



V.P & R.P.T.P SCIENCE COLLEGE

F.Y.BSc. (Ist Sem.) Internal test

Subject - Basic electronics instrumentation

Date: 03/10/2015

Course: Instrumentation (V)

Time: 1:30 pm to 2:30pm

Subject code: US01CINV01

Total Marks: 25

Q-1 Choose correct answer from given: [3]

- (1) A resistor has color band sequence is Gray, Blue, Gold and Gold, _____ is the resistance value of resistor.
- (A) $86\Omega \pm 5\%$ (C) $8.7\Omega \pm 5\%$
(B) $8.6\Omega \pm 5\%$ (D) $87\Omega \pm 5\%$
- (2) Capacitive reactances pass _____ signal and block _____ signal.
- (A) DC, AC (C) Low voltage dc, high voltage ac
(B) AC, DC (D) none of above
- (3) _____ converts one form of energy to another form of energy.
- (A) Transducer (C) Transconductance
(B) Transmission (D) none of above

Q-2 Short answer type questions. (attempt any two) [4]

- Briefly explain Thermistors.
- What is an inductive reactance (X_L)?
- Which factors affects the motion of moving coil in a magnetic field?

Q-3 Enlist different types of Resistor and explain any two fixed type resistor with necessary figure. [6]

OR

Q-3 Explain a voltmeter-ammeter method for resistance measurement. [6]

Q-4 Explain: (1) Electrolytic capacitor (2) Ceramic capacitor [6]

OR

Q-4 Explain fixed type inductor with necessary figure. [6]

Q-5 Explain suspended type galvanometer construction and working with necessary figure. [6]

OR

Q-5 Discuss the constructional details and temperature compensation of the PMMC mechanism. [6]

*** ALL THE BEST ***