

S.No. 216

Reg.No.
BATCH: 2003-2016

END OF SEMESTER EXAMINATIONS, APRIL / MAY 2017
COMPUTER SYSTEM ARCHITECTURE
SUBJECT CODE: 11UACA05

MAJOR : B.C.A
TIME : 3 HOURS

SEMESTER : II
MAX.MARKS: 75

SECTION – A (5 X 2 = 10)

Answer ALL Questions:

1. What is meant by a control word?
2. What are the acronyms for SIMD and MISD?
3. Define: underflow.
4. Differentiate between the control and status commands.
5. State two auxiliary memory devices used in computer systems.

SECTION – B (5 X 4 = 20)

Answer All Questions:

6. a) Briefly discuss the register stack with diagram.
(OR)
b) Write down the characteristics of a CISC.
7. a) Illustrate Pipeline organization with an example.
(OR)
b) Write short notes on "Vector Processing".
8. a) Briefly discuss the addition and subtraction with signed – 2's complement data.
(OR)
b) Draw a flowchart for decimal multiplication.
9. a) Explain the Isolated versus Memory – Mapped I/O.
(OR)
b) Write a brief note on the priority interrupt.
10. a) Compare address space and memory space.
(OR)
b) Elucidate the significances of the crossbar switch.

SECTION – C (3 X 15 = 45)

Answer Any Three Questions:

11. Describe the different types of addressing modes with appropriate examples.
12. Discuss in detail about the instruction Pipeline with necessary diagrams.
13. Explain the Booth's algorithm for multiplication of signed 2's complement numbers.
14. Elucidate the DMA controller with its block diagram.
15. What is mapping process? Explain the types of mapping procedure in the cache memory organization.

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