## M.Sc. ENVIRONMENTAL SCIENCE Third Semester RESEARCH METHODOLOGY (MEV - 301)

Duration: 3Hrs. Full Marks: 70

Part-A (Objective) =20 Part-B (Descriptive) =50

(PART-B: Descriptive)

Duration: 2 hrs. 40 mins. Marks: 50

## Answer any four from Question no. 2 to 8 Question no. 1 is compulsory.

- 1. Define research. Discuss about the characteristics of scientific research. What are the steps for conducting a research? [1+4+5=10]
- 2. What is research design? Enumerate the need of research design. Write the different phases of research design. [1+3+6=10]
- 3. Categorize hypothesis. State the difficulties in formulating the hypothesis. Explicate their importance. [5+3+2=10]
- 4. Define population and sample. Classify probability sampling. Write the pros and cons of this sampling. [2+4+4=10]
- 5. How many types of question are there in the questionnaire survey? How this survey is performed? Write the advantages and disadvantages of this survey. [5+3+2=10]
- 6. State the different types of interview. Discuss about the process of interview.

  Mention the merits and demerits of the interview. [5+2+3=10]
- 7. Define observation. Classify observation. Specify the process of observation.

[1+5+4=10]

8. What do you mean by ethics? State the general principles of ethics. [2+8=10]

\*\*\*\*

(c) Replicated

Marks - 20

 $1 \times 20 = 20$ 

## M.Sc. ENVIRONMENTAL SCIENCE Third Semester RESEARCH METHODOLOGY (MEV - 301)

**Duration: 20 minutes** (PART A - Objective Type) I. Choose the correct answer: (i) Objectives of research study technically includes -(a) Diagnostic study (b) Quantitative study (d) None (c) Qualitative study (ii) In peer review process, the research paper is verified by-(a) Reviewer (b) Editor (c) Publisher (d) All (iii) Plagiarism is -(a) Copying other's idea (b) Duplicating other's idea (c) Stealing other's idea (d) All (iv) Classification scale questions are -(a) Nominal question (b) Ordinal question (c) Interval question (d) Direct question (v)The aim of research is to put emphasis on accomplishment related to -(a) What (b) How (c) When (d) Why (vi) Evaluation research is included under -(a) Applied research (b) Basic research (c) Quantitative research (d) None (vii) Research design includes -(a) Skill (b) Variable (c) Budget (d) All (viii) Working hypothesis is based on -(b) Theories (a) Assumption (c) Data (d) None (ix) According to Horton and Hunt, research should be -(a) Logical (b) Significant

(d) All

| <ul><li>(x) Purposive sampling is also known</li><li>(a) Accidental sampling</li><li>(c) Judgment sampling</li></ul>  | as - (b) Reason sampling (d) Aptitude sampling  |
|---|---|
| <ul><li>(xi) Secondary data could be obtained</li><li>(a) Interview</li><li>(c) Published sources</li></ul>           | d from - (b) Correspondent (d) Investigation  |
| <ul><li>(xii) In which sampling, the responde</li><li>(a) Volunteer sampling</li><li>(c) Purposive sampling</li></ul> | ent gives the names of other respondent to be studied?  (b) Snowball sampling  (d) Quota sampling |
| <ul><li>(xiii) In open ended question, the resp</li><li>(a) Researcher</li><li>(c) Pressure</li></ul>                 | pondent provides answer according to - (b) Own view (d) None                                      |
| (xiv) Primary function of the hypother<br>(a) Social policy<br>(c) Laws   | esis is to make - (b) Changes (d) Theory  |
| <ul><li>(xv) In multi-stage sampling, which s</li><li>(a) First</li><li>(c) Last</li></ul>                            | sample is finally selected?  (b) Middle  (d) Random   |
| <ul><li>(xvi) Naïve observations are-</li><li>(a) Systematic</li><li>(c) Participative</li></ul>                      | (b) Unstructured (d) None   |
| <ul><li>(xvii) Aim and objectives of the resea</li><li>(a) Interrelated</li><li>(c) Repeated</li></ul>                | (b) Ambitious (d) Contradictory   |
| (xviii) Empirical test by scientific wa<br>(a) Hypothesis<br>(c) Evidence   | y deals with- (b) Variable (d) Concept  |
| <ul><li>(xix) Stratified random sampling enta</li><li>(a) Sub-sample</li><li>(c) Computers</li></ul>                  | (b) Tipper's table (d) All  |
| <ul><li>(xx) Operational design deals with -</li><li>(a) Item selection</li><li>(c) Statistics</li></ul>              | <ul><li>(b) Observation</li><li>(d) Techniques</li></ul>  |

\*\*\*\*