

MFS

2007

GEOLOGY (Optional)

भूशास्त्र (वैकल्पिक)

000388

Time : 3 hours

Maximum Marks : 200

- Note :**
- In all attempt five questions.
 - Question No. 1 is compulsory.
 - Of the remaining Questions, Attempt any four by selecting one question from each section.
 - 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.
 - Candidate should not write roll number, any names (including their own), signature, address or any indication of their identity anywhere inside the answer book otherwise he will be penalised.

1. Answer any four of the following : 40
- Give and explain various parts of Clinometer and Brunton compass and their uses in geological studies.
 - Give the classification of folds based on axial plane and the limbs.
 - Explain early magmatic processes of mineralisation.
 - Give the geological consideration for safe construction of highways.
 - Give the criteria for selection of building stones and characters of various building stones.

SECTION - A

2. Answer the following sub-questions :
- Explain internal structure and give age of the earth. 20
 - Explain various landforms formed by the river. 20
3. Answer the following sub-questions :
- Give the concept of plate tectonics and explain plate boundaries. 20
 - Give the morphometric analysis and explain the use of Geographical Information System in geomorphology. 20

P.T.O.

SECTION - B

4. Answer the following sub-questions :

- (a) Define a mineral. Give forms, hardness, fracture and cleavage in mineral. 20
- (b) Explain factors controlling formation of textures and various textures in igneous rocks. 20

5. Answer the following sub-questions :

- (a) Give a sketch of petrological microscope and explain its various parts and their functions. 20
- (b) Explain processes involved in the formation of sedimentary rocks. 20

SECTION - C

6. Answer the following sub-questions :

- (a) What is correlation ? Give methods of correlation. 15
- (b) Give and explain hardpart morphology of Trilobite. 15
- (c) Give geographical distribution of iron, manganese and coal in Maharashtra. 10

7. Answer the following sub-questions :

- (a) Explain stratigraphic succession, lithological characters and topographic features of Deccan Traps. 15
- (b) Explain processes of fossilization and give different methods of their collection. 15
- (c) Give the distinguishing properties and uses of magnesite, siderite and malachite. 10

SECTION - D

8. Answer the following sub-questions :

- (a) What is artificial recharge ? Explain methods of artificial recharge. 20
- (b) Explain the effects of quarrying and mining on environment. 20

9. Answer the following sub-questions :

- (a) Give the concept of watershed management. Explain various methods of water conservation. 20
- (b) Explain hazards related to earthquake and volcanic eruption. 20

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