University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

Winter 11-1-2023

A Brief Introduction to Koha ILS and its Modules

Sukanta Halder

National Institute of Pharmaceutical Education and Research, Kolkata, lissukanta@gmail.com

Sangram Haldar

Rampurhat College, Birbhum, sangramhaldar@gmail.com

Follow this and additional works at: https://digitalcommons.unl.edu/libphilprac



Part of the Scholarly Communication Commons

Halder, Sukanta and Haldar, Sangram, "A Brief Introduction to Koha ILS and its Modules" (2023). Library Philosophy and Practice (e-journal). 7992.

https://digitalcommons.unl.edu/libphilprac/7992

A Brief Introduction to Koha ILS and its Modules

Sukanta Halder

Library and Information Officer

National Institute of Pharmaceutical Education and Research, Kolkata

lissukanta@gmail.com

and

Sangram Haldar Librarian Rampurhat College, Birbhum sangramhaldar@gmail.com

Abstract

Koha is a widely-used open-source Integrated Library System (ILS) that offers a range of modules to support libraries' diverse functions and workflows. This abstract provides a brief introduction to Koha and its modules. Koha is designed to help libraries efficiently manage their collections, automate critical processes, and provide enhanced services to their users. It is built on open-source principles, allowing libraries to customize and tailor the system to their needs. The core modules of Koha encompass essential library functions. The Koha modules are the Acquisition module, Cataloguing module, OPAC (Online Public Access Catalogue) module, Serial Control module, Circulation module, Patron Management module, OPAC module, Report module, and Tools module. This paper describes in brief about different modules available in Koha.

Keywords: Koha, Integrated-Library System (ILS), Module, Open Source Software, Library management

Introduction:

In the present era, digitalized databases are assembled in most library services, created on information technology and resources accessible in electronic formats. To manage all kinds of resources and information, libraries need high-quality integrated software and cutting-edge retrieval tools. Library automation is concerned with collecting, monitoring and automating library collection, activities, and services in an automated library; computers are used in most activities, such as acquisition, cataloguing, circulation control, and periodical management. Library automation not only does housekeeping activities but also provides current and relevant information to the user, according to their demand.

Koha is a robust and widely-used open-source Integrated Library System (ILS) that provides libraries with comprehensive modules to streamline their operations and enhance user services. Developed with the principles of open-source software, Koha offers libraries the flexibility to customize and tailor the system to their specific needs. At its core, Koha consists of several key modules that cover essential library functions.

About Koha:

Koha is a powerful open-source Integrated Library System (ILS) that empowers libraries to manage their collections and streamline operations. Developed with the principles of open-source

software, Koha offers a range of modules and functionalities that cater to the diverse needs of libraries. This paper discusses the Koha version 21.11.10.000

Key features of Koha include:

- Comprehensive modules: Koha encompasses core modules such as cataloguing, circulation, acquisitions, serials, administration, reports, tools and online public access catalogue (OPAC). These modules enable libraries to handle key functions, including creating and managing bibliographic records, automating circulation processes, managing acquisitions and orders, and providing user-friendly access to the library's collection.
- Customization and flexibility: As an open-source system, Koha allows libraries to customize and adapt the software to fit their specific requirements. Libraries can configure workflows, tailor cataloguing rules, and personalize the user interface to align with their unique needs and preferences.
- User-friendly interface: Koha provides an intuitive and user-friendly interface for library staff and users. Koha user can efficiently navigate the system, perform tasks, and access relevant information, while library patrons can easily search for materials, place holds and manage their accounts through the OPAC.
- Automation and efficiency: Koha helps libraries optimize their operations and improve efficiency by automating various library processes. Tasks such as cataloguing, circulation, and acquisitions can be streamlined, reducing manual work and saving time for library professionals.
- Interoperability and integration: Koha supports interoperability with other systems and standards, allowing seamless integration with third-party services and technologies. It can integrate with external databases, discovery systems, and other library software, enhancing its overall functionality and resource-sharing capabilities.
- Community support: Koha benefits from a vibrant and active community of developers, library professionals, and users contributing to its ongoing development, support, and improvement. Libraries using Koha can tap into this community for assistance, collaboration, and sharing best practices.
- Cost-effectiveness: Being an open-source solution, Koha eliminates the need for expensive proprietary licenses. Libraries can leverage Koha's features and benefits without incurring significant costs, making it an affordable option for libraries of all sizes.

