



- (b) (i) Draw the schematic diagram of an LVDT and explain its electromechanical transfer characteristics. Show an arrangement to extract the amplitude as well as the phase information contained in the AC output of an LVDT. (10)
- (ii) Explain the construction, principle and working of a variable inductive capacitive transducers. (6)

13.

(a) Explain briefly with neat diagram, the working of the following:

(i) Frequency Counter (8)

(ii) Spectrum Analyzer (8)

(or)

(b) Explain briefly with neat diagram, the working of the following:

(i) Logic Analyzer (8)

(ii) Wave Analyzer (8)

14.

(a) With the neat diagram, explain the working of IEEE 488 bus. (16)

(or)

(b) Draw and explain the block diagram of analog and digital data acquisition system. (16)

15.

(a) With a neat diagram, explain the architecture of virtual instrumentation and discuss its application in various fields. (16)

(or)

(b) Sketch the basic block diagram for a digital storage oscilloscope and explain the operation. (16)