Total No. of Questions :5] *[Total No. of Printed Pages :2*

Roll No .....

EI/IC - 8303

B.E. VIII Semester

Examination, June 2016

Intelligent Instrumentation

(Elective - III)

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each question are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) List the advantages of digital transducers.
   b) What is Real time system?
   c) What do you mean by computer ports? Discuss various types of ports.
   d) What do you understand by dump and intelligent instruments? Give examples.

   OR

   Discuss about optical shaft encoder communication standards.

2. a) What is loop controller?
   b) Compare continuous and both modes.
   c) Why signal conditioner is used in a DAS?
   d) List and discuss each block of a General Data Acquisition System.

   OR

Explain the working principle of data loggers and list their applications.

3. a) What data types are used in Lab view programming?
   b) List the applications of Lab view.
   c) Differentiate between controls and indicators.
   d) What do you mean by Architecture of virtual instrument? Discuss in detail.

   OR

   What is G programming, explain by giving an example.

4. a) What is the use of libraries in G programming?
   b) Write syntax for For loop and While loop.
   c) What is the differences between bundled and unbundled strings?
   d) What do you mean by local and global variables, explain by giving an example.

   OR

   What is Direct digital encoding? Also explain digital encoders?

5. a) What is clusters?
   b) What is Case structure?
   c) How to interface sensors with Lab view applications?
   d) Write down the steps for developing a software in Lab view.

   OR

   Write the software for level measurement with indications for low and High levels.

******