| Reg. No | Name | 22P1043 |
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M. Sc. DEGREE END SEMESTER EXAMINATION : OCTOBER 2022 SEMESTER 1 : ENVIRONMENTAL SCIENCE

COURSE: 21P1EVST03: RESEARCH METHODOLOGY II

(For Regular - 2022 Admission and Supplementary - 2021 Admission)

Duration : Three Hours Max. Weights: 30

| | PART A | |
|-----|---|--------------------|
| | Answer any 8 questions | Weight: 1 |
| 1. | How is Prof. R.A. Fisher's name associated in research methodology? | (R, CO 4) |
| 2. | Comment on unstructured observation. | (U, CO 3, CO |
| | | 4) |
| 3. | What is a population? | (R, CO 2, CO |
| | | 3) |
| 4. | What is meant by conceptual research? | (U, CO 3) |
| 5. | Comment on Null hypothesis and Alternative hypothesis. | (U, CO 4) |
| 6. | Comment on structured observation. | (R, CO 3, CO |
| | | 4) |
| 7. | Define scientific investigation. | (U, CO 2) |
| 8. | Write notes on colloquium. | (U, CO 5) |
| 9. | Give an account of the steps of scientific methods in research. | (U, CO 3) |
| 10. | How do reach findings help society? | (E) |
| | | $(1 \times 8 = 8)$ |
| | PART B | |
| | Answer any 6 questions | Weights: 2 |
| 11. | Enumerate the importance of knowledge in life. | (U, CO 1, CO 2) |
| 42 | Enumerate the important concents relating to research design | /F CO 4\ |

| | PART B | |
|-----|--|----------------------------|
| | Answer any 6 questions | Weights: 2 |
| 11. | Enumerate the importance of knowledge in life. | (U, CO 1, CO 2) |
| 12. | Enumerate the important concepts relating to research design. | (E, CO 4) |
| 13. | Distinguish between dependent and independent variables. | (R, CO 4) |
| 14. | Explain the advantages of case study. | (A, CO 3, CO |
| | | 4) |
| 15. | How do you select a research question? | (An, CO 3) |
| 16. | Write notes on systematic sampling. | (A, CO 2, CO |
| | | 3) |
| 17. | What are the points to be taken care of while using animals in research? | (A, CO 5) |
| 18. | Add a note on fundamental research. | (An, CO 3) (2 x 6 = 12) |

PART C Answer any 2 questions

Weights: 5

| 19. | What is Experimental design? Explain in detail the types of Experimental | |
|-----|--|--|
| | design. | |

(An, CO 4)

20. Differentiate thesis and dissertation. Explain the preparation of thesis and dissertation.

(An, CO 5)

21. Discuss the main aspects of a questionnaire. Explain in detail.

(U, CO 3, CO

4)

22. Explain the need for a hypothesis in research.

(E, CO 4) (5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

| СО | Course Outcome Description | CL | Questions | Total Wt. |
|------|---|----|---------------------------------------|--------------|
| CO 1 | Understand the types and basic concepts of research and its methodologies | U | 11 | 2 |
| CO 2 | Identify apt and relevant research topics | Cr | 3, 7, 11, 16 | 6 |
| CO 3 | Demonstrate research process | An | 2, 3, 4, 6, 9, 14, 15, 16, 18, 21 | 18 |
| CO 4 | Define suitable research problem and its parameters | R | 1, 2, 5, 6, 12, 13, 14, 19, 21, 22 | 25 |
| CO 5 | Design, organize and conduct research (advanced project) appropriately | Cr | 8, 17, 20 | 8 |

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