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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY WAKNAGHAT

T1 Examination

B.Tech Biotechnology (7th Semester)/Ph.D

COURSE: Industrial Plant Tissue Culture /Plant Tissue Culture Technologies MARKS:15

COURSE CODE: 10B1WBT725/18M1WBT132

TIME:1HR

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Q1. How upscaling of hairy roots of *Picrorhiza* is carried out? Explain the methodology for the same. (3)

Q2. How you can carry out long term conservation of somatic embryos? Explain the procedure for their revival after storage for 12 years. (3)

Q3. How you can develop high content genotype of *Swertia*? Explain the technique and technology used for the production of variants of the same genus.(3)

Q4. Explain the followings:

- a. How elimination of virus can be carried out in plants?
- b. How somaclonal variation contributes in crop improvement?
- c. How you can produce triploids through in vitro techniques? (6)