UNIT-2

Library Automation Software

Location	Learning Outcome	Knowledge Evaluation	Performance Evaluation	Teaching and Training Method
• Class room, library or computer laboratory.	• Understanding concept of software.	• Meaning and definition.	• Explain software.	• **Interactive lecture:** software and their functions. • **Activity:** Show different types of software in computer laboratory.
	• Library automation software.	• Need and purpose.	• Explain need and purpose of automation software.	• **Interactive lecture:** Explaining the need and purpose of specialized library automation software. • **Activity:** Show the functions of library automation Software in automated library.
	• Functions of library automation software.	• Acquisition. • Serial control. • Technical section. • Circulation section. • Inter library loan. • Library catalogue. • OPAC. • Reference section. • Maintenance section.	• Explain different functions of library automation software.	• **Interactive lecture:** Explain the functions of a library performed by software. • **Activity:** Visit automated library and show how library executes different functions using software.
	• Type/Kinds of library automation software packages.	• Proprietary software. • Open source software.	• Explain different types of library automation software, their benefits and limitations.	• **Interactive lecture:** Explain proprietary and open source software, their benefits and limitations. • **Activity:** Visit computer laboratory & show some literature available on internet regarding both categories of software.

	• KOHA.	• Features of KOHA. • System and skills requirement. • Installation.	• Explain features of KOHA. • Identify system and skills requirements. • Skills of installing KOHA.	• **Interactive lecture:** Explain features of KOHA, system and skills required and process of installing KOHA. • **Activity:** Visit computer laboratory & show downloading and installation process of KOHA.
	• Practical.	• Installation of KOHA. • Working with KOHA.	• Skills of down-loading and installing KOHA. • Working with KOHA.	• **Activity:** Visit computer laboratory, download and install KOHA and hands on practice on different modules of KOHA.

2.1 Understanding Concepts of Software

Software is a set of programmes, meant to perform a well defined function. The software is created by grouping various related programmes. These programmes are written in computer programming languages. A programme is a sequence / set of instructions which are made to perform a well defined task. On the basis of functions, the software can be grouped in following categories:

(i) Operating System

(ii) Utility Software

(iii) Application Software

(i) Operating System: The Operating System is a programme which controls the overall internal operations of a computer system. It performs the booting and rebooting functions, schedule the tasks, control the peripherals and manages the files. Windows, Linux, etc., are some of the examples of an operating system.

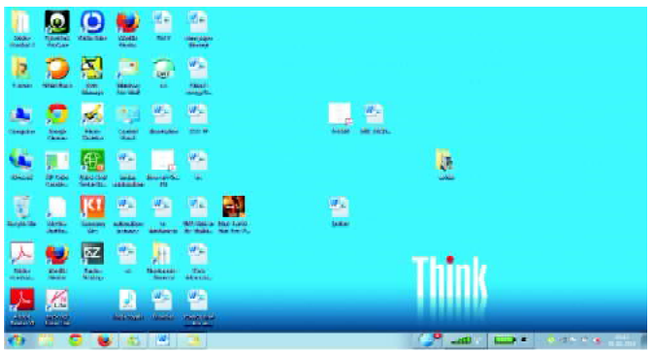

Figure 2.1: Windows Operating System

(ii) **Utility Software:** The utility software is a programme which analyzes, configure, optimize or maintain a computer system without any input. All the antivirus and system software fall under this category. For example: Microsoft Security Essential, etc.

(iii) **Application Software:** Application software is designed to perform a particular task or a group of tasks to satisfy the needs of a particular environment. They are created by analyzing the environment and the need of a particular system. For example, a Library Automation Software (LAS) is a customized application software for managing day to day functions of a library and its management. The Library Automation software is developed to perform the housekeeping as well as storage and retrieval tasks. The work in library can be categorized into two categories:

a) Routine Work

b) Information Service Work

Both the above tasks in a library can be performed easily in less time through the LAS. It helps the library staff performing routine, administrative or clerical works efficiently, accurately and reduces the duplication of work.

