No. of Printed Pages : 4 180933/170933
Roll No. .....

3rd Sem / Electrical Engg.
Subject:- Electronics-II

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 In voltage amplifiers, the load resistance should be
a) as large as possible.
b) as small as possible
c) equal to output impedance.
d) equal to input impedance.

Q.2 Which of the following classes of amplifiers has maximum distortion.
a) Class A b) Class B
c) Class AB d) Class C

Q.3 Heat sink is used in the power amplifier circuit.
a) to increase the output power.
b) to reduce the heat loss in a transistor.
c) to increase the voltage gain of the power amplifier.
d) to increase the collector dissipation ratings of the transistor.

Q.4 Feedback in amplifier always helps in
a) Controlling its output.
b) increasing its gain.
c) reducing its input impedance.
d) stabilizes its gain.

Q.5 A tuned amplifier amplifies
a) a wide band of frequencies.
b) audio frequencies only.
c) video frequencies only.
d) a narrow band of frequencies.

Q.6 Emitter follower is an example of .
a) positive current feedback
b) positive voltage feedback
c) negative current feedback
d) negative voltage feedback

Q.7 A sinusoidal oscillator is an amplifier with_____feedback.
a) positive b) negative
c) No d) any of the above

Q.8 Wien bridge oscillator is basically a
a) pulse generator
b) sine wave generator
c) squrae wave generator
d) triangular wave generator

Q.9 A 555 timer can be used as
a) an astable multivibrator only.
b) a monostable multivibrator only.
c) a frequency divider only.
d) an astable multivibrator or a monostable multivibrator or a frequency divider.

Q.10 A differential amplifier essential consists of
a) two input and two output terminals
b) only resistors and transistors.
c) two transistors.
d) two CE amplifiers having emitters directly coupled to each other.

SECTION-B

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

Q.11 Amplifiers are coupled to increase gain .(True/False)

Q.12 Negative feedback increases gain while positive feedback reduces gain.(True/False)

Q.13 An astable multivibrator has_____stable state(s).

Q.14 ICs are generally made of_____.

Q.15 Common mode rejection ratio is used to measure the quality of _____amplifier.

Q.16 Push pull operation needs two transistors of the same type with _____characteristics.

Q.17 schmitt trigger is basically a_____multivibrator.

Q.18 _____ is an electronic circuit that changes the DC level of signal to desired level without changing the shape of applied signal.

Q.19 in the output waveform, positive part is clipped is known as_____ clipper.

Q.20 Write the function of voltage regulator.

SECTION-C

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

Q.21 Give the difference between voltage and power amplifier.

Q.22 Explain the working principle of class-A power amplifier.

Q.23 Describe the working principle of complemertary push pull amplifier.

Q.24 Differentiate between single and double tuned voltage amplifier.

Q.25 Write the impedance of feedback in amplifiers.

Q.26 Write a short note on Emitter follower amplifier circuits and its two applications

Q.27 Differentiate between oscillator and alternator.

Q.28 Describe the construction of Hartley oscillators with the help of circuit diagram.

Q.29 Explain the diode clamping circuit.

Q.30 Draw and explain wave shape of the bistable multivibrator.

Q.31 Classified the different type of IC voltage regulator.

Q.32 Describe the working of integrator using Op-amp.

Q.33 Draw the block diagram of 555IC timer.

Q.34 Draw the pin diagram of IC 741.

Q.35 Write the applications of multivibrators.

SECTION-D

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

Q.36 Explain the effect of negative feedback on the basis of voltage gain, stability , distortion, bandwidth, input and output impedance of an amplifier.

Q.37 Explain the construction and working of R-C oscillator with the help of circuit diagram. Also give its advantages and disadvantages.

Q.38 Explain the working principle of CVT.