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Total Number of Pages: 2

B.Tech
PEEI5304

6th Semester Back Examination 2016-17
INTELLIGENT AND VIRTUAL INSTRUMENTATION
BRANCH: AEIE,EIE,IEE
Time: 3 Hours
Max Marks: 70
Q.CODE: Z690

Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.

- Q1 Answer the following questions: (2 x 10)**
- a) What is binary fuzzy relation? (2)
 - b) Differentiate between crisp set and fuzzy set with suitable example (8)
 - c) What is three layer of perception? (5)
 - d) What is VISA? (5)
 - e) What is coercion dot? (5)
 - f) Define File I/O function. (5)
 - g) What are the different structures available in LabVIEW? (5)
 - h) What is defuzzification? (5)
 - i) What is pop-up menu? (5)
 - j) Distinguish between graph and chart (5)
- Q2 a) Explain Fuzzy logic control (2)**
b) Explain why an MLP does not learn if the initial weights and biases are zero. (8)
- Q3 a) Explain Back propagation algorithm with an example. (5)**
b) What is neural network? How it helps to solve many complex problem (5)
- Q4 a) What is different file format available in LabVIEW? Explain each in brief. (5)**
b) What are the tools in labVIEW helps in parallel programming discuss in brief (5)
- Q5 a) Explain, RS232, RS485 interfaces in brief. (5)**
b) Explain MLP and recurrent Network. (5)
- Q6 a) What is DAQ? Explain features of DAQ. Explain different configuration of DAQ. (5)**
b) What is Shift register? Illustrate with suitable example. (5)
- Q7 What is state machine? Using LabVIEW illustrate State machine with suitable example. (10)**

Q8 Write short answer on any TWO:

(5 x 2)

- a)** Auto indexing
- b)** GPIB
- c)** Hopfield Neural network
- d)** Sequence structure and case structure