## B.E.Third Semester (Civil Engineering) (C.B.S.)

**Engineering Geology** NKT/KS/17/721 P. Pages: 1 Time: Three Hours Max. Marks: 80 Notes: 1. All questions carry marks as indicated. 2. Solve Question 1 OR Questions No. 2. 3. Solve Question 3 OR Questions No. 4. 4. Solve Question 5 OR Questions No. 6. Solve Question 7 OR Questions No. 8. 5. Solve Question 9 OR Questions No. 10. 6. Solve Question 11 OR Questions No. 12. 7. Assume suitable data whenever necessary. 8. Illustrate your answers whenever necessary with the help of neat sketches. 9. What is stratigraphy? Discuss the principle of stratigraphic Co-relation. a) Discuss the physiographic and tectonic division of India. b) OR Write short notes on following. 14 a) Ox-bow lake. b) Sand dunes Products of volcano. Plate tectonics d) What is mineral? Describe the various physical properties that help in their identification. 3. 13 OR 4. What are igneous rocks? Describe the tabular classification of igneous rocks. 13 What is fault? Describe the different types of fault with neat sketches. Add a note on 14 5. engineering consideration of fault. A limestone bed in a reservoir area is dipping at 1 in 5 along N 70°E. Find its apparent dip 6. a) along S 60°E. Give procedure scale 1 unit = 1cm. b) A limestone bed is dipping at 25° East into a hill slope 20° West. Its out crop is 300m wide. Determine the true and vertical thickness of limestone. Write procedure. Scale 1 cm = 50 m. 7. What is earthquake? Describe the origin of earthquake. Add a note on seismic zones of 13 India. OR 8. What are landslides? How are they caused? Describe the methods of preventing 13 landslides. 9. What is hydrological cycle? Describe the occurrence of ground water below the earths 13 surface. 10. What is prospecting? Explain Electrical Resistivity method of geophysical exploration in 13 detail. Discuss the brief account of the geological knowledge as applied in the construction of 11. 13

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12. Discuss the geological conditions which lead to location, design and construction of a successful dam projects.

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