

**B.TECH. SEM -V BIO MEDICAL 2014 COURSE (CBCS) : WINTER -
2017**

**SUBJECT: PRINCIPLES OF COMMUNICATION &
TELEMEDICINE**

Day: **Saturday**
Date: **13/01/2018**

W-2017-2168

Time: **02.30 PM TO 05.30 PM**
Max Marks: **60**

N.B:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data if necessary.
- 4) Use of non-programmable **CALCULATOR** is allowed.

Q.1 Describe single channel & multichannel telemetry system. **(10)**

OR

What is telemedicine? How analog physiological signals are transmitted over telephone lines?

Q.2 What is the role of satellite & video conferencing for health care diagnosis? **(10)**

OR

Elaborate the concept:

- a) Artificial intelligence system in health care
- b) Telemedicine training to personnel for diagrams & health care.

Q.3 Compare Amplitude modulation & frequency modulation. **(10)**

OR

Describe super heterodyne receiver. What is sensitivity, selectivity & fidelity?

Q.4 What is sampling Theorem? Differentiate natural & flat top sampling. **(10)**

OR

How ADM overcomes the drawbacks of the Delta modulation?

Q.5 Describe the architecture of open system interconnection (OSI) layer with block diagram. **(10)**

OR

What is ASK,FSK and PSK in keying modulation?

Q.6 What are different orbital aspects of satellite? Also state its advantages, disadvantages & applications. **(10)**

OR

Describe the following points regarding fiber optic communication.

- a) Types & modes of fiber
- b) Losses in fiber
- c) Applications

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