

V.P. & R.P.T.P SCIENCE COLLEGE
US05CELE-01
First Internal Test

Date: 1/10/19
11:00 a.m. to 12:15 p.m.
Total Marks 25

Q1: Multiple choice questions:

5 marks

- (1) Which signal is sampled from the output circuit in the Transconductance amplifier?
(i) Voltage
(ii) Current
(iii) resistance
(iv) Conductance
- (2) Which oscillator is suited to the range of frequency from few kilo hertz to few megahertz
(i) Phase shift oscillator
(ii) Crystal oscillator
(iii) Wein Bridge oscillator
(iv) Hartley Oscillator
- (3) Complementary symmetry amplifier uses
(i) two npn transistor
(ii) two pnp transistor
(iii) one npn one pnp transistor
(iv) None of the above
- (4) In switching regulator the power transistor is used as
(i) high frequency ON/OFF switch
(ii) Low frequency ON/OFF switch
(iii) medium frequency ON/OFF switch
(iv) zero frequency ON/OFF switch
- (5) 78XX is a ----- regulator IC
(i) positive voltage
(ii) negative voltage
(iii) neutral voltage
(iv) None of above



Q2 : List the general characteristic of negative feedback and explain any two in detail. 5 marks

OR

Q2 : Classify amplifiers. Explain with appropriate circuit diagram any of two amplifiers. 5 marks

Q3 : Draw the circuit diagram of Wein bridge oscillator and explain in detail? 5 marks

OR

Q3 : Draw circuit diagram of crystal oscillator and explain it in detail. 5 marks

Q4 : For transformer coupled audio amplifier obtain expression for any one of following. 5 marks

- (i) Maximum power output
(ii) Impedance matching

OR

Q4 : Describe in detail Class A Pushpull amplifier. 5 marks

Q5 : List electrical parameters of a regulator IC. Explain any four. 5 marks

OR

Q5 : Draw block diagram of Switching regulator IC and state its applications. 5 marks

***** Best of Luck*****