

Name Wapas Bangash
ID 16323
Assignment Electronics
Module 2nd.

Qⁱ_q Explain Rectifier with
half wave and full
wave rectification.

Ans **Full-wave rectification**
rectifies the negative
component of the
input voltage to a
positive voltage, then
converts it into
DC (pulse current) utilizing
a diode bridge
configuration. In contrast,
half - wave rectification
removes just the
negative voltage
component using a
single diode before
converting to DC.

Q¹

Differentiate between intrinsic and extrinsic semiconductor.

Ans

Difference between Intrinsic and extrinsic semiconductor.

Electrical conductivity in intrinsic semiconductor is a function of temperature alone, but in extrinsic semiconductor the electrical conductivity depends upon the temperature and the amount of impurity doping in the pure semiconductor.

Q²₉

What is Transistor?
Differentiate between
BJT and FET.

Ans

Transistor :-

A transistor is a semiconductor device used to amplify or switch electronic signals and electrical power. It is composed of semiconductor material usually with at least three terminals for connection to an external circuit.

BJTs and FETs :-

BJTs and FETs are two different kinds of transistor and also known as active semiconductor devices. The major difference between BJT and FET is that, in a field effect transistor

only majority charge
carries flows, whereas
in BJT both majority
and minority charge
carries flows.

Q³_b

Differentiate between inverting and non-inverting amplifier.

Ans

The amplifier which has 180 degrees out of phase output with respect to input is known as an inverted amplifier, whereas the amplifier which has the o/p in phase with respect to i/p is known as a non-inverting amplifier.

Q₃

Differentiate between Active and saturation region of transistor.

Ans

Transistor cut off, saturation and active regions.

The flow Fig. The Region between cut off and saturation is known as active region. In the active region, collector-base junction remains reverse biased while base-emitter junction remains forward biased.

$Q_{\bar{3}}$
b

Differentiate between NPN and PNP transistor.

Ans

One of the major difference between the NPN and PNP transistor is that in the NPN transistor the current flow between collector to emitter when the positive supply is given to the base, whereas in PNP transistor the charge carrier flows from the emitter to collector when negative supply is given to the base.
