

2008

15

100138

GEOLOGY (Optional)**भूशास्त्र (वैकल्पिक)****Time : 3 hours]****[Maximum Marks : 200****Note :**

- (i) In all attempt Five questions.
- (ii) Question No. 1 is compulsory.
- (iii) Of the remaining questions, attempt Any Four by selecting one question from each section.
- (iv) Numbers of optional questions upto the prescribed number in the order in which questions have been solved, will only be assessed and excess answers of the question/s will not be assessed.
- (v) Candidate should not write roll number, any names (including his/her own), signature, address or any indication of his/her identity anywhere inside the answer book otherwise he/she will be penalised.

1. Answer any four of the following :**4x10=40**

- (a) What is toposheet ? How can you interpretate, toposheet and geological maps ?
- (b) How fault in field can be recognised ? Write in brief criteria for recognition.
- (c) Explain formation, Geographic distribution and economic uses of coal of Maharashtra.
- (d) Explain role of engineering geology in civil construction.
- (e) Explain the supergene enrichment process of mineralisation.

SECTION - A**2. Answer the following sub-questions :**

- (a) Explain in detail various continental drift theory, with reference to evidences. **20**
- (b) What is Aerial photographs ? Explain in detail uses of Aerial photographs in mineral exploration. **20**

3. Answer the following sub-questions :

- (a) Explain in detail different hypothesis regarding the origin of Earth. **20**
- (b) What is GIS ? Explain Application of Geographic Information System in various field of Geology. **20**

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SECTION - B

4. Answer the following sub-questions :
- (a) Define silicate structure ? Explain various types of silicate structure of rock forming minerals. 20
- (b) How can you identify following rocks of Earth Crust : Granite, Basalt, Dolerite, Sandstone and Schist. 20
5. Answer the following sub-questions :
- (a) Explain various optical properties of minerals, under plane polarised and cross nicol. 20
- (b) Define metamorphism ? Explain in detail, Agents and Kinds of metamorphism. 20

SECTION - C

6. Answer the following sub-questions :
- (a) Explain Geological Time Scale with subdivision. 15
- (b) Explain in brief uses of fossils. 15
- (c) Explain Geographic distribution and use of Iron in India. 10
7. Answer the following sub-questions :
- (a) Describe, classification, distribution and economic importance of Gondwana Supergroup. 15
- (b) Explain classification and morphology of hard part of Pelecypoda. 15
- (c) Give geographical distribution and uses of manganese. 10

SECTION - D

8. Answer the following sub-questions :
- (a) What is aquifer ? Describe different types of Aquifers. 20
- (b) Describe in detail impact of volcanic activity on the environment. 20
9. Answer the following sub-questions :
- (a) What is Hydrological Cycle ? Describe in detail various processes responsible for Hydrological Cycle. 20
- (b) What is Landslide ? Which factors are responsible for landslides, and write their effect on life ? 20