

(g) Describe the traditional cultivation process of mushroom for small-scale mushroom production.

(h) What is short-term storage of mushroom? Discuss various steps that are employed for long-term storage of mushroom products.

Total number of printed pages-8

3 (Sem-6/CBCS) BOT SEC 1/2

2022

**BOTANY**

(Skill Enhancement Course)

Answer the Questions from any one Option.

**OPTION - A**

**(Ethnobotany)**

Paper : BOT-SE-6014

**OPTION - B**

**(Mushroom Culture Techniques)**

Paper : BOT-SE-6024

Full Marks : 50

Time : Two hours

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

**OPTION - A**

Paper : BOT-SE-6014

**( Ethnobotany )**

1. Fill in the blanks/Answer **any four** of the following : 1×4=4
- (a) Define ethnobotany.
  - (b) *Vitex negundo* is commonly known as \_\_\_\_\_.
  - (c) What is endangered taxa ?
  - (d) The branch of ethnobotany that deals with folk concepts of classification of plant by habit, habitat, usage or some other parameter is called \_\_\_\_\_.
  - (e) What is sacred grove ?
  - (f) \_\_\_\_\_ is the first well-known book on ethnobotany.
  - (g) Define ethnotoxicology.
  - (h) \_\_\_\_\_ is the main alkaloid that is present in *Withania somnifera*.
2. Answer **any three** of the following questions : 2×3=6
- (a) What is medico-ethnobotanical source ?

(b) What do you understand by traditional knowledge ?

(c) What is biopiracy ?

(d) Which method is most significant in all ethnobotanical studies ?

(e) Where do resins come from ?

(f) What is the relevance of ethnobotany ?

3. Write short notes on **any two** of the following questions : 5×2=10

(a) Significance of *Azadirachta indica* in ethnobotanical practices

(b) Intoxicant and beverage plants used by the tribes of North-East India

(c) Medicinal importance of *Tribulus terrestris*

(d) Importance of temples and sacred places in methodology of ethnobotanical studies

(e) Participatory forest management

(f) Herbarium techniques

4. Answer **any three** of the following questions :  
10×3=30

- (a) Discuss the concept, scope and objective of ethnobotanical study.
- (b) What is herbarium ? Discuss the roles of herbaria in teaching and learning process of ethnobotany.
- (c) Describe the detailed ethnobotanical practices of *Ocimum sanctum* and *Indigofera tinctoria*.
- (d) Discuss the role of ethnic group in conservation of plant genetic resources.
- (e) Discuss with the help of examples the role of ethnobotany in modern medicine.
- (f) What are ancient literatures ? Discuss the importance of Indian ancient literatures in framing the traditional medicinal system in India with examples.
- (g) Discuss about the major ethnic groups and their lifestyle that inhabited in Assam.
- (h) What is IPR ? Discuss how IPR gives safeguard to protect the interest of traditional knowledge in India.

**OPTION - B**

Paper : BOT-SE-6024

**( Mushroom Culture Technique )**

1. Fill in the blanks/Answer **any four** of the following :  
1×4=4

- (a) What is mycology ?
- (b) Vitamins \_\_\_\_\_ and \_\_\_\_\_ are present in *Agaricus* sp.
- (c) What is mushroom spawn ?
- (d) Write the name of *one* poisonous mushroom.
- (e) The process that refers to the steps taken to safely preserve food for later use is called \_\_\_\_\_.
- (f) What is pure culture ?
- (g) The \_\_\_\_\_ considered mushrooms 'the Food of the Gods'.
- (h) What is sugarcane trash ?

2. Answer **any three** of the following questions :  
2×3=6

- (a) Write the name of *two* commercially used edible mushrooms in India.



- (b) Write about the export value of mushrooms.
- (c) Mention some commercial products of mushroom.
- (d) What are the bed preparing materials used for mushroom culture ?
- (e) What is cost-benefit ratio ? Give an example.
- (f) Mention some free amino acids that are present in mushroom.

3. Answer **any two** of the following questions :  
5×2=10

- (a) Write briefly the differences between edible and poisonous mushrooms.
- (b) What is sterilization ? Write about the sterilization process in mushroom culture.
- (c) Distinguish between inoculation hook and inoculation loop.
- (d) Compare the nutritional values between *Volvariella volvacea* and *Pleurotus citrinopileatus*.

- (e) Write a note on pure culture medium that is used for mushroom spawn production.
- (f) Write about marketing potentialities of mushroom in North-East India.

4. Answer **any three** of the following questions:  
10×3=30

- (a) Discuss the nutritional and medicinal values of edible mushroom.
- (b) What is composting technology ? Describe the process of composting technology used for commercial production of mushroom.
- (c) Describe the morphological structure of the fructification of *Agaricus sp* with labelled diagram.
- (d) Discuss the factors affecting the mushroom bed preparation.
- (e) Describe various infrastructural managements employed in mushroom cultivation technology.
- (f) Discuss about the national and regional level research centres and significance of mushroom research.