In summary, Koha is a feature-rich, customizable, and cost-effective ILS that empowers libraries to manage their collections efficiently, provide enhanced services to users, and adapt to evolving library needs. It is open-source nature, and active community make it a dynamic and reliable choice for libraries seeking a flexible and robust library management system.

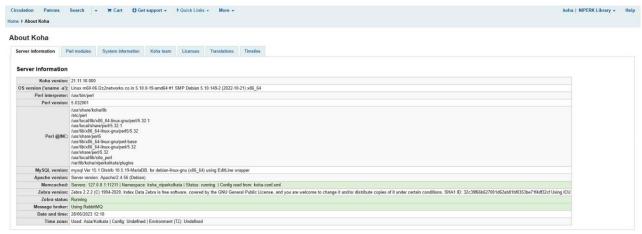


Figure-1: About Koha page

Koha Modules:

Koha is a comprehensive open-source Integrated Library System (ILS) that offers various modules to support library functions. These modules cover acquisitions, cataloguing, circulation, serials, reports, Patrons, administration, tools and online public access catalogue (OPAC). With these modules, Koha enables libraries to efficiently manage their collections, automate workflows, and enhance user experiences.



Figure-2: Koha Home Page Showing all Modules

Acquisition Module:

The Koha Acquisition module is an integral part of the open-source Integrated Library System (ILS) that facilitates the management of library acquisitions and ordering processes. This module streamlines the workflow in acquiring new materials for the library's collection, from the initial selection to the final receipt of items.

Koha Acquisition module includes:

- ➤ Vendor management: The module allows Koha user to maintain a database of vendors and suppliers, including their contact information, terms and conditions, and preferred ordering methods. This helps streamline communication and facilitates efficient purchasing.
- Selection and requisition: Koha user can create and manage selection lists, which are a basis for procuring new materials. They can also generate purchase requisitions, including details such as the title, author, format, quantity, and budget allocation for each item.

- ➤ Purchase orders: Koha enables the generation and tracking of purchase orders. Koha user can create purchase orders based on approved requisitions, specifying the vendor, delivery instructions, and other relevant information. The module also supports receiving and matching the ordered items with the corresponding purchase orders.
- ➤ Budget management: The Acquisition module provides tools for budget management, allowing Koha user to allocate funds to different departments, projects, or collections. It helps monitor expenditures, track remaining balances, and generate reports related to budget utilization.
- ➤ Integration with cataloguing: Once materials are received and processed, the Acquisition module seamlessly integrates with the cataloguing module. It allows Koha user to update the acquired materials' bibliographic records, item status, and location information.
- Notifications and alerts: The module provides automated reports and alerts, keeping Koha user informed about the status of orders, delays in delivery, or issues related to acquisitions. This helps ensure timely and efficient handling of materials.

The Koha Acquisition module improves the efficiency of the library's acquisition process by centralizing and automating various tasks. It simplifies vendor management, streamlines selection and requisition processes, facilitates budget tracking, and integrates seamlessly with other modules for a cohesive workflow. With its comprehensive features, the Acquisition module enhances the library's ability to acquire and process new materials, ensuring a smooth and effective acquisition process.

Cataloguing Module:

The Koha Cataloguing module is a vital component of the open-source Integrated Library System (ILS) that focuses on organizing and managing bibliographic records within a library. This module provides Koha user with the tools and features necessary to create, edit, and maintain accurate and comprehensive bibliographic data for library materials.

Koha Cataloguing module includes:

- ➤ Bibliographic record creation: Koha user can input detailed information about each item in the library's collection, including title, author, publication details, subject headings, and more. The module supports various metadata standards, such as MARC21 and UNIMARC, ensuring compatibility with different cataloguing practices.
- ➤ Copy cataloguing: Koha offers copy cataloguing capabilities, allowing Koha user having cataloguing privilege to import bibliographic records from external sources, such as library consortia or global databases. This feature saves time and ensures consistent cataloguing across libraries.
- Authority control: The Cataloguing module includes features for managing authority records, which help ensure consistent and standardized access points for names, subjects, and other controlled vocabularies. Authority control enhances search accuracy and enables users to find relevant materials more efficiently.
- ➤ Classification and shelving: Koha user to assign classification numbers, such as Dewey Decimal or Library of Congress Classification, to items. This facilitates proper shelving and organization of materials within the library.
- ➤ Item and holding management: The Cataloguing module allows Koha user to associate individual items with bibliographic records, tracking their physical location, circulation

- status, barcode numbers, and other relevant details. It also supports the management of multiple copies and sites for the same item.
- ➤ Linked data and integration: Koha supports the integration of linked data resources, allowing access to additional information and related resources. This enhances the discoverability and interconnectedness of library materials.
- ➤ Customization and local practices: Libraries can customize the Cataloguing module to align with local cataloguing practices, such as setting up custom fields, defining data entry rules, and incorporating local subject headings or authority files.

