

V. P. & R. P. T. P. Science College
First Internal Exam
US06CELE-04

10:00 a.m. to 12.00 Noon
Total Marks 50
8/3/2019

Q. 1 Multiple Choice Questions:

08

1. A source follower circuit following the emitter follower circuit increases input impedance by
 - (i) 100 fold
 - (ii) 1000 fold
 - (iii) 10 fold
2. The output voltage of heater element of thermocouple is directly proportional to
 - (i) squareroot of rms value of input signal.
 - (ii) square of rms value of input signal
 - (iii) double of rms value of input signal.
3. In a resonant circuit, at resonance capacitive reactance is equal to
 - (i) resistance of circuit
 - (ii) inductive reactance
 - (iii) Q of the circuit
4. The instrument is used to measure electrical properties of inductors and capacitors
 - (i) Ramp type DVM
 - (ii) Successive approximation DVM
 - (iii) Q meter
5. In optical writing, special photo sensitive chart paper sensitive to -----is used
 - (i) visible light
 - (ii) ultraviolet light
 - (iii) infrared light
6. -----type of recorders are well suited for low frequency AC input.
 - (i) Galvanometer
 - (ii) Potentiometer
 - (iii) XY recorder
7. In IEEE 488 system the frequency counter is
 - (i) Talker instrument
 - (ii) Listener instrument
 - (iii) Both (i) and (ii)
8. For a good radio receiver the signal to noise ratio should be greater than
 - (i) 2 or 4 dB
 - (ii) 6 or 10 dB
 - (iii) 1 or 2 dB



Q. 2 Answer any five questions in short.

10

1. Why MOSFET are most successful choppers?
2. What is principle of True RMS responding voltmeter?
3. What is use of SH circuit? Draw its circuit.
4. What is principle of basic Q meter circuit?
5. Explain briefly Thermal writing

6. What is characteristic of tape in magnetic tape recorder.
7. Which three components are required for computer controlled test system?
8. What is function of computer in ATE system.
- Q.3 Describe in detail working of True RMS responding voltmeter. 08
OR
- Q.3 Describe with neat diagram working of amplified DC meter. 08
- Q.4 Obtain expression for various components using parallel connection method of Q meter. 08
OR
- Q.4 Describe working of successive approximation DVM. 08
- Q.5 Explain fully strip chart recorders. 08
OR
- Q.5 Explain in detail working of Magnetic recorders. 08
- Q.6 Explain the testing of Audio Amplifier using automatic test system 08
OR
- Q.6 Give detailed information on 8 status lines of IEEE 488 digital interface system. 08

*****BEST OF LUCK *****

