

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2015

(CUCSS)

Zoology

ZO 1CT 02 – BIOPHYSICS AND BIostatISTICS

Time : Three Hours

Maximum : 36 Weightage

I. Answer the following :

1. What is diffusion coefficient?
2. Write briefly on osmosis.
3. Write on infrasonic and ultrasonic sound
4. How a GM counter works?
5. Write on circular dichroism.
6. What is a fluorescent microscope?
7. What is G force?
8. Give applications of PAGE.
9. Explain the terms 'population' and 'sample'
10. How do you calculate mode?
11. Define 'Standard Deviation'.
12. What is non-parametric statistics?
13. State the addition theorem of probability.
14. What is regression line?

(14 × 1 = 14 weightage)

II. Answer any seven of the following :

15. What is Donnan equilibrium?
16. Write briefly on the preparation and properties of buffers.
17. Write on nuclear medicines.
18. Explain the working principle of ECG.
19. Give applications of TLC.

Turn over

20. Explain Flow Cytometry.
21. Briefly explain different sampling techniques.
22. Write briefly on 'point estimation' and 'interval estimation'.
23. What is ANOVA?
24. Write briefly on correlation and correlation coefficient.

(7 × 2 = 14 weightage)

III. Answer any *two* of the following :

25. Explain the properties of colloids
26. Explain the biophysical basis of hearing.
27. Give applications of LASER in biology.
28. Write on graphical representations of statistical data.

(2 × 4 = 8 weightage)