GRADUATE DIPLOMA IN MATERIALS MANAGEMENTS

POST GRADUATION DIPLOMA IN MATERIALS MANAGEMENT

POST GRADUATE DIPLOMA IN LOGISTICS MANAGEMENT

GUIDELINES FOR PROJECT WORK

STUDENT HAND-OUT

Indian Institute of Materials Management

NATIONAL HEADQUARTERS (EDUCATION WING)

Plot Nos. 102 & 104, Sector - 15, Institutional Area,
CBD Belapur, Navi Mumbai - 400 614.
Phone : (022) 27571022 Telefax : 2756 5741
Email : iimmedu@mtnl.net.in

INDIAN INSTITUTE OF MATERIALS MANAGEMENT

GUIDELINES FOR PROJECT WORK

As part of the curriculum during the last Semester, students are required to take up project work for the successful completion of the GDMM/PGDMM/PGDLM Course.

1.1 WHAT IS A RESEARCH PROJECT?

It is intensive study on a topic. It explores the subject in depth and elucidates information about the problem investigated, the methods used to solve the problem, the results of the investigation and the conclusions inferred and a set of recommendations that can be implemented. Research can be descriptive or explanatory. In descriptive work we study the existing systems / prevailing conditions of the topic under Research. In exploratory work we explore the area of study, by introducing new arguments to the existing system and draw inferences and projections.

1.2 WHAT CAN BE STUDIED IN A PROJECT?

The project taken for study can be related to a particular organization. It can be a comparison study of many organizations, or related to an organization. All projects must be related to the area of Materials either directly or indirectly. A project should preferably be conducted in the organization where the student is employed.

1.3 SUGGESTED AREAS OF STUDY :

The list in Appendix I is illustrative.

1.4 Before embarking on the project study the student should identify the problem he intends to study and know the subject under study. He can facilitate this from the reading material on the intended study.

1.5 Do you have access to the materials, data, references for the study? A review of the Literature i.e., the studies done so far, the topics studied will give a comprehensive view to the student as to which area of study is found wanting or there is a lacuna. This information can be acquired by reading periodicals and recent publications in materials management.

1.6 Is a guide available to you? Is the guide adept and well versed with the area of research you want to undertake? The student has to take the necessary permission from the current employer if he intends to conduct the study in the organization he is working.

2.0 SCOPE OF THE STUDY

How Valuable is the study to be done by you? Does it have application value? Can it be used for improvement by the organizations in the field of materials management? The study should highlight its application in day to day functioning or in a specific area of materials management.

2.1 The data collected could be primary, i.e., gathered by your own observation, or it may be secondary i.e. taken from the records of the organization where the research is being undertaken like balance sheets, control figures, performance reports, sales reports. Survey of recent publications on the topic will provide comparable secondary data from other sources.

