

POST-GRADUATE COURSE
Term End Examination — December, 2011

MLIS
**[INFORMATION TECHNOLOGY :
 APPLICATION (THEORY)]**

Paper – VI**Time : Four Hours****Full Marks : 100**

(Weightage of Marks : 80%)

Special credit will be given for accuracy and relevance in the answer. Marks will be deducted for incorrect spelling, untidy work and illegible handwriting. The weightage for each question has been indicated in the margin.

GROUP – AAnswer any two questions : $18 \times 2 = 36$

1. What is an operating system ? Discuss six major functions of any operating system. Discuss any two operating systems. 2 + 6 + 10
2. Discuss the importance of infrastructure for implementing computer based serial control system. What are various subsystems of a computer based serials control system ? 8 + 10

3. What are the differences in the objectives of information network at international, national, metropolitan level ? Describe one example of each of international, national and metropolitan networks. 6 + (4 × 3)
4. What is network protocol ? Why are protocols important ? Discuss various network protocols. 2 + 4 + 12

GROUP – BAnswer any three questions : $12 \times 3 = 36$

5. What is OPAC ? Discuss various technologies needed to provide access to OPAC. 4 + 8
6. Discuss in detail the steps involved in designing and developing a bibliographical database using CDS/ISIS. 12
7. Describe various network topologies. 12
8. What is resource sharing ? What can be the benefits of and barriers to resource sharing in ICT environment ? 4 + 8
9. Discuss a probable file structure for computer based book acquisition system. 12
10. Give a comparative description of hierarchical data model and network data model. 12

GROUP – C

Write short notes on any *four* of the following :

$$7 \times 4 = 28$$

11. Algorithm
 12. Bibliographic standard
 13. Components of database management systems
 14. Object-oriented model
 15. Quick sort
 16. UNIMARC
 17. Machine language.
-