

63/1 (SEM-4) SEC2/BOTSE4022

2023

BOTANY

Paper : BOTSE4022

( Mushroom Culture and Technology )

Full Marks : 50

Pass Marks : 20

Time : 2 hours

*The figures in the margin indicate full marks  
for the questions*

1. Choose the correct answer from any *five* of the following questions :  $1 \times 5 = 5$

(a) Mushrooms are low in calories but rich in

- (i) fat
- (ii) sodium
- (iii) protein
- (iv) cholesterol

(b) A mushroom typically does not consist of

- (i) stipe
- (ii) pileus
- (iii) annulus
- (iv) stipule

- (c) The common name of *Agaricus bisporus* is
- (i) oyster mushroom
  - (ii) button mushroom
  - (iii) morel mushroom
  - (iv) shiitake mushroom
- (d) Seed or planting material of mushroom is called
- (i) compost
  - (ii) paddy straw
  - (iii) substrate
  - (iv) spawn
- (e) Which of the following is not a long-term preservation method of mushroom?
- (i) Ice-bank cooling
  - (ii) Drying
  - (iii) Pickling
  - (iv) Use of chemicals
- (f) Which one of the following is not related to mushroom cultivation?
- (i) Polythene bag
  - (ii) Earthworm
  - (iii) Cow dung
  - (iv) Paddy straw

- (g) Which of the following is the most poisonous mushroom?
- (i) *Pleurotus*
  - (ii) *Volvariella*
  - (iii) *Amanita*
  - (iv) *Agaricus*
- (h) Which of the following is not true for mushrooms?
- (i) They are fungus
  - (ii) They are saprophytic
  - (iii) They are all edible
  - (iv) They are cultivable
- (i) The head portion of a mushroom is scientifically termed as
- (i) fruiting body
  - (ii) flowering body
  - (iii) growing body
  - (iv) ground body
- (j) Which of the following components is present approximately 90% in mushrooms?
- (i) Protein
  - (ii) Vitamin
  - (iii) Oxygen
  - (iv) Water

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2. Answer any five of the following short questions :  $2 \times 5 = 10$

- (a) Name at least two chemicals used in canning for mushroom preservation.
- (b) Name two poisonous mushrooms.
- (c) Write the botanical classification of *Agaricus bisporus*.
- (d) Name two important vitamins found in mushrooms.
- (e) Mention the use of mushroom powder.
- (f) Define compost in mushroom cultivation.
- (g) Name one mushroom research centre of India and its location.

3. Answer any five of the following questions :  $5 \times 5 = 25$

- (a) Write a note on *Agaricus bisporus*.
- (b) Write a note on poisonous mushroom.
- (c) Briefly discuss the drying methods for preservation of mushroom.
- (d) Give a brief note on food preparation from mushrooms.
- (e) Write a note on nutritional and medicinal value of *Volvariella volvacea*.

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- (f) Give the significance of mushroom cultivation.
- (g) Write a note on wild edible mushrooms.
- (h) Explain the morphological and nutritional value of *Pleurotus citrinopileatus*.
- (i) Write a note on mushroom research activities carried by different research centres in India.

4. (a) Write an essay on storage and preservation of mushrooms. 10

Or

- (b) Write an essay on the different steps involved in mushroom cultivation technique.

Or

- (c) Write an essay on cost benefit ratio of mushroom marketing in India and abroad.

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