Dr. Hemat sood

## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT

T1 Examination February 2020

M.Sc Biotechnology

COURSE: Plant & Animal Biotechnology

MAX.MARKS:15

COURSE CODE: 118MS1BT213

TIME:1HR

All questions are compulsory:

Q1. a) What are the Risk groups for animal cell culture? Classify and explain.

b) How continuous cell lines are generated? Explain any one method. (2.5 + 2.5) (CO1)

Q2. What are the components of plant tissue culture medium? Explain the functions of each component for plant growth and development under in vitro conditions.(2.5) (CO2)

Q3. For the clonal production of Oriental lilies grown in the field, which plant tissue culture technique you would like to use. Explain the stages involve in the production of large number of plantlets for the same. (3.5) (CO2)

Q4. Explain the followings:

- a. Brassinosteroids
- b. Role of auxins
- c. Embryo Culture
- d. Landmark contribution by two Indian and foreign scientists in plant biotechnology

(4) CO1