C 46573

Name.....

Reg. No.....

EIGHTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, JUNE 2008

EE 2K 803/PTEE 2K 802—INSTRUMENTATION SYSTEMS

Time : Three Hours

Maximum : 100 Marks

Answer **all** *questions.*

Part A

I. (a) Explain the dynamic characteristics of transducer.

(b) Explain the operation of piezoelectric transducer.

(c) Explain the circuit of signal conditioner.

(d) Explain the principles of frequency division multiplexing.

(e) Explain galvanometric recording system.

(f) Explain what is limiting errors.

(g) List the properties of linear system.

(h) State and explain the properties of frequency response.

(8 × 5 = 40 marks)

Part B

II. (a) List the different types of transducers and explain any *two* types.

Or

(b) What is the difference between photoemissive and photoconductive cell ? Explain *one* application for each cell.

III. (a) Explain bandpass and band rejection filters with neat circuit diagram.

Or

(b) Draw the block diagram of PAM, PPM and PWM system and explain.

IV. (a) List the different types of display system and explain.

Or

(b) Explain probability of errors and guarantee errors.

V. (a) (i) Explain the dynamic characteristics of linear system.

(ii) Explain the concept of transfer function for a measuring system.

Or

(b) Explain the block diagram of PI and PD system.

[4 × 15 = 60 marks]