Post Graduate Diploma

in

Library Automation and Networking

Assignments

For January 2022 and July 2022 Sessions

ignou
THE PEOPLE'S
UNIVERSITY

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

DATES FOR SUBMISSION OFASSIGNMENTS

FOR January SESSION 30thSeptember 2022

FOR July SESSION 31st March 2023

WHERE TO SUBMIT THE ASSIGNMENTS

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

Contents   **Page No.**

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 2022 session fails to submit her/his assignments till 30th September 2022, s/he will have to attempt the fresh assignments of January 2023 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 2022 session fails to submit her/his assignments till 31st March 2023, s/he will have to attempt the fresh assignments of July 2023 session).

2)   Write your Enrolment Number, Name, Full Address and Date of Dispatch 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 Code: MLI-001**
Course: Introduction to Computers   **Assignment Code: AST/TMA-T/Jan. & July 2022**
Blocks: 1 to 3
Units: 1to 9
                                                                          Total Marks: 50

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

1)   Define data communication. Explain the different elements of generic model of communication with the help of a diagram.   (15)

2)   "System software is designed to act as an interface between users or their application programmes and the computer system itself". Discuss.   (15)

3)   What are the components of a Linux system? Explain Linux Kernel and its modules.   (15)

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

1)   Discuss the benefits of secondary storage over the primary memory.   (5)
2)   Differentiate between sequential and direct storage devices.   (5)
3)   Explain the advantages of Windows operating system over DOS operating system.   (5)
4)   Discuss the concept of Information Society.   (5)
5)   Differentiate between network operating system and distributed operating system.   (5)
6)   Explain the steps in creating graphs in MS-Excel.   (5)

MLIL-001: Introduction to Computers
TMA – Practical

Coverage: **Course Code: MLIL- 001**
Course: Introduction to Computers   **Assignment Code: AST/TMA–P/ Jan. & Jul.2022**
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.

1)   Perform the following activities: (10)

    A)   **DOS:** Configure MS DOS, make partitions of hard disk.

    B)   WINDOWS:
        (i) Create and rename a desktop short cut.
        (ii) Change the background of the desktop.
        (iii) Arrange the icons on desktop by date.
        (iv) Set date and time.
        (v) Install a programme.

    C)   **UNIX:** Add/delete users, change password; write a shell program to sort the given numbers in ascending order.

2)   Prepare a document in MS WORD, with one paragraph and a table having three columns and five rows, using different font size and styles for heading and text. Create a new folder and copy the file in this folder.   (10)

3)   Prepare a Power Point presentation consisting of 8 slides having text and pictures. Add different slide transition effects for each slide. Also add clip art.   (10)

4)   Create a file in MS-EXCEL showing enrolment of students in four zones in PGDLAN programme during 2019-2021. Format the borders and add a line chart to present this data.   (10)

5)   Prepare a database for circulation section of a library in MS Access. (Details will be provided by the Counsellor/ Supervisor)   (10)

MLI-002: Library Automation
TMA-Theory

Coverage: **Course Code: MLI- 002**
Course: Introduction to Computers   **Assignment Code: AST/TMA–T/ Jan. & Jul.2022**
Blocks: 1 to 4
Units: 1 to 14

Total Marks: 50

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

1.   Discuss the functions of cataloguing system of a library in an automated environment.   (15)

2.   What do you understand by an alerting service? Critically examine the characteristics

       of a computerized CAS and SDI services.   (15)

3.   What is retro- conversion? Explain the advantages and disadvantages of in-house

       retro-conversion.   (15)

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

1.   Discuss in brief the features of an automated circulation control system.   (5)

2.   Describe the advantages of using an expert system to provide reference service in a

       library.   (5)

3.   Explain the criteria for evaluation of a document delivery system.   (5)

4.   Explain the concept of a field and content designator in a MARC record.   (5)

5.   Briefly explain the meaning of UNIMARC and describe its structure   (5)

6.   Explain the concept of 'proximity searching'.   (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-P/Jan. & July 2022

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. (a)   Create a database of six books received to be acquired in a library with   (15)
            the following fields: Author, Title, Name of Publisher, Place of
            Publication, Year of Publication, Pages, Subject Heading and Accession Number.
            Provide meaningful data on your own

   (b)   Select any four titles from these for approval   (5)

   (c)   Generate reports for: Books approved, Books rejected and Books requested.   (5)

2. (a)   Create a database of five records each for publishers, suppliers and binders with   (15)
            the following fields of books requested by users for acquisition. Approve Name,
            Address email and contact number. Provide meaningful data on your own

   (b)   Generate the list of publishers, binders and suppliers separately.   (10)

NB: The questions are based on the software package SOUL, which will be made available to you at the Study Centre.

