B.Sc. Sem-III Examination, 2021 (CBCS)

Subject : Botany (Honours)

Paper : SEC 1(Ethnobotany)

Time: 2 Hours

Full Marks: 40

5x8=40

Answer any eight questions from the following:

1. Briefly describe the relevance of ethnobotany in the present context.

2. Mention the names of some major and minor ethnic group or Tribals of India. Describe briefly the life style of any one of them.

3. What is herbarium? How does it help in ethanobotanical studies.

4. Write short notes on roles of Sacred groves and Ancient Literature in ethnobotanical studies.

5. Write the significance along with the habitat and morphology of *Ocimum tenuiflorum* in ethno botanical practices.

6.Mention the significance of *Azadirachta indica* and *Indigofera tinctoria* in ethno botanical practices.

7.Describe briefly the roles of *Rauvolfia serpentina* and *Trichopus zeylanicus* in modern medicine?

8.Briefly describe the role of ethnic groups in conservation of plant genetic resources and endangered taxa.

9. What is biopiracy? How it is related to ethnobotany?

10.Write down the common and scientific names of five plants used by the Tribals as food plants.

B.Sc. Sem-III Examination, 2021 (CBCS)

Subject : Botany (Honours)

Paper-SEC-1 (Agricultural Botany)

Time: 2 Hours

Full Marks: 40

Answer any eight (8) questions:

5x8=40

- 1. Describe the relationship between water potential with osmotic potential. Write a brief note on facilitated diffusion.
- 2. Describe the role of K+ and ABA in relation to Stomatal opening in regulation to transpiration.
- 3. Mention the importance of Micropropagation in Agriculture.
- 4. Briefly describe the mechanism of Phloem loading and unloading.
- 5. Briefly describe the methods of Cyanobacterial isolation.
- 6. Briefly describe the mechanism of symbiotic nitrogen fixation in symbiotic bacteria.
- 7. Briefly describe the mode of action of Auxin in plant development.
- 8. Write a short note on significance of VAM in Agriculture.
- 9. Describe the process of RAPD in agricultural trait analysis of cash crops.
- 10. Describe the different methods adopted for Marker Assisted Breeding of Agronomic plants.

B.Sc. Sem III (Hons.) Examination 2021 (CBCS)

Subject : Botany

Paper: SEC 1 (Medicinal Botany)

Full Marks: 40

Time: 2 Hours

Answer any **eight** from the following :

5X8=40

- 1. Describe briefly the importance of medicinal plants.
- 2. Write a concise note on Saptadhatu and Tridohaa.
- 3. Write a short note on Panchamahabhutas
- 4. What is Umoor e tabiya concept in Unani medicine.
- 5. Write a short note on endemic and endangered plants.
- 6. What is *in situ* conservation ? Name one Boisphere reserve and National park in India.
- 7. Write briefly the importance of *ex situ* conservation. Name one Botanical garden and one ethnic community in West Bengal.
- 8. Write the importance of green house in nursery.Mention the methods of propagation of medicinal plants through grafting.
- 9. Write a short note on Ethnobotany and Palaeo-ethnobotany
- 10.Write scientific name of plants which can cure heart disease, jaundice, infertility, diabetics and blood pressure.

B. Sc. Sem-III Examination 2021(CBCS)

Subject-Botany(Hons.)

Paper-SEC-1 (Intellectual Property Right)

FM-40

Time-2hrs

Write short notes of the following, any eight.

8X5=40

- 1. Write a concise note on Patent Act 1970 and its amendments.
- 2. Comment on Copyright law.
- 3. Elaborate the concept of Traditional Knowledge on IPR.
- 4. Write a note on Bio-Piracy
- 5. Give short account on Protection of Plant Varieties and Farmers' Rights Act, 2001.
- 6. Write on Moral Issues in Patenting Biotechnological inventions.
- 7. Briefly discuss Database and Data Protection.
- 8. Write short note on Computer Software and Intellectual Property Right.
- 9. Mention the importance of National gene bank.
- 10. Comment on Multilateral Treaties and its significance.

B.Sc. Sem-III Examination, 2021 (CBCS)

Subject : Botany (Honours)

Paper- SEC-1 (Mushroom Culture Technique)

Time: 2 Hours

Full Marks: 40

Answer any eight (8) questions:

5x8=40

- 1. Write a short note on nutritional values of Mushroom.
- 2. What is spawn? Briefly describe the method of spawn production.
- 3. What is compost? How is it prepared during Mushroom cultivation.
- 4. Distinguish between poisonous and edible Mushroom and give examples of each.
- 5. Briefly enumerate the low cost method of Oyster mushroom production.
- 6. Briefly describe the long term preservation of mushroom.
- 7. What do you mean by "casing"? Where and why it is needed for mushroom production?
- 8. Name one national and one regional research centre for mushroom. Eneumerate different types of food prepared from mushroom.
- 9. Write the suitable temperature range for *Pleurotus* spp., *Volvariella volvacea* and *Agaricus bisporus* mushroom production.
- 10. Briefly describe the medicinal importance of Mushroom.
