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**Question Paper Code : X10236**

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2020  
Third / Fifth Semester  
Civil Engineering  
CE 8392 – ENGINEERING GEOLOGY  
(Regulations 2017)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions

PART – A

(10×2=20 Marks)

1. Mention some useful effects of weathering.
2. Sketch the layers of the interior of the Earth.
3. Define Lusture of minerals.
4. Write note on Moh's scale of mineral hardness.
5. Distinguish between igneous and sedimentary rocks.
6. Write note on properties of rocks used for road metaling.
7. Define Strike direction and Dip direction.
8. Write the electrical Resistivity values of some rocks.
9. Explain Gravity Dam.
10. What is meant by False Colour Composite (FCC) ?

PART – B

(5×13=65 Marks)

11. a) Briefly explain the role of geology in civil engineering.

(OR)

- b) Define Seismograph. Mention some location where seismic instruments installed in India. Explain about the Seismic Zones of India.



12. a) Describe the physical properties of Feldspar group and Mica group of minerals.

(OR)

b) Write about the physical properties of

- a) Hypersthene, Augite      b) Quartz, Hornblende

13. a) Brief notes on following igneous rocks.

- a) Granite      b) Dolerite

(OR)

b) Describe the geological occurrence, economic uses and engineering significance of the Sandstone.

14. a) Explain the basic component of seismic instruments and their working procedure.

(OR)

b) Define fold and its parts, how it is classified and explain the civil engineering consideration of fold.

15. a) Discuss the necessary geological conditions for successful Tunneling.

(OR)

b) Define landslides, discuss the causes of landslides, give an example for remedial taken to mitigate landslides.

**PART – C**

**(1×15=15 Marks)**

16. a) Briefly explain the different engineering property test for rocks.

(OR)

b) Mention the standard guidelines considered for construction of major dams and reservoirs.

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