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(Sem-6/CBCS)BOT

2023

BOTANY

(Honors)

Paper Code: BOT-HC-6026

(Plant Biotechnology)

Full Marks: 30

Time: 1 ½ Hours

1. Fill in the blanks

1X4=4

- (a) Full form of PCR.
- (b) Define phagemids.
- (c) Cryopreservation.
- (d) What do you mean by palindromic sites.

2. Answer the following questions (*any three*)

2X3=6

(a) Define organogenesis.

(b) Shuttle vectors.

(c) Callus

(d) Totipotency.

3. Write briefly on the following: (*any two*)

5X2=10

(a) Embryogenesis

(b) Ti plasmid

(c) Germplasm conservation.

4. Answer the following questions (*any one*)

10

(a) What is protoplast fusion? Discuss the techniques involved in protoplast isolation, purification and fusion.

(b) Discuss about pUC 18, pUC 19 and pBR322.