28+2=30

SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR

ROLL No.: | | | | | | | | | | |

Total number of pages:[2]

Total number of questions: 06

B. Tech. Electrical Engg. (Semester-4th)

MICROPROCESSORS

Regular / Re-appe

Subject code: BTEE-404A

Paper ID: [ ]

Batch: 2015 onwards

Time allowed: 3 Hrs.

Max. Marks: 60

Important Instructions:

- All questions are compulsory.
- Assume any missing data.

PART– A (2 x 10)

Q1) a) Define Program Counter.

b) How does Stack pointer work in 8085 and 8086?

c) What is meant by Vectored and Non-Vectored interrupts?

d) Compare Z80 with 8085.

e) What are the types of flags in 8086?

f) Which cycle is used for fetching and executing instruction?

g) What is meant by LATCH?

h) Give examples for 8/16 /32 bit Microprocessor?

i) What are assemblers Directives? Name any two assembler directives.

j) Why serial data transfer is mostly preferred over parallel data transfer?

PART – B (8 x 5)

Q2) Describe the criteria of selection of a particular microprocessor? (CO1)

OR

Discuss the evolution of microprocessor with its different generations. (CO1)

P. T. O.

Q3) Discuss with example following instructions related to 8085:

CMA, DAD, JC, ADC **(CO3)**

OR

Write an assembly language program in 8086 to move block of N bytes of data from source to destination. **(CO3)**

Q4) Explain why 8086 internal architecture is divided into BIU and EU? Discuss the A-bus, B-bus and C-bus and their use. **(CO2)**

OR

Discuss the functions of all general purpose registers of 8085. Explain the special function of each register and instruction support for these functions. **(CO2)**

Q5) What is memory segmentation? Explain the use of segmentation in different applications. Explain how segmentation provides effective task switching mechanism. **(CO2)**

OR

Describe various addressing modes of 8085 with one examples of each. **(CO2)**

Q6) Discuss the sequence of operations performed in the interrupt acknowledge cycle. Give the priority of 8086 interrupts, hardware and software. Explain why single step interrupt is having lower priority. **(CO4)**

OR

Discuss the interfacing of keyboard with microprocessor and draw a neat diagram. **(CO4)**

****