

Code No: 138CG

R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year II Semester Examinations, December - 2020

GLOBAL POSITIONING SYSTEM

(Electronics and Communication Engineering)

Time: 2 Hours

Max.Marks:75

Answer any Five Questions

All Questions Carry Equal Marks

1. How to determine the user position and velocity from received satellite ephemeris? Explain. [15]
2. Discuss briefly about User segment, Control segment and Space segment. [15]
3. Describe C/A code and P-code Generations with block diagrams. [15]
- 4.a) How Pseudo range is different from True range?
b) Describe Selective Availability and how the Selective Availability is achieved. [6+9]
5. Draw the schematic functional block diagram of the generic GPS receiver and explain each block in detail. [15]
- 6.a) Describe how ionospheric delay is estimated using dual frequency GPS receiver measurements.
b) Define the tropospheric delay. [12+3]
- 7.a) Discuss the salient features of WADGPS.
b) What is Wide Area Augmentation System? [10+5]
8. Describe Receiver Independent Exchange format (RINEX) of GPS observation and navigation data. [15]

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