

SUBJECT : PRINCIPLES OF COMMUNICATION

Day : Monday
Date : 22/10/2018

W-2018-0958

Time : 12.00 NOON TO 02.00 PM
Max. Marks : 40

N. B. :

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw diagrams **WHEREVER** necessary.
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Q.1 Answer **ANY TWO** of the following: (10)

- a) State any five features of CDMA.
- b) Explain working of the circuit for diode modulator with a neat diagram.
- c) Draw block diagram of communication system and explain the function of each block.

Q.2 Answer **ANY TWO** of the following: (10)

- a) What is synchronous data communication? State its merits and demerits.
- b) What is PSK? Explain.
- c) What is FDM? Explain the formation of 12 channel group.

Q.3 Answer **ANY TWO** of the following: (10)

- a) State five points of difference between amplitude modulation and frequency modulation.
- b) Explain synchronization in TDM system.
- c) Explain the GPRS system with necessary diagram.

Q.4 Answer **ANY FIVE** of the following: (10)

- a) State two points of difference between QAM and QPSK.
- b) What is serial communication?
- c) Define any two parameters of antenna.
- d) Give the classification of modems on the basis of speed of data transmissions.
- e) Define : Shannon channel capacity theorem.
- f) Define : Signal to noise ratio and bit rate.
- g) Draw a diagram showing output of FSK modem sending data 10101100.

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