

Post Graduate Diploma
in
Library Automation and Networking
Assignments
For January 2025 and July 2025 Sessions



Faculty of Library and Information Science
School of Social Sciences
Indira Gandhi National Open University
Maidan Garhi New Delhi-110068

DATES FOR SUBMISSION OF ASSIGNMENTS

FOR January SESSION 30th September 2025

FOR July SESSION 31st March 2026

WHERE TO SUBMIT THE ASSIGNMENTS

**Kindly submit your assignments at the concerned Study
Centre/TLC within the due dates as mentioned above**

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INSTRUCTIONS FOR ASSIGNMENTS

As a part of PGDLAN Programme, each candidate has to do two Tutor Marked Assignments (TMAs), in all the seven courses except course MLIP – 008: Project. These TMAs comprise theoretical as well as practical assignments.

Assignments carry 20% weightage in the continuous evaluation process of a course. The term-end examinations carry 80% weightage.

The assignments will be evaluated by the Counsellors at the TLCs and the respective weightage of marks will be added to their percentage of marks obtained at the term-end examination. Each candidate will have to complete assignments in order to appear in the term-end examination. Candidates are, therefore, advised to take assignments seriously and submit them in time.

INSTRUCTIONS FOR TUTOR MARKED ASSIGNMENTS

- 1) The validity of the assignment is ONE YEAR. Those who take admission in January session have to attempt the assignments of January session only. If they fail to submit their assignments before the due date of the particular session, they are supposed to attempt the fresh set of assignments of subsequent January session (e.g. if a student of January 2023 session fails to submit her/his assignments till 30th September 2025, s/he will have to attempt the fresh assignments of January 2026 session). Similarly, those who take admission in July session have to attempt the assignments of July session only. If they fail to submit their assignments before the due date of the particular session, they are supposed to attempt the fresh set of assignments of subsequent July session (e.g. if a student of July 2025 session fails to submit her/his assignments till 31st March 2026, s/he will have to attempt the fresh assignments of July 2026 session).
- 2) Write your Enrolment Number, Name, Full Address and Date of Despatch at the top right-hand corner of the first page of your answer sheet.
- 3) Write the Programme Title, Course Title, Assignment Number, Code and Place of the Study Centre (TLC) on the left-hand corner of the first page of your answer sheet.

The top of the first page of your answer sheet for each assignment should be as follows:

Programme Title	Enrolment No.
Course Code & Title	Name
Assignment Number	Address
Study Centre/TLC (Code)	
Study Centre/TLC.....	
Place	Date

Note: Candidates are required to follow this format strictly otherwise the assignments will not be evaluated.

- 4) Your answer sheet should be complete in all respects. Make sure that you have answered all the questions in assignments before you submit them. Incomplete answer sheets will lead to poor marks.
- 5) As far as possible students are advised to give the relevant points from the course material and elaborate their answers and explanations in their own language instead of reproducing the language of the course materials.
- 6) You are advised not to copy from the study material while attempting the assignments. In case it is found that the assignments have been copied from study material, you will be awarded zero marks.
- 7) Avoid copying from the answer sheets of other students. If copying is noticed, the assignments of such students will be rejected.
- 8) Use only foolscap size paper for your answers, ordinary writing paper, neither too thick nor too thin, will do.
- 9) Leave 3" margin on the left and at least 4 lines in between each answer in an assignment. This will enable your Counsellor to write useful comments in appropriate places. Write question number for each answer.
- 10) The Coordinator of your Study Centre/TLC will return the evaluated assignments to you. This will also include a copy of assessment sheet containing global comments of the evaluator on your performance in the assignments. This will enable you to improve in your future assignments as well as in the term-end examinations.

- 11) The Tutor Marked Assignments should be sent to the Coordinator / Programme In-charge of the Study Centre/TLC allotted to you.

