

MSc Sem.-2 Examination**407****Botany****May-2025****Time : 2-30 Hours]****[Max. Marks : 70**

Instructions: 1. All Question carries equal mark and Write your Que/Ans. Number properly in Answersheet.

2. Draw neat and labelled diagram where it necessary.

Que:1. Describe Plant Cell Death in Plant life cycle. (14 Marks)

OR

Que:1 (a) Describe Tonoplast membrane and functions. (07 Marks)

(b) Describe Researches in Cell Biology. (07 Marks)

Que:2. Describe Recombinant technology and Applications. (14 Marks)

OR

Que:2 (a). Describe : Genomics-software (07 Marks)

(b). Describe: RNA splicing. (07 Marks)

Que:3. Describes principle of staining for DNA and RNA. (14 Marks)

OR

Que:3 (a). Describes : Light Microscopy (07 Marks)

(b). Describes :Cytrophotometer application. (07 Marks)

Que:4. Explain Separation methods technique and application (14 Marks)

OR

Que:4. (a). Gas Liquid Chromatography. (07 Marks)

(b). Immunoblotting. (07 Marks)

(P.T.O)

Que: 5. Give short answer of Following (Any 07 out of 12 each of 02 marks) (14 Marks)

- (a). How many types of DNA. Give Names .
 - (b). What is Cell Cycle ?
 - (c). Give functions of Lysosomes.
 - (d). Give Two name of Pyrimidines.
 - (e). Define : Nucleotide.
 - (f). Give Two names of Plasma membrane Models .
 - (g). What is Cell Death.
 - (h). Give two name Proteins.)
 - (i). Give Two examples of RNA types.
 - (j). Give Two names of Enzyme used in Recombinant DNA.
 - (k). Give full form of ELISA .
 - (l). Give application of Phase contrast Microscope.
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