S.18

Code No.: 9A04604/R09

Set-4

B.Tech. III Year II Sem. Regular and Supplementary Examinations

April/May - 2013

ELECTRONIC MEASUREMENTS AND INSTRUMENTATION

(Electronics and Communication Engineering)

Time: 3 Hours | Max. Marks: 70

*Answer any **FIVE** Questions*

***All** Questions carry **equal** marks*

- - -

1. (a) What are the essential requirements of multipliers?

   (b) Explain how different full scale voltage ranges may be obtained by the use of individual multiplier resistors or potential divider arrangement.

2. (a) How signal generators are different from self-contained oscillators?

   (b) Write brief note about RF signal generators with frequency band limits.

3. (a) Describe with a diagram the operation of a harmonic distortion analyzer using a bridged T-network.

   (b) Explain the procedure of measurement of a harmonic distortion analyzer using a bridged T-type.

4. (a) State the standard specifications of a sample CRO.

   (b) Explain with a diagram how frequency can be measured using a gear wheel method.

5. With a neat block diagram, describe the working of a triggered sweep CRO.

6. (a) Describe the operation of the wheatstone bridge.

   (b) Define the term null as it applies to bridge measurements.

7. (a) What is the operating principle of beta gauge?

   (b) What are the various scanning modes of a beta gauge?

8. (a) Explain about I/O address map and PC bus of PC system.

   (b) Explain the hard disk features and partitions.