

QP Code : 5196

REVISED COURSE

3 Hours

Total marks : 80

- N.B.
1. Question No. 1 is compulsory.
  2. Attempt any three questions out of remaining five questions.
  3. Draw neat labeled diagrams wherever necessary.
  4. All the parts of a question should be grouped together.
  5. Figures to the right indicate marks.

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|----|-------|---|----|
| 1. | A.    | Explain the following terms in short  | 10 |
|    | i)    | Sial and Sima   |    |
|    | ii)   | Talus slope   |    |
|    | iii)  | Geological agents   |    |
|    | iv)   | Loess   |    |
|    | v)    | Rock forming minerals   |    |
|    | vi)   | Intrusive igneous rocks   |    |
|    | vii)  | Geological structures   |    |
|    | viii) | Order of superposition  |    |
|    | ix)   | Core loss   |    |
|    | x)    | Sources of groundwater  |    |
|    | B.    | Name the following :-   | 05 |
|    | i)    | Two minerals have chemical composition C.   |    |
|    | ii)   | Two minerals show Lamellar form.  |    |
|    | iii)  | Mineral has purple colour and absence of cleavage.  |    |
|    | iv)   | Two minerals have high specific gravity.  |    |
|    | v)    | Two minerals feel soapy   |    |
|    | C.    | Name the structure of the rock with example..   | 05 |
|    | i)    | The rock shows parallel alternate arrangement of equidimensional minerals and platy minerals. |    |
|    | ii)   | The rock shows amygdals.  |    |
|    | iii)  | The rock shows three sets of joints.  |    |
|    | iv)   | The rock shows layered structure where thickness of the bed is less than one cm.              |    |
|    | v)    | The rock/deposit shows spherical grains whose dimension upto 2 mm.                            |    |
| 2. | i)    | Describe various products of volcanoes.   | 05 |
|    | ii)   | Describe various precautionary measures during construction in the earthquake prone areas.    | 05 |
|    | iii)  | Explain the geological action of river with various landforms.                                | 10 |
| 3. | i)    | Write different textures of igneous rock with examples.                                       | 10 |
|    | ii)   | Which geological structures are suitable and unsuitable for tunnel construction               | 10 |

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4. i) Explain physiographic divisions of India with economic importance. 05  
 ii) How is unconformity formed ? Explain Disconformity. 05  
 iii) State the importance of geological investigation. What is core logging and RQD ? 05  
 iv) Explain different types of spring. 05
5. i) What are the parts of fault ? 04  
 ii) Explain the geological and engineering properties of building stones.State the uses of building stones with examples. 08  
 iii) Describe the different types of landslide.Give recent examples. 08
6. Write short notes on (any four) 4x5  
 i) Pedestal rock  
 ii) Glacial valley and hanging valley  
 iii) Overturned fold and fan fold  
 iv) Dome and basin  
 v) Gravity fault and reverse fault  
 vi) Ripple marks and cross bedding  
 vii) Cone of depression  
 viii) Thermal metamorphism  
 ix) Physical weathering with examples  
 x) Whale back form and drumlins