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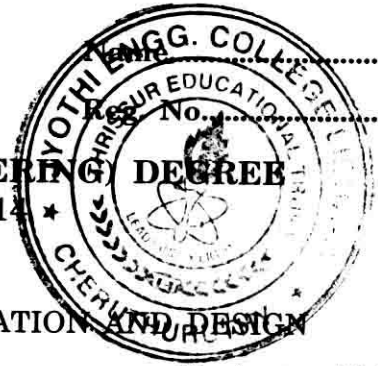
**FOURTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, APRIL 2014**

(2009 Scheme)

IT/CS 09 403/PTCS 09 402-COMPUTER ORGANIZATION AND DESIGN

Time : Three Hours

Maximum : 70 Marks



Part A

*Answer all questions.
Each question carries 2 marks.*

1. What do you mean by an operand ?
2. Define an instruction.
3. Write the functionality of an ALU.
4. Define multiprogramming.
5. Enumerate the I/O performance measures.

(5 × 2 = 10 marks)

Part B

*Answer any four questions.
Each question carries 5 marks.*

6. Explain about the SPEC95 bench marking.
7. Write about the metrics used to evaluate and compare the performance of computers.
8. Explain about the floating point operation in 80 × 86.
9. Explain about construction of an ALU.
10. Explain about the characteristics of I/O devices.
11. Explain about the process of designing an I/O system.

(4 × 5 = 20 marks)

Part C

Answer all questions.

12. (a) Explain about the different addressing modes supported by 80 × 86.

Or

- (b) Bring out the historical perspective of computer abstraction and technology.

Turn over

13. (a) Explain the logical operations supported by 8086 with examples.

Or

(b) How is multiplication operation done in 80 × 86 ? Give examples.

14. (a) Explain about Microprogramming in detail.

Or

(b) Explain in detail about the process of building a data path.

15. (a) Explain the working of virtual memory in detail.

Or

(b) Explain in detail about Pentium Pro memory hierarchy.

(4 × 10 = 40 marks)