

(DCE 216)

B. Tech. DEGREE EXAMINATION, MAY - 2015

(Examination at the end of Second Year)

CIVIL ENGINEERING

Paper - VI : Engineering Geology

Time : 3 Hours

Maximum Marks : 75

Answer question No. 1 compulsory

(15)

Answer ONE question from each unit

(4 x 15 = 60)

- 1) a) Define Geology.
- b) What is meant by Erosion?
- c) Write short note about Rock Cycle.
- d) Define Metamorphism.
- e) Draw the diagram of chevron fold.
- f) Define unconformity.
- g) What is meant by outcrop?
- h) Define land slide.
- i) Define Rock.
- j) What are the different types of dam?
- k) Define over break.
- l) What is meant by Soil Degradation?
- m) What are the different parts of Dam?
- n) Write about Ground water Quality.
- o) Define Isomorphism.

Unit – I

- 2) a) Write about the importance of geology in civil engineering point of view? (8)
b) What are the rock forming Minerals? And explain about their identification in detail. (7)

OR

- 3) Write the physical properties, chemical composition and uses of following minerals. (15)
- | | |
|-------------|---------------|
| a) Asbestos | b) Dolerite |
| c) Feldspar | d) Hornblende |
| e) Mica | |

Unit – II

- 4) What is the texture of Igneous rocks? Discuss briefly the types of textures found in Igneous Rocks. (15)

OR

- 5) Describe about the following :
- | | |
|--|-----|
| a) Insitu tests for Deformability Tests. | (5) |
| b) Shear Tests. | (5) |
| c) Strength Tests for Internal Stresses. | (5) |

Unit – III

- 6) a) What are the parts of FOLDS? Classify the types of joints with sketches. (7)
b) How would you distinguish between joints and faults? How do they influence major civil engineering works? (8)

OR

- 7) a) Describe the classifications and causes of Earthquakes. (7)
b) Describe the various effects of Earthquakes? How do we measure the earthquakes by earthquake measuring scales. (8)

Unit – IV

- 8) Explain the following geophysical methods with suitable sketches. Also discuss their importance.
- | | |
|--|-----|
| a) Electrical Resistivity Method. | (5) |
| b) Seismic Refraction Method. | (5) |
| c) Geophysical Methods of Investigation. | (5) |

OR

- 9) Explain the purposes, effects and geological considerations for Tunneling. (15)

