Q.P. Code :23693

[Time: Three Hours]   [Marks:80]

Please check whether you have got the right question paper.

N.B: 1. Question.No.1 is compulsory.
        2. Solve any three question out of remaining five question.
        3. Assume suitable data if necessary
        4. Figures to right indicate marks.

Q.1   Solve any four out of five   20
       a) Write a note on scanner
       b) Draw and explain the flowchart of Add & shift method of integer multiplication
       c) Briefly explain Flynn's classification
       d) With the help of diagram, explain Von- Neumann's architecture
       e) What are the major functions of I/O module?

Q.2   a) Divide 6 by 2 using restoring division algorithms   10
       b) Discuss various pipline hazards with example   10

Q.3   a) Multiply (-2) and (2) using Booth's Algorithm.   10
       b) Consider the string 9,4,2,3,2,9,5,9,4,2,6,7,5,3,4,2,3,2,4,   10
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Q.4   a) Explain various cache mapping function   10
       b) Draw and explain instruction cycle with interrupt execution   10

Q.5   a) Explain the various characteristics of memory   10
       b) Describe the register organization within the CPU   10

Q.6   a) What is bus arbitration? Explain its techniques   10
       b) What is the need of DMA? Explain its various techniques of data transfer   10