POST-GRADUATE COURSE

Term End Examination – June, 2017

MASTER OF LIBRARY AND INFORMATION SCIENCE

Paper-VI : Information Technology : Applications

(New : From July 2016 Enrolment Session
Old : Up to July 2015 Enrolment Session.)

Time : 4 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 – A

Answer any *two* of the following questions : 18 × 2 = 36

1. a) What do you mean by 'multiuser' OS ? Write down the features of Unix-like Operating System as multiuser. 2 + 4

   b) State a comparative discussion on Linux and Windows. 12

2. a) What is RDBMS ? What are the essential factors that determine relational features of a DBMS ? 2 + 4

   b) Discuss different types of database organisation. 12

3. a) What do you mean by "bound link" transmission media ? Make a comparative study of Twisted Copper pair, Coaxial Cable and Optical Fibre as bound link transmission media. 2 + 6

   b) What is OSI Reference model ? Describe briefly the role of each layer in OSI Reference model. 2 + 8

4. a) What is an automated library system ? How does it differ from a digital library system ? 2 + 4

   b) Discuss any *two* of the following issues related with library automation. 6 × 2 = 12

      (i) Generic requirements for library automation

      (ii) Functional requirements for library automation

      (iii) Software level requirements for library automation.

GROUP – B

Answer any *three* of the following questions : 12 × 3 = 36

5. Make a comparative study of Low-level and High-level programming languages. 12

6. What are the advantages of machine-readable cataloguing ? Explain the workflow of computerized cataloguing in an automated library system. 3 + 9

7. What do you mean by MARC 21 family of standards ? Systematically state the organisation of MARC 21. 12

8. Comment on any *two* of the following issues related with library automation ; 6 × 2 = 12

   (i) Barriers to Library Automation

   (ii) Z 39·50

   (iii) Modules of Library Automation Software structure.

9. Make a comparative study of Window NT with any available Linux distribution on the basis of given areas as follows : 4 × 3 = 12

   (i) Multiuser and Multitasking

   (ii) File system and hierarchy

   (iii) Security and Networking.

10. Describe the steps of developing a bibliographic database in CDS/ISIS by taking MARC 21 bibliographic format as data standard. 12

GROUP – C

Answer any *four* of the following : 7 × 4 = 28

11. Describe the services of INDEST as library consortia.

12. Write a flowchart to solve the following problem :

    You need to take an ASCII character from the keyboard and have to produce the corresponding ASCII value for the given character.

13. Make a comparative study of any one open source ILS and any one close source ILS known to you,

14. Discuss the role of social networking tools in designing library users' services.

15. Write a short note on database normalization techniques.

16. What is text-encoding standard ? Make a comparative study of ASCII, ISCII and Unicode as text encoding standards.

17. Write a short note on MySQL.

18. Illustrate the file system of a Unix-like operating system.