2.2 Student must ensure that the project undertaken is an original study.

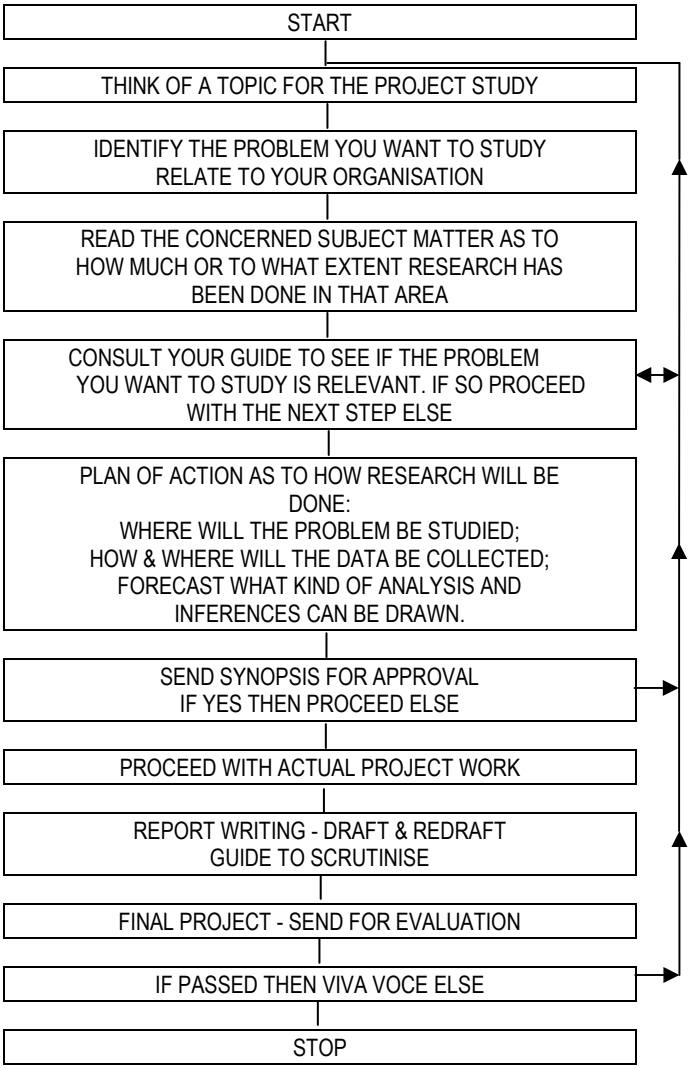
3.0 SELECTION OF GUIDE

A project report must be conducted with the guidance of the project Guide. A guide has to be a competent person possessing vast experience and knowledge in the field of research the student intends of study. The guide can even suggest to student any relevant area for research. He/She should preferably be a senior member of the organization, where the student is employed.

3.1 The set of guidelines for the project work is also given to the guide to ensure that the student abides by the format or project structure laid down by the institution.

3.2 A certificate from the guide should be submitted along with the project work. (See Appendix II)

(FLOW CHART INDICATING THE BASIC ELEMENTS FOR PROJECT WORK)



4.0 SYNOPSIS

Before embarking on the actual study, it is necessary to submit a SYNOPSIS of the intended study, for approval by the Branch course coordinator or by the Director of Education in the case of correspondence students. This synopsis should be submitted by 1st March and 1st September of each year. Regular course students will submit the synopsis to the Branch Course coordinator and correspondence students to the Director of Education, NHQ Education wing at Mumbai. The synopsis will be returned to the student after approval. A synopsis should be accompanied by the name and address of the guide.

4.1 It is important for students to note that only if the SYNOPSIS is approved can they conduct the research study. In case of non-approval it is mandatory to submit a fresh synopsis for approval, which may be on a different area of research or the previous synopsis written again to be based on the suggestions for improvements .

The synopsis should be brief-Not more than 2 to 3 pages. Synopsis for approval must be submitted in the structured format given below :

Item	Particulars	Remarks
Name of Student		
Roll no. of student		
Address for correspondence Telephone E-mail		
Name of Guide Designation Address		
Proposed title of project		
Problem under study		
Scope		
Brief background		
Methodology		
Conclusion/ Recommendations		
Approved/Not approved		
Comments/Suggestions		

4.2 WHAT IS A SYNOPSIS?

A Synopsis is an outline of what the intended research is all about and the general plan of action. It serves as a guideline for the ensuing research. It should contain the following elements.

a) **The problem under study :** It is important to identify the problem you intend to study and where the study will conducted. How precise is the problem? E.g. if X then Y. It should not be vague and ambiguous or too narrow so as to reduce the scope of the study. E.g. A student wants to conduct a study on the purchase of envelopes in his company. This topic is a very narrow subject and hence cannot be studied for project work. The problem should be broad enough to elicit useful information. .

b) **Scope of the Study :** Is it an original research? What application value, does the study forecast? Why is the study being done? It should not be a repetitive study. Can another investigator replicate the research by following this project report?

