

Part – B

5 x 6 = 30

Answer the following

Answer should not exceed 400 words or two pages

11.a. Discuss about PN junction diode characteristics

(Or)

11.b. Explain about characteristics of tunnel diode

12.a. Describe the circuit arrangement for the output characteristics of
CB TRANSISTOR

(Or)

12.b. Discuss about the advantages and disadvantages of RC coupled amplifier

13.a. What is meant by feed back? Discuss about its types

(Or)

13.b. Describe Barkhausen criterion.

14.a. Express IP/OP impedance in terms of hybrid parameters

(Or)

14.b. Discuss about the parameters of OP-amp (inverting)

15.a. Compare FET AND BJT

(Or)

15.b. Discuss about the drain characteristics of depletion type MOSFET

Part – C

5 x 12 = 60

Answer the following

Answer should not exceed 800 words or four pages

16.a. State and prove Thevenin and Norton's theorem

(Or)

16.b. With a neat diagram explain in detail about V-I characteristics
of Zener diode.

17.a. Derive expressions for IP/OP resistance and voltage gain of common
emitter amplifier

(Or)

17.b. With a neat diagram explain the construction and operation of RC
coupled amplifier

18.a. Discuss the principle of operation and gain and advantages of
negative feed back

(Or)

18.b. Explain the operation of Colpitt's oscillator

19.a. Describe the construction and working of bistable multivibrator

(Or)

19.b. Explain the OP-AMP acting as subtractor and differentiator

20.a. Describe about FET operation and characteristics

(Or)

20.b. Discuss about SCR operation and characteristics
