

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



Date: 03/10/17
11:00 to 12:30 pm
Total Marks 25

Q1: Multiple choice questions:

3 marks

- (1) The frequency of sinusoidal oscillator is determined by the condition that phase shift around the close loop is
- (i) High
 - (ii) Low
 - (iii) 0° or 360°
 - (iv) 0° or 180°
- (2) For Class A amplifier current in output flows for
- (i) one half of input cycle.
 - (ii) more than onehalf of input cycle.
 - (iii) whole input cycle.
 - (iv) Quarter of the input cycle.
- (3) 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) None of the above

Q2 : Answer in short: (Any two)

4 marks

1. State two differences Hartley oscillator and Colpitt's oscillator.
2. Define Class A, Class B amplifiers.
3. Draw block diagram of regulated power supply.

Q3 : Draw the circuit diagram of phase shift oscillator and explain in detail?

6 marks

OR

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

6 marks

Q4 : For transformer coupled audio amplifier obtain expression for

6 marks

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

OR

Q4 : Name classification of amplifiers and obtain expression for power in case of large signal amplifier? **6 marks**

Q5 : Describe characteristics (parameters) of a regulator IC. **6 marks**

OR

Q5 : Explain two applications of IC-723. **6 marks**

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