

Enrollment No: _____

Exam Seat No: _____

C. U. SHAH UNIVERSITY

Winter Examination-2021

Subject Name: Genetic Engineering and Biotechnology

Subject Code: 4SC03GEB1

Branch : B.Sc. (Microbiology)

Semester: 3

Date: 15/12/2021

Time: 02:30 To 05:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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- Q-1 Attempt the following questions: (14)**
- a) Define: Genetic Engineering. (1)
 - b) What is a function of linker? (1)
 - c) Define a patent. (1)
 - d) What is blotting. (1)
 - e) Define: Genomic library (1)
 - f) Full form: BACs. (1)
 - g) Enlist a methods of gene delivery. (1)
 - h) Why ddNTPS used in Sanger Sequencing? (1)
 - i) Define a copyright. (1)
 - j) Define a vector. (1)
 - k) Which Blotting technique is used for separation of DNA molecules. (1)
 - l) What is the function of kinase and phosphatase enzyme? (1)
 - m) What is a blocking in western blotting? (1)
 - n) What is a Ti-plasmid? (1)

Attempt any four questions from Q-2 to Q-8

- Q-2 (14)**
Write a note on genomic and cDNA library.
- Q-3 (14)**
Attempt all questions
(a) Explain about Agarose gel electrophoresis. (7)
(b) Write a note on trademarks. (7)
- Q-4 (14)**
Attempt all questions
(a) Write a note on Sanger sequencing. (7)
(b) Write down detailed note on Gene therapy. (7)



