Code No. OBS/401/B/20

M.Sc. IV Semester Main & ATKT Examination September 2020 Subject : - Botany Paper-I : Plant Cell, Tissue & Organ Culture

Maximum Marks : 35

- Note : Attempt all questions in about 250 to 300 words. All questions carry equal marks.
- Q.1 What do you mean by "cellular totipotency". Discuss the molecular basis of differentiation.
- Q.2 Describe the method of haploid production in plants using suitable examples.
- Q.3 What is somatic embryogenesis. Describe different stages of development of somatic embryo.
- Q.4 Define Somatic hybridization. Explain the various steps involved in the process.
- Q.5 What is in situ and ex situ conservations? Briefly describe different steps of cryopreservation.

Code No. OBS/402/B/20

M.Sc. IV Semester Main & ATKT Examination September 2020 Subject : - Botany Paper-II : BIOTECHNOLOGY AND GENETIC ENGINEERING

Maximum Marks : 35

- Note : Attempt all questions in about 250 to 300 words. All questions carry equal marks.
- Q.1 Write notes on-(i) Patent (ii) Scope of biotechnology
- Q.2 Describe construction of genomic and c-DNA libraries ?
- Q.3 Describe role of Agrobac- terium in genetic engineering ?
- Q.4 What do you understand by fermentation technology ? Explain fermentor with appropriate diagrams.
- Q.5 What is micro-array? Describe in detail.

Code No. OBS/403/B/20

M.Sc. IV Semester Main & ATKT Examination September 2020 Subject : - Botany Paper-III : ETHNOBOTANY

Maximum Marks : 35

- Note : Attempt all questions in about 250 to 300 words. All questions carry equal marks.
 - Q.1 Write about the archaeo ethnobotany and Ethnocosmetics.
 - Q.2 Describe the Homeopathic medicines system.
 - Q.3 Give the Ethnobotanical importance of following plants.(i) Allium cepa(ii) Ocimum sanctum
 - Q.4 Write the local name, family , plant part of Ethnobotanical importance of the following plants.
 - (i) Emblica officinalis
 - (ii) Ricinus communis
 - (iii) Cassia fistula
 - Q.5 Give the name of common plants and their parts used in the treatment of following disease.
 - (i) Malaria (ii) Piles (iii) Leprosy

Code No. OBS/404/B/20

M.Sc. IV Semester Main & ATKT Examination September 2020 Subject : - Botany Paper-IV : Plant Protection

Maximum Marks : 35

Note : Attempt all questions in about 250 to 300 words. All questions carry equal marks.

- Q.1 Give an account on Insect Pest of Gram, Soyabean and Teak.
- Q.2 Explain in detail the disease cycle of wilt of Arhar.
- Q.3 Write about Bunchy Top of Banana and yellow vein mosaic of Bhindi.
- Q.4 Give a detailed account of cultural methods of plant protection.
- Q.5 Define the biological control methods of plant protection and explain its significance.