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18CC1654

M. Tech. EXAMINATION, 2020

(Third Semester)

(C Scheme) (Main & Re-appear)

CE(SE)

CES627C

REMOTE SENSING AND GIS IN ENGINEERING

Time: 2½ 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 *Four* questions in all. All questions carry equal marks. Assume if any missing data.

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- **1.** (a) Write in brief about the history of surveying and mapping.
 - (b) Explain the following terms:
 - (i) Geomatic Surveying
 - (ii) Large and Small mapping
 - (iii) Numbering Surveying.
- **2.** (a) Mention the applications of remote sensing to various Highways of remote.
 - (b) Give the characteristics of solar radiation energy.
- **3.** (a) Explain in detail about the ideal remote sensing system.
 - (b) What are Sensor ? Discuss about characteristics of Orbital.
- **4.** (a) What is the phenomenon in satellite that gives you a stereo data product?
 - (b) Describe the various remote sensing digital data format.

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- **5.** (a) Define topography. What are the main parts of a GIS data model ?
 - (b) Elaborate Spatial modelling and its functions.
- **6.** (a) Differentiate between space Segment, Control Segment and User Segment.
 - (b) Give a detailed description of satellite navigation system of GPS.
- 7. (a) Describe the utility of GIS for the selection of a site for an engineering project.
 - (b) Mention three broad areas of water resources application where remote sensing can be used.
- **8.** Write in detail:
 - (i) DTED
 - (ii) Data acquisition
 - (iii) Receivers.