

- 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.

1. (i) Write the identifying properties and economic use of the following minerals. 5  
 (a) Quartz  
 (b) Hematite  
 (c) Talc  
 (d) Galena  
 (e) Corundum
- (ii) Define the following terms. 5  
 (a) Strike  
 (b) Gravity Dam  
 (c) RQD  
 (d) Solifluction  
 (e) Dyke
- (iii) Which geological agent is responsible for the formation of the following Landforms-- 5  
 (a) Hanging Valley  
 (b) Pedestal rock  
 (c) Alluvial fan  
 (d) Stalactite  
 (e) Delta
- (iv) Name the following-- 5  
 (a) Parent rock for marble  
 (b) Hardest mineral  
 (c) A fracture along which there is relative displacement of the rocks  
 (d) Maximum angle of inclination of a layer of rock with the horizontal  
 (e) A type of metamorphism where temperature plays the dominant role
2. (i) What is texture? Describe various types of textures of igneous rocks. 10  
 (ii) Write a note on causes and preventive measures for landslides. 5  
 (iii) What is chemical weathering? 5
3. (i) Discuss the favourable and unfavourable geological structures for dam foundation. 10  
 (ii) Agents of metamorphism. 5  
 (iii) Various types of Unconformity. 5

4. (i) Give a brief account of various types of faults. 10  
(ii) Write a note on electrical resistivity method of geophysical investigation. 6  
(iii) Draw a neat labeled diagram showing various parts of a fold. 4
5. Write short notes on any 5 of the following-- 20  
(a) Economic importance of Deccan Trap  
(b) Mural joints  
(c) Structures in sedimentary rocks  
(d) Building stones  
(e) Perched Water Table  
(f) Internal structure of Earth  
(g) Products of volcano
6. Differentiate between any 5 of the following-- 20  
(a) Conglomerate and Breccia  
(b) Mechanical joint and natural joint  
(c) Overturned and recumbent fold  
(d) Aquifer and aquiclude  
(e) Seismograph and seismogram  
(f) Phacolith and Laccolith  
(g) Influent stream and effluent stream.
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