

S.B. Roll No.....

**ELECTRONICS DEVICES AND CIRCUITS**  
**3<sup>rd</sup> Exam/ECE/5861/Jan'2022**  
**(FOR BATCH 2018 ONWARDS)**

**Duration: 1.15Hrs.**

**M.Marks:25**

**SECTION-A**

**Q1. Attempt any three questions.**

**3x5=15**

- i. What is need of multistage amplifier?
- ii. Explain the difference between a voltage and a power amplifier.
- iii. Explain Transformer coupled transistor Amplifier.
- iv. Comparison of different types of multistage amplifiers.
- v. Explain the principle of working of push pull amplifier.
- vi. Explain the working of a crystal oscillator.
- vii. Describe the working of class B amplifier.

**SECTION-B**

**Q2. Attempt any one question.**

**1x10=10**

- a. What do you mean by Class A, Class B, and Class C amplifier?
- b. Differentiate between Monostable, Bistable and Astable Multivibrators.
- c. Explain the working of an RC coupled amplifier using a neat circuit diagram. Draw and explain its frequency response.
- d. Write short note on :
  - i. Barkhausen criteria
  - ii. Schmitt trigger circuit