# Sardar Bhagwan Singh University Balawala, Dehradun VII 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 10.05.2020** 

(true /false)

## Attempt all question

# Section A: multiple choice Questions (1 Mark each)

Q. No. (1) Moist heat sterilization consist of

A. steam under pressure B. heating at 120 C°

C. steam pressure of 1.05kg/cm D. all of these

Q. No. (2). thermolabile component of culture media is

A. Agar B. inorganic nutrients

C. plant growth regulators D. sugars

Q. No. (3). which of the following is not true about filter sterilization?

A. pore size 0.45 µm B. sterilized components can be stored at 4C°

C. a fiter paper can use sterilization D. filter sterilization use for thermostable components

Q. No. (4). the sterilization of instrument is usually carried out by

A. 50% methanol B. 95% ethanol

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

Q. No. (5). Explants can sterilize by

A. heating at high temperature B. by filtration

C. both (a) and (b)

D. by chemical sterilization

### **Section B: True False questions (1 Mark each)**

Q. No. (1) Plant cell culture has been for sometime considered as an alternative method for the production of secondary metabolites (true /false)

Q. No. (2) major limiting factors in the development of a commercial production system using plant cell culture has been the production cost of phytopharmaceuticals (true /false)

Q. No. (3) Immobilization of cells would be a method of increasing productivity (true /false)

Q. No. (4) Immobilization of plant cells can achieved by suspending these materials on to or within a liquid (true /false)

Q. No. (5) Matrix for immobilization must be easily available.

### **Section C: Short answer questions (5Mark each)**

Q. No. (1)Write a short note on biotransformation of alkaloid and steroids.

Q. No. (2) Write short note on advantages of biotransformation

### **Section D: Long answer question (10 mark)**

Q. No.(1) write a detail note on need of plant cell immobilization, explain its role in secondary metabolite production.