

DVOC (Medical Imaging Technology)
Subject : Electronic Measurement & Instrumentation-I

Time : 2 Hrs.

M.M. : 50

SECTION-A

Note: Multiple Choice questions. All questions are compulsory. (5x1=5)

- Q.1 The error occur due to the human mistake in measurement are _____
a) random errors b) gross error
c) systematic error d) environmental errors
- Q.2 Which is the correct notation of dimensional formula for Force?
a) Mass x acceleration b) Newton
c) $[M^1 L^1 T^2]$ d) $m \times a$
- Q.3 _____ is the degree to which a experimental value is very near to the actual value.
a) Precision b) Resolution
c) Mean d) Accuracy
- Q.4 Multirange ammeter can uses:
a) universal Shunt b) Series Shunt
c) Parallel Shunt d) None of the above

- Q.5 Deflecting torque is _____ quantity under measurement in PMMC instrument.
- a) directly proportional
 - b) inversely proportional
 - c) directly proportional to square of
 - d) inversely proportional to square of

SECTION-B

Note: Objective type questions. All questions are compulsory. (5x1=5)

- Q.6 What do you mean by systematic error?
- Q.7 What is the CGS unit of Mass?
- Q.8 Define the term Resolution.
- Q.9 Give the formula for converting a temperature value from kelvin to Celsius.
- Q.10 What is the scientific notation of 0.00035?

SECTION-C

Note: Short answer type questions. Attempt any six questions out of Eight questions. (6x5=30)

- Q.11 What is the importance of scientific notations?

- Q.12 What are the basic units of electricity?
- Q.13 What is the difference between absolute and relative errors?
- Q.14 Distinguish between accuracy and precision.
- Q.15 Discuss the working of DC voltmeter.
- Q.16 Explain with diagram, the working of digital frequency meter system.
- Q.17 What is the importance of Dimensions? Give its examples.
- Q.18 What are the advantages of transistorized voltmeters?

SECTION-D

Note: Long answer type questions. Attempt any one questions out of two questions. (1x10=10)

- Q.19 What do you mean by unit? Give the classification of Units along with examples. Also mention various systems of unit.
- Q.20 Explain with block diagram, the working of digital multimeter. Also give the applications of digital multimeter.