RAMAKRISHNA MISSION VIDYAMANDIRA
(Residential Autonomous College affiliated to University of Calcutta)

SECOND YEAR [2014-17]
B.A./B.Sc. THIRD SEMESTER (July – December) 2015
Mid-Semester Examination, September 2015

Date : 17/09/2015

ELECTRONICS (General)

Time : 12 noon – 1 pm

Paper : III

Full Marks : 25

1. Draw and explain the working principle of CRO. Mention also the features of CRT. [8+2]

2. What is transducer? Draw and explain the working principle of LVDT. [2+8]

3. An ac LVDT has the following data. Input = $6\cdot3$V, output = $5\cdot2$V, range $\pm0\cdot5$in. Determine. [5]
   a) Calculate the output voltage Vs. Core position for a core movement going from $+0\cdot45$ to $-0\cdot30$ in.
   b) The output voltage when the core is $-0\cdot25$ in from the centre.

OR,

Draw a CMOS – NAND gate and explain the operation using NAND truth table. [5]

———— × ————