

MLISc 1st Semester Examination, 2009
INFORMATION AND COMMUNICATION
TECHNOLOGY

PAPER — VIIA

(Theory - I)

Full Marks : 40

Time : 2 hours

Answer all questions

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

1. Write short notes on any *two* of the following : 5 × 2
- (i) ISO-OSI Model of Networking
 - (ii) Hashing
 - (iii) Open Source Operating System
 - (iv) PERL.

(Turn Over)

2. (a) Describe the file structure in UNIX. Elucidate, with example, the role of 'shell' in UNIX system. 9 + 6

Or

- (b) Classify High Level Programming Languages mentioning examples for each category. What is 'C' character set? " 'C' is often considered as a Middle Level Language".— Explain. 6 + 3 + 6

3. (a) Why do we need data structures? Compare linked list, Inverted list and B-tree highlighting the manner in which relationships between data elements are represented in the computer system. 3 + 12

Or

(b) Distinguish between Frequency Division Multiplexing and Time Division. Illustrate circuit switching process and mention its disadvantages in data communication. 8 + 5 + 2
