

No. of Printed Pages : 4

Roll No.

123743/30943

**4th Sem / Branch : Electrical, GE, Power Station,
Elect. Engg, Fine Tech & Safety
Subject:- Electronic Devices and Circuits**

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Multistage amplifier amplifies _____
a) Voltage level b) Power level
c) Current level d) None
- Q.2 Radio receiver uses _____ number of stages in IF section
a) Two b) Three
c) Four d) Five
- Q.3 In class A Amplifier, collector current flows for _____
a) Less than half cycle
b) Half the cycle
c) Entire cycle
d) Less than entire cycle
- Q.4 The Hartley Oscillator uses
a) Negative feedback b) Positive
c) Sinusoidal d) None

(1)

123743/30943

- Q.5 Transistor can be used as _____ for application
a) Switch b) Amplifier
c) Inverter d) All
- Q.6 _____ multivibrators are used as flip-flop in digital circuits
a) Astable b) Monostable
c) Bistable d) None
- Q.7 The collector efficiency of amplifier is maximum for:
a) Class A b) Class B
c) Class C d) Class AB
- Q.8 Sample and hold circuit is used in application like _____
a) D/A converter b) A/D converter
c) Amplification d) None
- Q.9 Feedback in Schmitt trigger is a _____ series
a) Positive b) Negative
c) Current d) None
- Q.10 A Schmitt trigger uses _____ feedback to generate square wave
a) Positive b) Negative
c) Current Series d) None

(2)

123743/30943

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 In 555 timer _____ pin is used for trigger pulse?
- Q.12 What is a tuned amplifier?
- Q.13 _____ multivibrator is called one shot multivibrator?
- Q.14 In integrator circuit, output is taken across _____
- Q.15 What is positive feedback .
- Q.16 What is voltage amplifier?
- Q.17 Crystal oscillator is used where _____ frequency is required.
- Q.18 The negative feedback reduces _____ in amplifier
- Q.19 Push Pull amplifier uses class _____?
- Q.20 The distortion is minimum in _____ type of power amplifiers.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 What are heat sink and why are they important.
- Q.22 Why power amplifiers are called large signal amplifiers.
- Q.23 Explain in brief operation of push pull amplifier.
- Q.24 Discuss the effect of negative feedback on gain, distortion and bandwidth.

(3)

123743/30943

- Q.25 Name various types of oscillator and state two applications of oscillator.
- Q.26 What are the advantages of tuned amplifiers.
- Q.27 Write a short note on Double tuned voltage amplifiers
- Q.28 Draw pin diagram of 555 timer.
- Q.29 Write a note on phototransistors.
- Q.30 Explain working of bistable multivibrator?
- Q.31 Explain block diagram of OP AMP and draw its symbol.
- Q.32 Explain RC as integrator circuits.
- Q.33 Explain Line regulation
- Q.34 Write a note on VCO
- Q.35 Explain concept of schmitt trigger circuit using OP AMP

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Define collector efficiency and derive expression for class A amplifier.
- Q.37 Explain working of RC phase shift oscillator
- Q.38 Explain working principle of photodiode

(780)

(4)

123743/30943