

2021

BOTANY — HONOURS

Paper : SEC-B-4

(Mushroom Culture Technology)

Full Marks : 80

The figures in the margin indicate full marks.

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

1. Answer **any ten** questions from the following: 2×10
 - (a) Give an example of edible mushroom from ascomycetes.
 - (b) What is spawn?
 - (c) What is compost?
 - (d) Name two artificial culture media for mushroom cultivation.
 - (e) Name any two mushroom research centres of India.
 - (f) Name two surface sterilizing agents.
 - (g) Write the identifying characters of poisonous mushrooms.
 - (h) What do you mean by food values of mushroom?
 - (i) Why calcium hydroxide is used in paddy straw mushroom cultivation process?
 - (j) What is the ideal pH of mushroom substratum?
 - (k) What is Golden Oyster mushroom?
 - (l) What are amatoxins? State its source.
 - (m) State the role of brine in mushroom storage.
 - (n) Name two food items prepared from mushrooms.
 - (o) What do you mean by browning of *Agaricus* fruit body?
2. Write short notes on the following (**any four**): 5×4
 - (a) Types of sterilization methods used in mushroom cultivation.
 - (b) Mushroom canning technique.
 - (c) Low cost technology for mushroom cultivation.
 - (d) Cage method of Paddy Straw mushroom cultivation.
 - (e) Health benefits of mushrooms.
 - (f) Types of mushroom bed preparation.

Please Turn Over

3. Answer *any four* questions from the following:

- (a) What is mother culture? Describe the process of composting in mushroom cultivation. 2+8
 - (b) (i) What are the advantages of cultivation of paddy straw mushroom?
(ii) Explain in brief the process of substrate preparation for cultivation of Oyster mushroom. 5+5
 - (c) Describe the prospects of marketing of mushrooms. Write in brief the use of polythene bags and vessels for mushroom cultivation. 4+3+3
 - (d) What are the steps for mushroom cultivation? State the importance of mushroom storage. Mention the different methods of short term storage of mushrooms. 3+2+5
 - (e) What do you mean by toxic mushroom? With suitable illustrations discuss the effect of toxins present in common poisonous mushroom strains. 2+8
 - (f) Write about the types of nutrients present in edible mushroom. Briefly state the benefits of mushroom in daily diet. 6+4
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