## St. Francis Institute of Technology Borivali (West), Mumbai-400103

# **Information Technology Department**

Academic Year: 2023-24 Semester: III

Class / Branch / Division: SE - IT A/B

Subject: Principle of Communication

### **MODULE – 2B – Noise**

## **IMPORTANT QUESTIONS**

- Q1. Define the following -
  - Noise
  - Signal to noise ratio
  - Noise Figure
  - Noise Factor
  - Noise Temperature
- **Q2.** Classify noise stating clearly the factors that contribute to generation of each type.
- Q3. Differentiate between correlated and uncorrelated noise.
- Q4. Highlight the main reason due to which the following type of noise exist
  - Thermal noise
  - Shot noise
  - Partition noise
  - Low frequency noise
  - High frequency noise
  - Natural Noise
  - Man-made noise
- **Q5.** Derive the expression for
  - Noise voltage
  - Friis formula for cascaded amplifiers
  - Equivalent noise temperature for cascaded amplifiers

### **NUMERICALS** of the following types –

**Noise** – Calculation of thermal noise power, thermal noise voltage, SNR, noise factor, noise figure, Overall Noise factor/ noise figure (Friss formula)

#### **Subject Incharge**

Dr. NITIKA RAI