

This question paper contains 4 printed pages]

**CODE : FS-17**

**GEOLOGY**

*Time : 3 Hours*

*Maximum Marks : 200*

*Note :— (i) Attempt five questions in all selecting at least one question from each section in addition to the compulsory questions. Question numbers 1 and 5 are COMPULSORY. All questions carry equal marks. Illustrate your answer with suitable labeled sketches.*

*(ii) Parts of the same question must be answered together and should not be attempted between the answers to other questions.*

**Part I**

1. Write short notes on the following :

- |               |   |
|---------------|---|
| (a) Crust     | 8 |
| (b) Ring dyke | 8 |

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- |     |   |    |
|-----|---|----|
| (c) | Geological surveying                              | 8  |
| (d) | Lithostratigraphy                                 | 8  |
| (e) | Gastropods  | 8  |
| 2.  | Describe any <i>two</i> of the following :        |    |
| (a) | Internal structure of the earth                   | 20 |
| (b) | Origin of oceans                                  | 20 |
| (c) | Evidences of Continental Drift                    | 20 |
| 3.  | Write short notes on the following :              |    |
| (a) | Ripple marks                                      | 10 |
| (b) | Types of unconformities                           | 10 |
| (c) | Fault terminology                                 | 10 |
| (d) | Types of metamorphism                             | 10 |
| 4.  | Write notes on any <i>four</i> of the following : |    |
| (a) | Siwalik Group                                     | 10 |
| (b) | Modes of preservation of fossils                  | 10 |

- |     |                                     |    |
|-----|-------------------------------------|----|
| (c) | Principles of stratigraphy          | 10 |
| (d) | Evolution of sutures in Cephalopods | 10 |
| (e) | Subathu and Kasauli Formations      | 10 |

### Part II

5. Write short notes on the following :

- |     |                                 |   |
|-----|---------------------------------|---|
| (a) | Crystal systems                 | 8 |
| (b) | Physical properties of minerals | 8 |
| (c) | Pegmatites                      | 8 |
| (d) | Sandstones                      | 8 |
| (e) | Schists                         | 8 |

6. Describe any *two* of the following :

- |     |   |    |
|-----|---|----|
| (a) | Types of twinning   | 20 |
| (b) | Physical and optical properties of feldspar group of minerals | 20 |
| (c) | Structure of silicate group of minerals                       | 20 |

7. Write short notes on the following :

(a) Classification of ore deposits 10

(b) Occurrence of iron ore deposits in India 10

(c) Location of Coal deposits of India 10

(d) Schlumberger and Wenner configuration 10

8. Explain any *four* of the following :

(a) Origin of igneous rocks 10

(b) Classification of sedimentary rocks 10

(c) Types of metamorphism 10

(d) Gneissosity 10

(e) Conglomerates 10