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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

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

(1)

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(2)

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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)

- 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)