FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2019
(CUCSS PG)
CC19P ZOL1 C02 - BIOINSTRUMENTATION AND BIOSTATISTICS
(2019 Admission Regular)

Time: Three Hours   Maximum: 30 Weightage

I. Answer any *four* questions.

1. Principle of phase contrast microscopy.

2. Isoelectric focussing.

3. Describe gel filtration chromatography.

4. Principle and applications of NMR spectroscopy.

5. Write on laws of probability.

6. Explain Karl pearson's coefficient of correlation.

7. Explain quartile deviation.

(4 x 2 = 8 Weightage)

II. Answer any *four* questions.

8. Differentiate between CT scan and PET scan.

9. What is LASER? Explain its applications.

10. Explain the principle, working and applications of FACS.

11. Describe the principle and applications of SEM and TEM.

12. Briefly explain different types of sampling methods.

13. Enumerate the difference between parametric and nonparametric statistics.

14. Comment on methods of t-test and chi-square test.

(4 x 3 = 12 Weightage)

III. Answer any *two* questions.

15. Explain the role of nanotechnology in environmental management.

16. Write an essay on different types of radiation detectors.

17. Describe the methods and applications of different types of electrophoretic techniques.

18. Enumerate various methods of data collection and classification.

(2 x 5 = 10 Weightage)

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