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

LIFE SCIENCE AND BIOINFORMATICS

(2nd Semester)

Course No. : LSBCC–202

(Techniques in Biology)

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Describe the working principle and applications of scanning electron microscopy. Write a note on critical point drying. 5+5+4=14

OR

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

(a) Fluorescence microscopy

(b) Phase-contrast microscopy

3. Describe the principle, instrumentation and application of high performance liquid chromatography technique. 5+5+4=14

OR

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

(a) Gel filtration chromatography

(b) Density gradient centrifugation

5. Explain the principle and applications of Western blotting technique. Write a note on isoelectric focussing. 5+5+4=14

OR

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

(a) DNA sequencing methods

(b) RFLP

7. Describe the different measures of central tendency and point out the advantages and disadvantages of different measures. 14

OR

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

(a) Chi-square test

(b) *t*-test

9. Write a note on the alternative forms of ELISA. 14

OR

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

(a) Ouchterlony

(b) Radioimmunoassay

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