The Koha Cataloguing module empowers Koha user to create and manage accurate bibliographic records efficiently, ensuring the discoverability and accessibility of library materials. With its flexibility, integration capabilities, and adherence to international standards, the module provides libraries with comprehensive and user-friendly access to their collections.

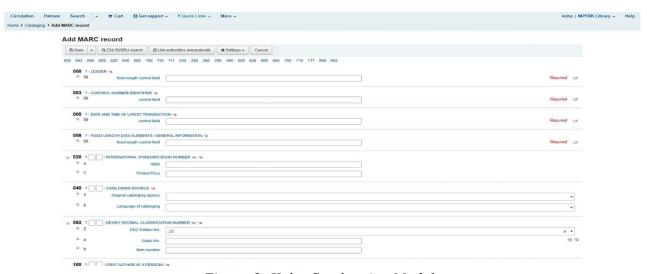


Figure-3: Koha Cataloguing Module

Circulation Module:

The Koha Circulation module is a core component of the open-source Integrated Library System (ILS) that automates and streamlines library circulation operations. This module facilitates the lending and borrowing of library materials, ensuring efficient management of patron accounts and smooth circulation workflows.

Koha Circulation module includes:

- ➤ Check-in and check-out: Koha user can use the Circulation module to check in returned items and check out materials to library patrons. The module records due dates, calculates fines for overdue items, and handles renewals and reservations.
- ➤ Patron management: The module allows Koha user to create and manage patron accounts, including capturing personal information, contact details, and membership data. It enables Koha user to track borrowing history, control holds, and communicate with patrons regarding their account status.
- ➤ Holds and requests: The Circulation module supports placing and managing has or recommendations on library items. Patrons can request materials that are currently checked out, and the system notifies them when the items become available.

- Fine management: Koha provides tools for managing fines and fees associated with overdue items or lost materials. The module can automatically calculate penalties based on defined rules and generate reports for fine collection.
- ➤ Renewals: Patrons can request renewals of borrowed items through the Circulation module. The system checks for any restrictions or conflicts and allows for easy extension of the borrowing period if applicable.
- ➤ Self-checkout and self-service options: Koha offers self-checkout capabilities, allowing patrons to check out materials using self-service kiosks or mobile devices independently. This enhances efficiency and provides a convenient opportunity for library users.
- Notifications: The Circulation module can send automated messages to patrons, reminding them of upcoming due dates, informing them about holds or requests, and providing other relevant information about their borrowing activities.
- ➤ Integration with other modules: The Circulation module seamlessly integrates with other Koha modules, such as Cataloguing and OPAC, ensuring consistent and up-to-date information across the system.

The Koha Circulation module simplifies the management of library materials and patron accounts, enhancing the overall user experience. By automating routine circulation tasks and providing robust features for patron management, holds, fines, and self-service options, the module enables libraries to efficiently handle circulation operations and deliver quality services to their patrons.



Figure-4: Koha Circulation Module

Serials Control Module:

The Koha Serials module is an essential component of the open-source Integrated Library System (ILS) that facilitates the management of serial publications within a library. This module is designed to handle the unique characteristics and complexities of serials, such as journals, magazines, newspapers, and other ongoing publications.

Koha Serials control module includes:

- > Subscription management: The Serials module allows Koha user to manage subscriptions to serial publications. They can track subscription details, including subscription periods, renewal dates, and subscription history.
- ➤ Issue tracking: Koha user can record and track individual issues of serials, including volume numbers, issue numbers, publication dates, and holdings information. This ensures accurate and up-to-date information about the availability of the specific problems.
- ➤ Claims and routing: The module provides features for managing claims and routing of serials. Koha user can generate and track claims for missing or delayed issues, ensuring that subscriptions are fulfilled on time.