PRACTICAL ASSIGNMENTS

Assignment No. 2 of each course (TMA – P), which is for practical, is to be carried out at Study Centres/ TLCs. These have to be submitted/shown to the concerned counsellors.

MLI-001: Introduction to Computers

TMA – Theory

Coverage:

Course: Introduction to Computers

Course Code: MLI-001

Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 1 to 3

Units: 1 to 9

Total Marks: 50

I) Answer **any two** of the following in **not more than 1000 words each**

- 1) Explain why Linux is becoming a preferred operating system? (15)
- 2) Discuss the different uses of computers in libraries (15)
- 3) Describe the concept of information society. Discuss the changes in the Libraries due to the impact of the information society. (15)

II) Answer **any four** of the following in **not more than 500 words each**

- 1) Explain which is the most used operating systems in the present time and why? (5)
- 2) What do you understand by memory hierarchy? (5)
- 3) Explain why library automation is essential in present day context. (5)
- 4) Describe the importance of barcode as an input device in libraries. (5)
- 5) Differentiate between multitasking and multiuser operating system. (5)
- 6) Discuss the latest trends in the area of wireless communication. (5)

MLIL-001: Introduction to Computers

TMA – PRACTICAL

Coverage:

Course: Introduction to Computers

Course Code: MLIL-001

Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 1 to 3

Units: 1 to 9

Total Marks: 50

General Instructions for Practical Assignment:

- i) Documents, data, database, etc. to work on for the practical assignments will be provided by the Counsellor/Practical Supervisor in the Study/Tele Learning Centre.
 - ii) You are required to do the practical assignment in the Study/Tele Learning Centre. Evaluation of the assignment will be done by the Counsellor/Practical Supervisor on the spot.
 - iii) Make Screen Captures for all the answers and save them in one file. The Counsellor/Practical Supervisor will evaluate these screen captures and give marks accordingly.
 - iv) All questions are compulsory.
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- 1) Performing the following activities

A) WINDOWS:

- i) Change the appearance of the icons on desktop
- ii) Change the colour scheme of your desktop
- iii) Create a folder on the desktop named “PGDLAN” and copy a file in this folder
- iv) Empty the Recycle Bin
- v) Auto-hide the task bar

C) UNIX:

- i) Create a new directory LAB in your home directory
 - ii) Move the directory LAB to another directory
 - iii) List the names of files in your home directory
 - iv) Identify the name of your terminal
-
- 1) Prepare a MS Word document containing both text and table, also use bullets and numbering in text. Copy and Paste any picture to this document. (10)
 - 2) Prepare a Power Point presentation consisting of 06 slides having text, clip art and word art. Apply different design templates and transition sounds for each slide. (10)
 - 3) Create a file in MS-EXCEL containing enrolment data of students in PGDLAN Programme from 2021-2012. Add a chart to present this data. (10)
 - 4) Prepare a database in MS-Access of twenty books in a Library. (Details will be provided by the Counsellor/ Supervisor). (10)

MLI-002: Library Automation

TMA – Theory

Coverage:

Course: Library Automation

Course Code: MLI-002

Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 1 to 4

Units: 1 to 14

Total Marks: 50

I) Answer **any two** of the following in **not more than 1000 words each**

- 1) What do you mean by Library Automation? Discuss historical evolution of library automation. (15)
- 2) Describe the features of serials control system of a library in an automated environment. (15)
- 3) Explain what is retrospective conversion? Discuss its need and benefits in libraries. (15)

II) Answer **any four** of the following in **not more than 500 words each**

- 1) Explain the criteria to be considered while evaluating bibliographic databases. (5)
- 2) What do you understand by MARC 21 ? Explain the structure of a MARC 21 record. (5)
- 3) Discuss the various steps involved in the reference process. (5)
- 4) Discuss in brief the operational aspects of an SDI service. (5)
- 5) What is electronic document delivery service (EDDS)? Discuss the need and problems associated with it. (5)
- 6) Discuss the criteria for evaluating library automation software. (5)

