| | Enrollmo | ent No: | Exam Seat No: | | | |
|------|--|---|---|--------------------|--|--|
| | C.U.SHAH UNIVERSITY Summer Examination-2018 | | | | | |
| | Subject Name: Fundamentals of Biotechnology | | | | | |
| | Subject | Code: 5SC01FBT1 | Branch: M.Sc (Microbiology) | | | |
| | Semester | r: 1 Date: 19/03/2018 | 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. | | | | | |
| Q-1 | | Attempt the following questions: | | (14) | | |
| Atte | a) b) c) d) e) f) g) h) i) j) k) l) m) mpt any f | Expand pUC8. Define Plasmid. What are competent cells? What is a cosmid? What is gene therapy? Write full form of TRIP Write full form of GATT Write full form of WTO Name the different types of yeast p What is the purpose of Southern bl Define Trademark Name the mechanisms of genetic r Define Geographical Indicator Name the organism from which Ti Four questions from Q-2 to Q-8 | otting? naterial transfer in Bacteria. | | | |
| Q-2 | a) b) | Attempt all questions Explain the Rights afforded by Co Write a note on Good manufactur | | (14) (7) (7) | | |
| Q-3 | a) b) | <u> </u> | from a cDNA library? How is each created? loning vectors and also classification of vectors | (14) (7) (7) | | |



Attempt all questions
a) Discuss the steps of trademark claims with help of a suitable example
b) Write a note on Copyright

Q-4

(14) (7) (7)

| | Attempt all questions | (14) | |
|------------|--|--|--|
| a) | What essential features should a molecule have so as to be an ideal vector in gene | (7) | |
| | cloning/ recombinant DNA technology? | | |
| b) | Write a note on Hybridoma technology. | (7) | |
| | Attempt all questions | | |
| a) | List some applications of recombinant DNA technology. | (7) | |
| b) | Give a detailed classification of plasmids. | (7) | |
| | Attempt all questions | (14) | |
| a) | | (7) | |
| | | . , | |
| b) | | (7) | |
| , | Copyrights are considered as Territorial Rights. | () | |
| | Attempt all questions | (14) | |
| a) | • • | (7) | |
| | as markers to determine which cells contain a particular plasmid. | () | |
| b) | Write a note on WTO explaining its role in today's global World | (7) | |
| | b)a)b)b) | a) What essential features should a molecule have so as to be an ideal vector in gene cloning/ recombinant DNA technology? b) Write a note on Hybridoma technology. Attempt all questions a) List some applications of recombinant DNA technology. b) Give a detailed classification of plasmids. Attempt all questions a) Write important characteristics of a plasmid and draw a labeled diagram of plasmid depicting its important characteristics. b) Justify the statement with help of examples / case studies: Copyrights are considered as Territorial Rights. Attempt all questions a) Briefly explain how an antibiotic-resistance gene and the lacZ gene can be used as markers to determine which cells contain a particular plasmid. | |

