FY_EEEE_Theory_IA2_Quiz

Total points 13/20

FY BTech_EEEE_Theory_IA2_Quiz

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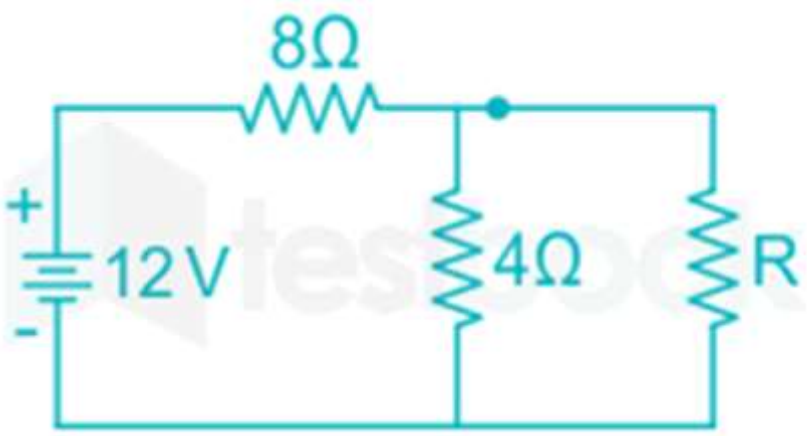
✓ 1)In the following circuit, what should be the value of R to absorb the maximum power from the source? *1/1



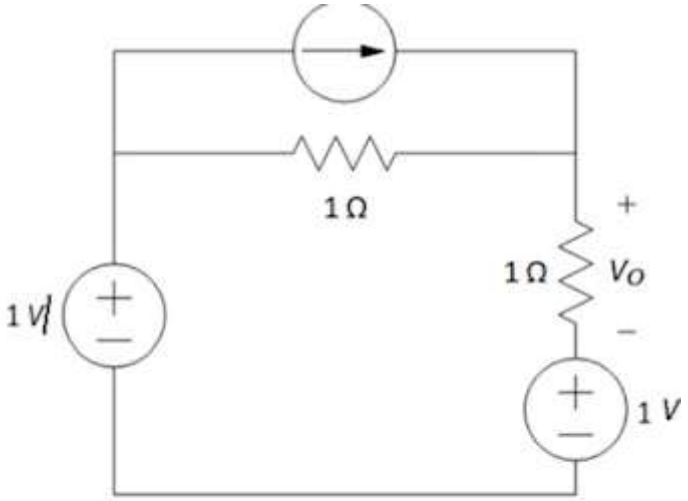
- ○ 3/8 Ω
- ◉ 8/3 Ω ✓
- ○ 4 Ω
- ○ 8 Ω

✓ **2)In a Full wave rectifier what is the average value of the voltage at the output of the rectifier?** *1/1

- ○ Vm/2
- ◉ 2Vm/π ✓
- ○ Vm/π
- ○ Vm/2π

✗ 3) Refer the following circuit diagram: * 0/1

Ca3lculate value of voltage Vo across 1 ohm resistor



- -1.5 V
- - 0.5 V
- 0 V ✗
- 0.5 V

Correct answer

- 0.5 V

✓ 4) The Thevenin voltage is the_____ * 1/1

- Short circuit voltage
- Open circuit voltage ✓
- Neither open circuit nor short circuit voltage
- Both Open circuit and short circuit voltage

✓ 5) If Current and Voltage are 90 Degree Out of Phase, Then The Power (P) will be_____. *1/1

- (●) Zero ✓
- ( ) Maximum
- ( ) Minimum
- ( ) Normal

✗ 6) In a half wave rectifier, the diode conducts for * 0/1

- (●) Half cycle ✗
- ( ) None of these
- ( ) Full cycle
- ( ) Alternate Half cycle

Correct answer

- (●) Alternate Half cycle

✗ **7) The reverse current effect damages the junction in _____ diode** *0/1

- (●) Zener diode ✗
- ( ) None of these
- ( ) LED
- ( ) PN Junction diode

Correct answer

- (●) PN Junction diode

✗ **8) ----- breakdown voltage is directly proportional to the temperature *** 0/1

- ( ) None of the above
- (●) Zener ✗
- ( ) Both above
- ( ) Avalanche

Correct answer

- (●) Avalanche

✓ **9) An ideal diode in forward bias have _____ resistance *** 1/1

- ( ) None of the above
- ( ) Finite
- ( ) Infinite
- (●) Zero ✓

✓ **10) The half-wave rectifier output DC voltage calculated by _____** * 1/1

- ○ Vpeak/2π
- ○ 2Vpeak/π
- ○ Vpeak/4π
- ◉ Vpeak/π ✓

✓ 11) Three similar coils each of resistance 20 Ω and inductance of 0.5 H, are connected in star to a three phase 50 Hz, 400 V supply then what is the value of phase voltage *1/1

- ○ 400 V
- ◉ 230.94 V ✓
- ○ 692 V
- ○ 440 V

✗ 12) In the measurement of 3-phase power using two wattmeter method, the value of phase angle when the two wattmeter reads equal reading is _____ *0/1

- (●) 90 ✗
- ( ) 60
- ( ) 45
- ( ) 0

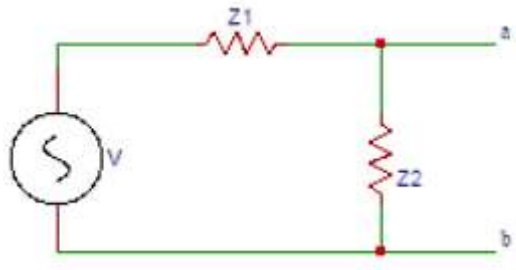
Correct answer

- (●) 0

✓ **13) In NPN BJT transistor which of the following terminal defines P-type** * 1/1

- ( ) Collector
- (●) Base ✓
- ( ) Gate
- ( ) Emitter

✓ 14) The Norton's equivalent impedance (ZN) in the circuit shown below is: *1/1



- ○ (Z1+Z2)/Z1
- ◉ Z1Z2/(Z1+Z2) ✓
- ○ Z1+Z2
- ○ (Z1+Z2)/Z2
- ○ Other: _____

✗ 15) **If the resistance of the load is double the resistance of the source in a circuit, the power transferred to the load is _____** *0/1

- ○ Double the maximum power
- ○ One fourth of the maximum power
- ○ Equal to the maximum power
- ◉ Half of the maximum power ✗

Correct answer

- ◉ Double the maximum power

✓ 16) The Maximum Power Transfer Theorem is based on the concept of *1/1

- (●) Thevenin's Theorem ✓
- ( ) Kirchoff's Law
- ( ) Ohm's Law
- ( ) Superposition Theorem

✓ 17) The efficiency and ripple factor of center tap full wave rectifier is *1/1

- ( ) 28.7% and 1.21
- ( ) 69.3% and 0.48
- (●) 81.2% and 0.48 ✓
- ( ) 40.6% and 1.21

✓ 18) In the P-N junction at thermal equilibrium, the space charge region is a zone with a net charge provided by *1/1

- ( ) Minority charge carriers
- ( ) both majority and minority charge carriers
- ( ) Majority charge carriers
- (●) Immobile ions ✓

✓ 19)Which of the following BJT terminal controls the current flow * 1/1

- (●) Base ✓
- ( ) Drain
- ( ) Collector
- ( ) Emitter

✗ 20) In which of the following region do BJT operates in forward bias? * 0/1

- (●) Active ✗
- ( ) Cut-off
- ( ) Both a and c
- ( ) Saturation

Correct answer

- (●) Both a and c

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