1. What are the key requirements for automation of libraries and information centers?
2. Explain the role of principles of automation of libraries and information centers
3. Discuss hardware requirements towards building an integrated library system
4. Discuss software requirements vis-à-vis automation of a library
5. What is the role of training in the deployment of library automation?

The key requirements of library automation are:

* Adequate collection
* Financial assistance
* Hardware
* Software
* Trained staff
* User training
* Maintenance & development

The role of the principles of automation of libraries and information centers are:

The hardware requirements for building an integrated library system can vary depending on the available budget, size of the data to store, usage load, required speed, features to upgrade when its required, availability of servicing (maintenance), compatibility with operating system, warranty period. Any hardware system use will need Keyboard and Mouse, Printer, Scanner and Barcode Printer. Two hardware systems that can be chosen from are:

* Standalone System Specification
  + I5/17 Intel Processor
  + 8GB Ram
  + DVD Writer
  + 500 GB Hard Disk
* On Cloud
  + Azure
  + Amazon Web Service
  + Google Cloud
  + IBM Cloud
  + Computer with internet access; the specification does not matter

The software requirements for building an integrated library system are:

* Functional modules; basic modules-acquisition, cataloging, circulation, OPAC. Add on modules-serial control, interlibrary loan and Web OPAC.
* Operating Systems-Windows or Linux
* Database systems-NoSQL, Microsoft SQL, Informix
* Network Architecture-Client server architecture that uses TCP-IP to communicate across networks (LANs and WANs)
* User interface-Should be Graphical user interface.
* Library automation standards- A compatible standards such as MARC and Z39.50 protocol

The role of training in the deployment of library automation is to ensure that library staff is able to use the modules such as:

* Acquisition System
* Cataloguing System
* Serials Management System
* Circulation
* Members management
* Reports