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Course Title: Electronics

Ans No 18-

electronics components
widely used. and Modren
in world technology e-

The basic components
of electronic communication
system are the transmitter,
communication channel or
medium, receiver, and

noise. Analog signals (such human
voice) or digital (binary data)

are inputted to the
system, proceed in the electric
circuit. For transmission

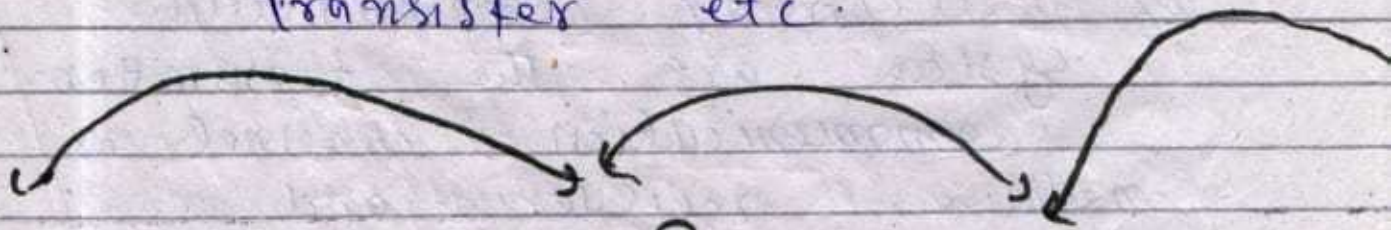
and then decoded by
receiver. an electronic

components is any
physical entity in an electronic
system use to effect

The electrons or their
associated field in a

intended Function of
 The electronic system -
 components usually connected
 together to printed circuit
 board. to create an
 electronic circuit. with
 particular Function. Components
 may be package singly
 or in more complex
 group as integrated circuit.

Some common electronic
 components are capacitor,
 inductor, resistor, diodes,
 Transistor etc.



Ans No R

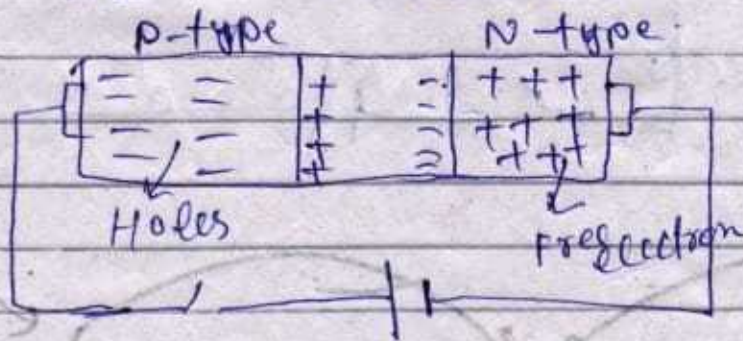
Forward and reverse
 Bias of PN junctions

① Forward Bias PN junctions -

When we connect p-type
 region of a junction with
 positive terminal of
 a voltage source and
 n-type region with
 the negative terminal

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of the voltage source
Then the junction is
said to be forward
biased - at this condition
due to the attraction
of positive terminal
of source -
electrons which participated
covalent bond creation in
p-type material will
be attracted towards
the terminal

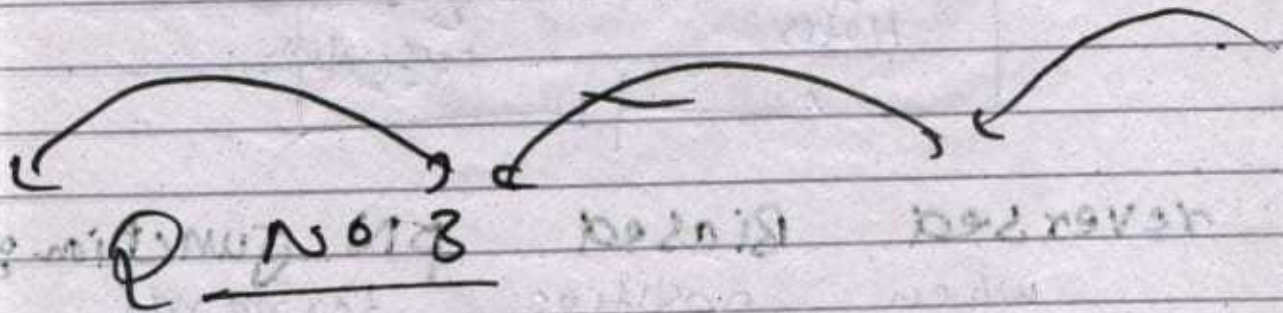
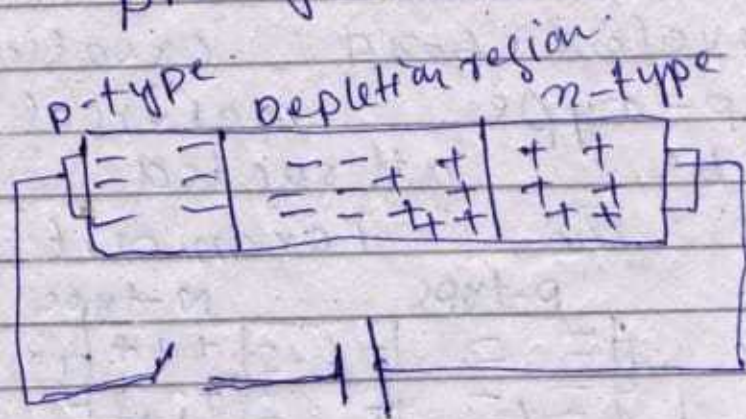


reversed Biased PN junction:-

when positive terminal
of a voltage source
is connected to n-type
region and the negative
terminal of the source
is connected to

the p-type region
then the PN junction
is said to be in
reverse biased condition
when there is no

The potential developed across the junction is 0.3 volts at 25°C for ~~prose~~ germanium PN junction and 0.7 volts at 25°C for silicon PN junction.



* intrinsic semiconductor
 intrinsic semiconductor also called an undoped semiconductor is a pure semiconductor without any significant dopant species present - The number of charge carriers is there for determining by the properties of the material.

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(5) ID # 16717

itself instead of the amount of impurities.

★ Doped Semi conductor:-

In semi conductor production doping is the intentional introduction of impurities into an intrinsic semi conductor. For the purpose of the modulating its electrical, optical and structural properties the doped material is referred as extrinsic semi conductor.


★ charge movement:-

In physics the charge movement is a particle that is free to move carrying an electric charge. The particle that carry electric charges in electric conductor

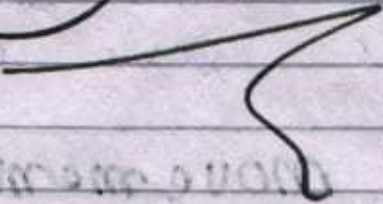
Examples are electrons ions and holes, in conducting medium an electric field

causing ~~at~~ a net
motion of the particles
through the medium

- ex: This is what constitute
an electric current
in conductive media
particles serve to
carry charge.



END



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