B.Tech. SEM -V Bio Medical 2014 Course (CBCS) : WINTER - 2018

SUBJECT : PRINCIPLES OF COMMUNICATION AND TELEMEDICINE

Day : Saturday **W-2018-2431** Time : 02.30 PM TO 05.30 PM

Date : 24/11/2018 Max. Marks : 60

N. B. :

1) All questions are **COMPULSORY**.
2) Figures to the right indicate **FULL** marks.
3) Draw neat and labeled diagram **WHEREVER** necessary.
4) Assume suitable data, if necessary.

Q. 1 Discuss in brief multi channel wireless telemetry system. **(10)**

OR

Describe the various modulation schemes used in wireless telemetry for transmitting Biomedical signals. **(10)**

Q. 2 Elaborate the role of artificial intelligent system in health care and diagnosis. **(10)**

OR

What is a telemedicine concept? Discuss various applications in detail **(10)**

Q. 3 **a)** Explain the block diagram of super heterodyne receiver. **(05)**

b) What is tracking? Explain any one method of tracking. **(05)**

OR

Describe the generation of FM and PM wave. **(10)**

Q. 4 **a)** Compare natural and flat top sampling. **(05)**

b) What are the drawbacks of Delta modulation? **(05)**

OR

a) How analog signal is converted into digital using PCM? **(05)**

b) What is concept of Time division multiplexing? **(05)**

Q. 5 Describe the various modulation schemes used for MODEM. **(10)**

OR

a) Write in brief about physical and network layer of OSI architecture. **(05)**

b) Write a note on Rs. 232 protocol. **(05)**

Q. 6 **a)** Describe different orbital aspect in satellite communication. **(05)**

b) Explain polarization with respect to satellite communication. **(05)**

OR

a) Discuss the losses in optical fiber. **(05)**

b) Compare various multiple access methods. **(05)**

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