MLI-003: Information Systems
TMA-Theory

Coverage   **Course Code: MLI-003**
Course: Information Systems   **Assignment Code: AST/TMA-T/ Jan. & July 2022**
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

I)   Explain the concepts 'system' and 'system approach'.   (15)

II)   Define Expert Systems. Describe in detail their structure and major components.   (15)

III)   What is a digital library? Discuss the major and challenges involved in its
        development.   (15)

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

I)   Explain the concept of 'file organisation'.   (5)

II)   Describe the different types of information system.   (5)

III)   Describe briefly different techniques of Boolean search.   (5)

IV)   Briefly explain the criteria for evaluation of information retrieval systems. (5)

V)   Define SQL. Describe the need of Structured Query Formulation   (5)

VI)   Explain the concept of proximity operators.   (5)

MLIL-003: Information Systems
TMA-Practical

Coverage   **Course Code: MLIL-003**
Course: Information Systems   **Assignment Code: AST/TMA–P/ Jan. & Jul.2022**
Block 1 to 4
Units: 1to 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.

1) Create a database 'LIBRARY USERS' with the following tables:
   Students
   Class
   Add the following fields in the 'Students':
   Students _Enrollment ID, Students _NAME, Students_AGE, Students _ADDRESS, Class_NAME
Add at least 20 records in the table 'Students'.   (15)

2) Add the following fields in the Table 'Class' Class_ID, Class_NAME Add at least 20 records in the table.   (15)

3) Display information about all students in the above table using Form or SQL Query.   (5)

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

5) Display information about all the students in the above table using SQL Query.   (10)

MLI-004: Networking and Internet Technology
TMA-Theory

Coverage   **Course Code: MLI-004**
Course: 004 (Networking and Internet Technology)   **Assignment Code: AST/TMA–T/ Jan. & Jul.2022**
Blocks: 1 to3
Units: 1to 14
                                                           Total Marks: 50

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

    1. Describe the seven layers of ISO-OSI model with a suitable diagram.   (15)

    2. Define resource sharing. Also identify the various areas of resource sharing.   (15)

    3. Define "Extranet", enlist various advantages of Extranet? Also mention how
       extranet can be beneficial in Library Applications.   (15)

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

    1. Write brief note on the Client – Server Architecture with the help of a diagram.   (5)

    2. Explain the International Organization for Standardization Inter-library Loan
       Protocol Standard.   (5)

    3. Describe the role of Virtual Private Network (VPN) in Libraries   (5)

    4. Write short note on the growth of internet.   (5)

    5. Enumerate various internet security measures that can be adopted by a library.   (5)

    6. Explain how does the World Wide Web work?   (5)

MLIL-004: Networking and Internet Technology
TMA-Practical

Coverage   Course Code: MLIL-004
Course: 004 (Networking and Internet Technology)   Assignment Code: AST/TMA–P/ Jan. & Jul.2022
Blocks: 1 to3
Units: 1to 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 "Library Science" in IndCat. Explain the types of searches available in IndCat.   (10)

2. Create an e-Mail ID using Gmail, create one folder "Important Communication" and Two sub-folder in it (Internal and External) and organize your emails as "Internal" and "External" using folder option.   (10)

3. Identify websites of the important Indian library networks (minimum 3) and highlight their common services.   (10)

4. Evaluate the various types of services offered by the ERNET.   (10)

5. Search the term "Library and Information Science as Career" 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
Blocks: 1to2
Units: 1to 7

Course Code: MLI-005
Assignment Code: AST/TMA–T/ Jan. &Jul.2022

Total Marks: 50

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

1) What do you understand by internet Information resources? Discuss the different types
    of Electronic information resources.   (15)

2) Define the concept meta-resources. Discuss its characteristics and types.   (15)

3) Describe the steps in the process of evaluation of information resources.   (15)

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

1) Discuss the steps in building a digital Library.   (5)

2) Discuss the technical infrastructure required for a digital library.   (5)

3) What is DOI? Discuss its features.   (5)

4) Explain different file formats of a digital library.   (5)

5) What is a Search Engine? Discuss any Subject-specific Search Engines of LIS.   (5)

6) Briefly discuss five Library and Information Science databases.   (5)

MLIL-005: Internet Resources
TMA-Practical

Coverage   **Course Code: MLIL-005**
Course: Internet Resources   **Assignment Code: AST/TMA–P/ Jan. &Jul.2022**
Blocks: 1to2
Units: 1to 7

                                                            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.

I)   Browse the electronic version of the Hindustan Times newspaper.   (25)
          (a) List its different volumes along with their URLs. Published during last 3 years
          (b) Browse its archive covering the last 2 years publication.
          (c) Select any ten articles in any issues and try to download them in one MS word file
          (d) Select any five data analysis images from the latest issue and save them in one MS word file
          (e) Save the 20 articles in one Folder titled "C&RL Editorial Items"

   (II)   Browse the website of UGC, India.   (15)
          (a) Find out the names of Digital Initiatives
          (b) Find out the number of Regional Offices of UGC along with their geographical coverage.
          (c) Find out the URL address of other Central Universities in India
          (d) List the Scholarship/Fellowships given by the UGC
          (e) List out the UGC Approved Journals in Library and Information Science.

