B.Tech 6th Semester (Civil) F-Scheme Examination,

May–2017

ENGINEERING GEOLOGY

Paper-CE-312-F

Time allowed : 3 hours]   *[Maximum marks : 100*

Note : Attempt any five questions selecting first question as compulsory.

1. Attempt any *five* :   4+4+4+4+4

  (a)   What are sedimentary rocks ?

  (b)   Define anticline and syncline

  (c)   Define spring and artesian well

  (d)   What is soil profile ?

  (e)   Define stratigraphy

  (f)   Discuss intensity of earthquake

2. (a) Define Geology and list down various sub divisions of geology.   10

  (b)   Give a general view of the internal structure of the Earth as revealed by the seismological evidence.   1

3. (a) What is soil profile ? Discuss its importance. 1

(b) Explain briefly some major geological features produced by wind on the land. 10

4. (a) Define a mineral, a rock and an ore. 6

(b) Explain important physical properties of minerals that are commonly studied for their identification. 10

5. (a) Describe with the help of neat sketches, various parts of faults as understood in structural engineering. 14

(b) What are folds ? Give an outline of classification of folds. 10

6. Write a short note on uses of remote sensing techniques for geological and hydrological survey of site. 20

7. (a) Write an essay on "Ground water and Engineering Practice". 10

(b) Give an account of the various properties and functions of an aquifer. 10

8. (a) Give a general account of geological characters that have to be known for location of a DAM. 10

(b) Give a broad account of geological conditions that influence the stability of a road cut. 10

9. (a) Explain the importance of understanding geology in improving hill-slope stability. 10

(b) How rock quality at a foundation site can be improved by artificial treatment ? 10