The LAS has the provisions of controlling and performing the routine works in acquisition, circulation, accounting, records maintenance, library catalogue, information storage and retrieval, etc. The library automation software, automates the library functions with the help and assistance of computers and other equipments such as radio frequency identification (RFID), barcode, and so on.

Review Questions

A. Fill in the blanks

1. Software is a set of _____, meant to perform well-defined functions.
2. Library automation software is an _____ programme.

B. Multiple Choice Questions

Tick the correct answer

1. Which kinds of operations can be performed through library automation software?
   (a) Shelving
   (b) Classification
   (c) Routine and information service operations
   (d) Book preparation
2. Library automation software automates the library operations with the help of:
   (a) Computer
   (b) Typewriter
   (c) Mobile phone
   (d) Photocopying machine

C. Short Answer Questions

1. What do you mean by software?
2. What is application software?
3. Have you ever seen the use of barcode while shopping?
4. What does RFID stands for?

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part-A

1. Understood software and its categories.
2. Explained equipments required for automating library.

Part-B

1. What is a software?
2. What are different categories of software?

Part-C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Able to explain software.		
Able to explain categories of software.		

2.2 Library Automation Software

Recent advancement in the field of information technology has compelled libraries to automate their functions to provide better services to their members. Suitable library automation software coupled with computers and other equipments can enhance the effectiveness of library services.

The LAS is needed for managing library in computerized environment. The maintenance of library records and provision of lists (catalogues) and notices involve considerable manual efforts and time. There are a number of routine works which are repetitive in nature. With the help of LAS, these functions can be performed easily, efficiently and effectively with less time consumption.

The need of library automation software can realize as follows:

(i) To provide efficient and accurate services.

(ii) To reduce duplication of work, save the time of library staff and increase their productivity.

(iii) To quick and easy update, edit and information retrieval.

(iv) To control the rapid growth of information.

(v) To save the time of the reader/user.

(vi) To utilize the library resources efficiently and effectively.

(vii) To prepare library catalogues.

(viii) To provide OPAC.

(ix) To prepare various records of library such as circulation records, accession register, etc.

(x) To create different statistical reports.

(xi) To make statistical analyses,

(xii) To compare with records of previous year to enhance efficiency of the library.

(xiii) To provide current awareness services and selected dissemination of information.

(xiv) Stock verifications, etc.

The purpose of LAS can be understood as:

(i) The LAS introduces in library to keep pace in the era of information explosion and the need of the users. Once information is store in the computer and verified, it becomes an asset for the library. After that it provides accurate information to the users and the library staff, easily and quickly.

(ii) There are a numbers of repetitive works performed by the library staff which consumes time and prone to make mistake also. For example, sending reminders, different notices, circulars, ordering books and many others. with the help of LAS, the repetitive works may be done in very less time and with accuracy. It reduces the burden of library staff and save their time which would enhance their productivity.

(iii) The application of LAS saves the precious time of the library users/readers as it provides them quick and accurate information services.

(iv) The LAS facilities to update, edit and replace the existing data and different information which make day-to-day task easier and to complete them within the specific time.

(v) The LAS helps in locating the resources available in-house as well as in other libraries which makes staff and users both controlling over the rapid growth of information and finding the relevant information resources with less effort and time.

(vi) The LAS provides tool to create centralized library catalogue and make it searchable over Internet or Intranet. This provision of the software maximizes the utilization of the library resources and makes the users self-dependent in using the library services.

(vii) The LAS has the provisions of creating different reports which helps in managing the library functions and further planning and designing better services to the users.

(viii) The LAS provides tools for reference services, as new addition list, selective dissemination of information, arrival of new issues of journals, compilation of study list or bibliography on the topic of interest, etc.

(ix) The LAS provide different administrative tools for the authority of the library to monitor the library functions, keep eyes on activities of the libraries, consumption of budget, stock verification, etc. There are such provisions through which a library can be monitored remotely in real time environment.

