Please check that this question paper contains_ 09 questions and 02 printed pages within first ten minutes.

[Total No. of Questions: 09]

[Total No. of Pages: 02]

Uni. Roll No. ....

Program: B.Tech. (Batch 2018 onward)
Semester: 4th
Name of Subject: Computer Architecture and Microprocessors
Subject Code: PCIT-108
Paper ID: 16237

Detail of allowed codes/charts/tables etc. Nil
Time Allowed: 03 Hours

Max. Marks: 60

NOTE:

1) Parts A and B are compulsory
2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
3) Any missing data may be assumed appropriately

Part – A [Marks: 02 each]

Q1.

   a) Distinguish between register and memory.

   b) How many bits are required for 4096 words of memory?

   c) Point out the purpose of program counter.

   d) What do you meant by cycle stealing mode in DMA.

   e) List the advantages of assembly language.

   f) Write the meaning of LDA and LXI instructions.

Part – B [Marks: 04 each]

Q2. What is the need of control unit in computer? Draw the control unit of a basic computer. Discuss how fetch and decode phases are carried out.

Q3. Write a program to exchange the data at 5000M and 6000M locations.

Q4. Elaborate the various types of flag registers in 8085.

Q5. Specify the applications of microprocessor in household, consumer/electronics and in medical sciences.

Q6. Discuss the various types of interrupts in 8085 with an example of each.

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P.T.O.

Q7. How parallel processing works? Discuss the various types of parallel processors.

Part – C   [Marks: 12 each]

Q8. Discuss the architecture of 8085 with the help of labelled diagram.

OR

Write the meaning and explanation of following instructions a) SIM b) CMP c) XRI d) JC e) STA

Q9. Write an assembly language program to find maximum of two 8 bit numbers in 8085 microprocessor.

OR

Write an assembly language program to swap two 8-bit numbers stored in an 8085 microprocessor.

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