

Bankura University
B.Sc 6th Semester (Honours) Examination,2021
SUB: Microbiology

Course ID:62212

Course Code: SHMCB/602/C-14

Course Title: Recombinant DNA Technology

Full Marks:25

Time: 1h.15mins.

The figures in the margin indicate full marks

Answer all the questions.

UNIT I

1. Answer *any five* of the following questions: (1X5=5)

- a. What is biotechnology?
- b. Write the role of topoisomerase?
- c. What is cosmid?
- d. What is dot blot?
- e. What is mean by Real-time PCR?
- f. Write the full form of SDS-PAGE.
- g. Write the purpose of Northern blotting technique.
- h. What is expression vector?

UNIT II

2. Answer *any two* of the following questions: (5X2=10)

- a) Explain the process of electroporation in gene delivery.
- b) Schematically represent the Sanger's method of DNA sequencing.
- c) Write the uses of c-DNA libraries.
- d) Write short note on chromosome walking and chromosome jumping.

UNIT III

3. Answer *any five* of the following questions: (1X5=5)

- a) Describe the structure of pBR 322 as cloning vector. What is its advantage and disadvantage over bacteriophage lambda vector? 8+1+1=10
- b) Write the applications of Recombinant DNA technology.

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