(x) The LAS gives time and tools for research and development in the field of library and information science.

Review Questions

A. Fill in the blanks

1. Library automation software is needed for managing library in _____ environment.
2. Library automation software is needed to provide efficient and _____ services.
3. Application of library automation software save the time of staff and _____ _____.

B. Multiple Choice Questions

Tick the correct answer

1. Library automation software is needed for maximum utilization of:
   - (a) Library space
   - (b) Library furniture
   - (c) Library users
   - (d) Library resources
2. Once information is stored in computer and verified, it provides accurate information to both:
   - (a) Users and staff
   - (b) Members and community
   - (c) Staff and librarian
   - (d) None of the above

C. Short Answer Questions

1. Define library automation software.
2. How does an LAS save the time of the users?
3. How does an LAS saves the time of the Library staff?
4. How does an LAS helps in better planning and designing library services?

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part-A

1. Understood the needs of library automation software.
2. Explained the purposes of library automation software.
3. Explained the benefits of using library automation software.

Part-B

1. What are the needs of library automation software?
2. What are the purposes of library automation software?
3. Explain the benefits of using library automation software?

Part-C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Able to explain needs of library automation software.		
Able to explain purposes of library automation software.		
Able to identify benefits of using library automation software.		

2.3 Function of LAS

In an automated library system, all kind of the tasks are performed through the LAS. It can perform housekeeping operations as well as information retrieval and dissemination. It can be applied in all sections of a library such as acquisition, cataloguing, OPAC, reference service, serial control and other services. It can also help library in its administration and management such as, planning, decision making, stock verification, statistical analyses, etc.

Use of LAS in Various Section of a Library

(a) Acquisition

The LAS has the provisions to undertake all the routine work under acquisition with the wide range of outputs, giving the librarian full control over acquisition process and budget. It supports in selection of library materials, ordering, receiving, accessioning, budgeting, fund management and other works of the section. The application of the LAS in acquisition section can be understood as follows:

(i) Collecting bibliographical information through various selection tools and managing the recommendations given by the members of the library.

(ii) Assuring the availability of proposed materials within the available or allotted budget.

(iii) Preparation of supply order to be sent to the vendors.

(iv) Maintaining online records of all materials, ordered, received, accessioned, pending, etc.

(v) Maintaining database of vendors.

(vi) Detection of delay in supply and sending reminders.

(vii) Checking in of item received, processing of invoice, accessioning of materials.

(viii) Accounting fund for payment of bills, and controlling the funds for books and other materials.

All the tasks of acquisition section can be done accurately and efficiently with less human resources and in less time compared to manual system.

(b) Serial Control

Serial acquisition is completely different from acquiring books. Serial subscription is being paid in advance and issues are received continuously within the period of subscription. Each periodical is being subscribed separately and because of different frequency, each issue is received and recorded separately. Payments details of each title is recorded and maintained separately. The records of the serial section are very important and necessary to keep up to date. Therefore, serial control in a library needs separate set of functions to manage the serial section.

The LAS can help in subscription, keeping payment records, receiving and maintaining issues, claiming missing issues and sending reminders, renewal of subscriptions, updating list of current holdings and managing bound volumes, as well as other functions of the section.

(c) Technical Section

The LAS can make possible the computerized classification and cataloguing of books, which reduces the manpower and save the time of the library staff. Computerized classification has been experimented by DRTC Bangalore, in India. Classification needs much human intelligence to decide a class number for a material therefore, difficult in implementing.

A library can create its own catalogue or can get help from other libraries, or cataloguing service providers. Library of Congress(USA) is one of the largest catalogue holders in MARC format from which a catalogue can be imported directly in to own library database. Today there is a number of software for example KOHA, in which data can be imported directly from the catalogue database of other libraries if they are Z39.50 standard compatible and online. The LAS provides tools to create, edit, delete catalogue and make them searchable.

