Department of Electronics & Communication Engineering

Faculty of Engineering, Integral University, Lucknow

Quiz 2

Basic Electrical Engineering (IEN-101)

Faculty : Dr. Syed Hasan Saeed

Section : EC-1

Name & Roll Number :

Date :

Problems : 10

1. The voltage across heater of resistance 5 ohms, when the current flowing through it is 46A will be

   (a) 230V (b) 320V (c) 460V (d) 200V

2. A potential difference of 12V is applied to a 4.7 k Ω resistor. The circuit current will be

   (a) 5.22 mA (b) 2.55mA (c) 2.55A (d) 5.22A

3. A current in a circuit is due to a potential difference of 20V applied to a resistor of resistance 200 ohm. What resistance would permit the same current to flow if the supply voltage were 200V?

   (a) 2 Ω (b) 0.2 kΩ (c) 2 kΩ (d) 0.22 kΩ

4. A potential difference of 12V is applied to a 7.5Ω resistor for a period of 10 sec. The electric charge transferred during this time

   (a) 61C (b) 61.1C (c) 16C (d) 1.6C

5. Four capacitors each of 20 μF are connected in parallel, the total capacitance is

   (a) 80 μF (b) 5 μF (c) 16 μF (d) 61 μF

6. Ten capacitors each of 10 μF are connected in series, the total capacitance is

   (a) 100 μF (b) 1 μF (c) 0.1 μF (d) 0.001 μF

7. One Farad is equal to

(a) 1 Ω (b) 1V/C (c) 1C/V (d) 1 Ω/sec

8. The unit of resistivity

(a) Ω (b) Ω/m (c) Ω/m^2 (d) Ωm

9. Two resistors connected in parallel across a battery of 1V draw a current of 1A. When one of the resistor is disconnected, the current drawn is 0.2A. The resistance of the disconnected resistor is

(a) 1 Ω (b) 1.25 Ω (c) 5 Ω (d) 125 Ω

10. Which of the following does not represent the unit of power?

(a) VI (b) V/I (c) I^2R (d) J/sec

Basic Electrical Engineering By T.K.NAGSARKAR AND M.S.SUKHIJA, Oxford University Press