Question Bank (G scheme)

Name of subject: ELECTRONICS DEVICES AND CIRCUITS **Unit Test :II**
Subject code: 17319 **Course : EJ/IS/IE**
Semester: III

Chap 3. Amplifiers (4 marks)

4 marks question

1) Draw circuit diagram of single tuned amplifier with frequency response curve.
2) Draw & explain double tuned amplifier with its frequency response

Chapter.4 Feedback Amplifiers & Oscillators (12 marks)

3 marks

3) Explain the advantages and disadvantages of negative feedback.
4) Draw the ckt. Diagram of crystal oscillator. Give the basic principle
5) A phase shift oscillator has R=220Kohms, C=500pF. Calculate the frequency of oscillation.

4 marks

6) Draw the block diagram and circuit diagram for current series feedback amplifier.
7) Explain the effect of negative feedback on voltage gain, input & output resistances, distortion, bandwidth and noise of piezoelectric crystal and also give the equivalent ckt. Diagram.
8) Draw & explain RC phase shift oscillator.
9) Explain the advantages and disadvantages of crystal oscillator.

Chapter.5 Time Base Generators (12 marks)

3marks

10) Explain operation of UJT with neat diagram.
11) Give application of sweep generators in TV and CRO.
12) Draw & explain UJT relaxation oscillator. Draw the waveforms & write the formula of frequency.

4 marks

13) Draw and explain the operation of Bootstrap sweep circuit.
14) Explain construction of UJT and draw its symbol.
15) Draw and explain the operation of Miller sweep circuit.
16) Draw and explain the operation of current time base generator.
17) Give applications of UJT.
18) A UJT with ή=0.62 is used in a relaxation oscillator circuit with

19) R=5kΩ and C=0.05μF. Determine the period and frequency of oscillation. Define intrinsic standoff ratio.

Chapter.6 Voltage Regulators (16 marks)

3marks

20) Draw & explain zener diode as a voltage regulator.
21) Draw the pin diagram of 1. IC78XX 2. IC 79XX 3. IC LM723

4 marks

22) Draw & explain transistorized shunt regulator.
23) Draw the block diagram of DC power supply. Explain the function of each block.

24) Draw & explain transistorized series regulator.
25) Construct a dual power supply capable of giving ±12V using 78XX and 79XX IC's.
26) State important features of IC 723. What is the use of CL and CS terminals?
27) For a zener diode voltage regulator , if Vs= 20V , Vz= 10V, Rs=500Ω, RL = 1KΩ, find a. Load voltage, b. Voltage drop across series resistor Rs and c. current through zener diode.