(d) Circulation Section

The LAS makes the functions of circulation section easy and fast. It also helps library in saving time and space as there is no need to keep members borrowing cards and book cards at the circulation counter in different trays.

The software helps the library staff in issue, return and renewal of the library resources and also in maintaining the records. With the help of software the circulation work can be made automated to the extent that there would no need of staff for issue and return. This can be done with the help of RFID.

LAS give the facility of reservation of books and other materials. The members of the library can reserve the issued materials online which, leads to save the time of the users and staff both.

The software helps in preparing different reports and statistics of the circulation section like, issue-return, fine, membership granted and terminated number of users/readers, etc.

(e) Interlibrary Loan

The Interlibrary loan is one of the services provided by libraries in which required resources, (if not available in the library) can be traced and brought from other libraries into own library and issued to the needed member. Similarly, if needed, materials can be issued to other libraries too.

Locating resources and their availability is easy through online catalogue. For this purpose, generating request letter to holding library, issue-return process (with the member who has demanded), again returning the material to holding library and maintaining the records, all are done through the LAS.

(f) Library Catalogue

The library catalogue is being created through LAS. Once, the database of catalogue created and uploaded for online access, it becomes easy to search required materials and to know their availability status. It provides full bibliographic details of the materials and depending upon the library, image, content page, reviews, etc, of the materials may be provided also.

(g) OPAC/Web OPAC

The online access of a catalogue is known as OPAC (Open Public Access Catalogue). It provides the library collection on a computer system to its user in the form of searchable catalogues. It is a tool which makes user self-dependent in searching required materials. All the LAS have the provision to provide OPAC.

The OPAC accessible through Internet is being known as Web OPAC. The Web OPAC saves the time of the user and the staff of the library. It is a tool which makes the users self-dependent in exploring the resources of the library remotely.

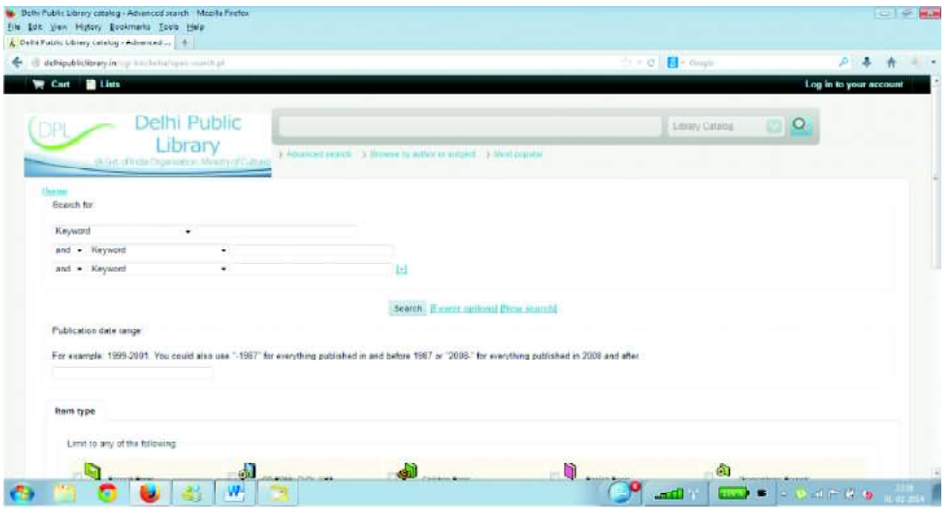

Figure 2.2: OPAC of Delhi Public Library

(h) Reference Section

The LAS provides tools for reference service to the users. It helps in locating required materials in own library and if needed it can search other library also.

Preparing study list and compiling bibliography on a given topic, bringing out new addition list, providing Current Awareness Service (CAS), Selective Dissemination of Information (SDI), or other activities of the section become easy through LAS.

(i) Maintenance Section

Maintenance of records, statistics, pre-defined and customized reports can be taken out with maximum accuracy through LAS. Planning for future, data analyses and decision making information is easy through proper utilization and timely updating different databases of the LAS.

