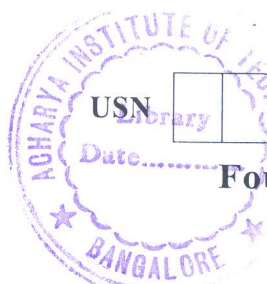


CBCS SCHEME

18BT44



USN

Date.....

Fourth Semester B.E. Degree Examination, July/August 2021 Cell Culture Techniques

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions.

- 1 a. Explain the Planning of layout design of cell culture lab. (10 Marks)
b. Mention the uses of inverted microscope. (10 Marks)
- 2 a. Write a note on Clean Air Circulation in cell culture lab. (10 Marks)
b. Explain the Slow Cooling System for cell freezing. (10 Marks)
- 3 a. Explain the method of Media preparation for cell culture. (10 Marks)
b. Explain the process of Osmolarity. (10 Marks)
- 4 a. Explain with example use of growth supplements in the media. (10 Marks)
b. Discuss the Sterilization process in cell culture lab. (10 Marks)
- 5 a. Explain the method of Tryprimization in cell culture technique. (10 Marks)
b. Discuss the method of Organ culture. (10 Marks)
- 6 a. Write a note on Cell Separation Techniques in detail. (10 Marks)
b. Discuss the applications of Animal cell culture for invitro testing of drugs. (10 Marks)
- 7 a. Cellular totipotency helps in differentiation of tissues. Discuss. (10 Marks)
b. Discuss the process of Osmotic Embryogenesis. (10 Marks)
- 8 a. Write a note on Secondary Metabolites in Cell culture techniques. (10 Marks)
b. Explain the process of Immobilization of cultures. (10 Marks)
- 9 a. Explain the method of Microbial Production of Antibiotics. (10 Marks)
b. Discuss the use of microbes in Industrial Waste Water treatment. (10 Marks)
- 10 a. Discuss the Screening of Microbial Product Preservation Techniques. (10 Marks)
b. Write a note on the importance of Strain improvement. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.