- ➤ Binding and holdings maintenance: Koha allows it's user to manage the binding and care of serials holdings. They can track information about bound volumes, holdings locations, and any changes in the physical format or location of serials.
- ➤ Serials check-in: Koha user can use the Serials module to check in received issues of serials, updating the status and availability of each case. The module provides features for handling irregular publication schedules, multiple copies of issues, and handling special issues or supplements.
- ➤ Serials search and discovery: The Serials module integrates with the library's catalogue and online public access catalogue (OPAC), enabling users to search and discover serial publications. Users can browse through available issues, check availability, and access digital content.
- Reporting and statistics: Koha offers reporting tools within the Serials module, allowing Koha user to generate reports on subscriptions, claims, circulation statistics, and other serials-related data. These reports provide valuable insights for collection management and decision-making.

The Koha Serials module simplifies the management of serial publications, ensuring accurate tracking of subscriptions, efficient handling of issues, and seamless integration with the library's catalogue and discovery systems. With its comprehensive features and functionality, the Serials module helps libraries manage their serials collections effectively and provides seamless access to ongoing publications.

Reporting Module:

The Koha Reports module is a powerful tool that enables libraries to generate and analyze various reports to gain insights into their collection, circulation, and overall library operations. This module allows Koha user to create customized reports based on specific criteria and parameters, helping them make informed decisions and assess the performance of their library services.

Koha Reports module includes:

- ➤ Report customization: Koha user can create custom reports tailored to their specific needs. They can select the desired data fields, set filters and criteria, define sorting options, and choose the report format. This flexibility allows Koha user to generate reports focusing on the areas they want to analyze.
- ➤ Comprehensive report types: Koha offers a wide range of report types covering different aspects of library operations. These include circulation reports, collection reports, cataloguing reports, acquisitions reports, serials reports, and more. Each report type provides valuable insights into specific areas of the library's activities.
- ➤ Data visualization: The Reports module supports data visualization options, such as charts and graphs, to present information in a visually appealing and easily understandable format. Visual data representations can help Koha user identify trends, patterns, and outliers more effectively.
- ➤ Scheduled and automated reports: Koha user can prepare reports to run at specified intervals, such as daily, weekly, or monthly. This feature allows for automated generation and delivery of messages, ensuring the most up-to-date information is available to library staff.
- Export and sharing options: The Reports module allows Koha user to export reports in various formats, including PDF, Excel, CSV, and HTML. This enables easy sharing and distribution of information with library staff, Koha Administrator, or other stakeholders.

- ➤ Report templates: Koha provides pre-built report templates that cover everyday reporting needs, offering a convenient starting point for library professionals. These templates can be customized to suit specific requirements, saving time and effort in report creation.
- ➤ Usage statistics: The Reports module offers statistics and analytics related to library usage, circulation trends, collection analysis, and more. These statistics help Koha user measure the impact and effectiveness of their services and make data-driven decisions.

The Koha Reports module allows Koha user to access and analyze data meaningfully, permitting them to monitor and evaluate various aspects of their library's performance. This module enhances the library's ability to assess its operations, optimize workflows, and improve user services by providing customizable reports, data visualization options, and scheduled report generation.

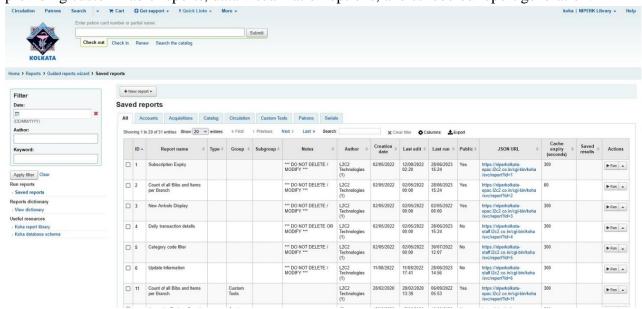


Figure-5: Koha Report Module

Patrons Module:

Koha Patrons is a module within the open-source Integrated Library System (ILS) that manages patron or user information in a library. This module enables Koha user to create, update, and maintain patron accounts, ensuring efficient management of user records and providing personalized services to library patrons.

Koha Patrons module includes:

- ➤ Patron registration: Koha user can use the module to register new patrons, capturing essential information such as name, contact details, address, and other relevant demographics. This allows for the creation of unique patron records within the system.
- ➤ Patron categories and types: Koha allows it's user to define different patron categories or types, such as students, faculty, staff, or community members. This categorization helps manage access privileges, borrowing policies, and customized services based on patron types.
- ➤ Borrowing privileges: The Patrons module provides options for configuring borrowing privileges for different patron categories. Koha user can set parameters such as loan periods, the maximum number of items allowed, and renewal policies based on the library's policies.