Analysis of data and comparison with the data of previous years are easy and accurate through LAS which enhance the efficiency of a library.

Review Questions

A. Fill in the blanks

1. Library automation software can apply in all most all _____ of a library.
2. Library automation software can maintain the _____ of vendors.
3. The Library of Congress is the largest catalogue holders in _____ format.

B. Multiple Choice Questions

Tick the correct answer

1. Online access of catalogue of a library is known as:
   - (a) OPAC
   - (b) COPAC
   - (c) WEBPAC
   - (d) Internet
2. What are different categories of reports generated through library automation software?
   - (a) Defined and undefined
   - (b) Customized and creative
   - (c) Predefined and customized
   - (d) Manual and automated

C. Short Answer Questions

1. List the different sections of a library which can be automated through LAS.
2. How LAS provides searching facilities to the users?

3. What are the functions of acquisition which can be automated through LAS?
4. What are different tools provided by LAS for reference services?
5. How does the LAS saves time and space in circulation section?

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for Assessment Activities.

Part-A

1. Explained functions of different sections of library.
2. Understood utility of library automation software in different sections of a library.

Part-B

1. What are different sections of a library?
2. Identify different functions of each section of a library where library automation software can be used.

Part-C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Able to identify different sections of a library.		
Able to identify functions of each section of a library where library automation software can be used.		

2.4 Types / Kinds of Library Automation Software Packages

The LAS can be categorized on the basis of different characteristics of the software. Here, we are discussing the types of LAS on the basis of licensing. There are two types of Library automation software available in the market. Those are:

(i) Proprietary Software

(ii) Open Source Software

(i) Proprietary Software

The proprietary software is a kind of software for which ownership remains with the creator under the provisions of copyright. The owner or proprietor provides license to the user, for using its applications on certain terms and conditions. Users are not being given the right to open, modify or further distribute the source code of such software. Because of this, the software of this category is being called closed source software also. The owner of the software takes fees for granting the license for using its applications, sometimes, some of the software may be free from charges for using its applications but the source code of the software remains closed.

The proprietary software is most of the times a paid software but sometimes it can be made available free of cost, on the basis of some terms and conditions decided by the owner whereas. Whether such software are being purchased or made available free of cost, but the source code of such software remains closed. We have a number of Library automation software in this category. For example : LIBSYS, VIRTUA, TRUDAN, etc.

(ii) Open Source Software

The Open Source Software (OSS) is a software for which source code is open. The users are granted license to use, study, modify and further redistribute it. Such software is usually the product of collective efforts of the professionals to provide free and also the right of customization as per need of the user.

There are a number of open source Library automation software available and being used worldwide. For example, KOHA, New Gen Lib, ABCD, etc, are a few open source LAS available worldwide.

Here, we are going to discuss KOHA, which is one of the popular and worldwide used open source LAS.

2.5 KOHA: A Library Automation Software

KOHA is one of the most popular, free and open source Integrated LAS in the world. The package was developed by Katipo Communication Limited , wellington, New Zealand for the Horowwhenua Library Trust(HLT). The HLT is a regional library system located in Levin, near Wellington. The developer of KOHA proposed to develop a new system for HLT using open source tools as, Perl, My SQL and Apache which run on LINUX platform and use telnet to communicate with the branches.

