No. of Printed Pages : 4 220824
Roll No. .....

**2nd Sem / Computer, Computer (For Speech and Hearing Impaired)**

**Subject : Analog Electronics**

Time : 3 Hrs. M.M. : 60

## SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 The number of diodes required in bridge rectifier

a) 4 b) 2

c) 1 d) None

Q.2 Zenor Diode normally works in

a) Forward Bias b) Reverse Bias

c) Both d) None

Q.3 Transistor can work as amplifier

a) Yes b) No

Q.4 _____ Type of feedback is used RC phase shift oscillators

a) Negative feedback b) Positive feedback



Q.5 BJT is essentially a

a) Current driven device

b) Voltage driven device

c) Power driven device

d) None

Q.6 Majority carriers in P-type semiconductor is

a) Holes b) Electrons

c) Both d) None

## SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Define hole current.

Q.8 Define doping.

Q.9 Define Biasing.

Q.10 What is the efficiency of half wave rectifier?

Q.11 What is Class B amplifier?

Q.12 Define inverting amplifier.

## SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Explain working of PN junction diode.

Q.14 Explain extrinsic semiconductor.

Q.15 Explain working of thermistor.

Q.16 Explain working of common emitter amplifier.

Q.17 Differentiate between BJT and MOSFET.

Q.18 Explain working of full wave rectifier.

Q.19 Explain working of transistor as switch.

Q.20 What is feed back? Write advantages of Negative feed back.

Q.21 Explain working of Non Inverting amplifier.

Q.22 Explain working of 555 timer as monostable multivibrator.

## SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain difference between conductor, semiconductor and insulator with energy diagram.



Q.24 Explain working RC phase shift oscillator with neat diagram.

Q.25 Write short note on (Any two)

a) Filters

b) Crystal oscillator

c) Applications of op-amp