- ➤ Holds and requests: Patrons can place holds or requests on library materials through the Koha Patrons module. This feature enables patrons to reserve items that are currently checked out, and the system notifies them when the items become available.
- ➤ Patron messaging and notifications: Koha user can communicate with patrons through the Patrons module, sending notifications about due dates, hold pickups, overdue fines, or other relevant information. This helps in maintaining effective communication with library users.
- ➤ Patron history and statistics: The Patrons module records patron activities, including borrowing history, holds placed, fines paid, and other relevant data. This information can be used for generating reports and analyzing patron behaviour and library usage.
- ➤ Integration with other modules: The Patrons module seamlessly integrates with other Koha modules, such as Circulation and Cataloguing, ensuring consistent and up-to-date patron information throughout the system.

The Koha Patrons module is crucial in managing patron accounts and providing personalized library services. By enabling the registration and management of patron information, configuring borrowing privileges, facilitating holds and requests, and maintaining patron history, this module enhances the overall user experience and supports efficient library operations.

Administration Module:

The Koha Administration module provides Koha user the tools and functionalities to configure and customize the Koha system according to their library's specific needs. This module grants access to various administrative functions and settings, enabling efficient system administration and maintenance.

Koha Administration module includes:

- > System configuration: The Administration module allows Admin to configure system-wide settings and parameters. This includes defining library policies, configuring circulation rules, setting up loan periods, fine structures, and managing various system preferences.
- ➤ User management: Koha admin user can create and manage user accounts within the Administration module. This includes assigning user roles, granting permissions, and managing staff accounts. User management ensures appropriate access and security measures within the Koha system.
- ➤ Patron categories and types: The module provides options for defining and managing different patron categories and types. Koha admin user can customize patron profiles based on specific user groups, allowing for tailored borrowing privileges, fines, and service levels.
- ➤ Cataloguing rules and authorities: The Administration module enables Koha admin to define cataloguing rules and authorities for bibliographic records. This includes configuring data entry rules, setting up local subject headings, and managing controlled vocabularies for consistent and standardized cataloguing practices.
- > System preferences: Koha admin user can customize various system preferences within the Administration module. This includes configuring default search settings, enabling or disabling features, customizing display options, and adapting the system to suit the library's requirements.
- ➤ Report generation: The Administration module allows Koha super librarian to generate reports on various aspects of the library's operations. This includes circulation statistics,

- collection analysis, and system usage reports. Reports provide valuable insights for decision-making and resource management.
- > System maintenance: Koha admin user can perform system maintenance tasks within the Administration module. This includes managing backups, conducting system updates, configuring email notifications, and monitoring system performance.

The Koha Administration module empowers Koha admin user to efficiently manage and customize the Koha ILS according to their library's specific needs. The module ensures smooth administration and maintenance of the Koha system by providing access to configuration settings, user management, cataloguing rules, system preferences, report generation, and system maintenance functionalities.

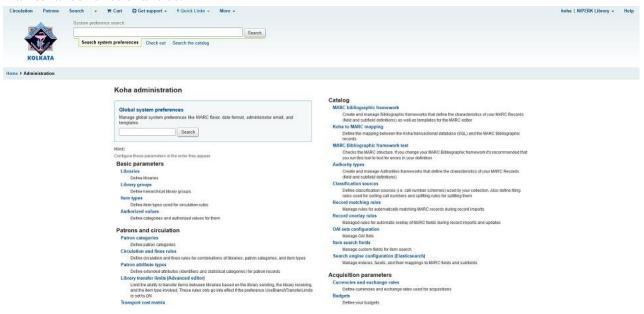


Figure-6: Koha Administration Module

Tools Module:

The Koha Tools module is a component that provides Koha user with a set of useful tools and utilities to enhance their management and maintenance of the Koha system. This module offers a range of functionalities that aid in data manipulation, system maintenance, and troubleshooting tasks.

