

5. Why are protoplasts isolated ? Describe the methods of isolation and culture of protoplasts to regenerate plantlets.
6. Write notes on the following :—
 - (a) Cybrids
 - (b) Applications of somatic cell hybridization.
7. Discuss the different types of bioreactors used for secondary metabolite production.
8. Taking suitable examples, briefly describe the role of following in secondary metabolite production :
 - (a) Elicitation
 - (b) Biotransformation
 - (c) Immobilization
 - (d) Two phase cultures.

Exam. Code : 107406
Subject Code : 1785

B.Sc. (Bio Technology) 6th Semester
APPLICATIONS OF PLANT TISSUE CULTURE
Paper—BT-2

Time Allowed—2 Hours] [Maximum Marks—40

Note :— There are *eight* questions of equal marks.
Candidates are required to attempt any *four* questions.

1. Describe the stages of micropropagation using axillary buds as the explants. Also write the applications of micropropagation.
2. Write notes on the following :—
 - (a) Modes of regeneration
 - (b) Technical problems in micropropagation.
3. Discuss the technique of androgenesis and its applications in crop improvement programmes.
4. Write notes on the following :—
 - (a) Embryo culture
 - (b) Causes of somaclonal variations.