

PG Even Semester (CBCS) Exam., May—2018

LIFE SCIENCE AND BIOINFORMATICS

(2nd Semester)

Course No. : LSBCC-204

(Biotechnology)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

- 1** What are the characteristics of a good cloning vector? Write a note on PBR 322 with suitable diagram. 14

OR

- 2.** Write short notes on the following : 7+7=14
(a) Restriction endonuclease
(b) c-DNA library

- 3.** Write short notes on the following : 7+7=14
(a) Primary culture and continuous cell line and their characteristic features
(b) Balanced salt solution

OR

- 4.** Write a note on hybridoma technology. 14
- 5.** Write a detailed account on the method of anther culture and its application in plant tissue culture. 11+3=14

OR

- 6.** Write notes on the following : 7+7=14
(a) Cybrid
(b) Chemical fusogen and its application
- 7.** What do you mean by microbial growth kinetics? Write a note on nutritional uptake by microorganisms. 4+10=14

OR

- 8.** Write short notes on the following : 7+7=14
(a) Batch, fed and continuous fermentation
(b) Microbial food production

(3)

9. Write short notes on the following : 7+7=14

(a) Molecular docking (basic concept)

(b) Swiss-Prot

OR

10. (a) Discuss about different methods and tools of nucleotide sequence submission to NCBI.

(b) Add a note on 'Mega'. 7+7=14

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