Sardar Bhagwan Singh University Balawala, Dehradun
VI assignment, M. Pharm II semester
School of Pharmaceutical Sciences and Technology
M. Pharm Pharmacognosy (1st year) II sem
Subject- Medicinal Plant Biotech (MPG201-T)
Total Marks 30 **Submission Date 03.05.2020**

Attempt all question

Section A: multiple choice Questions (1 Mark each)

Q. No. (1) 1Synthetic seeds are

A. artificially synthesized seeds B. somatic embryos encapsulated in suitable matrix

C. seeds of plants modified genetically D. none of these

Q. No. (2). The preserved embryoids are termed as

A. synthetic seeds B. semi-synthetic seeds

C. natural seeds D. fermented seeds

Q. No. (3). Which of the following is not true about synthetic seeds?

A. Can be stored for a year without the loss of valuables B. Easy to handle

C. Can be directly sown in the soil like natural seeds D. Need hardening in the green house

Q. No. (4). The encapsulation of somatic embryos can be carried out by

A. automatic encapsulation process B.gel complexation

C. both (a) and (b) D.coating proteins

Q. No. (5). Recalcitrant seeds are

A. resistant to drying and freezing temperature B. killed by drying and freezing temperature

C. both (a) and (b) D. none of above

Section B: True False questions (1 Mark each)

Q. No. (1) The selection and management of the source plant is an important aspect of successful micropropagation (true /false)

Q. No. (2) Primary disinfectants for explants, include alcohol (true /false)

Q. No. (3) In the disinfestations of explants, effectiveness increases with an increase in both time and concentration (true /false)

Q. No. (4) Higher amounts of hormones needed during establishment compared to the multiplication stage of micropropagation (true /false)

Q. No. (5) Cytokinin and auxin are used to support a basic level of growth during micropropagation. (true /false)

Section C: Short answer questions (5Mark each)

Q. No. (1)Write a short note on benefits of synthetic seeds over normal seeds.

Q. No. (2) Write short note micropropagation and explain its various stages of development

Section D: Long answer question (10 mark)

Q. No.(1) write a detail note on hairy root culture and explain its importance in production of secondary metabolite.