indicate full marks for the questions

Candidates have to answer either from Option—A (Nursery and Gardening) or Option—B (Mushroom Culture Technology)

OPTION-A

Course No.: BOTSEC-601T (A)

(Nursery and Gardening)

SECTION-A

Answer any fifteen questions:

1×15=15

- 1. Define nursery.
- 2. What is the moto of a wholesale nursery?

22J/111 (Turn Over)

(2)

- 3. What is transplanting?
- 4. What are seedlings?
- 5. What do you mean by sunken beds?
- 6. Give an example of a non-endospermic seed.
- 7. What is plumule?
- 8. What do you mean by seed viability?
- **9.** Name a hormone responsible for flowering in plants.
- 10. Mention a cause of seed dormancy.
- 11. What is scarification?
- 12. Name a seed certification agency in India.
- 13. Define vegetative propagation.
- 14. Name the hormone which is commonly used to treat cuttings.
- 15. What is the use of mist chamber?
- **16.** What are the different means of propagation of tea plant?

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- 17. What is the full form of IBA?
- 18. What are composts?
- 19. Define floriculture.
- 20. What are orchards?
- 21. What is rock gardening?
- 22. What do you mean by the term 'manuring'?
- 23. Name a common fungicide used in the control of fungal diseases of nursery plants.
- 24. Name a common fungal disease of nursery plants.
- 25. What is landscaping?
- 26. What is the scientific name of onion?
- 27. What do you mean by sowing?
- 28. What is the scientific name of lady's finger?
- 29. Give an example of a root crop.
- **30.** Brinjal belongs to which family of angiosperm?

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SECTION-B

Answer any five questions:

2×5=10

- 31. Write a short note on stratification.
- 32. What do you mean by seed dormancy?
- 33. What is hardening of plants?
- 34. Write the advantages of seed dormancy.
- **35.** Name four plants suitable for home gardening.
- **36.** What are the different harvesting procedures of garden crops?
- 37. Write a short note on air-layering.
- **38.** What are the uses of a glasshouse in gardening?
- **39.** Write the storage procedures of tomatoes for marketing.
- **40.** Name four vegetable plants which are raised from vegetative body parts.

(5)

SECTION-C

Answer any five questions:

5×5=25

- 41. Write the objectives and scope of nursery.
- **42.** Write a note on the infrastructures needed for nursery.
- **43.** Write a note on seed bank with special emphasis on its role in gardening.
- 44. Give an account of the different methods of seed testing.
- **45.** Write a note on greenhouse. How does a greenhouse differ from a glasshouse? 3+2=5
- **46.** Write a note on the different means of vegetative propagation.
 - **47.** Give an account of the gardening operations needed to maintain a good garden.
 - **48.** Give an account of the components of a park with an emphasis on plant types suitable for a nice park.
 - **49.** Describe the processes of raising different types of plants suitable for a garden.
 - 50. Describe the cultivation process of cabbage.

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OPTION-B

Course No.: BOTSEC-601T (B)

(Mushroom Culture Technology)

SECTION-A

Answer any fifteen questions:

1×15=15

- 1. Define mushrooms.
- 2. What is Morchella?
- 3. What do you mean by toadstools?
- 4. What is the scientific name of paddy straw mushroom?
- **5.** What is the scientific name of button mushroom?
 - 6. Name an oyster mushroom.
 - 7. What is inoculation loop?
 - 8. What do you mean by inoculation hook?
 - 9. Define pure culture.
- 10. How does spawn undergo multiplication?

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- 11. What is hypha?
- Name a culture medium for running of mushroom mycelium.
- 13. What is mushroom bed?
- 14. Define mycelium.
- 15. What do you mean by fruiting body?
- 16. Why is maize straw selected as a substrate for mushroom cultivation?
- 17. What is pileus?
- 18. To what class of fungi mushrooms belong?
- 19. How is mushroom drying performed?
- 20. What is canning?
- 21. Name two amino acids found in mushrooms.
- **22.** What is the percentage of protein in mushrooms (dry weight basis)?
- 23. What do you mean by gills?
- 24. Name the spores found in mushroom.

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- 25. Name a mushroom research centre in North-East India.
- 26. Name mushroom research centre at national level of India.
- **27.** Name a toxin present in poisonous mushroom.
- 28. Name a poisonous mushroom.
- **29.** What is the incubation temperature of mushroom mycelium?
- 30. Define mycotoxin.

SECTION—B

Answer any five questions:

2×5=10

- 31. Write a brief history of mushroom culture technology.
- 32. Draw and label a typical mushroom.
- **33.** Name some locally available substrates for mushroom cultivation.
- 34. Write about medium sterilization.

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(Continued)

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- **35.** Write a brief note on paddy straw as a substrate for mushroom cultivation.
- **36.** Point out the factors affecting mushroom bed preparation.
- **37.** Write about short-term storage of mushroom.
- 38. Write a note on vitamins found in mushrooms.
- **39.** Give a brief account of marketing of mushrooms in India.
- 40. Write about export value of mushrooms.

SECTION-C

Answer any five questions:

5×5=25

- **41.** Describe the nutritional value of edible mushrooms.
- **42.** Give a detailed account of medicinal value of edible mushrooms.
- **43.** Give an illustrated account of cultivation of oyster mushroom.

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- **44.** Describe the preparation of mushroom spawn.
- **45.** Describe composting technology in mushroom production.
- **46.** Give an account of preparation of mushroom bed.
- 47. Describe long-term storage of mushrooms.
- **48.** Describe carbohydrates and crude fibre content present in mushrooms.
- **49.** Describe various types of food items prepared from mushrooms.
- **50.** Describe cost-benefit ratio of mushroom cultivation.
