

Reg. No

Name

23P129

M. Sc. DEGREE END SEMESTER EXAMINATION : NOVEMBER 2023

SEMESTER 1 : ENVIRONMENTAL SCIENCE

COURSE : 21P1EVST02 : RESEARCH METHODOLOGY I

(For Regular - 2023 Admission and Improvement/Supplementary -2022/2021 Admissions)

Duration : Three Hours

Max. Weights: 30

PART A

Answer any 8 questions

Weight: 1

1. Construct a frequency table with an interval of four
10, 17, 15, 22, 11, 16, 19, 24, 29, 18, 25, 26, 32, 14, 17, 20, 23, 27, 30, 12,
15, 18, 24, 36, 18, 15, 21, 28, 33, 38, 34, 13, 10, 16, 19, 22, 29, 19, 23, 31 (Cr, CO 1)
 2. Indicate the utility of MS-PowerPoint? Comment on slide transition. (A)
 3. Define 'Level of confidence'. ()
 4. How to calculate the combined arithmetic mean for two groups? (A, CO 1)
 5. Define the following: (A)
1. Router 2. Switch 3. Hub 4. Bridge 5. Modem
 6. What is a super computer? (U)
 7. Define coefficient of variation. ()
 8. What are the properties of Normal distribution? ()
 9. What are output devices. Give examples. (A)
 10. What is a Cell Pointer? What are the different types of values a cell can hold? (A)
- (1 x 8 = 8)**

PART B

Answer any 6 questions

Weights: 2

11. Distinguish between probability sampling and non-probability sampling. (U, CO 1)
 12. List out the uses of Vital statistics. ()
 13. Distinguish between Interpreters and Compilers. (A)
 14. Explain advantages and disadvantages of digital and analog systems? (U)
 15. Explain different file systems ,file extensions and its uses? (A)
 16. Define median and explain the formula for calculating it from a frequency table. (U, CO 1)
 17. Distinguish between Internet and Intranet. (An)
 18. Define chi-square test and their use. ()
- (2 x 6 = 12)**

PART C

Answer any 2 questions

Weights: 5

19. Write a note on Programming Languages. (A)
20. Write a short note on various secondary storage devices. (A)

21. For a random sample of 10 pigs fed on diet A, the increase in weight in pounds in a certain period were 10,6,16,17,13,12,8,14,15,9. For another random sample of 12 pigs fed on diet B the increase in the same period were 7,13,22,15,12,14,18,8,21,23,10,17. Test whether diet A & B differ significantly as regard the effect on increase in weight (or test whether the mean increase in two samples are significantly different)(table value = 2.086, for significance level $\alpha = 0.05$) (E)
22. What is a scatter diagram? How does it help in ascertaining the degree of correlation between two variables? ()
- (5 x 2 = 10)**

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Calculate and apply measures of central tendency and measures of dispersion for grouped and ungrouped data and to analyse demographic data	A	1, 4, 11, 16	6

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;