

36 Lecture - PHY301

Important Subjective

What is a full wave rectifier?

Answer: A full wave rectifier is a type of rectifier that converts the entire cycle of an AC signal into a positive DC signal.

What is the configuration of a full wave rectifier?

Answer: A full wave rectifier consists of four diodes arranged in a bridge configuration.

How do the diodes conduct in a full wave rectifier?

Answer: During the positive half-cycle of the AC input, diodes D1 and D2 conduct, while during the negative half-cycle, diodes D3 and D4 conduct.

What is the ripple frequency in a full wave rectifier?

Answer: The ripple frequency in a full wave rectifier is twice the frequency of the AC input.

What is the purpose of the filter capacitor in a full wave rectifier?

Answer: The filter capacitor is added across the load resistor R_L to reduce the ripple component of the output.

How does the efficiency of a full wave rectifier compare to that of a half wave rectifier?

Answer: The efficiency of a full wave rectifier is higher than that of a half wave rectifier.

What is the output voltage of a full wave rectifier compared to that of a half wave rectifier?

Answer: The output voltage of a full wave rectifier is higher than that of a half wave rectifier.

What is the significance of the output waveform in a full wave rectifier?

Answer: The output waveform in a full wave rectifier is smoother than that of a half wave rectifier.

What is the input voltage required for a full wave rectifier?

Answer: A full wave rectifier requires an AC input voltage.

What is the load resistor in a full wave rectifier?

Answer: The load resistor in a full wave rectifier is the resistor connected to the output terminals.