Course Code: LS101N, RP-102N and Dissertation

Guidelines to Prepare Mini Project/Project/Literature Survey/Dissertation

1. Objectives of the Project

- To facilitate the learner to independently formulate and solve a social, philosophical, commercial, or technological problem and present the results in written and oral form.
- To render learners to the real-life problems.
- To provide opportunities to learners to interact with people and present them confidently.

2. Types of Projects

The learners are expected to work on:

(1) Application Oriented Project or
(2) Research Oriented Project.

However, it is not mandatory for a learner to work on a real-life project. The learner can formulate a project problem with the help of his Guide and submit the project proposal of the same. **Approval of the project proposal is mandatory.** If approved, the learner can commence working on it, and complete it. It is upon the learner to carry the same project of V semester to VI semester OR choose a new project for VI semester. Use the latest versions of the software packages for the development of the project.

3. Software and Broad Ideas of Application

Any of the software's can be used as per the need of the subjects and application of research project.

- **Languages** - C, C++, Java, VC++, C#, R,Python, etc.
- **Scripting Languages** - PHP,JSP, SHELL Scripts (Unix), TcL/TK
- **.NET Platform** - F#,C#. Net, Visual C#. Net, ASP.Net
- **Middle Ware(Component) Technologies** - COM/DCOM, Active-X, EJB
- **Front-End/GUI Tools** - .Net Technologies, Java
- **Back-End/DBMS** - Oracle, SQL Plus, MY SQL, SQL Server
- **UNIX Internals** - Device Drivers, RPC, Threads, Socket programming
- **Real time Operating Systems/Embedded Skills** - LINUX, Raspberry Pi, Arduino.
- **Application and Research Areas** – Basic Science fields like Chemistry, Physics, Biochemistry, Botany, Zoology, Environmental Science, Statistics, Mathematics, Financial / Insurance / Manufacturing / Multimedia / Computer Graphics / Instructional Design/ Database Management System/ Internet / Intranet / Computer Networking-Communication Software development/ E-Commerce/ ERP/ MRP/ TCP-IP programming / Routing protocols programming/ Socket programming
- **Chem Draw, Origin, Mercury, WinGx, R-software, Octave, Matlab, etc.**

4. Eligibility of the Guide

Guide should be a regular teacher of the University/College/Higher Education Institute. Learner can also do the project under the guidance of regular teacher of Institute of National Importance.

5. Introduction to the Project

The learner should include the details in the project diary, in which they will record the progress of their project throughout the course. The project report should be documented with scientific approach to the solution of the problem that the learners have sought to address. The project report should be prepared in order to solve the problem in a methodical and professional manner, making due references to appropriate techniques, technologies and professional standards. The project report should contain enough details to enable examiners to evaluate the work. The important points should be highlighted in the body of the report, with details often referred to appendices.

6. Structure and Format of the Project

Project report or Dissertation has to be hard bound with golden embossing.

(i) Title Page:

Sample format of Title page is given below. Learners should follow the given format.

(All the text should be in Times New Roman)

<TITLE OF THE PROJECT>
(NOT EXCEEDING 2 LINES, 24 BOLD, ALL CAPS)

A Project Report/Dissertation (12 Bold)

Submitted in partial fulfillment of the
Requirement of the award of the Degree of (Size- 12)

MASTER OF SCIENCE (14 BOLD, CAPS)

By (12Bold)

Name of The Student (Size 15, title case)
Enrollment Number (Size- 15)
Study Centre Name (Size- 15)

UNIVERSITY LOGO

SCHOOL OF SCIENCES (12 BOLD, CAPS)
U. P. RAJARSHI TANDON OPEN UNIVERSITY,
PRAYAGRAJ, 211013 (14 BOLD, CAPS)
UTTAR PRADESH (12 bold, CAPS)
YEAR (12 bold)

(ii) Original Copy of the Approval Proforma of the Project Proposal:
Sample Proforma of Project Proposal is given below. Learners should follow the given format.