Koha Tools module includes:

- ➤ Data import and export: The Tools module enables library professional to import and export data into and from the Koha system. This includes bulk importing of bibliographic records, patron data, or other relevant information and exporting data for backup or analysis purposes.
- ➤ Data manipulation: Koha user can utilize the Tools module to perform various data manipulation tasks. This includes batch updating of records, modifying or correcting metadata, reclassifying items, or making global changes to the catalogue.
- ➤ Database maintenance: The module provides tools for managing the Koha database. Koha admin user can perform database cleanup tasks, optimize database performance, repair any database inconsistencies, or perform other maintenance operations to ensure the smooth functioning of the system.
- > System troubleshooting: The Tools module includes utilities for troubleshooting and diagnosing issues within the Koha system. This may involve checking system logs,

- verifying database integrity, testing connectivity, or identifying and resolving system errors.
- ➤ Batch processes: The module supports batch processes, allowing Koha user to automate repetitive tasks or perform actions on a large scale. This includes batch deleting of records, bulk item modifications, or running scripts to perform specific operations.
- Indexing and searching: The Tools module provides options for managing the indexing and searching functionalities of the Koha system. Koha admin user can rebuild search indexes, update authority records, or configure search settings to enhance the accuracy and efficiency of searching within the catalogue.
- ➤ Customization and extensions: The Tools module offers tools for customization and extensions of the Koha system. This allows Koha user to modify system templates, create custom reports or labels, or integrate additional functionalities through plugins or modules.

The Koha Tools module authorizes Koha user with a range of utilities and functionalities to manage and maintain the Koha system effectively. The module enhances the flexibility and efficiency of system management by providing tools for data import/export, manipulation, database maintenance, troubleshooting, batch processes, indexing, and customization.

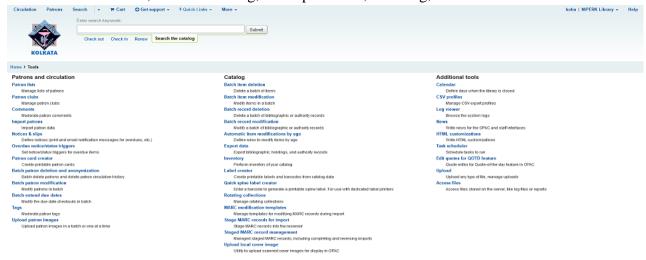


Figure-7: Koha Tools Module

Koha OPAC:

The Koha OPAC (Online Public Access Catalogue) module is a vital component of the open-source Integrated Library System (ILS) that provides library users with access to the library's collections, services, and resources through a user-friendly online interface. The OPAC module serves as a gateway for patrons to search for materials, place holds, manage their accounts, and interact with the library. The Koha OPAC interface provides library users with a user-friendly interface to search, discover, and access library materials and services. By offering search capabilities, item availability information, hold placement, account management features, access to digital resources, personalization options, and seamless integration with other modules, the OPAC module enhances the user experience and facilitates convenient access to the library's collections and resources.

Conclusion:

In conclusion, Koha is an open-source Integrated Library Management Software that offers a complete set of modules to manage various aspects of library operations. With its user-friendly

interface and customizable features, Koha provides it's user with powerful tools to streamline tasks such as cataloguing, circulation, acquisitions, and reporting. Overall, Koha and its modules provide a robust and flexible platform for efficient library management. Its open-source nature allows for collaboration and full customization, making it a popular choice among libraries worldwide. By holding the power of technology, Koha enhances the user experience, promotes accessibility to library resources, and supports effective library operations. With these advance features, Koha software become internationally accepted one of the popular integrated library management system.

References:

Mishra ,V.K. (2016) Basics of Library Automation, Koha Library Management Software and Data Migration: Ess Ess Publication

Sharma, Y., Sharma, A., & Sharma, M. (2018). Open Source Integrated Library Management Software KOHA: Overview & Features. *Journal of Advanced Research in Library and Information Science*, 5(4), 14-19.

Salma, M. S., & Devi, B. M. (2020). Adoption of Koha open source integrated library management system: a review of literature. *Library Philosophy and Practice (e-journal)*, 4424.

Devi, B. M., & Salma, M. S. (2021). Library Automation Using Koha Open Source Integrated Library Management System: A Study. *Knowledge Management in Higher Education Institutions*, 303.

https://koha-community.org/about/ [Accessed on 27.06.2023]

https://bywatersolutions.com/education/koha-erm-module [Accessed on 27.06.2023]

https://egyankosh.ac.in/bitstream/123456789/59597/1/Introduction%20to%20Koha%20ILS.pd

f [Accessed on 28.06.2023]

1483340471P5_M-24.pdf [Accessed on 28.06.2023]

https://niperkolkata-staff.l2c2.co.in/index.html [Accessed on 29.06.2023]

https://niperkolkata-opac.12c2.co.in/ [Accessed on 29.06.2023]