BALOCHISTAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY KHUZDAR

DEPARTMENT: EED **TEST-01** Date: 07-09-2921

SUBJECT: Electrical Network Analysis CODE: EE-211

SEMESTER: B.E(3rd Semester) Max: Marks: 05

Time Allowed: 20 Minutes Roll No:_____ Name of Student_____

(1) The power factor at resonance in R-L-C parallel circuit is
(a) Zero (b) 0.08 lagging (c) 0.8 leading (d) Unity

(2) Power factor of an electrical circuit is equal to
(a) R/Z (b) Cosine of phase angle between I and V (c) Ratio of useful current to total current (d) All above

(3) Capacitive reactance is more when
(a) Capacitance is less and frequency of supply is less
(b) Capacitance is less and frequency of supply is more
(c) Capacitance is more and frequency of supply is less
(d) Capacitance is more and frequency of supply is more

(4) Capacitive Susceptance is a measure of
(a) Reactive power in a circuit
(b) The extent of neutralization of reactive power in a circuit
(c) A purely capacitive circuits ability to pass current
(d) A purely capacitive circuits ability to resist the flow of current

(5) Ohm is unit of all the following except
(a) Inductive reactance
(b) Capacitive reactance
(c) Resistance
(d) Capacitance

(6) In a Y-connected circuit, the magnitude of each line current is
(a) One-third the phase current
(b) Three times the corresponding phase current
(c) Equal to the corresponding phase current
(d) Zero

(7) In a balanced three-phase load, each phase has
(a) An equal amount of power
(b) One-third of total power
(c) Two-thirds of total power
(d) A power consumption equal to $\sqrt{3}\, V_L I_L$

(8) In a three-phase system, the voltages are separated by
(a) 45^0 (b) 90^0 (c) 120^0 (d) 180^0

(9) The most commonly used connections for power systems as a step-up and step-down transformer are
(a) Star-delta, Star-star
(b) Delta-star, Star-delta
(c) Star-delta, Delta-delta
(d) Star-delta, Delta-star

(10) Phase sequence means ……

(11) Draw the Impedance Triangle ……

(12) Draw the Admittance Triangle……

(13) Draw the Power Triangle ……

(14) In Delta connection Line Current is equal to Phase Current (T/F) ……

(15) Write the formula of Resonance frequency ……

(16) Laplace Transform of sin(3t) ……

(17) Laplace Transform of (e^{-3t})……

(18) Laplace Transform of $e^{4t}\cos 3t$ ……

(19) Laplace Inverse of $(3/(s^2+9))$ ……

(20) Laplace Inverse of (s/s^2+16) ……

THE END