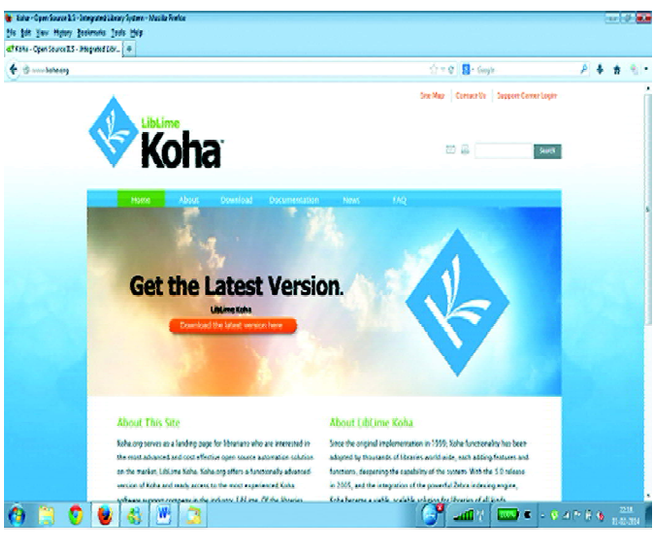

Figure 2.3: http://koha-community.org

The KOHA software was first released in July 2000 under the general public licensing for public. The whole world took interest in this software and a global community of users and developers of KOHA got created. From its first Version to Version 2.9, the package was available for both Linux and Windows operating systems. Since the KOHA community is promoting the concept of open source software therefore, only Linux version was being developed and distributed, from version 3 onwards. Hence, KOHA version 3 onwards is available for LINUX environment only.

(a) Features of KOHA

KOHA is an open source, web centric Integrated Library automation software, free to

download from its official website: **http://koha-community.org/**, without any fees for licensing, customizing, using and further distributing. It has a strong user community worldwide to provide documentation and technical support. Technical details and operating guidelines have been given in the manual of the software. The manual is available online as well as in PDF form. It is suggested that download a PDF version of the manual of a particular version of KOHA you are going to work with. It has been observed that the website of the KOHA Community maintains the manual of latest and few previous versions of the software.

The Salient Features of KOHA can be Listed as Follows:

(i) **Centralized Vs Decentralized Library:** The software provides facility to create different branches of a library and share their resources and members. It has provisions to restrict interoperability among branch libraries. This feature is very much useful for universities or public library system which has branches to control. With the help of the software, control can be centralized and real time monitoring system of the library operations can be developed.

(ii) **Administration:** The software has very strong administration tools. It can restrict its users or staff from accessing its certain areas of activities. The access can be linked with IP address. It gives control over each and every operation within the software. All the parameters which are needed to operate the software and keep the possible security measures under control are given in administration module.

(iii) **Tools:** The software provides tools to create different reports, notice, circular, members comments, imports patron profile in bulk, and a number of templates to be used.

(iv) **Patrons:** The software provides separate module for managing information of members, its addition, editing, import in bulk, etc.

(v) **Circulation:** The software provides facilities for issue-return, renewal, and reservation of the library resources, fine collection, using barcode, and generating overdue list for reminder.

(vi) **Cataloguing:** The software provides facility to create bibliographic database in popular fields like author, title, ISBN, and other attributes. KOHA supports MARC and its different forms. One of the best features of the KOHA is Z39.50 compatibility. With the help of Z39.50 feature one can easily import MARC records in own database from the databases of other libraries like the Library of Congress, RMIT Library, etc, modify them as per needs and make its own record. It is also a Unicode compatible LAS hence, multilingual catalogue can be created in it.

(vii) **Serials:** The software provides separate module for serials management. Under this module, serial subscription process, renewals of old subscriptions, receiving of issues, reminders of non-receipt of issues, are the key features.

(viii) **Acquisitions:** The software provides facility to manage real time budget, vendor profile, ordering, receiving, suggestions to purchase, and other routine works of the acquisition.

(ix) **Lists and Cart:** The software provides facility to save a collection of content on a

specific topic or for a specific purpose under list and session specific storage space under cart.

(x) **Reports:** The software provides facility to create customized reports and standard statistical reports needed for decision making and records.

(xi) **Searching:** KOHA software provides searching of the library resources of own library as well as the associated libraries. It has options of basic and advance searches.

(xii) **OPAC:** The software provides facility to search library catalogue online and to reserve or put comment against a record under its OPAC module. The OPAC created with the KOHA can be made accessible globally through internet.

