

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT

Test-1 2019

Semester : 4th Sem B.Tech Biotechnology

COURSE : Cell Culture Technology

MAX.MARKS:15

COURSE CODE: 10B11BT412

TIME:1HR

Q1. How you can produce clones of Orchid plants having many positive characters grown in the field, which plant tissue culture technique you would like to use? Mention the complete methodology. (3.5) (CO2)

Q2. How somatic embryos are different from zygotic embryos.? How you can develop Somatic embryo via direct and indirect method?(3.5) CO2

Q3. Which are the five landmark events in the history of Plant tissue culture which changed the course of action of all important technologies ? Explain (2) (CO1)

Q4. Explain with reasons the followings:

- a. Why we need to check plant cell viability during suspension cultures?
- b. Why we need to develop undifferentiated mass of cell cultures? Where it can be used for the industry?
- c. Why microrpropagation is more useful than conventional propagation ? (6) (CO1)