No. of Printed Pages : 2

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Sl. No.

# B.Sc. II Semester Degree Examination, September/October - 2023 ELECTRONICS

# II : Electronic Circuits

### (NEP)

Time : 2 Hours

**Note :** Answer **all** sections.

### **SECTION - A**

Answer the following questions :

- **1.** (a) What is Rectification ?
  - (b) Define ripple factor.
  - (c) What is operating point?
  - (d) What are h-parameters?
  - (e) Define Amplification.
  - (f) What is cascaded stage?
  - (g) Define voltage gain of Amplifier.
  - (h) Define Bandwidth in Amplifier.
  - (i) What is efficiency in Power Amplifier ?
  - (j) What is regenerative feedback in Amplifier ?

#### **SECTION - B**

Answer **any four** questions :

- 2. With neat circuit diagram explain Half Wave rectifier in power supply.
- **3.** Explain fixed base resister method in transistor biasing.
- **4.** Classify the Amplifier on the basis of operating point.
- 5. Explain the different coupling schemes in transistor Amplifier circuits.
- 6. Compare the difference between Voltage Amplifier and Power Amplifiers.
- 7. Define feedback concept in Amplifier System.

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**P.T.O.** 

4x5=20

10x1=10

Maximum Marks: 60



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#### **SECTION - C**

Answer any three questions :

- **8.** Explain the working of centre tapped Full Wave rectifier circuit. Obtain the expression for the ripple factor and efficiency.
- **9.** Explain the working of voltage divider biasing in transistor and obtain the stability factor.
- **10.** Explain the working of RC coupled Amplifier and obtain the frequency response curve.
- **11.** Explain the working of class-A power Amplifier and obtain the power efficiency expressions.
- **12.** With neat block diagram express the effect of negative feedback on voltage gain I/P impedance, O/P impedance in Amplifiers.
- **13.** Write a short note on :
  - (a) Linear IC regulators
  - (b) Thermal runaway

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# 3x10=30

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