Q.31 Explain the application of an OPAMP as differentiator.

Q.32 Write a short note on IC555.

Q.33 Write short note on CVT.

Q.34 Describe duty cycle.

Q.35 What is a regulated power supply?

SECTION-D

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

Q.36 Explain the operation of Wein Bridge Oscillator with a neat circuit diagram.

Q.37 i) Explain the operation of RC circuit as an integrator.

ii) Explain the circuit of a Bistable Multivibrator.

Q.38 Explain the construction and working of a Push Amplifier. What are its advantages?

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120943

4th Sem / Branch : Elect, Power Station Engg., Elect. & Eltx. Engg.

Subject:- Electronics-II

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 The push pull circuit must use _____ operation.

a) Class A b) Class C

c) Class B d) Class AB

Q.2 Reasonance occurs in an LC circuit when

a) $X_1 >> X_C$ b) $X_1 << X_C$

c) $X_1 = X_C$ d) None of the above

Q.3 At series resonance the circuit behaves as ____ load.

a) Capacitive b) Resistive

c) Inductive d) None of the above

Q.4 At parallel resonance the circuit offers _____ impedance.

a) Zero b) Minimum

c) Maximum d) None of the above

Q.5 The negative feedback in an amplifier _____ the voltage gain.

a) Reduces b) Increases

c) Does not change d) Produces oscillations

Q.6 A bistable multivibrator has
a) One stable state
b) Two stable state
c) No stable state
d) The state can't be changed

Q.7 Time constant of RC circuit is
a) RC
b) C/R
c) R/C
d) Independent of R and C

Q.8 A switch has _____ states.
a) One b) Zero
c) Three d) Two

Q.9 Zener diode used in a power supply.
a) Is forward Biased b) Is reversed biased
c) Rectifies the input d) Filters the input

Q.10 An ideal OP-AMP has
a) Infinite voltage gain
b) Infinite input resistance
c) Zero output resistance
d) All of the above

SECTION-B

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

Q.11 Complementry push pull amplifiers use _____ & _____ transistors.

Q.12 At resonance a parallel tuned circuit offers _____ impedence.

Q.13 Tuned voltage amplifiers are used to amplify _____ frequencies.

Q.14 What is the value of gain provided by an emitter follower circuit?

Q.15 Oscillators use _____ type of feedback.

Q.16 In a transistor oscillator active device is _____.

Q.17 Write full form of UPS.

Q.18 Output voltage of a 7805 IC voltage regulator is _____ Volts.

Q.19 The integrator circuit is _____ pass filter.

Q.20 Ideal OP AMP has _____ input impedance.

SECTION-C

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

Q.21 How does an oscillator produce output signal without any input?

Q.22 What is heat sink? Why it is used in Power Amplifiers?

Q.23 Explain the concept of parallel resonance.

Q.24 Explain the differences between Class A and Class B amplifiers.

Q.25 Explain Astable Multivibrator circuit.

Q.26 Explain the working of transistor as a switch.

Q.27 Explain the concept of load regulation.

Q.28 What is the concept of negative feedback?

Q.29 What are the applications of electronic oscillators?

Q.30 Define clamping. Draw a clamping circuit.