

00453

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

**Term-End Examination  
December, 2018**

**RGY-102 : RESEARCH TECHNIQUES IN  
GEOLOGY**

*Time : 3 hours*

*Maximum Marks : 100*

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

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1. Discuss the procedure of documentation of observations in the field diary. 20
  2. Discuss in detail the principle and working of Inductively Coupled Plasma Atomic Emission Spectrometer (ICPAES). Add a note on the sample preparation used for this technique. 20
  3. Elaborate different types of sampling methods with the help of suitable diagrams. 20
  4. Give an account on the points to be kept in mind while planning a geological field work. 20
  5. Discuss the methods of sample preparation for sedimentological investigation. 20
  6. Describe applications of remote sensing and GIS techniques in geological research. 20

7. Write short notes on **any two** of the following : **2x10=20**
- (a) Use of GPS in field work
  - (b) Heavy mineral separation
  - (c) Importance of site selection
  - (d) Data collection for geological research
8. Write short notes on **any two** of the following : **2x10=20**
- (a) Scanning electron microscope
  - (b) Field safety measures
  - (c) Grinding and polishing equipment
  - (d) Flame photometer
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