MLIL-002: Library Automation

TMA – PRACTICAL

Coverage:

Course: Library Automation

Blocks: 1 to 4

Units: 1 to 14

Course Code: MLIL-002

Assignment Code: AST/TMA-T/Jan. & July 2025

Total Marks: 50

General Instructions for Practical Assignment:

- i) Documents, data, database, etc. to work on for the practical assignments will be provided by the Counsellor/Practical Supervisor in the Study/Tele Learning Centre.
 - ii) You are required to do the practical assignment in the Study/Tele Learning Centre. Evaluation of the assignment will be done by the Counsellor/Practical Supervisor on the spot.
 - iii) Make Screen Captures for all the answers and save them in one file. The Counsellor/Practical Supervisor will evaluate these screen captures and give marks accordingly.
 - iv) All questions are compulsory.
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- 1) Write down the steps involved in (a) Preparing book order list (b) Duplicate checking. (10)
- 2) Add 08 publishers and their details in the Master Database and generate a list. (10)
- 3) After entering the books data generate Barcode Labels for books (minimum 10 books). (10)
- 4) Create a database for 10 departmental budget heads and allocate Rs.1 lakh each for every head. Generate reports for the list of budget heads and the amount allocated. (10)
- 5) Create a database of 15 national and international periodicals. Also generate a subject wise list of national and international journals. (10)

MLI-003: Information Systems

TMA – Theory

Coverage:

Course: Information Systems

Course Code: MLI-003

Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 1 to 4

Units: 1 to 14

Total Marks: 50

I) Answer **any two** of the following in **not more than 1000 words each**

- 1) Define the concept 'information retrieval system'. Describe the models of information retrieval. (15)
- 2) Discuss the structure, design and development of a Management Information System. (15)
- 3) Define Expert Systems. Describe in detail their structure and major components. (15)

II) Answer **any four** of the following in **not more than 500 words each**

- 1) Describe the role of a system analyst. (5)
- 2) Discuss the major issues involved in developing digital libraries. (5)
- 3) Describe the use of Boolean operators with suitable examples. (5)
- 4) Explain in brief the steps involved in system design process. (5)
- 5) Explain the concept of key in data management. (5)
- 6) Describe the basis of artificial intelligence and the key areas of its application. (5)

MLIL-003: Information Systems

TMA – Practical

Coverage:

Course: Information Systems

Course Code: MLIL-003

Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 1 to 4

Units: 1 to 14

Total Marks: 50

General Instructions for Practical Assignment:

- i) Documents, data, database, etc. to work on for the practical assignments will be provided by the Counsellor/Practical Supervisor in the Study/Tele Learning Centre.
 - ii) You are required to do the practical assignment in the Study/Tele Learning Centre. Evaluation of the assignment will be done by the Counsellor/Practical Supervisor on the spot.
 - iii) Make Screen Captures for all the answers and save them in one file. The Counsellor/Practical Supervisor will evaluate these screen captures and give marks accordingly.
 - iv) Attempt the questions using SQL commands or MS – Access.
 - v) All questions are compulsory.
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- 1) Design a blank database “LIBRARY” using MS-ACCESS and add to it the following tables: (15)

(i) JOURNALS

(ii) VENDORS

Add the following fields in the ‘JOURNAL table in the ‘Design View’

(a) JOURNAL_ID Auto Number

(b) JOURNAL_TITLE Text 255 Null Not Allowed

(c) JOURNAL_SPONSOR Text 255 Null Not Allowed

Now add 15 records in it using Data Sheet View.

