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PG (NEW) CBCS
M.Sc. Semester-IV Examination, 2020
ZOOLOGY
PAPER: ZOO 401

Full Marks: 40

Time: 2 Hours

Write the answer for each unit in separate sheet

The figures in the right-hand margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

GROUP-A
(Marks: 20)
(ENVIRONMENTAL POLLUTION & MANAGEMENT)

Answer one question of the following: (250 words)

1. Give a note on World Conservation Strategies. Briefly describe biomonitoring. Enumerate the EIA process. 10+5+5
2. Define bio-invasion. Add a note on the threats of bio-invasion to biodiversity. Define pollution. State the impact of air pollutants on human health. 2 +8+ 2+8
3. Explain the following: 5x4
 - i. Global warming
 - ii. Eutrophication
 - iii. Green movement
 - iv. Biosafety
4. What are the indicators of quality life? State the objectives of conservation in respect to management of sustainable environment. 6 +14

(1)

(P.T.O.)

(2)

GROUP-B
(Marks: 20)
(BIOSTATISTICS)

Answer one question of the following: (250 words)

1. What do you mean by positive, negative and '0' correlation between two variables? Explain different properties of correlation coefficient. Write a note on multiple correlations. 5+10+5
2. Explain the meaning of 'statistical fallacy'. Explain the difference between student's t-test and Fischer's t-test. Distinguish between type-I and type-II errors in statistics. State the salient properties of normal distribution. 5+5+5
3. Distinguish between t-test and ANOVA. (b) State the difference between one-way and two-way ANOVA. (c) Describe the principle of computation and interpretation of F-value in one-way ANOVA. 5+5+10
4. Work out the linear regression equation of wing length (Y in mm) on body weight (X in mg) of the mosquito Anopheles collected from a rice field area of Midnapore.

Sl. No.	1	2	3	4	5	6	7	8	9	10
Wing (Y) Length	2.5	3.5	3.1	2.9	2.7	3.2	2.6	4.1	3.4	3
Body (X) weight	4.6	5.6	5.9	5.7	5.2	5.8	5.0	6.4	5.1	4.4

From the computed equation, find out wing length (in mm) of a mosquito of 5.5mg body weight 20