PROFORMA FOR THE APPROVAL OF PROJECT/DISSERTATION PROPOSAL

(Note: All entries of the proforma of approval should be filled up with appropriate and complete information. Incomplete proforma of approval in any respect will be rejected)

Enrollment no:……..

1. Name of the Student
…….
2. Title of the Project/Dissertation
…….
3. Name of the Guide
……
4. Teaching experience of the Guide
……

Signature of the Student
Date……

Signature of the Guide
Date:……

(iii) Certificate of Authenticated work:
Sample format of Certificate of Authenticated work is given below. Learners should follow the given format. University is required to give plagiarism report for the project/dissertation work.

U. P. RAJARSHI TANDON OPEN UNIVERSITY, PRAYAGRAJ, 211013 (14 BOLD, CAPS)

SCHOOL OF SCIENCES (13 BOLD, CAPS)

CERTIFICATE (14 BOLD, CAPS, underlined, centered)

This is to certify that the project/dissertation entitled, "**Title of The Project/ dissertation**", is bonafide work of **NAME OFTHE STUDENT** bearing **Enrollment No.** submitted in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE in <NAME OF SUBJECT> from U. P. Rajarshi Tandon Open University, Prayagraj. (12, times new roman, justified)

Name of Guide (12 bold)
(Don't write names of lecturers or HOD)
External Examiner

Date: Department Seal

(iv) Certificate from other Institute of National Importance (to be issued by the HEI and the photocopy of the certificate is to be attach)

(v) Abstract
This should be one/two short paragraphs (100-150 words total), summarizing the project/Dissertation work. It will not be a re-statement of the original project/dissertation outline. A suggested flow is background,

project/dissertation aims and main achievements. From the abstract, a reader should be able to determine if the project/dissertation is of interest to them and, it should present results of which they may wish to know more details.

(Project/dissertation Abstract page format)

Abstract (20bold, caps, centered)

Content goes here (12, justified)

Note: Entire document should be with 1.5line spacing and all paragraphs should start with 1 tab space.

(vi) Acknowledgements

This should express learner's gratitude to those who have helped in the preparation of project.

ACKNOWLEDGEMENT (20, BOLD, ALL CAPS, CENTERED)

The acknowledgement should be in times new roman, 12 font with 1.5 line spacing,Justified.

(vii) Declaration

(Declaration page format)

DECLARATION (20 bold, centered, allcaps)
Content (12, justified)

I here by declare that the project/dissertation entitled, "**Title of the Project/dissertation**' done at **[name of place where projects/dissertation is done]** has not been in any case duplicated to submit to any other university for the award of any degree. To the best of my knowledge other than me, no one has submitted to any other university.

The project/dissertation is done in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE** to be submitted as **[V OR VI]** semester project as part of our curriculum.

Name and Signature of the Student

(viii) Table of Contents

The table of contents gives the readers a view of the detailed structure of the report. The learners would need to provide section and subsection headings with associated pages. The formatting details of these sections and subsections are given below.

TABLE OF CONTENTS (20bold, caps, centered)

Should be generated automatically using word processing software.

(ix) List of Tables

List of all the tables in the project/dissertation along with their page numbers.

List of Tables (20 bold, centered, Title Case)

Should be generated automatically using word processing software.

(x) List of Figures

List of all the figures, graphs, charts etc. in the project/dissertation along with their page numbers.

List of Figures (20 bold, centered, Title Case)

Should be generated automatically using word processing software.

Chapter 1: Introduction

The introduction has several parts as given below:

- Background: A brief detail of background and framework of project and its relation to work done in the area.
- Objectives: Point wise statement of the aims and objectives of the project/dissertation.
- Purpose, Scope and Applicability: The description of Purpose, Scope, and Applicability are given below:
    - Purpose: Describe the topic of the project on the basis of why this project is being done. How this project improves the existing system.
    - Scope: Describe methodology, assumptions and limitations.
    - Applicability: State the application of project.
- Achievements: Explain what kind of purpose is achieved after completion of project.
- Organization of Report: Summarize remaining chapters of the project report.

