

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT

Test-1

Semester : 4th BTech Biotechnology

COURSE : Cell Culture Technology

MAX.MARKS:15

COURSE CODE: 10B11BT412

TIME:1HR

Q1. For the clonal production of Orchid plants grown in the field, which plant tissue culture technique you would like to use. Explain the stages involved in the production of 1000 number of plantlets for the same. (3.5)

Q2. Does the Indirect Organogenesis have advantage over the Direct one in critically endangered plants? Justify your answer by citing examples. (3.5)

Q3. Which type of bioreactor is most suitable for the growth of plant cells or tissues producing secondary metabolites? Explain it along with diagram. (3)

Q4. Explain the followings:

- a. Plant Cell Viability Test
- b. Closed Continuous Culture
- c. Embryo Culture
- d. Immobilization of plant cells
- e. Chemotherapy for virus elimination in plants (5)