

**M.Sc. DEGREE (FIVE YEAR INTEGRATED COURSE) IV SEMESTER  
EXAMINATION IN PHOTONICS  
NOVEMBER 2004**

**CEL1402 COMPUTER SCIENCE**

Time : 3 Hours

Maximum Marks: 50

**PART - A**

(Answer ***ANY FIVE*** questions)

(All questions carry ***EQUAL*** marks)

(Support your answer with examples and diagrams, if necessary)

(5 x 2 = 10)

- I. (a) Explain the working principle of opto-mechanical mouse.
- (b) What is cache memory? How it increases the speed of execution of programs?
- (c) Explain Linux file system. How it differ from UNIX File System?
- (d) Explain the significance of Domain Name Servers in Internet.
- (e) What are the different methods to write algorithm for a specific task?
- (f) What is SVGA? How it gives millions of colours?
- (g) Explain the method of writing data onto DVD disks.
- (h) Why modem is required in dial-up line to connect the network?

***(Turn Over)***

**PART - B**

(Answer either *A* or *B* of each question)

(All questions carry equal marks)

(5 x 8 = 40)

II. A. Draw the basic hardware configuration of computer. Explain each component in detail.

**OR**

II. B. With the help of neat block diagram explain the working of CRT monitor.

III. A. Write an algorithm to find the largest and smallest elements from a given list of 'n' elements.

**OR**

III. B. Draw a flow-chart showing the algorithm of finding roots of a quadratic equation.

IV. A. Compare and contrast RISC and CISC architectures.

**OR**

IV. B. Explain different SCSI standards and its specification.  
Why SCSI interface supports more devices?

V. A. What do you mean by disk defragmentation? How it increases the access speed of data from hard disk drive? Which is the utility used in Windows-98 to defragment the disk?

**OR**

V. B. Explain the basic principle of representing movie files in .mpg format.  
How it differ from .avi format?

VI. A. Write short notes on the following:-

(i) TCP/IP, (ii) HTTP, (iii) LAN.

**OR**

VI. B. Write short notes on the following:-

(i) Cable Modem, (ii) Intranet, (iii) FTP

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