GUIDELINES FOR PROJECT REPORT WRITING

1.	Document type:	The report should be t	ype written a	s a MS Word docu	iment.
2.	Report Size:				
	2.1 Page Size:2.2 Report Length:	The size of pages in re Between 100 and 200	eport should b pages includ	be A4. ing all appendices	
3.]	Number of Copies:	Two hard copies of re submitted. One copy and the second copy should be submitted o	port and one should be typ can be a pho n a CD.	electronic copy are be written or word btocopy. The elect	e to be l processed ronic copy
4.]	Layout of Script:	Type script should be one & half spaced and on one side of paper only. Captions, footnotes, quotations and references may be single spaced. Times New Roman with 12 font size is to be used. Only footnotes can use a 10 size font with single spacing.			
5.1	Margins (Text):	Left hand side Top:	1.5", 1",	Right hand side Bottom:	1" 1"
6. '	Table of Contents:	A table of contents sh headings and sub-head (See Exibit-3 in Ann	ould be given lings with pa exure-C).	which should inc	lude major

7. Page Numbering:

- 7.1 All pages in the main text must be numbered at the bottom center using regular numerals e.g. (1, 2,.....)
- 7.2 Use lower-case Roman numerals (e.g , i. ii. etc.) for preliminary pages (e.g. Abstract, Acknowledgement, Table of Contents etc) and regular numbering for text pages in bottom, center .
- 8. **Headings / Sub-heading** Headings and Sub- headings, article numbers, etc. should all be left aligned.
 - 8.1 The main heading of the chapters should be 14 point font, bold, all upper case and centered (not underlined)

Example:

CHAPTER 4 (14 pt bold) $1^{1}_{/2}$

DESIGN CALCULATIONS

(14pt.bold)

8.2 First level subheading should be 12 point font, upper case, left justified and underlined with one complete line space above and below the heading. The numbering format to be made is #. #

Ex 4.1 TWELVE POINT UPPER CASE UNDERLINED LEFT JUSTIFIED

8.3 Second level subheading should be 12 point font, mixed case, left justified and underlined with one complete line space above and below the heading. The numbering format to be used is #. # . #

Ex. 4.1.1 Twelve Point Mixed Case underlined left justified

- 8.4 Third level heading should be 12 point font, mixed case and left justified with one line space above and below the heading. The number format to be used is #. # .# .# Ex. 4.1.1.1 Twelve Point mixed case left justified
- 8.5 Fourth level heading should be 12 point font, mixed case and left justified. Text to start in the same line as of heading separated by a colon and two character spaces. Numbering format to be used is #. # . # . #

Ex. 4.1.1.1.1 Twelve point mixed case left justified: Text to start from here

9. Equations:

- 9.1 All equations must be clearly set . When referring to equations in the text, preface the number with the word "eqn" or "eqns" and place the number within brackets i.e. eqn (1).
- 9.2 Displayed equations should be numbered simply (1), (2), (3) etc. The number should appear at the right of the equation , flush with the text on the right side .
- 10. **Tables**: Tables must have caption centered over the table. Captions should be numbered Sequentially starting with number 1, i.e. **Table 1**:
- 11. **Figure**: Caption to the figures (photo, diagrams, and /or illustrations) should be centered below the figure. i.e. **Figure 1:**

12. Report Sequencing:

Page sequence should be followed as under:

Title Page, Certificate, Abstract, acknowledgment, Table of Contents, List of figures, List of Tables, Main body of report (chapters), Appendices

- 12.1 A typical sample of the title page is shown as "Exhibit-1".
- 12.2 A typical sample certificate is placed as "Exhibit-2".
- 12.3 An abstract of the report must be included immediately after the certificate. It should be a brief review (about half to one page) of the entire project including the statement of the problem, the method or procedure used in problem, the main results and conclusions drawn.
- 12.4 A sample of Table of Contents is shown as "Exhibit-3".
- 12.5 References should be provided in following form:

Author's name, title, journal/book name, volume, page range, publishing year.

For Example:

[1] Wilkins, C., "Cryogenic Processing: The Big Chill", EDM Today, pp. 36 44, 1999.
[2] Collins, D.N., and Dormer, "Deep Cryogenic Treatment of a D2 Cold-Work Tool Steels", Heat Treatment of Metals, Volume 3, pp.71-74, 1997.

- 13. Box file: All relevant reference materials which do not form part of the report such as catalogues, internet down loads, software, etc. must be submitted in a box file. On top of the box file information mentioned in Exbit-1 should be printed.
- 14. **Binding**: All project reports must be hard bound in Navy Blue color. No other form of bind shall be acceptable. Any large size diagram must be properly folded and placed in a pocket of the bounded report to be provided at the end of this purpose. The Front Cover Title (same as Exibit-1) should be printed in *Silver letters*

15. Spine Labeling :

The Project title, department and batch should also be indicated on the spine of the binding as well as of the box file as shown in the following figure.



