



DH-1698

M. Sc. (Integrated Biotechnology) (Sem. VII) Examination

March / April - 2016

BT-1004 : Cell & Tissue Culture Technology - I

Time : 3 Hours]

[Total Marks : 70

Instruction :

नीचे दर्शाविए निशानीवाणी विगतो उत्तरवही पर अवश्य कभवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="M. Sc. (Integrated Biotechnology) (Sem. VII)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="BT-1004 : Cell & Tissue Culture Technology - I"/>	<input type="text"/>
Subject Code No. : <input type="text" value="1"/> <input type="text" value="6"/> <input type="text" value="9"/> <input type="text" value="8"/>	<input type="text"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	<input type="text"/>
Student's Signature	

1: Answer Any Two: (18)

- Enlist different levels of regulation of gene expression in plants.
- Discuss the details of mitochondrial and chloroplast genomes in plants
- What are promoters and heterologous promoters? List out the examples of promoter elements used to drive transgene expression in plants

2: Answer Any Two: (18)

- Explain the terms plasticity and totipotency ? Discuss the characteristics of culture environment in plant tissue culture.
- Discuss in detail the applications and disadvantages of somaclonal variations
- Give the details of the factors responsible for somaclonal variations in plants

3: Answer Any Two: (18)

- Describe in detail Antibody based techniques for cell separation.
- Write a detail note on aberrant growth control.
- Describe suspension cloning and isolation of clones.

4: Write short notes on Any Four: (16)

- Chromosomal aberrations
- Transformation
- Control of senescence
- Tumorigenicity
- Immortalization with viral genes