

QP Code : 1177**OLD COURSE****(3) Hours****Total Marks: 100****N.B. 1. Question No. 1 is compulsory**

2. Attempt any 4 questions out of remaining 6 questions.

3. Draw neat labelled 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) Corundum | (b) Gypsum |
| (c) Rock salt | (d) Calcite |
| (e) Muscovite | |
- (ii) Define the following terms. 5
- | | |
|-------------------|-------------|
| (a) Water Table | (b) Strike |
| (c) Dyke | (d) Erosion |
| (e) Seismic Waves | |
- (iii) Answer the following- 5
- Write two metallic minerals.
 - Name the products of volcano.
 - Define engineering geology.
 - What is a strike-slip fault?
 - What is a confined aquifer?
- (iv) Which geological agent is responsible for the formation of the following landforms- 5
- | | |
|----------------|--------------------|
| (a) Oasis | (b) Mushroom rock |
| (c) Delta | (d) Hanging valley |
| (e) Seif Dunes | |

[TURN OVER**QP-Con. 10504-15.**

2. (i) What is texture? Write the various textures of igneous rocks. 10
- (ii) Give a brief account of the agents of metamorphism. 5
- (iii) How sedimentary rocks are formed? Describe any two structure of sedimentary rocks. 5
3. (i) What is a tunnel? Discuss the favourable and unfavourable geological structures for Tunnel construction. 10
- (ii) Write a note on weathering of rocks. 5
- (iii) What are the causes of earthquakes? 5
4. (i) Describe various types of Folds based on the position of axial plane 10
- (ii) What is unconformity? Describe Angular unconformity. 5
- (iii) What is a dam? Describe various forces acting on dam. 5
5. (i) Describe the stratigraphy of Cuddapah System and its economic importance. 10
- (ii) Describe the seismic method of geophysical investigation? 5
- (iii) What is RQD? Explain its significance. 5
6. (i) Differentiate between any 5 of the following- (4x5=20)
- (a) Central eruption and fissure eruption
- (b) Chemical Weathering and Physical weathering
- (c) V shaped valley and U shaped valley
- (d) Normal Fault and Reverse Fault
- (e) Seismogram and seismograph
- (f) Phacoliths and Laccoliths
7. Write short notes on any 5- (4x5=20)
- (a) Horst and Graben structure (b) Principles of Stratigraphy
- (c) Zones of ground water (d) Importance of geology in civil engineering
- (e) Causes and preventive measures of landslides (f) Building stones