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**3rd Sem / Electrical**  
**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 amplifier must use \_\_\_\_\_ operation (CO1)
- a) Class C                      b) Class A  
c) Class B                      d) Class AB
- Q.2 In Class B Amplifier, the operating point is located at (CO1)
- a) Centre of Load line    b) Near saturation  
c) Cut off Point              d) None
- Q.3 Positive feedback is used in (CO3)
- a) Oscillators                  b) Amplifiers  
c) Alternator                  d) none of these
- Q.4 When RC circuit is taken as differentiator circuit, output is taken across (CO5)
- a) Capacitor                      b) Resistor  
c) Source voltage              d) none

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- Q.5 At parallel resonance, the circuit offers \_\_\_\_\_ impedance (CO2)
- a) Zero                              b) maximum  
c) minimum                      d) None of the above
- Q.6 Bistable multivibrator has \_\_\_\_\_ stable state (CO5)
- a) two                                b) one  
c) no                                 d) three
- Q.7 Hartley Oscillator uses (CO4)
- a) Negative feedback    b) a Tickler coil  
c) Split Inductor              d) Quartz
- Q.8 An IC voltage regulator has \_\_\_\_\_ pins (CO6)
- a) two                                b) one  
c) four                               d) three
- Q.9 In class B Amplifier, the operating point is located at (CO1)
- a) Centre of Load line    b) Near saturation  
c) Cut off point                d) None
- Q.10 An ideal OP-AMP has (CO7)
- a) Infinite voltage gain  
b) infinite input resistance  
c) zero output resistance  
d) all of the above

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## SECTION-B

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

- Q.11 Class \_\_\_\_ amplifier has highest collector efficiency. (CO1)
- Q.12 Negative feedback is used in (CO3)
- Q.13 Gain for ideal OP-AMP is \_\_\_\_ (CO7)
- Q.14 Output impedance of voltage amplifier is \_\_\_\_ as compared to power amplifier. (CO1)
- Q.15 Draw damped oscillation (CO4)
- Q.16 At parallel resonance, the circuit impedance is \_\_\_\_ L/CR \_\_\_\_ (CO2)
- Q.17 Colpitt's oscillator uses \_\_\_\_ (capacitive / inductive) feedback. (CO4)
- Q.18 Bistable multivibrator has \_\_\_\_ stable states. (CO5)
- Q.19 Expand CVT. (CO6)
- Q.20 Clamping is the process of introducing a DC \_\_\_\_ level \_\_\_\_ into an ac signal. (CO5)

## SECTION-C

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

- Q.21 Differentiate between voltage Amplifier and Power Amplifier. (CO1)
- Q.22 Explain single Tuned voltage Amplifier with diagram. (CO2)
- Q.23 Explain effects of negative feedback on gain and bandwidth of an amplifier. (CO3)

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- Q.24 Draw symbol of OP-AMP and list three characteristics of an ideal OP-Amp. (CO7)
- Q.25 List the essentials of an Oscillator circuit. (CO4)
- Q.26 Differentiate between Series and Parallel Resonance (CO2)
- Q.27 Explain the working of Hartley Oscillator. (CO4)
- Q.28 List five important features of Emitter follower circuit. (CO3)
- Q.29 Describe the operation of Transistor as a switch. (CO5)
- Q.30 Compare CVT and an ordinary stabilizer. (CO6)
- Q.31 Explain the working of bistable multivibrator. (CO5)
- Q.32 Explain the OP-Amp as a summing Amplifier. (CO7)
- Q.33 Draw and explain circuit diagram for diode clipping circuits (CO5)
- Q.34 Explain the working of Class-A amplifier. (CO1)
- Q.35 Explain the concept of Heat sinks in Power Amplifiers. (CO1)

## SECTION-D

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

- Q.36 Explain the operation of Class B PUSH PULL amplifier and its advantages. (CO1)
- Q.37 Explain various diode clamping circuits. (CO5)
- Q.38 Explain the working of Phase shift oscillator with neat circuit diagram. (CO4)

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