H.T.No. | | | | | | | | | | |

Code No: CE1506 **GEC-R14**

II B.Tech I Semester Regular Examinations, November 2016

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. Write on types of lustre of minerals.
2. Write on porphyritic and intergranular textures.
3. State how the unconformities are recognised.
4. Explain the terminology of Earthquake.
5. What are the data input devices and data output devices in GIS?
6. What is overlaying in GIS.

PART-B

4 × 12 = 48M

1. a) Explain the relevant branches of Geology significance to Civil Engineering. (6M)
   b) Write the physical properties of
   i) Quartz ii) Talc (6M)
2. a) Explain the textures of Igneous rocks. (6M)
   b) Describe the mechanical structures of Sedimentary rocks. (6M)
3. a) Classify and describe the joints. (6M)
   b) Explain the Engineering considerations involved in dealing with folded rocks. (6M)
4. a) Explain the internal and external causes to landslides. (6M)
   b) Explain the types of Aquifers. (6M)
5. a) Write the comparison of raster and vector data models. (6M)
   b) Explain map projections. (6M)
6. a) Explain the raster overlay operations with examples. (6M)
   b) Explain GIS application in flood zone delineation and mapping. (6M)

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