Sensors and Transducers Question Bank by Dr SM Shashidhar, RYMEC, Ballari VTU

VTU B.E ELECTRICAL AND ELECTRONICS ENGINEERING (EEE) CHOICE BASED CREDIT SYS TEM (CBCS)

SENSORS AND TRANSDUCERS 15EE662 (Open Elective)

Module 3b and 4a

SEMESTER – VI (A Section)

Questions on topics

- **Data Acquisition Systems and conversion**
- **Data transmission and Telemetry**

1. Draw the Generalized block diagram of Data Acquisition System and explain it in brief.
2. What are the objectives of a Data Acquisition System?
3. Explain with a neat diagram the working of multi-channel data acquisition system.
4. Explain with a neat diagram the working of analog automated data acquisition system.
5. Explain with a neat diagram the working of multi-channel data acquisition system.
6. Explain briefly R-2R ladder Digital to Analogue converter.
7. Explain briefly the working principle of Flash ADC.
8. Explain briefly the working principle of dual-ramp ADC.
9. Explain briefly the working of binary weighted resistors DAC.
10. Draw the general block diagram of telemetry system and explain briefly.
11. Explain the working of landline voltage telemetry system.
12. Explain the working of landline current telemetry system.
13. Explain the need for Modulation and explain briefly amplitude modulation.
14. What are the advantages of radio telemetry? Give the ranges of major radio frequency bands used in telemetry.