Scope should indicate the broad area taken up for study or investigation and indicate limits within which the study is being conducted. (e.g. the time period, geographical area, departments of an organization etc.).

c) **Brief Background :** About the organization where the study will be conducted. .

d) **Methodology:** How and where will the study be conducted? Where will the data for the study be collected? Is it primary or secondary? What type of analysis is being done on the data gathered? Is it qualitative or quantitative? Qualitative analysis is done on data collected from marketing research, product

development etc. It mainly consists of subjective inputs and rarely uses precise numerical description. In Quantitative analysis the data gathered is quantified in terms of numerical or figures and suitable statistical analysis is done. Quantified data is more reliable and precise than qualitative data.

e) **Conclusions and Recommendations :** What conclusions can be expected from the study? What recommendations can be made to improve the working in the area of the project study?

5.0 CONDUCTING THE STUDY

After the necessary approval of the synopsis the student has to embark on the actual study. If the data is of primary nature the data collection should be the prime concern. Students should ensure that data collection be done at the earliest and the responses are quantified if the student intends to analyze the gathered data. Statistically.

It is important that the student keeps the guide informed about the progress at each stage of the project. Each chapter completed by student should be given to the guide for approval before a final draft is made. Likewise all the chapters of the project need to be scrutinized by the guide. Student may have to write and rewrite the specific chapters before a final draft is generated.

5.1 STRUCTURE OF THE PROJECT REPORT

a) **Introduction :** to the topic under study, E.g. if it is a study on inventory control practices, an introduction as to what is inventory control and its practices, and other introduction should be given.

b) **Background** :A brief background about the company / organization under study, like name, location etc. and also relevant details like organization structure, existing systems related to the particular subject under study. And a brief write up of the problem you want to study in that organization.

c) **Methodology:** forms the crux of the report . It should include the following information :

1) Problem - the main objectives of the study the scope which includes the usefulness of the project, how applicable it is, and how it can be used by the organization for improved performance.

2) Review of Literature indicating the research done so far with regard to the particular subject.
3) The relevant data gathered should be presented in the form of tables, graphs, flow charts etc.
4) Detailed discussion about the present practices related to the subject. If new practices / augments have been introduced, a discussion of the same may be done.
5) Analysis of the data collected or the effect of the new practices on the existing one.

d) **Conclusions & Recommendations**: based on the study done, what conclusions / inferences can be drawn. Recommendations are based on the conclusions of the study. It is important to indicate that a set of recommendations should follow from the conclusions inferred. The recommendations should have value to the organization. If possible, quantify the benefits that can be gained from following the recommendations. Indications as to what other techniques can be applied to improve the systems viz. Cost saving techniques, precautions.

e) Limitations of the study if any should be highlighted.

6) IMPORTANT GUIDELINES FOR WRITING THE PROJECT

1) Students should use simple and good English while writing the report. Avoid grammatical errors.
2) The problem and objectives should be specific and clearly stated. Avoid ambiguity.
3) No aspects of the structure of the report should be omitted.
4) Important to include Bibliography, List of tables, Certificate from guide and acknowledgments.
5) The report should be in about 60-70 pages.

7. OTHER DETAILS TO BE INCLUDED IN THE REPORT

a) Acknowledgment - to all those who have helped the student to complete the project.

2) Certificate from the guide. (See appendix II)

3) Abstract of the study. It should not exceed 500 words.

4) Table of contents, chapter wise with the appropriate page numbers.

5) Actual project content following the given format.

6) Bibliography - It is important to the students to list out Books of reference. It should follow the order. Author's name, Title of the Book or Journal, page nos, and year of publishing.

