

Project Work (MCH-355, MCH-452, MCH-454, MCH-456, MCH-458) (Seminar & Viva)

**L T P
0 0 12**

For students to enter into preliminary research field both in theory and experiment the concept of Project has been introduced in the final Semester. In the Project the student will explore new developments from the books and journals, collecting literature / data and write a Dissertation based on his / her work and studies. The Project work can also be based on experimental work in industries / research laboratories.

Selection of Topic:

1. Students will make project which should be preferably a working of the thoughts based on their subject.
2. The student will be assigned a faculty guide who guides the supervisor of the students. The faculty would be identified before the end of the III semester.
3. The assessment of performance of the students should be made at least twice in the semester. The students shall present the final project live using overhead projector powerpoint presentation on LCD to the internal committee and the external examiner in the form of seminar.
4. The evaluation committee shall consists of faculty members constituted by the college which would be comprised of at least three members comprising of the department Coordinator's Class Coordinator and a nominee of the Director. The students guide would be special in bitted to the presentation. The seminar session shall be an open house session. The internal marks would be the average of the marks given by each members of the committee separately to the director in a sealed envelope.

The Marking shall be as follows.

Internal: 100 marks

By the Supervisor – 50 marks

By Committee appointed by the Director – 50 marks

External: 100 marks

By External examiner –100

Dissertation

Selection of Topic:

1. All students pursuing M.Sc. Shall select and propose a topic of dissertation in the first week of the semester. Care should be taken that the topic selected is not directly related to the subjects of the course being pursued or thesis work, if any. The proposed topic should be submitted to the course coordinator.
2. The course coordinator shall forward the list of the topics to the coordinator of concerned department, who will consolidate the list including some more topics, in consultation with the faculty of the department. The topics will then be allocated to the students along with the name of the faculty guide and also forwarded to the director for approval.
3. On approval by the Director, the list shall be displayed on the notice board and the students will also be accordingly informed by the course coordinator within three weeks of the commencement of the semester.

Preparation of Dissertation:

1. The student shall meet the supervisor for the necessary guidance for their preparation for the seminar.
2. During the next two to four weeks the student will read the primary literature related to the topic under the guidance of supervisor.
3. After necessary collection of data and literature survey, the students must prepare a report. The report shall be arranged in the sequence as per following format & lay out plan:-

A. Top Sheet of transparent plastic.

B. Top cover.

C. Preliminary pages.

(i) Title page

(ii) Certification page.

(iii) Acknowledgment.

(iv) Abstract.

(v) Table of Content.

(vi) List of Figures and Tables.

(vii) Nomenclature.

D. Chapters (Main Material).

E. Appendices, If any.

F. Bibliography/ References.

G. Evaluation Form.

H. Back Cover (Blank sheet).

I. Back Sheet of Plastic (May be opaque or transparent).

(a). Title Page:- The Title Page cover shall be as Under:

.....**Title of Dissertation**.....

Submitted in Partial fulfilment of the requirement for the degree of

Master of Science

In

Physics

By

**Name of Student in capital Letters
(Roll No.)**

**Under the Supervision of
(Name of Supervisor with designation)**



Department of Applied Sciences & Humanities

INVERTIS UNIVERSITY

Invertis Village

Bareilly-Lucknow NH-24, Bareilly-243123, India

MONTH AND YEAR

(b). Certification page: - This shall be as under

The dissertation Report and Title “Name of the Topic of Dissertation” submitted by Mr./Ms. (Name of the student) (Roll No.) May be accepted for being evaluated-

Date:

Signature

Place:

(Name of Supervisor)

Note:

For Supervisor: If you choose not to sign the acceptance certificate above, please indicate reasons for the same from amongst those given below:

- I. The amount of time and effort put in by the student is not sufficient;
- II. The amount of work put in by the student is not adequate;
- III. The report does not represent the actual work that was done / expected to be done;
- IV. Any other objection (Please elaborate)

(c)- Abstract: - A portion of dissertation grade will be based on the abstract. The abstract will be graded according to the adherence to accepted principles of English grammar and according to the adherence to the format described below. The dissertation abstract is an important record of the coverage of your topic and provides a valuable source of leading references for students and faculty alike. Accordingly, the abstract must serve as an introduction to your dissertation topic. It will include the key hypotheses, the major scientific findings and a brief conclusion. **The abstract will be limited to 500 words, excluding figures, tables and references.** The abstract will include references to the research articles upon which the dissertation is based as well as research articles that have served as key background material.

