S.NO.267 BATCH: 2007-2016 Reg. No. 4

END OF SEMESTER EXAMINATIONS, NOVEMBER - 2017
COMPUTER ORGANISATION AND ARCHITECTURE
SUBJECT CODE: 08UAIT04

MAJOR: B.Sc (IT) SEMESTER : II
TIME : 3 HOURS MAX. MARKS: 75

SECTION – A (5 X 2 = 10)

Answer ALL the questions:

1. What are the major components of CPU?
2. What is parallel processing?
3. What are the differences between central computing and peripheral computing?
4. Define: Dividend alignment.
5. What is memory hierarchy?

SECTION – B (5 X 4 = 20)

Answer ALL the questions:

6. a) Explain the general register organization.

   (OR)

   b) What are interrupts? Explain its types.
7. a) Explain the difference between hardwired computing and micro programmed control.

   (OR)

   b) What is address sequencing? Explain.
8. a) What are priority interrupts? Discuss.

   (OR)

   b) What is CPU-IOP communication? Explain.
9. a) Draw a flow chart for multiply operation.

   (OR)

   b) Perform subtraction using 2's complement

   i) $110110_2 - 10110_2$

   ii) $10100.01_2 - 11011.10_2$
10. a) Explain: Segmented page mapping.

    (OR)

    b) Explain the working principle of magnetic disks.

SECTION – C (3 X 15 = 45)

Answer any THREE questions:

11. Explain the different types of addressing modes.
12. What is pipelining? Explain arithmetic pipelining.
13. What is asynchronous data transfer? Explain strobe control.
14. Write an algorithm in flow chart for adding and subtracting numbers in signed 2's complement representation.
15. What is cache memory? Explain mapping procedures.

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