No. of Printed Pages : 4
Roll No. .....

170933

3rd Sem. / Electrical

Subject : Electronics-ll

Time : 3 Hrs. M.M. : 100

SECTION-A

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

(Course Outcome/CO)

Q.1 Class _____ power amplifier has the highest collector efficiency. (CO-1)

Q.2 At resonance in series RLC circuit, the current is _____ (Minimum/Maximum). (CO-2)

Q.3 Most of the amplifiers use _____ feedback. (CO-2)

Q.4 Op-Amp can amplify both dc and ac signals. (True/False) (CO-5)

Q.5 Push Pull amplifier uses to transistors. (True/False) (CO-2)

Q.6 Wein Bridge oscillator can generate high

frequency.(True/False) (CO-3)

Q.7 Distortion in amplifier decreases with _____ feedback. (CO-2)

Q.8 Op-Amp stands for _____. (CO-5)

Q.9 In monostable multivibrator, number of stable states is _____. (CO-3)

Q.10 A 555 timer is a 6-pin IC. (True/False) (CO-4)

SECTION-B

Note: Very Short answer type questions. Attempt any ten parts 10x2=20

Q.11 Write any two applications of tuned voltage amplifiers. (CO-2)

Q.12 Define collector efficiency? (CO-1)

Q.13 Write any two reasons, why we need feedback in amplifiers. (CO-1)

Q.14 Write any two differences between oscillator and alternator. (CO-2)

Q.15 Draw a clamping circuit? (CO-3)

Q.16 Write two applications of wave shaping circuits. (CO-3)

Q.17 Why we use heat sink in power amplifiers. (CO-2)

Q.18 Write any two applications of Op-Amp. (CO-5)

Q.19 Describe a multivibrator? (CO-3)

Q.20 Define input offset voltage? (CO-4)

Q.21 Write any two applications of transistor inverter circuit using power transistor. (CO-2)

Q.22 What is class-B power amplifier? Explain in brief. (CO-1)

SECTION-C

Note: Short answer type questions. Attempt any eight questions. 8x5=40

Q.23 Explain with diagram working of single tuned voltage amplifier. (CO-2)

Q.24 Explain the effect of on voltage gain and stability in an amplifier. (CO-2)

Q.25 Differentiate between voltage and power amplifier. (CO-1)

Q.26 Draw the circuit of emitter follower? Explain its working. (CO-3)

Q.27 Explain working of a bistable multivibrator circuit. (CO-3)

Q.28 Explain working of a Class-A single ended power amplifier. (CO-2)

Q.29 Enlist the essentials of an oscillator? (CO-1)

Q.30 The gain of an amplifier is 100. When negative feedback is used, it reduces to 50. Find feedback factor. (CO-2)

Q.31 Explain the frequency response of a tuned voltage amplifier with diagram. (CO-2)

Q.32 Write a note on IC 555 timer. (CO-4)

SECTION-D

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.33 Explain working of complementary symmetry push pull amplifier with a neat labelled diagram. (CO-2)

Q.34 Draw diagram and explain working of Hartley oscillator. (CO-3)

Q.35 Explain working of Op-Amp as Differentiator. (CO-5)

Q.36 Write short notes on any two of the following:
(a) IC voltage regulator (CO-4)
(b) Advantages of negative feedback (CO-3)
(c) Piezo electric crystals (CO-3)

(**Note:** Course outcome/CO is for office use only)