

B.Sc. 4th Semester (Honours) Examination, 2022

PHYSIOLOGY

Course ID: 42514

Course Code: SH/PHY/404/GE-4(T)

Course Title: Biotechnology

Time: 1 Hour 15 Minutes

Full Marks: 25

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

- 1. Answer any five questions from the followings: 1×5=5**
- (a) What do you mean by Cosmid?
 - (b) Write any one importance of DNA finger printing.
 - (c) What do you mean by gene therapy?
 - (d) Mention any one significance of RT-PCR.
 - (e) What is therapeutic cloning?
 - (f) What do you mean by Northern Blot?
 - (g) Write any one enzyme used in PCR.
 - (h) What do you mean by neutral media?
- 2. Answer any two questions from the followings: 5×2=10**
- (a) Write down the clinical importance of monoclonal antibody. 5
 - (b) State the different techniques used in enzyme immobilization. Describe about advantages of enzyme immobilization. 3+2
 - (c) Discuss in brief the different areas of interest in biotechnology. 5
 - (d) Briefly describe the process of cloning. 5
- 3. Answer any one question from the followings: 10×1=10**
- (a) What is CAT-MAP? Briefly describe the process of hybridoma technique. 2+8
 - (b) What is cloning vector? Why are they necessary? Describe the cloning vectors studied by us. 2+2+6