

00175

**Ph.D. GEOLOGY
(PHDGY)**

Term-End Examination

June, 2018

RGY-102 : RESEARCH TECHNIQUES IN GEOLOGY

Time : 3 hours

Maximum Marks : 100

Note : Answer any *five* questions. All questions carry equal marks.

1. Describe the kind of geological data you would collect in field pertaining to your area of research/interest. 20

2. Discuss in detail, the principle of X-Ray Fluorescence (XRF) technique giving suitable diagrams. Add a note on the sample preparation used for analysis in XRF technique. 20

3. Explain the methods of sample preparation for palaeontological investigation. 20

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4. Give a brief account on field equipment you would carry to undertake fieldwork for any geological research. 20

 5. Discuss the applications of remote sensing and GIS techniques in geological research. 20

 6. Elaborate on different types of sampling methods with the help of suitable diagrams. 20

 7. Write short notes on any **two** of the following : 2×10=20
 - (a) Field Safety Measures
 - (b) Heavy Mineral Separation
 - (c) Use of GPS in Fieldwork
 - (d) Preparation of Thin Section

 8. Write short notes on any **two** of the following : 2×10=20
 - (a) X-Ray Diffraction Technique
 - (b) Preparation of Solution 'B'
 - (c) TAS Classification
 - (d) Electrolyte Polishing and Etching Techniques
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