(xiii) **Customization:** KOHA provides facility to customize it as per the need of the library. The library staff, with the knowledge of HTML or XML can make changes easily. As the source code of the software is open and the schema of database and coding instructions are given on the community website, with the help of those person having knowledge of coding can change in programme of the software as per need and vision to create a better version.

Apart from above mentioned features, there are a number of other features of the software which can be learnt from the documentation section of the KOHA Community website.

(b) System Requirements

The KOHA can run on any personal computer (under LINUX operating system) but it is recommended to install it on web server to get better result. It is to be remembered that the LINUX is having different versions. Two versions of LINUX namely Ubuntu and Dabian are popular. Hence, KOHA is available for these versions of LINUX.

In addition to the server, barcode printer and barcode reader as well as normal printer to print different labels and reports, should be connected to the system. With these machines and equipments a library can operate its automated systems with KOHA.

(c) Software Requirements for Installing and Running KOHA are as Follows:

(i) **Operating System:** A Linux server – The software can run on any version of Linux, Debian or Ubuntu.

(ii) **Apache:** This is a web server software on which Koha runs.

(iii) **MySQL:** This is an RDBMS software which provides back end support to KOHA.

(iv) **Perl:** This software provides web interface.

(v) Root access to the server.

(d) Other Skills

(i) A reasonable level of comfort with the command line.

(ii) Database administration skills.

The KOHA and other required software to run KOHA are listed above. They can be downloaded from the KOHA community website where links of the download page of different software have been provided. All this software is licensed under the GNU General Public License, either version 2 of the License, or (at your option) any later version. Instead

of downloading different software separately, complete bundle of KOHA with related software can be downloaded from the CD or DVD version which is known as CD or DVD image or KOHA Live CD/DVD. After downloading CD or DVD image or can say ISO file, burn it on CD or DVD and boot your system with this CD or DVD and follow the instructions. All the software gets installed and after setting the parameters, KOHA runs.

As we know that the KOHA runs on Linux operating system, therefore, if you are running any other operating system and rebooting the system with the KOHA, CD or DVD then you may lose your previous operating system and data as it may format the hard disc and then install the software. Hence, it is recommended that, before installing KOHA especially from CD or DVD, save your important data and then install it. If you wish to run KOHA on your personal computer or laptop for practice purposes then, install KOHA in another partition of the Hard Disk of your Computer system. This will facilitate you to boot your computer system with the operating system you wish to work.

It is recommended that you download the KOHA Manual of that particular version of KOHA you have installed in your computer system and follow the instructions. For example, if you have installed KOHA 3.10 then download the Manual for KOHA 3.10. With the help of the manual and documentations available at the KOHA community web site (http://koha-community.org/), you would be able to operate the software and execute the functions of your library smoothly.

Review Questions

A. Fill in the blanks

1. The owner of proprietary software provides _____ to the user for using software on certain terms and conditions.
2. Open sources software is such a software which _____ is open.
3. KOHA runs on _____ operating system.

B. Multiple Choice Questions

Tick the correct answer

1. Which kinds of library automation software KOHA is?
   - (a) Proprietary software
   - (b) Open sources software
   - (c) Anti-virus software
   - (d) Non of the above
2. Which version of KOHA runs on LINUX?
   - (a) Up to 2.9 version
   - (b) Version 3.0 onwards
   - (c) Version 4.0 onwards
   - (d) From version 1.0 to 2.9

C. Short Answer Questions

1. Define proprietary software.
2. Define open source software.
3. What are the different software required to run KOHA?
4. Name a few proprietary LAS available in India.
5. Name different versions of LINUX.

Checklist for Assessment Activity

Use the following checklist to see if you have met all the requirements for assessment activity.

Part-A

1. Explained open source and proprietary software.
2. Explained features of KOHA.
3. Explained system requirements of KOHA.
4. Install and work with KOHA.

Part-B

1. Differentiate open source and proprietary software.
2. What are different features of KOHA?
3. What are system requirements of KOHA?
4. How can KOHA be installed?

