No. of Printed Pages: 03	Roll No
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CC-722

M. Tech. EXAMINATION, Dec. 2018

(Third Semester)

(B. Scheme) (Main & Re-appear)

CE(HSE)

CEH603

GIS IN HIGHWAY ENGINEERING

Time: 3 Hours [Maximum Marks: 75]

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note: Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

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P.T.O.

Unit I

- 1. Write short notes on the following:
 - (a) Type of resolution of remote sensing Data
 - (b) Ideal and real remote sensing
 - (c) Type of land use and land cover classification.
- **2.** (a) Write a brief note on Indian Remote Sensing Program.
 - (b) What is spectral reflectance curve and discuss its its use ?

Unit II

- **3.** (a) Write a brief about various components of GIS.
 - (b) Discuss various application of GIS in Civil Engineering.
- 4. (a) Describe various types of GPS errors.
 - (b) Write different data type used in GIS and their application in various civil engineering projects.

Unit III

- **5.** Discuss various process involve in implanting a GIS project.
- **6.** What are the requirement of proper planning, implanting and management for GIS ?

Unit IV

- 7. Write short notes on application of GIS in :
 - (a) Intelligence transport system
 - (b) Highways alignment.
- 8. Write short notes on application of GIS in :

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- (a) Environment impact analysis
- (b) Collecting road inventory.

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