M.Sc. 3rd Semester Examination-2022-23

GEO-INFORMATICS

Course ID : 33151   **Course Code : GI-301T**

Course Title : Database Management System, GNSS and GPS

Time : 2 Hours   *Full Marks : 40*

The figures in the right hand margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

Answwer any *four* questions selecting at least one from each unit.

UNIT-I : Database Management System

1. Write down the properites of RDBMS   5

   • What do you mean by "Tuple"?   2

   • What is the function of Data Manipulation Language?   3

2. Write a short note on temporal and object oriented database. Explain one to many Relationship and data redundancy.   6+4

(Turn Over)

UNIT-II : GNSS

3. • Discuss the main functions of Ground Control Segment of GNSS. 4+1+2+3

   • Which part of the Electromagnetic wavelength is used by GNSS ?

   • What is the purpose of the atomic clocks on-board the satellites ?

   • What technique is used by GNSS receivers to determine their locations ? Explain in brief.

4. Briefly explain the differences between ophemeris and almanac data. 5+2+3

   • What is Anti-spoofing ?

   • Explain the Multipath Error.

UNIT-III : Differential Global Navigation Satellite System

5. Briefly describe different type of GPS surveying method. Describe the term double difference. 7+3

6. Write down the three applications of GNSS. Explain the working principles of DGNSS with proper illustrations. 3+7

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