(d). Table of Content: - This shall be as under

SAMPLE SHEET FOR TABLE OF CONTENTS

TABLE OF CONTENTS

| Chapter No | Title | Page No. |
|------------|-------------------------|----------|
| | Certificate | ii |
| | Abstract | iii |
| | Acknowledgement | iv |
| | List of Figures | v |
| | List of Table | vi |
| 1 | Introduction | 1 |
| | 1.1 | |
| | 1.2 | |
| | 1.3 | |
| 2 | | |
| 3 | | |
| 4 | References/Bibliography | |
| 5 | Evaluation sheets | |

(e). **List of Figures and Tables:** - This will be as under

List of Figures and Tables - sample entries are given below:

List of Figures

| Figure No. | | Caption / Title |
|------------|--|-----------------|
| 2.1 | Schematic representation of a double layered droplet | ... 21 |
| | | |
| 3.2 | Variation in rate versus concentration | ... 32 |

List of Tables - sample entries are given below:

List of Tables

| Table No. | Caption / Title | Page No. |
|-----------|--|----------|
| 2.1 | Thickness of a double layered droplet | ... 22 |
| | | |
| 3.2 | Variation in rate versus concentration | ... 34 |

(f). **Main Pages-** The Main report should be divided in chapters (1, 2, 3 Etc.) And structured into sections (1.1, 1.2etc) and subsections (1.2.1, 1.2.2,

Etc). Suitable title should be given for sections and subsections, where necessary.

Referencing style- wherever reference is given in the main pages it should have the following format.

The values of thermal conductivities for a variety of substances have been reported by Varma (1982). For polymers, however, the information is more limited and some recent reviews have attempted to fill the gaps (Batchelor and Shah, 1985).

For two authors - (Batchelor and Kapur, 1985)

For more than two authors - (Batchelor et al., 1986)

By same author/combination of authors in the same year –
(Batchelor, 1978*a*; Batchelor, 1978*b*; Batchelor et al., 1978)

(g) Bibliography/References- In the bibliography/ references list standard formats must be used. The typical formats are given blow-

Journal articles: -

David, A.B., Pandit, M.M. and Sinha, B.K., 1991, "Measurement of surface viscosity by Tensiometric methods", Chem. Engng Sci.47, 931-945.

Books: -

Doraiswamy, L.K. and Sharma, M.M., 1984, "Heterogeneous Reactions-Vol 1", Wiley, New York, pp 89-90.

Edited books/Compilations/Handbooks: -

Patel, A.B., 1989, "Liquid -liquid dispersions", in Dispersed Systems Handbook, Hardy, L.C. and Jameson, P.B. (Eds.), mcgraw Hill, Tokyo, pp 165-178.
Lynch, A.B. (Ed.), 1972, "Technical Writing", Prentice Hall, London.

Theses/Dissertations: -

Pradhan, S.S., 1992, "Hydrodynamic and mass transfer characteristics of packed Extraction columns", Ph.D. Thesis, University of Manchester, Manchester, U.K..

Citations from abstracts: -

Lee, S. And Demlow, B.X., 1985, US Patent 5,657,543, Cf C.A. 56, 845674.

Personal Communications: -

Reddy, A.R., 1993, personal communication at private meeting on 22 October 1992 at Physics Department, Indian Institute of Technology, Delhi.

Electronic sources (web material and the like)-

For citing web pages and electronic documents, use the APA style given at:

[Http://www.apastyle.org/elecsources.html](http://www.apastyle.org/elecsources.html)

(h) Evaluation Form:- Three sheets of evaluation form should be attached in the report as under.

a. Evaluation form for supervisor and other Internal Examiner.

