END TERM EXAMINATION

SIXTH SEMESTER [B.TECH] MAY-JUNE 2018

Paper Code: ETCE-304   Subject: Applications of Remote Sensing and GIS
(Batch 2013 onwards)

Time: 3 Hours   Maximum Marks: 75

Note: Attempt all questions as directed. Internal choice is indicated.

Q1 (a) Write down different frequencies of EM spectrum in tabular form.   (5)
    (b) Explain the applications of GIS in geotechnical engineering.   (5)
    (c) What are the merits and demerits of GPS?   (5)
    (d) Differentiate the active and passive sensing.   (5)
    (e) What are the true and false colour composites?   (5)

UNIT-I

Q2 Discuss spectral reflectance curves for rocks, soils, vegetation and water.
                                                                         (12.5)

OR

Q3 What are the laws of radiations? Explain image characteristics.

UNIT-II

Q4 Discuss the salient features of some of operating remote sensing satellites.
                                                                         (12.5)

OR

Q5 What are the difference between restoration and enhancement of remote sensing images? Explain any two image enhancing operations.

UNIT-III

Q6 Explain the principle of cartography and cartographic design.   (12.5)

OR

Q7 Discuss the merits and demerits of raster data format and vector data format. Illuminate different types of GIS data.

UNIT-IV

Q8 What is geo-spatial technology? Explain how the assessment of cyclones and rainfall are made.   (12.5)

OR

Q9 Explain the applications of geo-spatial technology in-
    (a) Inventory and monitoring
    (b) Coastal zone management

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