(Project Introduction page format)

Chapter 1

Introduction (20 Bold, centered)

Content or text (12, justified)

Note: Introduction has to cover brief description of the project with minimum 4 pages.

Chapter 2: Literature Review OR Survey of Technologies

In this chapter survey of technologies for application oriented project should demonstrate the learner awareness and understanding of available technologies OR literature survey is required for research oriented project. The learner should give the detail of all the related literature/technologies that are necessary to complete the project. The learner should present a comparative study of all those technologies/literatures.

Chapter 3: Requirements and Analysis (For Application Oriented) OR [Title of Research Working Chapter]

Chapter 4: System Design (For Application Oriented) OR [Chapter related to Research Work]

Chapter 5: Implementation and Testing

- **Implementation Approaches:** Define the plan of implementation, and the standards or standard data sets used in the implementation.
- **Coding Details and Code Efficiency:** Learners not need include full source code, instead, include only the important codes (design of new data structure, algorithms, applets code, forms code etc). The program code should contain comments needed for explaining the work a piece of code does. Comments may be needed to explain why it does it, or, why it does a particular way. The learner can explain the function of the code with a shot of the output screen of that

program code. The learner should explain how the code is efficient and how the learners have handled code optimization.

- **Testing Approach**
- **Modifications and Improvements**

Chapter 6: Results and Discussion

- **Test Reports:** Learner should provide the test results and reports based on the test cases to show that it works fine in different conditions of input.
- **User Documentation:** In this section, working of the software should be explained; also explain its different functions with screen shots. The user document should be like a manual.

Chapter 7: Conclusions and Future Work

The conclusions shall be summarized with in 2 or 3 pages. This chapter mainly focuses on:

- Limitations of the Proposed System OR Research
- Future Scope describes new areas of investigation and parts of the current work that was not completed due to time constraints and/or problems encountered.

(xi) References

In this, learners acknowledge the work of others that they have used or adapted in their own work. Learner can follow the given standard for the references for books, journals, and online material. The citation is mandatory in report.

Eg.
Lipson, Charles (2011). Cite right : A quick guide to citation styles; MLA, APA, Chicago, the sciences, professions, and more (2nd ed.). Chicago [u.a.]: University of Chicago Press. p. 187. ISBN 9780226484648.

(xii) Glossary

If any acronyms, abbreviations, symbols, or uncommon terms is used in the project report then their meaning should be explained where they first occur.

(xiii) Appendices

Appendix include some further details like results, mathematical derivations, certain illustrative parts of the program code (e.g., class interfaces), user documentation etc.

7. Evaluation

- During the project/dissertation work, its progress will be monitored, on fortnightly/monthly basis, by the guide.
- 2 copies of Project/dissertation Report to be submitted to University (1 copy to be retained by School of Science and 1 copy to Examination Section)
- End Examination shall be based on Project/dissertation Report, Presentation, Viva, and Demonstration (if any)**.**

Duration:

Evaluation Components		
Type of evaluation	**Total time**	**Max. Marks**
Presentation	10 minutes	25
Viva	10 minutes	20
Demonstration	5 minutes	20
Report checking	5 minutes	35
Total Time/Max. Marks	**30 minutes**	**100**

Format of Certificate of Evaluation

Certificate of Evaluation (14 point, Times, Bold)

This is to certify that the undersigned have assessed and evaluated the project/dissertation work titled "……..." submitted by < Name of Learner and enrolment number>

The project report has been accepted/ rejected for the partial fulfillment of M.Sc. programme.

Signature of the examiner
Name of the examiner

Stamp of the School

8. Project/Dissertation Viva Voice

Learner may be asked about project/dissertation methodology, objectives and any thing related to his/her work.