- 2) Add the following fields in the Table ‘SUBJECT’ – SUBJECT_ID, SUBJECT_NAME, AUTHOR_ID. Add 15 records in the table. (15)
- 3) Make a relationship of JOURNAL_ID field in VENDORS table to the JOURNALS table using ‘Look Up Wizard’ in Design View. (5)

- 4) Design E-R diagram for the database 'DOCUMENTS' to show relationship among the tables. (5)

Add 15 records in VENDORS table in Data Sheet View. (10)

MLI-004: Networking and Internet Technology

TMA – Theory

Coverage:

Course Code: MLI-004

Course: Networking and Internet Technology

Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 1 to 3

Units: 1 to 14

Total Marks: 50

i) Answer any two of the following in not more than 1000 word search

1. What do you mean by Network Management System (NMS)? Discuss conceptual areas of ISO Network Management Model. (15)
2. Define 'Resources Sharing'. Discuss its need and areas in detail with the suitable examples. (15)
3. Describe Internet Security in detail with suitable examples. (15)

ii) Answer any two of the following in not more than 500 words each

1. Write brief note on Transmission Control Protocol / Internet Protocol (TCP/IP). (5)
2. Explain role of librarians in the network based information resources. (5)
3. Describe various Local Area Network topologies. (5)
4. Discuss the Growth of Internet. (5)
5. Explain how World Wide Web works? (5)
6. Explain Inter-Library Loan Standards. (5)

MLIL-004: Networking and Internet Technology

TMA – Practical

Coverage:

Course Code: MLIL-004

Course: Networking and Internet Technology

Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 1 to 3

Units: 1 to 14

Total Marks: 50

General Instructions for Practical Assignment:

- i) Documents, data, database, etc. to work on for the practical assignments will be provided by the Counsellor/Practical Supervisor in the Study/Tele Learning Centre.
- ii) You are required to do the practical assignment in the Study/Tele Learning Centre. Evaluation of the assignment will be done by the Counsellor/Practical Supervisor on the spot.
- iii) Make Screen Captures for all the answers and save them in one file. The Counsellor/Practical Supervisor will evaluate these screen captures and give marks accordingly.
- iv) All questions are compulsory.

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- | | |
|---|--------------|
| 1. Use Google Chrome and search five titles on “Resource sharing” in IndCat. Explain the types of searches available in IndCat. | (10) |
| 2. Create an e-Mail ID using Gmail, create one folder “Assignment” and Two sub-folder in it (Theory and Practical) and organize your emails as ‘Theory’ and ‘Practical’ using folder options. | (10) |
| 3. Identify websites of the Libraries of Central Universalities (minimum 10) and highlight their common services. | (10) |
| 4. Evaluate the various products and services offered by the DELNET. | (10) |
| 5. Search the term “Role of Public Libraries in National Development” using Boolean Operators (AND, OR, NOT) and compare the search results, also provide the screenshots of the respective search. | (10) |

MLI-005: Internet Resources

TMA – Theory

Coverage:

Course: Internet Resources

Course Code: MLI-005

Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 1 to 2

Units: 1 to 7

Total Marks: 50

I) Answer **any two** of the following in **not more than 1000 words each**

- 1) What do you understand by the term “meta resources”? Explain the methodology for building up meta resources. (15)
- 2) Define Internet information resources. Enlist the different categories of such resources. Briefly describe any one category with the help of examples. (15)
- 3) Explain the steps involved in the process of evaluating Internet information resources. (15)

II) Answer **any four** of the following in **not more than 500 words each**

- 1) Describe the technical infrastructure required for a digital library. (5)
- 2) What are the approaches to achieve interoperability in digital library implementation? (5)
- 3) What are the different types of search tools and facilities available on the Internet? Describe their advantages and disadvantages. (5)
- 4) What do you understand by Campus Wide Information System (CWIS)? Discuss some of the CWIS available on the net. (5)
- 5) List the categories of reference sources in humanities available on the Internet. Give your answer with suitable examples under each type. (5)
- 6) Discuss the ways of keeping up to date with new information resources on the Internet in the area of social sciences. (5)

MLIL-005: Internet Resources

TMA – Practical

Coverage:

