

KAMARAJ COLLEGE (Autonomous)

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(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

(3 Pages)

Reg. No:.....

Question Code: 26E00907

Course Code : 24USB021/25USB021

UG Degree - End Semester Examinations, April 2026

Second Semester

B.Sc., BOTANY

Mushroom Cultivation

(For those who joined in July 2024 and June 2025 onwards)

Time : 3Hours

Maximum : 75 Marks

PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer :

- CO:1 1. Which part of a mushroom is responsible for spore production?
K: 1 (a) Stipe (b) Cap (Pileus)
(c) Gills (Lamellae) (d) Mycelium
- CO:1 2. Mushrooms that form symbiotic relationships with plant roots are
K: 2 _____
(a) Saprophytic (b) Parasitic
(c) Mycorrhizal (d) Aquatic
- CO:2 3. The cell walls of *Pleurotus* and *Agaricus* are made of _____
K: 1 (a) Cellulose (b) Chitin
(c) Lignin (d) Pectin
- CO:2 4. The dikaryotic stage in the life cycle of *Agaricus* is _____
K: 2 (a) Short-lived and immediately forms spores
(b) Long-lived and forms the main mycelium
(c) Absent in *Agaricus*
(d) Only present in asexual reproduction
- CO:3 5. Which of these is used to sterilize the substrate before
K: 1 inoculation?
(a) Boiling or steaming (b) Sun-drying
(c) Freezing (d) Air-drying

- CO:3 6. The ideal temperature for spawn germination in most mushrooms
K: 2 is _____
(a) 5–10 °C (b) 20–25 °C
(c) 35–40 °C (d) 50–55 °C
- CO:4 7. The Bed method is best suited for _____
K: 1 (a) Small-scale outdoor (b) High-tech indoor cultivation
cultivation
(c) Production of liquid (d) Mushroom marketing
spawn
- CO:4 8. Mushrooms are called “Vegetable Meat” because _____
K: 2 (a) They taste like meat (b) They are rich in protein and
low in fat
(c) They can replace meat (d) All of the above
completely
- CO:5 9. The major insect pest responsible for stored grain loss is _____
K: 1 (a) Aphids (b) Rice weevil (*Sitophilus
oryzae*)
(c) Thrips (d) Whitefly
- CO:5 10. Fungal competitors in stored grains refers to _____
K: 2 (a) Beneficial fungi (b) Fungi that compete with pests
for food
(c) Fungi that spoil stored (d) Nematodes
products

PART - B (5 X 5 = 25 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 250 words.

- CO:1 11. (a) Explain the identification of Edible and Poisonous
K: 3 mushrooms with examples.

(OR)

(b) Describe the nutritive value of mushroom.

- CO:2 12. (a) Describe the structure of *Pleurotus* spp.

K: 4

(OR)

(b) Explain the structure of *Agaricus* spp.

- CO:3 13. (a) Demonstrate the harvesting techniques for mushrooms.

K: 3

(OR)

(b) Analyze the marketing methods of mushrooms.

CO:4 14. (a) Describe the bed method in mushroom cultivation.

K: 3

(OR)

(b) Discuss about the challenges in mushroom marketing.

CO:5 15. (a) Explain the insects involved in mushroom cultivation and how they impact on production?

K: 4

(OR)

(b) Describe in detail about how nematodes affect mushroom cultivation.

PART - C (5 X 8 = 40 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 500 words.

CO:1 16. (a) Explain in detail about the morphology of mushroom.

K: 5

(OR)

(b) Elaborate the types of mushrooms.

CO:2 17. (a) Discuss the life cycle of *Pleurotus* spp.

K: 6

(OR)

(b) Write an elaborate note on life cycle of *Agaricus* spp.

CO:3 18. (a) Demonstrate the methods of the spawn production.

K: 6

(OR)

(b) Discuss the cultivation media for spawn production.

CO:4 19. (a) Write a note on bag methods of mushroom cultivation.

K: 4

(OR)

(b) Analyze the scope of mushroom cultivation in small scale industry.

CO:5 20. (a) Explain about fungal diseases in mushroom production.

K: 5

(OR)

(b) Elaborate on the post harvesting techniques of mushroom.