Part-C

Performance Standards

The performance standards may include, but not limited to:

Performance Standards	Yes	No
Able to differentiate open source and proprietary software.		
Able to identify features of KOHA.		
Able to identify system requirements of KOHA.		
Able to install and work with KOHA.		

2.6 Summary

The library automation has become necessary to provide fast and accurate services to the library uses. Computers and some other equipment along with automation software are needed to automate a library. With the help of LAS almost all the functions of a library can be automated.

Library automation software is an important tool for creating an automated library system. There are two types of LAS available in the public domain namely proprietary and open source software. Most of the time, the proprietary software is paid and sometime it may be free too but, whether

paid or free, the owner of such software only provides the license to use its applications only. The users of the proprietary software cannot get access of its source code hence, cannot customize it as per their needs. The open source software is licensed to use its applications and make changes in programme as the source code of such software is open. It also provides licence to bring different version after changing in the programme and further distribute it to others.

The KOHA is one of the popular open source LAS worldwide. It runs in the LINUX environment and is completely web compatible. Allmost all the functions of a library can be automated through KOHA. A number of features of KOHA have been discussed in this chapter. The KOHA and its supporting software can download from http://koha-ommunity.org and associated links and can install in any computer.

Using KOHA can save the financial resources of a library and make the library service efficient and effective. The documentation and technical support can be obtained from the above mentioned website of the KOHA to run the system smoothly.

2.7 Exercise

1. What do you mean by a Library Automation Software?
2. Why automation of a library is needed?
3. What are the salient features of KOHA?
4. Write down the process of installing KOHA.
5. Write down the purpose of Library automation in 1000 words.

2.8 Practical

1. Download KOHA and other required software from http://koha-ommunity.org and install it.
2. Download a KOHA manual from http://koha-ommunity.org/documentation and make a short note on each module given in the manual.
3. Verify your short note made for each module of KOHA from KOHA software.
4. Create catalogues in KOHA for five books.
5. Create five patrons in KOHA.
6. Create five Catalogue through importing data from Library of Congress.
7. Create budget in KOHA and order five books to a vendor.

2.9 Glossary

- **Apache:** The Apache is an open source web server.
- **Coding:** Process of writing a computer programme in a specific programming language.
- **DRTC:** Documentation Research and Training Centre, Bangalore, Karnataka, India.
- **Information Explosion:** Rapid growth in the amount of published information.

- **Inter-Operability:** Ability to exchange information in a heterogeneous network.
- **LINUX:** It is an open source operating system.
- **MySQL:** MySQL is a relational database management system (RDBMS) that runs as a server providing multi-user access to a number of databases.
- **OPAC:** Online Public Access Catalogue, the Library Catalogue available to users for searching on computer.
- **Perl:** The Perl programming language is an open-source computer programming language. It is a high-level, general-purpose, interpreted, dynamic programming languages works specially in UNIX environment.
- **RDBMS:** Relational Database Management System.
- **Schema of Database:** It is a graphical depiction of the database structure.
- **SDI:** Selective dissemination of information, a customized service to an individual library member specially on current publications.
- **Source Code:** A text listing of commands to be compiled or assembled into an executable computer program.
- **Stock Verification:** It is a process of verifying the library resources accessioned by the library on record and physically available in the library. It ascertain the loss and the gain of the library resources in a given period of time.
- **UNICODE:** Unicode is a computing industry standard for the consistent encoding, representation and handling of text expressed in most of the world's writing systems.
- **Windows:** The Windows is a proprietary operating system developed and distributed by the Microsoft Corporation, USA.

Resource Material

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(iii) Neelakandan, B, etc.(2010). Implementation of Automated Library Management System in the School of Chemistry Bharathidasan University using Koha Open Source Software. International Journal of Applied Engineering Research. Volume 1, No1. Pp 149-167. Available at http://www.ipublishing.co.in/jarvol1no12010/EIJAER1014.pdf

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