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FIRST SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY) EXAMINATION, NOVEMBER 2024

(CBCSS)

Zoology

ZOL 1C 02—BIOPHYSICS AND BIOSTATISTICS

(2019 Admission onwards)

Time: Three Hours

Maximum: 30 Weightage

- I. Answer any four questions. Each question carries 2 weightage:
 - 1 GM counter.
 - 2 Gibb's Donnan equilibrium.
 - 3 Positron Emission Tomography.
 - 4 Effect of G force on human body.
 - 5 Surface plasma resonance.
 - 6 Kurtosis.
 - 7 Shannon diversity index.

 $(4 \times 2 = 8 \text{ weightage})$

- II. Answer any four questions. Each question carries 3 weightage:
 - 8 Biological effects of ultrasonic sound.
 - 9 Optical properties of colloids.
 - 10 Differentiate SEM and TEM.
 - 11 Role of nanotechnology in environmental management.
 - 12 Physical organization of ear.
 - 13 Poisson distribution.
 - 14 Measures of central tendency.

 $(4 \times 3 = 12 \text{ weightage})$

Turn over

- III. Answer any two questions. Each question carries 5 weightage:
 - 15 Biological effects of ionizing radiations.
 - 16 Briefly explain different types of chromatographic methods.
 - 17 Define and explain correlation and correlation co-efficient with suitable examp
 - 18 Define Regression. Discuss on regression line and regression equations. Add regression co-efficient.

 $(2 \times 5 = 10)$