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**Question Paper Code: 31133**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2016

Third Semester

Civil Engineering

01UCE303 - ENGINEERING GEOLOGY

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. What is an 'exfoliation' weathering?
2. Distinguish between wave and current?
3. How are minerals identified?
4. List out the places of Indian occurrences of coal.
5. Define Hypabyssal rock.
6. Write the types of metamorphism.
7. What is meant by dip in rock?
8. What is a Fault? Comment on its significance.
9. State the different types of remote sensing platforms?
10. What are the geological characters to be considered for bridge construction?

PART - B (5 x 16 = 80 Marks)

11. (a) (i) Discuss the importance of geology in the field of civil engineering projects. (10)  
(ii) Discuss about physical and chemical weathering. (6)

Or

- (b) Explain the concept of plate tectonics and describe its relation to seismicity. (16)

12. (a) Describe the classification and physical properties of quartz family. (16)

Or

- (b) Discuss about physical properties of minerals. (16)

13. (a) Bring out any six salient characteristics between Igneous, sedimentary and Metamorphic rocks? (16)

Or

- (b) How will you differentiate the three groups of rocks in the field. (16)

14. (a) What is a fold? Describe the various classifications of fold with neat sketch. (16)

Or

- (b) Describe electrical resistivity method and seismic method of geological investigations. (16)

15. (a) What are landslides? Give a detailed account on the types, causes, geological investigations and remedial measures for landslides. (16)

Or

- (b) Discuss the factors which are influencing landslides and suggest remedial measures. (16)