Exibit-1

REASONS OF EXCESSIVE INDUSTRIAL CORROSION RATE AND ITS REMEDIES ON STEEL STRUCTURES LOCATED NEAR COASTAL AREAS OF KARACHI



GROUP NO. XX (16 pt)	Batch: 20XX -20YY (16 pt)	
<u>Name</u>	<u>Seat No.</u>	
(16 pt)	(16 pt)	
Fawad Hussain Junejo	XXX	
Syed Mansoor Alam	XXX	
Aslam Khan	XXX	
Atta Ur Rehman (14 pt)	XXX	
Project Supervisor: (16 pt)	Prof. Dr	
Project Co-Supervisor :	Mr	

DEPARTMENT OF METALLURGICAL ENGINEERING NED UNIVERSITY OF ENGINEERING & TEHNOLOGY

Exibit-2

CERTIFICATE

(16 pt)

Submitted in partial fulfillment of the requirement of the degree of Bachelors of Engineering (Metallurgical Engineering). (14 pt)

Title of the Project (16 pt)

Group No . XX (16 pt)	Batch: 20XX – 20YY
<u>Name</u> (16 pt)	<u>Seat No.</u>
Fawad Hussain Junejo	XXX
Syed Mansoor Alam	XXX
Aslam Khan	XXX
Atta UR Rehman (14 pt)	XXX

Project Supervisor (16 pt) **Project Co-Supervisor**

Examiner-1

Examiner -2

DEPARTMENT OF METALLURGICAL ENGINEERING NED UNIVERSITY OF ENGINEERING & TEHNOLOGY

Exibit-3

CONTENTS

Chapter 1: Introduction

1.1 Brief Background	01
1.2 Problem Statement	05

Chapter 2: Literature Review

2.1 The Ultrasonic Flaw Detector	06
2.2 The Probes	07
2.3 Methods to Determine Microstructural Differences	11
2.3.1 The attenuation method	11
2.3.2 Velocity Measurements	12
2.4 Ultrasonic Testing for grain size measurement	16

Chapter 3: Experimental Procedure

3.0 Introduction	17
3.1 Heat Treatment	17
3.2 Metallographic Examination	20
3.3 Ultrasonic Velocity Measurements	20
3.4 Hardness Testing	23
Chapter 4: Results and Discussion	

4.1 Heat Treatment	24
4.1.1 Formation of Ferrite-pearlite Microstructure	25
4.1.2 Formation of different Grain Size	31
4.2 Ultrasonic Examination	34
4.3 Hardness Testing	37

Chapter 5: Conclusions & Recommendations	38

Chapter 6: References

39

PROJECT REPORT STRUCTURE

Title page Certificate Abstract (with key words not less than 5) Acknowledgment Table of Contents List of Figures List of Tables

Chapter 1 Introduction

1.1 Brief Background

Briefly explain your project **1.2 Problem Statement** Why research is carried on this particular title? **1.3 Aims and Objectives** What are major aims and objectives of this research?

1.4 Scope of Work

How you want to carry on research?

Chapter 2 Literature Review

Following are general outlines for this chapter

2.1 Introduction

2.2 Types of X-material

2.3 Processing of X-material

(List out major processing methods including the one you want to carry on your research)

2.4 Properties of X-Material

2.5 Mechanism of X-material

- 2.6 Factors affecting the Performance of X-material
- 2.7 Applications of X-material
- 2.8 New Trends in X-material
- 2.9 Summary etc.

Chapter 3 Experimental Procedure

3.1 Materials

All materials that are supposed to be used in the project.

3.2 Methods

Major methods performed in this research

3.3 Calculations/Derivations etc. (if any)

3.4 Testing and Characterization

Any test or characterization techniques that is carried out. For example XRD, SEM etc.

3.4.1 XRD

(Few lines about technique and then what you want to observe using this technique) **3.4.2 SEM** etc.

(Few lines about technique and then what you want to observe using this technique)

Chapter 4 Results & Discussion

4.1 SEM/Microstructure4.2 XRD/Phases4.3 UTM/Mechanical Properties4.4----- etc.

Chapter 5 Conclusions and Recommendations

5.1 Conclusions

5.2 Recommendations

Please provide full details for the future work as your recommendations.

Chapter 6 References

Author's name, title, journal/book name, volume, page range, publishing year.

For Example:

[1] Wilkins, C., "Cryogenic Processing: The Big Chill", EDM Today, pp. 36 44, 1999.

[2] Collins, D.N., and Dormer, "Deep Cryogenic Treatment of a D2 Cold-Work Tool Steels", Heat Treatment of Metals, Volume 3, pp.71-74, 1997.

Appendices

Plagiarism Policy:

• Plagiarism should be < 20%.