2023

Time - 3 hours

Full Marks - 80

Answer **ALL** questions.

Figures in the right hand margin indicate marks.

1. What are various types and significance of research? Describe the problems encountered by researchers in India. [20]

OR

Write notes on:

(a) Meaning and objectives of research methods [10
 (b) Criteria for good research [5
 (c) Research problems [5

2. What is research design? Describe briefly about measurements, scaling, data collection and data preparation in sample survey.

[20

OR

Write notes on:

[10 × 2

- (a) Interpretation and report writing in research
- (b) Statistical parameters in geology

3. Describe about fundamentals of geological mapping. Write a brief note on grain size analysis and interpretation with diagram. [20]

OR

Write notes on:

[10 × 2

- (a) Wenner method of groundwater exploration
- (b) Chemical parameters in quality of groundwater analysis
- 4. Describe briefly about how aerial photography and remote sensing used in mineral exploration. [20]

OR

Write notes on:

[10 × 2

- (a) Elementary idea on GIS
- (b) How remote sensing used in groundwater exploration?