

BCO 108-P FRONTIERS IN BIOTECHNOLOGY [P]

Practical Course Credit: 1

Contact Hours: 30

1. Plant tissue culture

- Explants (carrot/rice grain/meristematic tissue) – surface sterilization and excision

- Media preparation and inoculation

2. Isolation of antibiotic producers

- Isolation of microbes

- Screening for antimicrobial activity

Reference Books (Composite list for theory and practicals)

1. Jogdand, S.N., Gene Biotechnology. Himalaya publishing house.
2. Jogdand, S.N., Advances in Biotechnology. Himalaya publishing house.
3. Ravi, I., Baunthiyal, M.&Saxena, J., (Eds.).Advances in Biotechnology.Springer.
4. Satyanarayana. Books & Allied (P) Ltd. Biotechnology.
5. Widholm, J. M., Kumlehn, J.& Nagata, T., Biotechnology in Agriculture and Forestry.
6. Altman, A.& Hasegawa, P., Elsevier Plant Biotechnology and Agriculture.
7. Clark, D.&Pazdernik, N. Biotechnology.
8. Bielecki, S., Tramper, J.,&Polak, J. Food Biotechnology.
9. Pongracz, J.&Keen, M., Medical Biotechnology.
10. Fletcher, G. L.&Rise, M. L., (Editors). Aquaculture Biotechnology. Wiley.
11. Shenoy, M. Animal Biotechnology. Laxmi Publication.
12. Verma, A.& Singh, A. Animal Biotechnology Models in Discovery and Translation.