

# SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B.E - EEE

Title of the paper: Instrumentation Systems

Semester: V

Sub.Code: 314503/414503

Date: 04-11-2008

Max. Marks: 80

Time: 3 Hours

Session: FN

---

PART – A

(10 x 2 = 20)

Answer All the Questions

1. Define Static Calibration.
2. List some of the errors in measurement systems.
3. Give the classification of sensors.
4. Define transducer
5. List the characteristics of d.c. amplifier.
6. List the methods used for A/D conversion.
7. What are the methods used for Data Transmission?
8. Compare PAC and PCM.
9. What are the advantages of Digital Instruments?
10. List some of the output devices.

PART – B  
Answer All the Questions

(5 x 12 = 60)

11. Explain the dynamic and transient response of the measurement systems.  
(or)
12. Explain in details about the types of errors in the measurement systems.
13. Explain in detail with neat sketch the working of LVDT.  
(or)
14. Explain with neat sketch the operation of Hall Effect Transducer and list its applications.
15. Explain with neat circuit the operation of Instrumentation amplifier.  
(or)
16. Explain in detail the types of Filters.
17. Explain with neat sketch the current Telemetering Systems.  
(or)
18. Explain in detail about Pulse Modulation in transmission systems.
19. Explain in detail about Seven Segment Display system.  
(or)
20. With neat sketch explain the operation of X-Y Recorders.