Introduction to Electrical and Electronics Engineering (ECD104A)

Assignment -02 : Quiz

1. There are 10 questions.
2. Each Carries 1 Mark
3. No Negative Marking
4. Quiz will be closed automatically after the designated Time Window

Name *

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Register Number *

23ETCS002025

Section *

- (●) A
- ( ) B
- ( ) C
- ( ) D
- ( ) E

Programme : B.Tech. in _____ *

Computer Science & Engineering

Will be reviewed

In a digital circuit, which of the following scenarios would require the use of an AND gate? *

- (●) Turning on a light only when both switches A and B are closed
- ( ) Inverting the input signal

Will be reviewed

Which of the following best describes the behavior of a P-N junction diode under forward bias? *

- (●) The diode allows current to flow easily as the depletion region narrows.
- ( ) The diode operates as an open circuit regardless of the applied voltage.

Will be reviewed

The core of a transformer is laminated to reduce ____ losses. *

- ( ) Copper
- (●) Eddy current
- ( ) Hysteresis
- ( ) Windage

Will be reviewed

The field coils (windings) of a DC generator are usually made up of_____. *

- Mica
- Cast Iron
- Copper
- Carbon

Will be reviewed

According to the Right Hand Thumb Rule, the fingers curled around the conductor (wire) give the direction of _____. *

- Electric current
- Induced EMF
- Motion of conductor
- Magnetic field

Will be reviewed

Which of the following statements is correct regarding P-type and N-type semiconductors? *

- P-type semiconductors are created by doping silicon with elements from Group 5 of the periodic table.
- N-type semiconductors have an abundance of holes as the majority charge carriers.
- P-type semiconductors are created by doping silicon with elements from Group 3 of the periodic table.
- N-type semiconductors are created by doping silicon with elements from Group 4 of the periodic table.

Will be reviewed

The peak factor of a sinusoidal signal is ____. *

- 0.637
- 0.707
- 1.11
- 1.414

Will be reviewed

In Fleming's Left Hand Rule, the index finger shows the direction of_____. *

- Electric current
- Magnetic field
- Motion of conductor
- Induced EMF

Will be reviewed

_____ remains the same in all elements of a series circuit. *

- Resistance
- Power
- Current
- Voltage

Will be reviewed

Which of the following statements correctly differentiates between half-wave and full-wave rectifiers? *

- (●) A full-wave rectifier utilizes both the positive and negative halves of the AC cycle, while a half-wave rectifier uses only one half.
- ( ) A half-wave rectifier converts the entire AC waveform into DC, while a full-wave rectifier converts only half of the AC waveform.