PG Even Semester (CBCS) Exam., May—2017

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. Explain the principles and drawbacks of gene transfer methods available in recombinant DNA technology. 14

OR

2. Write short notes on any *two* of the following : 7×2=14

(a) Recombinant insulin production

(b) Artificial chromosomal vectors

(c) Cosmids as vectors

3. Write a note on the methods of stem cell culture. What are its practical applications? 14

OR

4. Briefly discuss various aspects of hybridoma technology. Mention its economic importance. 14

5. Write short notes on the following : 7×2=14

(a) Somatic hybridization

(b) Cryopreservation

OR

6. Discuss the methods of generation of transgenic plants. Write in detail their applications with examples. 4+10=14

7. Write a note on the method of production of single-cell protein. 14

OR

8. Write short notes on the following : 7×2=14

(a) Nutritional uptake by microorganisms

(b) Continuous fermentation

9. What do you understand by molecular clocking? Write the basic aspects of molecular clocking highlighting its practical applications. 4+10=14

OR

10. Write short notes on the following : 7×2=14

(a) Sequence retrieval system

(b) Method of submission of nucleotide sequence

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