Course: Internet Resources

Blocks: 1 to 2

Units: 1 to 7

Course Code: MLIL-005

Assignment Code: AST/TMA-T/Jan. & July 2025

Total Marks: 50

General Instructions for Practical Assignment:

- i) Documents, data, database, etc. will be provided by the Counsellor/ Practical Supervisor in the Study/Tele Learning Centre to work on practical assignment.
 - ii) You are required to do the practical assignment in the Study/Tele Learning Centre.
 - iii) Make Screen Captures for all the answers and save them question wise in one file. Wherever necessary also save the output in MS Word. The Counsellor/ Practical Supervisor will evaluate these Screen Captures/ MS Word files and give marks accordingly.
 - iv) All questions are compulsory.
-

List its different editions along with their URLs.

(25)

- Select Delhi edition.
- Browse the archives of its Delhi edition covering the last 15 days.
- Select one article each from the editorial/opinion page of the newspaper for the selected 15 days.
- Select any five editorial articles and try to download them in one MS word file
- Select any five images from the newspaper and save them in one MS word file
- Save the articles/images in one Folder titled 'HT Editorial Items'.

Browse the IGNOU website • Find out the names and numbers of schools/divisions/centers and units available in IGNOU. (15)

- Find out the number of Regional and Study Centers of IGNOU.
- Find out the links to other websites and resources provided by the IGNOU website.
- Find out the URL of other State Open Universities in India.
- Browse IGNOU library home page.
- List the services given by the Library.
- Can you name some of the open sources listed in the library web page.

III) (10)

- Use the search engine Google and search the web for “Raja Ram Mohan Roy Library Foundation, Kolkata”.
- Search the Directory of Public Libraries and find out the number of Public Libraries in Delhi.
- Open any five websites of such libraries.
- Try to find out the contact details of any such five libraries
- Make the selected websites as favourites or book mark them and save them in a folder named “Public Libraries in Delhi”.

MLI-006: Content Development

TMA – Theory

Coverage:

Course: Content Development

Course Code: MLI-006

Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 1 to 2

Units: 1 to 10

Total Marks: 50

i) Answer any two of the following in not more than 1000 word search

1. Describe various sources of information with suitable examples. (15)
2. Define 'Knowledge Management (KM)'. Discuss need for KM. Explain role of Librarians in KM. (15)
3. What do you mean by Intellectual Property? Explain various components of the IPR. (15)

ii) Answer any two of the following in not more than 500 words each

1. Write brief note on Navigational Tools (5)
2. Explain various points of Evaluation of Web Documents (5)
3. Describe Z39.50 Protocol. (5)
4. Discuss WWW and URL. (5)
5. Explain about DHTML? (5)
6. Explain user perspective of e-content and web documents. (5)

MLIL-006: Content Development

TMA – Practical

Coverage:

Course: Content Development

Course Code: MLIL-006

Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 1 to 2

Units: 1 to 10

Total Marks: 50

General Instructions for Practical Assignment:

- i) Documents, data, database, etc. to work on for the practical assignments will be provided by the Counsellor/Practical Supervisor in the Study/Tele Learning Centre.
- ii) You are required to do the practical assignment in the Study/Tele Learning Centre. Evaluation of the assignment will be done by the Counsellor/Practical Supervisor on the spot.
- iii) Make Screen Captures for all the answers and save them in one file. The Counsellor/Practical Supervisor will evaluate these screen captures and give marks accordingly.
- iv) All questions are compulsory.