- b. Evaluation form for external examiners.
- c. Summary Sheet.

(i). Evaluation form for Guide & Internal Examiners:-

EVALUATION SHEET

(To be filled by Supervisor & Internal Examiners only)

Name of Candidate:

Roll No:

Class and Section:

| S. No. | Details | Marks (10) | Marks (10) |
|--------|--|------------|-------------------|
| | | Supervisor | Internal Examiner |
| 1 | OBJECTIVE IDENTIFIED & UNDERSTOOD | | |
| 2 | LITERATURE REVIEW / BACKGROUND WORK (Coverage, Organization, Critical review) | | |
| 3 | DISCUSSION/CONCLUSIONS (Clarity, Exhaustive) | | |
| 4 | SLIDES/PRESENTATION SUBMITTED (Readable, Adequate) | | |
| 5 | FREQUENCY OF INTERACTION (Timely Submission, Interest shown, Depth, Attitude) | | |
| | Total (Out of 50) | | |
| | Total (Out of 100) | | |

Name & Signature:

Name & Signature:

Date:

Date:

EVALUATION SHEET FOR EXTERNAL EXAMINER

(To be filled by the External Examiner only)

Name of Candidate:

Roll No:

I. For use by **External Examiner ONLY**

| S.No. | Details | Marks (10) |
|--------------|---|-------------------|
| 1. | OBJECTIVE IDENTIFIED & UNDERSTOOD | |
| 2. | LITERATURE REVIEW / BACKGROUND WORK(Coverage, Organization, Critical review) | |
| 3. | DISCUSSION/CONCLUSIONS (Clarity, Exhaustive) | |
| 4. | POWER POINT PRESENTATION (Clear, Structured) | |
| 5. | SLIDES (Readable, Adequate) | |
| | Total (Out of 50) | |

Name & Signature:

Date:

EVALUATION SUMMARY SHEET

(To be filled by External Examiner)

| Name and Roll No. | Internal Examiner (100) | External Examiner (100) | Total (200) Result | (Pass/Fail) |
|--------------------------|--------------------------------|--------------------------------|---------------------------|--------------------|
| | | | | |

Note: - The summary sheet is to be completed for all students and the same shall also be compiled for all students examined by External Examiner. The Format shall be provided by the course coordinator.

(j). General Points for Dissertation

1. The report should be typed on A4 sheet. The Paper should be of 70-90 GSM.
2. Each page should have minimum margins as under-

- a. Left 1.5 inches
 - b. Right 0.5 Inches
 - c. Top 1 Inch
 - d. Bottom 1 Inch (Excluding Footer, If any)
3. The printing should be only on one side of the paper
 4. The font for normal text should Times New Roman, 14size for text and 16size for heading and should be typed in double space. The references may be printed in Italics or in different fonts.
 5. The Total Report should not exceed 50 pages including top cover and blank pages.
 6. A CD of the report should be pasted/ attached on the bottom page of the report.
 7. Similarly a hard copy of the presentation (Two slides per page) should be attached along with the report and a soft copy should be included in the CD.
 8. Three copies completed in all respect as given above are to be submitted to the Supervisor. One copy will be kept in departmental/University Library, One will be return to the student and third copy will be for the Supervisor.
 9. The power point presentation should not exceed 30 minutes which include 10 minutes for discussion/Viva.

Viva- voce

Students will prepare the viva, which should be based on their subject.

The student will be assigned a faculty guide who good the supervisor of the students. The faculty would be identified before the end of the III semester. The faculty will take the full responsibility for preparing the viva to the students.

The evaluation committee shall consists of faculty members constituted by the college which would be comprised of at least three members comprising of the department Coordinator's Class Coordinator and a nominee of the Director. The student's supervisor would be special invitee to the viva. The viva session shall be an open house session. The internal marks would be the average of the marks given by each members of the committee in a sealed envelope.