8. PHYSICAL FORMAT

a) The front cover should contain the following details

TOP : The Title of the report in block capitals

CENTRE: Full name of the candidate in block capitals with Roll No

BOTTOM: Name of the institute, year of submission.

b) BLANK SHEETS - At the beginning and end of the report two blank sheets of paper shall be provided one for the purpose of binding and another after the blank sheet.

c) TITLE SHEET - The title shall be the first typed sheet and shall follow immediately after the blank sheet.

d) PAPER - The report shall be typed on white quarto bond paper.

e) TYPING - The typing shall be in standard letter size. One and a half or double spaced on one side of the paper.

f) MARGIN - The typed sheet shall have the following margins : Left 35mm, Top 35mm, Right 20mm, Bottom 20mm.

g) PAGE NUMBER - Each page shall be numbered at the bottom of the page centrally located.

h) BINDING - The report shall be Rexene bound in black.

9. **SUBMITTED COPIES TO BE**

The candidate is required to make three (3) copies of the project report, which should be complete in all respects.

One copy along with Softcopy on Compact Disc (CD) must be submitted to IIMM NHQ Education Wing for evaluation. Student will be intimated about his viva voce test after the evaluation.

One copy is to be submitted to the concerned branch / study center immediately on receiving the intimation from NHQ Education about the viva voce test.

One copy must be retained by the student for his/her record.

10. VALUATION OF PROJECT & VIVA VOCE:

The submitted project report will be sent for evaluation. The project report will be evaluated on the following criteria.

CRITERIA	MAX. MARKS
1. Clarity of objectives, scope and coverage	15
2. Study methodology for data collection	30
3. Analysis of data, tools and techniques	45
4. Understanding of the subject and Conceptualizing of the key areas. 30	
5. Innovative techniques/approach to problem scheme	30
6. Conclusions drawn	45
7. Recommendations, usefulness implementation scheme	30
8. Linking of recommendations to the objective	30
9. Report writing and presentation	45
Total	300

If the student is successful in the project work, the he/she will be eligible to appear for the viva voce exam. Viva voce will be held, at the branch the student is attached to. In case of a student's project not being approved, he is not eligible to take up the viva-voce. The student then has to rewrite the project based on the remarks of the evaluator.

The Project can be disapproved on the basis of it not being a original study i.e. if it is copied or rewritten from an earlier project, incorrect data, insufficient discussion & analysis, typographical errors, improper presentation of the project matter, mismatch between the problem studied at hand and

the methodology i.e. design, insufficient subject matter etc.

11. MARKS FOR THE PROJECT

The project work will carry 300 marks and the viva-voce 100 marks. The minimum for passing will be 50% for both the project work and viva-voce.

LIST OF TOPICS FOR PROJECT WORK

1. Management of Scrap and Surplus Materials
2. Lead time Analysis in procurement
3. Stores Layout, Planning, systems and procedure
4. ISO 9000 in Materials Management
5. Quality Control/TQM
6. Inventory control Systems
7. Purchase Procedures, Systems and Policies
8. Vendor Rating
9. Spare Parts Management
10. Cost control/reduction
11. Planning and procurement of raw materials
12. Wastage control
13. Material handling equipment
14. Dispatch of finished goods
15. Transportation systems
16. Systems integration and Logistics
17. Design, Development and Implementation of Material cataloguing system
18. Materials Requirement Planning (MRP - I)
19. Vendor Assessment , Performance Appraisal and Development
20. Waste disposal
21. Ancillary development

22. Safety evaluation for material loss
23. Subcontracting systems
24. Value Analysis
25. Value Engineering
26. Preservation procedures
27. Import/Export systems
28. Materials Resources Planning (MRP - II)
29. Claims Management
30. Warehouse Planning, Organizing and Management
31. Inspection Techniques and Materials Management
32. Indenting systems
33. Accounting systems in stock control
34. Application of Modern Scientific Methods in Materials Management
35. Application of quantitative techniques/Operations Research in Materials Management
36. Budgetary impact on Materials Management
37. Storage and preservation procedure/Methods
38. Make or buy decision
39. Imported Materials Clearance Procedure
40. Project Purchasing
41. Stock control Methods, Selection and Implementation
42. Store keeping Functions
43. Source development
44. Development Strategic Alliances/Partnership/Association in Procurement
45. Buyer - Seller relations
46. Ethical Practices in Materials Management
47. JIT - (Kanban) system implementation
48. Information Technology an effective Tool in Materials Management
49. Enterprise Resources Planning Packages, selection, evaluation and implementation in the Materials Process

