## MLISc 1st Semester Examination, 2011

## INFORMATION AND COMMUNICATION TECHNOLOGY—I

(Theory)

PAPER-MLI-107

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 in brief on any five:

 $2 \times 5$ 

- (i) Piping in UNIX
- (ii) File permission in UNIX
- (iii) Multiuser-Multitasking System

- (iv) Float in 'C'
- (v) FLOSS
- (vi) Modulation
- (vii) Half-Duplex Communication System.
- 2. (a) Describe the role of Operating System. Classify different Operating Systems. Explain UNIX file system. Illustrate the function of 'grep' command in UNIX.
  4+4+4+3

**Or** 

- (b) Enumerate the desirable features of any high-level programming language. Categorise 'C' constants. Illustrate the 'Decision Control Structure' of 'C' with a suitable example.
   Define 'array' with example.
- (a) Why do you need to structure data? Describe different data structures with examples. Explain Indexed Sequential Access Method. Illustrate 'hashing' algorithm.
   3+4+4+4

Or

(b) Describe different wireless media for communication. Elaborate network topology diagrammatically. Explain the process of transfering message in ISO/OSI model. Distinguish Intranet with Internet. 4+4+5+2