

**2024/TDC (CBCS)/EVEN/SEM/
BOTSEC-601T (A/B)/039**

TDC (CBCS) Even Semester Exam., 2024

BOTANY

(6th Semester)

Course No. : BOTSEC-601T

**(Nursery and Gardening/Mushroom Culture
Technology)**

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 or Option—B**

OPTION—A

Course No. : BOTSEC-601T (A)

(Nursery and Gardening)

UNIT—I

1. Answer any *three* of the following questions :

1×3=3

(a) What is seed bed?

(b) Define plant nursery.

(2)

(c) What is direct seeding?

(d) What is seasonal nursery?

2. Answer any *one* of the following questions : 2

(a) Point out the objective of plant nursery.

(b) Write about scope of plant nursery.

3. Answer any *one* of the following questions : 5

(a) Give a detailed account of building up of infrastructure for nursery.

(b) Describe seasonal activities in plant nursery.

UNIT—II

4. Answer any *three* of the following questions :
1×3=3

(a) What is seed germination?

(b) Define stratification.

(c) What is seed viability?

(d) Define orthodox seeds.

(3)

5. Answer any *one* of the following questions : 2

(a) Write a note on seed storage.

(b) What is genetic erosion?

6. Answer any *one* of the following questions : 5

(a) Give an illustrated account of seed testing and certification.

(b) Describe causes of seed dormancy and factors breaking it. 2+3=5

UNIT—III

7. Answer any *three* of the following questions :
1×3=3

(a) What is glasshouse?

(b) What is grafting?

(c) Define shade house.

(d) Define air layering.

8. Answer any *one* of the following questions : 2

(a) Write a note on mist chamber.

(b) Write about selection of cutting.

(4)

9. Answer any *one* of the following questions : 5

- (a) Give an illustrated account of rooting medium and planting of cuttings.
 $2\frac{1}{2}+2\frac{1}{2}=5$
- (b) Write a note on hardening of plants.

UNIT—IV

10. Answer any *three* of the following questions :
 $1 \times 3 = 3$

- (a) Define gardening.
- (b) What is soil layering?
- (c) Define kitchen garden.
- (d) What is manuring?

11. Answer any *one* of the following questions : 2

- (a) Write a note on landscape gardening.
- (b) Give a short account of home gardening.

12. Answer any *one* of the following questions : 5

- (a) Give a detailed account of gardening operations.
- (b) Give an account of objectives and scope of gardening.

(5)

UNIT—V

13. Answer any *three* of the following questions :
 $1 \times 3 = 3$

- (a) Define seedlings.
- (b) Write the scientific name of brinjal.
- (c) Write the scientific name of onion.
- (d) What is seed sowing?

14. Answer any *one* of the following questions : 2

- (a) Write a note on cultivation of cabbage.
- (b) Write about cultivation of lady's finger.

15. Answer any *one* of the following questions : 5

- (a) Describe storage procedures of vegetables.
- (b) Give an account of raising of seeds and seedlings.

(6)

OPTION—B

Course No. : BOTSEC-601T (B)

(Mushroom Culture Technology)

UNIT—I

1. Answer any *three* of the following questions :

1×3=3

- (a) Define mushrooms.
- (b) What is toadstool?
- (c) What is *Pleurotus*?
- (d) Write the scientific name of button mushroom.

2. Answer any *one* of the following questions : 2

- (a) Write a note on poisonous mushrooms.
- (b) Write about *Volvariella volvacea*.

3. Answer any *one* of the following questions : 5

- (a) Write a note on history of mushroom cultivation. Briefly explain the nutritional value of mushrooms.

2½+2½=5

- (b) Describe medicinal value of edible mushrooms.

(7)

UNIT—II

4. Answer any *three* of the following questions :

1×3=3

- (a) Define spawn.
- (b) What is inoculation hook?
- (c) What is sterilization?
- (d) Name some locally available substrates for mushroom cultivation.

5. Answer any *one* of the following questions : 2

- (a) Write a note on culture rack.
- (b) Write about pure culture.

6. Answer any *one* of the following questions : 5

- (a) Give a detailed account of cultivation technology of edible mushrooms.
- (b) Describe the procedure for spawn preparation.

(8)

UNIT—III

7. Answer any *three* of the following questions :

1×3=3

- (a) Define mushroom bed.
- (b) What is composting?
- (c) What is fruiting body?
- (d) What is the benefit of maize straw?

8. Answer any *one* of the following questions : 2

- (a) Write about paddy straw as a substrate for mushroom cultivation.
- (b) Write a note on banana leaves for mushroom cultivation.

9. Answer any *one* of the following questions : 5

- (a) Describe various factors affecting mushroom bed preparation.
- (b) Give an account of low-cost technology in connection with mushroom cultivation.

(9)

UNIT—IV

10. Answer any *three* of the following questions :

1×3=3

- (a) What is the percentage of protein in mushrooms?
- (b) What is the average shelf life for mushrooms?
- (c) What is drying?
- (d) Name some mineral elements present in mushroom.

11. Answer any *one* of the following questions : 2

- (a) Write a note on crude fibre content of edible mushrooms.
- (b) Write about short-term storage of mushrooms.

12. Answer any *one* of the following questions : 5

- (a) Give an account of long-term storage of mushrooms.
- (b) Write an explanatory note on mushroom proteins.

(10)

UNIT—V

13. Answer any *three* of the following questions :

1×3=3

- (a) Name two types of food prepared from mushrooms.
- (b) Name the biochemical composition of mushrooms.
- (c) Name one amino acid present in mushrooms.
- (d) Why are mushrooms important for diabetic patients?

14. Answer any *one* of the following questions : 2

- (a) Write a note on export value of mushrooms.
- (b) Give a short account of cost-benefit ratio in connection with mushroom cultivation.

(11)

15. Answer any *one* of the following questions : 5

- (a) Give a detailed account of mushroom marketing in India and abroad.
- (b) Describe various Research Centres of Mushrooms at National and Regional levels.