50. Business Process Re-Engineering in Materials Management
51. Benefits of outsourcing
52. Development of Supply Chain Management Strategies for implementation
53. E-Commerce and Web oriented Transactions - opportunities, advantages, threats and hazards
54. Sourcing by using search Engines/Yellow pages product catalogues
55. Development of Partners in Supply Chain Management
56. Software Packages and their potential advantages in Materials Management
57. Globalization and International Purchasing
58. Benchmarking an effective Tool in Materials Management
59. Distribution Resources Planning
60. Effective SCM - process of Implementation
61. TQM for Purchasing Management
62. Performance Evaluation of the Purchase Process/function
63. Activity Based Costing of Purchase/Procurement Alliances
64. Critical factors in the Development of strategic Alliances
65. Impact of IT revolution in Materials Management and Future Opportunities
66. Analyzing Purchasing Performance using Activity Based Costing
67. Changing Role of Materials Managers in the current scenario
68. Downsizing / Down Costing / Re-engineering Tools of evaluation
69. Maintaining the Competitive Edge-Materials management the key driver
70. Total cost of Ownership (TCO) - an analytical Tool of evaluation

71. Supplier selection criteria under the new Purchasing Paradigm
72. Performance Appraisal system of Materials Management personnel
73. Skill Development of Materials Management Personnel
74. Multi-disciplinary, Multiskill development in the area of materials management
75. Green Purchasing and Environment aspects
76. Systems Identification value added and no value added activities
77. Process mapping of Material Functions and Analysis.
78. Identification of Skills requirement and gaps in the knowledge bank.
79. Computerization of Material Management Functions.
80. Introduction of Information Technology and computers in Materials Management.
81. Identification of Competitive Edge in Materials Management
82. Business Laws and Value addition in Materials Management
83. Development of a Cyber Age Purchasing Organization
84. Human Resources Development in the Area of Materials Management
85. Purchasing Procedures in Govt., Public Organization and Govt. Undertakings.
86. Market Research and Forecasting Techniques in Purchasing
87. Application of Pareto Analysis in Vendor Development
88. Negotiation Strategies in Purchasing
89. Design, Development and Implementation of Decision Support System in Materials Management
90. Documentation - Key to Success in Import/Export
91. Distribution Management using Quantitative Methods/ Operations Research

92. Logistics Management
93. Design, Development and Implementation of Logistics Information System
94. Role of Transportation Management in Logistics
95. Logistics Management the Key Performance Driver
96. Method of Carrying Quality Audit in Materials Management
97. Design and Development of Business Contracts, MOUS, Agreements and Terms and Conditions
98. Optimizing the Supply Chain Management for Value addition
99. Managing the Material Flow across the Supply Chain
100. Supply Chain Management in the Light of Globalization
101. Recycling of Materials
102. Conservation of Materials
103. Management of hazardous materials
104. Environmental management in stores
105. Selection of right packaging material
106. Bio-degradable Packaging
107. Storage and handling of perishable materials.

APPENDIX II

CERTIFICATE FROM THE GUIDE

This is to certify that the project work titled…….....

.....
is a bonafide work carried out by .....

.....

.....Roll No.....

a candidate for the Graduate / Post Graduate Diploma examination of the Indian Institute of Materials Management under my guidance and direction.

SIGNATURE OF GUIDE

NAME:

DESIGNATION:

ADDRESS:

DATE:

PLACE: