

**B.Tech. SEM -IV Bio Medical 2014 Course (CBCS) : WINTER -
2017
SUBJECT: ELECTRONICS INSTRUMENTS & MEASUREMENT SYSTEM**

Day: **Wednesday**
Date: **22/11/2017**

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

W-2017-2104

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labelled diagrams **WHEREVER** necessary.
- 4) Use of non-programmable **CALCULATOR** is allowed.

Q.1 Define accuracy, precision, linearity, sensitivity, resolution. (10)

OR

Q.1 Draw block diagram of electronic measuring system and describe function of each block in detail. (10)

Q.2 Describe how vector voltmeter is used in measurement of phase and magnitude at high frequency. (10)

OR

Q.2 Draw block diagram of digital LCR-Q meter and describe the function in detail. (10)

Q.3 Draw block diagram of universal counter and describe Time and frequency measurement modes. (10)

OR

Q.3 With the help of schematic diagram describe the operation of swept frequency generator. (10)

Q.4 Draw the block diagram of DSO and describe the function of each block in detail. (10)

OR

Q.4 What is power scope? State its applications. (10)

Q.5 What is Network analyzer? How 'S' parameters are measured using network analyzer? (10)

OR

Q.5 What are different EMI/ EMC standards? (10)

Q.6 What is distortion? How to use distortion factor meter for its measurement? (10)

OR

Q.6 How logic analyzer is used to analyze different digital circuits? (10)

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