**SUBJECT-BASIC ELECTRONICS-II QUESTION BANK**

**CLASS-FIRST YEAR (AT/WT/RAC)**

**Q1.MCQ**

1. For emitter bias, the voltage at the emitter is 0.7 V less than the

1. Base voltage 2.Emitter voltage 3.Collector voltage 4. Ground voltage

2. With voltage-divider bias, the base voltage is

1. Less than the base supply voltage 2. Equal to the base supply voltage

3. Greater than the base supply voltage 4. Greater than the collector supply voltage

3. Transistor biasing represents ……………. conditions

1. ac. 2.dc. 3. both a.c. and d.c. 4.none of the above

4. Transistor biasing is done to keep ………… in the circuit

1 .Proper direct current 2.Proper alternating current

3. The base current small 4.Collector current small

5. Operating point represents …………..

1. Values of IC and VCE when signal is applied 2.The magnitude of signal

2. Zero signal values of IC and VCE 4.None of the above

6. If biasing is not done in an amplifier circuit, it results in ……………

1. Decrease in the base current 2.Unfaithful amplification

3. Excessive collector bias 4.None of the above

7. Transistor biasing is generally provided by a …………….

1. Biasing circuit 2.Bias battery

3. Diode 4.None of the above

8. The output stage of a multistage amplifier is also called ……………

1.Mixer stage 2.Power stage 3.Detector stage 4.F stage

9. ………………. coupling is generally employed in power amplifiers

1.Transformer 2.RC 3.direct 4.Impedance

10. A class A power amplifier uses …………

1. Two transistors 2.Three transistor 3.One transistor 4.None of the above

11. The maximum efficiency of resistance loaded class A power amplifier is ……..

1.5% 2.50% 3.30 4.25%

13. The maximum efficiency of transformer coupled class A power amplifier is ………………

1.30% 2.50% 3.80% 5.45%

14. Class……. power amplifier has the highest collector efficiency

1.C 2.A 3.B 4.AB

15. Power amplifiers handle …………. signals compare to voltage amplifiers

1. Small 2.Very small 3.Large 4.None of the above

16. Class C amplifiers are used as …………….

1. AF amplifiers 2/Detectors 3.F. amplifiers 4.None of the above

17. A power amplifier has comparatively …………….. β

1.Small 2.Large 3.Very large 4.None of the above

18. The most costly coupling is ……………… coupling

1.RC 2.Direct 3.Impedance 4.Transformer

19. An oscillator converts ……………..

1.ac. power into d.c. power 2.dc. power into a.c. power 3.mechanical power into a.c. power

4.none of the above

20. In an LC transistor oscillator, the active device is ……………

1.LC tank circuit 2.Biasing circuit

3.Transistor 4.None of the above

21. In an LC circuit, when the capacitor is maximum, the inductor energy is ……….

1. Minimum 2.Maximum 3.Half-way between maximum and minimum 4.None of the above

22. An oscillator produces……………. oscillations

1. Damped 2.Undamped 3.Modulated 4.None of the above

23. Hartley oscillator is commonly used in ………………

1.Radio receiver 2.Radio transmitters 3.TV receiver 4.None of the above

24. In a phase shift oscillator, we use …………. RC sections

1. Two 2. Three 3.Four 4.None of the above

25. A Wien bridge oscillator uses ……………. feedback

1. Only positive 2.Only negative 3.Both positive and negative 4.None of the above

**Q2.EXPLAIN IN DETAIL 10 MARKS**

1.Explain in detail D.C. operating point and load line.

2.Explain in detail Q point.

3.List and explain different transistor biasing method

4.Explain in detail positive and negative feedback concept.

5.Explain in detail Hartly oscillator.

6 Explain in detail Rc phase shift oscillator

7.Explain in detail CLASS B push pull amplifier.

8.Explain in detail CLASS A amplifier.

9.Explain in detailmaximun and minimum undistoried output.

10.Explain in detail Colpitt’s oscillator.

11.Explain in detail coupling methods

**Q3.EXPLAIN IN SHORT 5MARkS**

1.What is D.C.Load line.

2.What is Q POINT.

3.What is feedback amplifier.

4.Define stability factor.

5.Explain base bias method.

6 Explain voltage divider method.

7.Explain positive feedback.

8.Explain Negative feedback.

9.Why coupling is used?

10.Explain direct coupling method.

11.Explain RC coupling method.

**Q4.WRITE A SHORT NOTE ON**

1.CLASS A AMPLIFIER

2.Q Point

3. Hartley oscillator

4.Wien bridge oscillator.

5.Crystal oscillator

6.Voltage bias method

7.FIXED Bias method

8.Positive feedback

9.Negative feedback

10. Factors affecting stability of Q-point

11. H parameter for CE configuration.