

CBCS SCHEME

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18AS744

Seventh Semester B.E. Degree Examination, July/August 2022 Global Navigation Satellite Systems

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

1 Describe about the basic architecture of GPS with neat diagram. (20 Marks)

OR

2 Explain about the GAGAN architecture with clear diagrams. (20 Marks)

Module-2

3 Write notes on:

- GPS signal structure
- Anti spoofing
- Selective Availability
- Differential GPS.

(20 Marks)

OR

4 Describe in detail about Galileo and compass satellite navigation construction with necessary diagrams. (20 Marks)

Module-3

5 Give detail notes on: i) GPS Orbital Parameters ii) RINEX (20 Marks)

OR

6 Explain about the GPS observation data, navigation data and GPS position determination with required figures. (20 Marks)

Module-4

7 Explain in detail about: i) Ionospheric Error ii) Tropospheric Error. (20 Marks)

OR

8 Describe about the following:

- Clock and Multipath Error
- Ionospheric Error estimation using dual frequency.

(20 Marks)

Module-5

9 Describe about the Navigation with Indian constellation by suitable figures. (20 Marks)

OR

10 Give detail explanation on:

- IRNSS Frequencies
- Data structure
- Frame structure
- Ionosphere correction coefficients.

(20 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.