III)
          (a) Calculate any Five E-ISSN and Five e-ISBN   (10)
          (b) List the courses in LIS analysis on MOOCs.
          (c) Make the selected websites as favorites or book mark them and save them in a folder named
              "Special Libraries in Delhi"
          (d) Open any five IIT library websites and identify library software
          (e) List out any five Commercial publishers which related to Library and Information Science

MLI-006: Content Development
TMA-Theory

Coverage
Course: Content Development
Blocks: 1 to2
Units: 1 to10

Course Code: MLI-006
Assignment Code: AST/TMA–T/ Jan. & Jul.2022

Total Marks: 50

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

1.   Identify the various components of IPR. Discuss the importance of Patent in detail.   (15)

2.   What are the types of content analysis? Make a comparative study of quantitative (conceptual) analysis and qualitative (relational) analysis? Also compare the advantages and disadvantages of content analysis.   (15)

3.   Critically evaluate role of Z39.50 protocol for information exchange   (15)

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

1)   Describe the advantages offered by a classification scheme for organising web resources in an academic library.
          (5)

2)   Critically evaluate W3C Web content accessibility guidelines.   (5)

3)   Describe the roles of Universal Resource Locator (URL) as a unique identifier.   (5)

4)   Write short note on the structural model for knowledge management in distributed environment.   (5)

5)   Enumerate various tools for web page designing? Describe any one in detail.   (5)

6)   Explain the concept of ontology?   (5)

Coverage
Course: Content Development

Course Code: MLIL-006
Assignment Code: AST/TMA–P/ Jan. & Jul.2022

Blocks: 1 to2
Units: 1 to10

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 thespot.

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 central university library websites using qualitative (relational) analysis.

(10)

2. Identify various types of information sources for an academic library. 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 a 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 Code: MLI-007**
Course: Programming   **Assignment Code: AST/TMA–T/ Jan. & Jul.2022**
Blocks: 1
Units: 1to 3

Total Marks: 50

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

1)   Draw a flow chart to show the issue of books and non- issue of reference books in a library.   (15)

2)   What is a pseudo code? Write a pseudo code for accepting three numbers and find the maximum.   (15)

3)   What is a system? Describe the characteristics of systems.   (15)

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

1)   A library is an open system. Explain.   (5)

2)   What is the role of library professionals in system analysis?   (5)

3)   Write an algorithm which accepts 5 numbers and sort them in ascending order.   (5)

4)   Explain the different strategies available for problem solving.   (5)

5)   Define 'Data Flow Diagram'. Explain the different elements of DFD.   (5)

6)   Explain the different symbols used in a flow chart with examples.   (5)

Coverage
Course: Programming
Blocks: 2 to 4
Units: 4to 24

Course Code: MLIL-007
Assignment Code: AST/TMA–P/ Jan. & Jul.2022

Total Marks: 50

General Instructions for Practical Assignment:

i)   Compilers to work on for the practical assignment will be provided by the counseller/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) Write a menu driven program for following: a) display a Fibonacci series b) compute Factorial of a number c) to check whether a given number is odd or even. d) To check whether a given string is palindrome or not.   (10)

2) Write a program to print the sum and product of digits of an Integer and reverse it.   (5)

3) Write a program to create an array of 10 integers. Accept values from the user in that array. Input another number from the user and find out how many numbers are equal to the number passed, how many are greater and how many are less than the number passed.   (10)

4) Write a program that will prompt the user for a list of 5 prices. Compute the average of the prices and find out all the prices that are higher than the calculated average.   (10)

5) Design a class named Car, having registration number, model and engine as its private members. Here engine is an object of a class called Engine with the private members: Chassis number and make. Define a suitable constructor of Car and override toString() Method to print the details of a car. Assume appropriate data types for the instance members of the classes. Write a Java program to test the above class.   (10)

6) Write a program that computes the area of a circle, rectangle and a Cylinder using function overloading.   (5)

(OR)

Group B: (Visual Basic)

1) Enter a list of positive numbers terminated by zero. Find the sum and average of these numbers.   (10)

2) A person deposits Rs. 1000 in a fixed account yielding 5% interest. Complete the amount in the account at the end of each year for n years.   (10)

3) Read n numbers. Count the number of negative numbers, positive numbers and zeros in the list.
                                                                                                                                                          (10)

4) Read n numbers. Count the number of negative numbers, positive numbers and zeroes in the list. use arrays.   (10)

5) Read a two dimension array. Find the sum of two 2D Array.   (10)

(OR)

Group C: (Java)

1) Write a java program to add, subtract, multiply and divide any two numbers entered by the user.
                                                                                                                                                          (5)
2) Write a java program to compute the square, cube of a number entered by a user using methods.
                                                                                                                                                          (5)
3) Write a java program to demonstrate the use of: A) Bitwise operators. B) Shift operators.
                                                                                                                                                          (5)
4) Write a java program to compute maximum of three numbers:
   A) using ternary operator. B) Using if-else statement.   (5)

5) Write a menu driven program(using switch-case) which accepts a number as user input :
   A) Checks whether the number is even or odd B) Checks whether the number is prime   (10)

6) Write a menu driven program (using switch-case) which accepts a number as user input:
   A) Prints sum of digits of the given number B) Prints reverse of the given number.   (10)

7) Write a program to display the first n terms of a Fibonacci series.   (5)

8) Write a method to compute the factorial of a number.   (5)