

GURUDAS COLLEGE

**B. Sc. SEMESTER IV (Honours) Examination
Online Internal Examination, 2020**

**Subject: BOTA
Subject Category: Honours
Course: SEC-B-4-4**

Course Name: Mushroom Culture Technology

Full Marks: 50

Date of Examination: 9th December, 2020

The figures in the margin indicate full marks

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

Answer each group in a new page

GROUP-A: (THEORY) Mushroom Culture Technology

BOT-A-SEC-B-4-4

FM=40

1. Answer any 13 questions from the following: 2 X 13
- i. Name two poisonous mushrooms.
 - ii. What is spawn?
 - iii. What is button stage? In which mushroom is it found?
 - iv. Write the substrate for the cultivation of *Volvariella volvacea*.

- v. Where is the National Centre for Mushroom Research and Training (NCMRT) located in India?
- vi. Name one basidiomycetous and one ascomycetous mushroom.
- vii. Write the full form of PDB? Why is it required in the spawn preparation?
- viii. Mention two common diseases in mushroom cultivation.
- ix. In which mushroom cultivation pin head stage is found?
- x. Write two food dishes prepared from mushroom.
- xi. Why sterilization of substrate is required for the cultivation of mushroom?
- xii. Write the scientific names of button mushroom and oyster mushroom cultivated in India.
- xiii. Write two short term storage techniques of mushroom.
- xiv. Name two unusual amino acids found in mushroom.
- xv. Mention two international mushroom research centres.
- xvi. Name one physical and one chemical sterilization process in mushroom cultivation.
- xvii. Mention any one category of mushroom of India on the basis of its ability to colonise the natural habitat with one example.
- xviii. Why edible mushrooms are called as SCP?

2. Choose any one question from the following

14 X 1

- i. Write a short note on the sterilization process in mushroom cultivation.
- ii. Write a short note on the food value of mushroom.
- iii. Write briefly on the long term storage techniques of mushroom.

- iv. Write a short note on the spawn preparation methodology for mushroom cultivation.
- v. Write a short note on the medicinal value of mushroom.
- vi. Classify mushrooms on the basis of their use.

GROUP- B (Internal Assessment)

Mushroom Culture Technology FM-10

3. Answer any five from the following

2×5

- a. Of the different nutritional elements present in mushroom, which one is highest?
 - i. Carbohydrate
 - ii. Protein
 - iii. Fat
 - iv. Cholesterol
- b. The advantages of cultivation of edible mushrooms are
 - i. Cheap substrates
 - ii. Excellent flavour
 - iii. High vitamins
 - iv. All of the above
- c. Essential amino acid found in mushroom is
 - i. Lysine
 - ii. glutamic acid

- iii. glycine
- iv. methionine

d. Which of the following is known as MILKY MUSHROOM?

- i. *Volvariella* sp
- ii. *Agaricus* sp
- iii. *Amanita* sp
- iv. *Calocybe* sp

e. Directorate of mushroom research (ICAR) is situated at

- i. Delhi
- ii. Pune
- iii. Solan
- iv. Kolkata

f. Fill in the blank.

For the production of white button mushroom, after casing is done, the room temperature should be maintained at temperature and at relative humidity 85-90% for 8-10 days.

- i. 23-28°C
- ii. 1-5°C
- iii. 40-45°C
- iv. 10-14°C

g. Which state from the following is NOT a major mushroom producing states in India?

- i. Uttar Pradesh
- ii. Tripura
- iii. Maharashtra,
- iv. Tamil Nadu

h. Choose the correct option

- i. Compost is the substrate on which the mushrooms are cultivated.

- ii. Compost is used in the post harvest stage when the mushrooms are cultivated.
- iii. The yield of the mushroom does not depend on the compost.
- iv. Compost can only be synthetic in nature.

Instructions for submission of answer scripts

1. Write the front page/top sheet as per instruction. Give page numbers to each page.
2. Scan the pages in sequence and make a single PDF file.
3. Rename file as per instruction.
4. Email the PDF file within the stipulated time to
botasem4GDC@gmail.com
and also give CC email to
gdccug20@gmail.com and botahons2020@gmail.com