Roll No..

IT-501 (GS)

B.E. V Semester Examination, June 2020
Grading System (GS)
Data Communication

Time : Three Hours

Maximum Marks : 70

Note: i) Answer any five questions.
        ii) All questions carry equal marks.

1. Draw the signal wavelength when D0110111 is transmitted using following codes
   i) NRZ-L   ii) NRZ-M.

2. Define and draw continuous time, discrete time, periodic nonperiodic, analog and digital signals.

3. Define Shannon capacity? A telephone line has a bandwidth of 3000Hz assigned for data communication. The signal to noise ratio is usually 3162. Calculate the channel capacity for it.

4. Differentiate between:
   i) Analog and Digital signals
   ii) Time and Frequency domain

5. Write Short Notes on:
   a) Network interface   b) Radio waves
   c) ISDN

6. Define the following terms:
   i) Bandwidth   ii) Throughput
   iii) Jitter

7. Give suitable examples and explain following codes :
   i) Return to zero   ii) Non return to zero
   iii) Bipolar line codes

OR

Explain guided and unguided media with example.

8. Write Short Notes on:(Any two)
   a) ISDN
   b) Co-axial Cables
   c) Synchronous Digital Hierarchy (SDH)

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