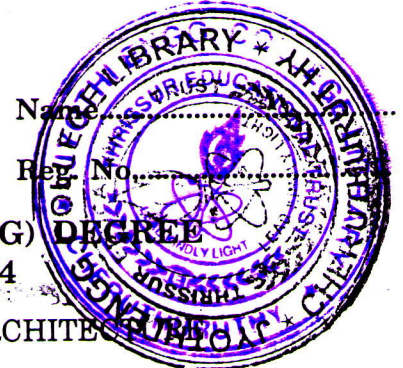


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**FIFTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, DECEMBER 2004**

EC 2K 505. COMPUTER ORGANISATION AND ARCHITECTURE

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

1. (a) Describe about different types of interfaces.
(b) What is meant by complexity of computing ? Explain.
(c) What is a Cache memory ? Explain.
(d) What is memory array organisation ? Explain.
(e) Write a note on "magnetic head".
(f) What is the need for an I/O interrupt ? Explain.
(g) Write a technical note on MCA bus.
(h) Explain the functions of an interconnection network.

(8 × 5 = 40 marks)

2. (a) Briefly explain the evolution of computer systems.

Or

- (b) Briefly explain the functions and advantages of CPU and ALU.

(15 marks)

3. (a) Distinguish Controller design from memory design. Explain each one of them in detail.

Or

- (b) What are the different types of memory ? Explain all the types in detail.

(15 marks)

4. (a) Discuss in detail all the digital recording methods.

(15 marks)

Or

- (b) Write technical notes on :

- (i) Magnetic tape drive and controller.

(8 marks)

- (ii) Disk drive and controller.

(7 marks)

5. (a) With a neat sketch, explain the architecture of memory subsystem.

(15 marks)

Or

- (b) Write short notes on :

- (i) Pipeline hazards.

(8 marks)

- (ii) SIMD system.

(7 marks)

[4 × 15 = 60 marks]