Code No: CE1506 **GEC-R14**

II B. Tech I Semester Regular Examinations, November 2015

ENGINEERING GEOLOGY AND GIS APPLICATIONS

(Civil Engineering)

Time: 3 Hours **Max. Marks: 60**

Note: All Questions from **PART-A** are to be answered at one place.
Answer any **FOUR** questions from **Part-B.** All Questions carry equal Marks.

PART-A

6 × 2 = 12M

1. Enumerate the physical properties of minerals.
2. Describe extrusive forms of igneous rocks.
3. Explain the terminology of the fault.
4. Write on the water table and its significance.
5. Explain the map projection.
6. Briefly state the role of GIS in hydrology.

PART – B

4 × 12 = 48M

1. a) Explain the identification of minerals using physical properties. (6M)
   b) Write the physical properties of i) Quartz ii) Calcite (6M)
2. a) Describe the concordant igneous forms. (6M)
   b) Describe the structures of Metamorphic rocks. (6M)
3. a) Give a comparative study of Anticline – Syncline, Similar fold – Parallel fold, open fold – closed fold (6M)
   b) Explain the recognition of faults in the field. (6M)
4. a) What are the Causes of earthquakes? (6M)
   b) what are the types of landslides (6M)
5. a) Write about Transverse Mercator projection, its usages and main features. (6M)
   b) What are the advantages and disadvantages of Raster data model? (6M)
6. a) Explain Raster overlay operations with examples. (6M)
   b) Explain GIS application in Geomorphology and hydrology. (6M)

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