

T.E-VI Sem - Biotech.

Cell & Tissue Culture.

(15)

TE/VI/~~BT~~^{LBHS}/BT/UTC

QP Code : 6329

(3 Hours)

Max.Marks: 80

Note: 1. Question no. 01 is compulsory.

2. Attempt any 03 questions out of remaining 05 questions.

1. (A) What is a plant tissue culture media? Explain the components of Plant tissue culture media. (10M)
- (B) What is animal cell culture? Explain the advantages & limitations of animal cell culture. (10M)
2. (A) Describe Agro bacterium mediated gene transfer with proper diagram. (10M)
- (B) Explain the Direct methods of gene transfer. (10M)
3. (A) Explain the primary culture in detail. (10M)
- (B) Explain the different methods of cell separation. (10M)
4. (A) Define somatic embryogenesis. Explain the process of somatic embryogenesis. (10M)
- (B) Explain the scale-up of plant tissue culture. (10M)
5. (A) Explain the stages of micropropagation. (10M)
- (B) Explain in brief about serum free media. (10M)
6. Write short notes on: (20M)
 - (a) Cryopreservation
 - (b) Organ culture
 - (c) Electroporation
 - (d) Embryonic stem cell