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1. Analyse the content of the five National Institute of Technology (NITs) libraries website using qualitative (relational) analysis. **(10)**
 2. Identify types of information sources for a university library offered by INFLIBNET. Assign Dublin Core metadata elements to at-least five entries under each category. **(10)**
 3. Import any ten titles from the Library of Congress on-line catalogue using Z39.50 protocol. Prepare bibliographic record for any five different kinds of information sources using MARC structure. **(15)**
 4. Develop an html web page for IGNOU LIS Programmes (PhD, MLIS, BLIS, PGDLAN, CLIS) indicating following information. **(15)**
 - a) Programme overview b) Duration c) Minimum and Maximum d) Course Fee: e) Age limit f) Eligibility g) Examination and Evaluation

MLI-007: Programming

TMA – Theory

Coverage:

Course: Programming

Course Code: MLI-007

Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 2 to 4

Units: 4to 24

Total Marks: 50

I) Answer **any two** of the following in **not more than 1000 words each**

- 1) Create a Data Flow Diagram that shows the interaction between the library management system and third-party eBook providers. (15)
- 2) Sketch a flow chart detailing the steps involved in a library's annual inventory check. (15)
- 3) Design a flow chart to show the process of an online book reservation system in a library. (15)

II) Answer **any four** of the following in **not more than 500 words each**

- 1) Describe Fourth Generation Languages (4GL) (5)
- 2) Explain the role of a Systems Analyst. (5)
- 3) Explain the object oriented features of JAVA. (5)
- 4) Write an event procedure to display the sum of "n" integers given as input. (5)
- 5) What is the use of Form in VB ? (5)
- 6) Differentiate between method overloading and method overriding (5)

MLI-007: Programming

TMA – Practical

Coverage:
Course: Programming

Course Code: MLI-007
Assignment Code: AST/TMA-T/Jan. & July 2025

Blocks: 2 to 4

Units: 4to 24

Total Marks: 50

General Instructions for Practical Assignment:

- i) Compilers to work on for the practical assignment will be provided by the counsellor/practical supervisor in the Study/TeleLearning.
 - ii) You are required to do the practical assignment in the Study/Tele Learning Centre. EvaluationoftheassignmentwillbedonebytheCounsellor/PracticalSupervisorontheSpot.
 - iii) Attempt either Group A (C++) or Group B (Visual Basic) or Group C (Java).
 - iv) For Each C++ and Java program, students are required to design a class construct.
 - v) All questions are compulsory.
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Group A: (C++)

- 1) Define a Book class in C++ with the same properties as the Java class. What are the key syntax differences in class definition between C++ and Java?
- 2) C++ allows for multiple constructors. Create two constructors for the Book class: a default constructor and a parameterized constructor that initializes all class attributes.
- 3) Implement a function in C++ to display the properties of a Book. How does handling output differ in C++ compared to Java?
- 4) Discuss and implement the destructor for the Book class in C++. When is the destructor called in the lifecycle of a C++ object?
- 5) Write a C++ program that creates an array of Book objects, modifies the quantity of the books, and prints the details of all books.

(OR)
Group B: (Visual Basic)

- 1) In Visual Basic, how are classes created differently from Java and C++? Create a Book class with properties using VB syntax.
- 2) Implement property procedures in the Book class for title, author, ISBN, and quantity in Visual Basic.
- 3) Write a method in VB to display the details of a book. Consider the user interface aspects that might be different from console applications.
- 4) Visual Basic uses events extensively. Create a form with text boxes for entering book details and buttons for adding and displaying books. Attach event handlers to these buttons.
- 5) Explain error handling in Visual Basic. Implement error handling in the event where a user tries to set an invalid quantity value.

Group C: (Java)

- 1) Implement a method in the Java Book class that calculates the total value of the books in stock, assuming each book has a price. The method should return the total cost.
- 2) Write a method to calculate the percentage increase or decrease in the book stock quantity and display the result.
- 3) Modify the Book class to include a method that formats the quantity of books to a string with leading zeros (e.g., 007 for 7 books) for display purposes.
- 4) Create a static method that compares the quantities of two books and returns the difference as a positive integer.
- 5) Implement exception handling in Java that catches arithmetic errors (like division by zero) when calculating the average price per book if prices are included in the class.