Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 90112

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019
Third/Fifth Semester
Civil Engineering
CE 8392 – ENGINEERING GEOLOGY
(Common to Environmental Engineering)
(Regulations 2017)

Time : Three Hours | Maximum : 100 Marks

Answer ALL questions.

PART – A **(10×2=20 Marks)**

1. Write short notes on the landforms of Sea.
2. Write short note on the interior of the earth.
3. Briefly write the physical properties of Quartz group of minerals.
4. Write notes on the physical properties of clay minerals.
5. Distinguish between igneous and sedimentary rocks.
6. Give the engineering properties of Limestones and Marble.
7. Write short notes on the attitude of beds.
8. Discuss the various coastal protection structures.
9. Distinguish between geological map and topographic map.
10. Write few lines on applications of Remote Sensing in civil engineering.

PART – B **(5×13=65 Marks)**

11. a) Explain how the Earthquakes occur. Write notes on seismic zones in India.

(OR)

b) Describe the different types of physical and chemical weathering of rocks.

12. a) Give a detailed account on the physical properties of Pyroxene group of minerals.

(OR)

b) Enumerate the physical properties of Feldspar group of minerals and their suitability in civil engineering applications.

13. a) Write an essay on the engineering properties, distribution and uses of Granite and Laterites.

(OR)

b) Describe the classification of rocks and their brief engineering properties.

14. a) Explain in detail on the seismic methods for subsurface investigations.

(OR)

b) Describe the various types of Faults and their control on geological structures.

15. a) Discuss in detail on the geological conditions essential for construction of dams.

(OR)

b) Write an essay on causes and mitigation of Landslides.

PART – C **(1×15=15 Marks)**

16. a) Write an essay and critically analyze the formations of various landforms of river and wind.

(OR)

b) Discuss in detail on the geological conditions required for the design and construction of Tunnels.