Question Paper Code: 45403

B.E. / B.Tech. DEGREE EXAMINATION, AUGUST 2021

Fifth Semester

Electronics and Communication Engineering

14UEC503 - ELECTRONIC MEASUREMENTS AND INSTRUMENTATION

(Regulation 2014)

Duration: 1:45 hour

Maximum: 50 Marks

PART A - (10 x 2 = 20 Marks)

(Answer any ten of the following questions)

- 1. List the sources of error.
- 2. Differentiate Accuracy and Precision.
- 3. Why delay line is used in CRO?
- 4. List the applications Q meter.
- 5. Differentiate Function generators from Signal generators.
- 6. Give the importance of L, C and R measurements.
- 7. List the different types of digital voltmeter.
- 8. What is meant by automatic zeroing?
- 9. Point out the analog elements used in digital data acquisition system.
- 10. List out the uses of data logger.
- 11. Write a short note on sweep generators.
- 12. What are the functions of multimeter?
- 13. What is meant by automatic zeroing?
- 14. Point out the analog elements used in digital data acquisition system.
- 15. List out the uses of data logger.

PART – B (3 x 10= 30 Marks)

(Answer any three of the following questions)

16. Explain in details about the various types of errors in measurement systems. (10)
17. With neat sketch explain the block diagram of digital storage oscilloscope. (10)
18. Explain the functional block diagram of Function generator and mention its features. (10)
19. Classify the different types of digital voltmeter. Explain the operation of ramp type digital voltmeter. (10)
20. Explain the characteristics of the IEEE 488 bus. How it is used as an interface? Give

its advantages and disadvantages. (10)