



B.Sc. II Semester Degree Examination, Sept./Oct. - 2024

ELECTRONICS

DSC 2 : Electronic Circuits

(NEP)

Time : 2 Hours

Maximum Marks : 60

Note : Answer *all* sections.

SECTION - A

Answer the following :

10x1=10

1. (a) What is Power supply ?
- (b) Define Ripple factor.
- (c) What is Regulation in Power supply ?
- (d) What is meant by operating point ?
- (e) What are h-parameters ?
- (f) What is cascade stage in Amplifier ?
- (g) What is h_{fe} ?
- (h) What is degenerative feedback in Amplifier ?
- (i) Define Power Amplifier.
- (j) What is Heat Sink in Amplifier ?

SECTION - B

Answer **any four** questions :

4x5=20

2. Explain with neat circuit diagram and I/P/Out put waveforms of Half Wave Rectifier.
3. Explain load line in Transistor biasing.
4. Classify the Amplifiers on the basis of various parameters.
5. What is coupling schemes in transistor Amplifier circuit ?
6. Write table of Voltage Amplifier and Power Amplifier comparison.
7. Define feedback concept in electronics. What is the importance in Amplifiers ?



SECTION - C

Answer **any three** questions :

3x10=30

8. Explain with neat circuit diagram full wave centre tapped Rectifier and sketch the I/P and O/P waveforms. Obtain the expression for the ripple factor.
9. Explain the working of Emitter bias in transistor and obtain the stability factor. State Advantages and Disadvantages.
10. With neat circuit explain two stage RC coupled Amplifier. Obtain the frequency response curve and calculate gain.
11. What is class-A Power Amplifier ? Obtain the power efficiency expressions.
12. With neat diagram express the effect of negative feedback on :
 - (a) Voltage gain
 - (b) Input impedance
 - (c) Current gain
13. Write a short notes on :
 - (a) Liner IC regulators
 - (b) h-parameters

- o O o -

