

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.***

Contd.

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.

- (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.
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