CIS FINAL YEAR PROJECT HANDBOOK

FOR SUPERVISORS AND STUDENTS

COMPUTER AND SCIENCES DEPARTMENT
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1. INTRODUCTION

1.1 Background

All Computer and Information Sciences (CIS) final year students in UTP are required to undertake a Final Year Project (FYP) course, which is a project development-based subject. This course is a compulsory element in Information and Communication Technology (ICT) and Business Information System (BIS) programs offered in UTP.

It requires students to do project; design and/or development work in ICT/BIS, especially on real-world problems which would motivate them to produce practical solutions. It is an opportunity for students to use the tools and techniques of problem-solving to solve the problems they have encountered. With this approach, the learning process is gained through 'by-doing' (practical) experience. Management concepts which provide students with skills required for managing a project are also incorporated. Thus, the students are expected to be well rounded by mastering various useful disciplines, which will enable them to participate and prepare for future employment.

Working under the guidance of a supervisor(s), students may shape the direction of what they want to be, as well as gain better understanding of the responsibilities they have to shoulder when they undertake a project. Teamwork will be inculcated with the development of good and professional relationships with their supervisor(s) and colleagues. The undertaken project can also be used as a basis for job employment by fully exploiting the learning process they have gone through, the skills they have gathered and the experience they have gained from the project. These handbooks are prepared for students and supervisors to enable them to execute their respective roles and responsibilities in an effective manner, hence benefiting both parties. With that, the successful implementation of this course can then be realised.

1.2 Purpose

The purpose of the project is to develop an ICT/BIS related project, which will enhance students' skills in the process of applying knowledge, expanding thoughts, solving problems independently and presenting findings through minimum guidance and supervision.

1.3 Scope of Work

The project can be in the form of system modelling, computer programming, simulations, analysis and product design. The area and scope of the project should be narrowed down so that the project is feasible and could be completed within the allocated time frame. The project work must exhibit element of originality, which indicates the maturity level for the final year bachelor degree programme.

1.4 Plagiarism

Plagiarism is the act of obtaining or attempting to obtain credit for academic work by representing the work of another as one's own without the necessary and appropriate acknowledgment. More specifically, plagiarism is:

a) The act of incorporating the ideas, words of sentences, paragraphs, or parts thereof without appropriate acknowledgment and representing the product as one's own work; and
b) The act of representing another's intellectual work such as musical composition, computer program, photographs, painting, drawing, sculpture, or research or the like as one's own.

(Source : www.sonoma.edu/uaffairs/policies/cheating_plagiarism.htm)

Submission of Final Draft Report should attached with the plagiarism report where similarity score should be less than 40%. If a student is in doubt about the nature of plagiarism, he/she should discuss the matter with the supervisor. If a student is caught committing plagiarism, stern action will be taken against the student. This includes that the student will be given zero marks for the particular assessment in FYP1. However, for FYP2, the student will be given a grade of F.

1.5 Copyright

The university shall be the owner for all findings, designs, patents, and other intellectual property rights

2. ASSESSMENT

2.1 Evaluation

Students are evaluated based on their capability in undertaking the project, producing the written report and presenting the result. Overall commitment, as well as personal conduct, is also to be observed at all time. The main components of evaluation are given in Table 2.1.1 and Table 2.1.2

Table 2.1.1: Evaluation Structure for FYP 1

Assessment Component	Assessment Contribution (%)	
	Supervisor	Panel of Examiner(s)
Logbook	15	-
Proposal Defence	20	15
FYP1 Interim Report	25	25
Total	**60**	**40**

Table 2.1.2: Evaluation Structure for FYP 2

Assessment Component	Assessment Contribution (%)		
	Supervisor	Panel of Examiner(s)	
		Internal	External
Logbook	15	-	
Pre-SEDEX	-	10	
Technical Paper	15	-	
Viva	-	10	10
Dissertation	30	-	10
Total	**60**	**40**	

2.2 Grading Scheme

Students will be graded according to the UTP grading scheme as in Table 2.2.1.

Table 4: UTP Grading Scheme

Score	Grade	Point
85 – 100	A	4.0
80 – 84.9	A-	3.75
75 – 79.9	B+	3.5
65 -74.9	B	3.0
55 – 64.9	C+	2.5
50 – 54.9	C	2.0
45 – 49.9	D+	1.5
40 – 44.9	D	1.0
0 - 39.9	F	0.0

3. RESPONSIBILITIES

A team comprising of FYP Committee, FYP Coordinator, Supervisor, Co-supervisor, Panel of examiners and Students is formed to manage the final year project paper. They should work closely with each other as shown in Appendix 1-1. It is the responsibilities of each party to ensure that a project would be completed and delivered within the project time frame. The team responsibilities are indicated as in the Project Process Flow in Appendix 1-2.

3.1 Students

In completing the project, students are required to demonstrate their ability to integrate fundamental knowledge in developing techniques, methods and analyses. Students should take their own initiative such as proposing a title for their project on their own. They are also required to work independently through exercising self-discipline, self-management and job co-ordination while undertaking the project. If

working in a group, the students are expected to exercise teamwork, co-operation, and trustworthiness to ensure the success of the project.

Among the expected responsibilities are:

a) To select a project topic on their own or the one suggested by the Supervisor.
b) To plan meeting schedule with their Supervisor.
c) To adhere to the meeting schedule with the Supervisor for the purpose of updating the progress and seeking advice on project matters.
d) To be responsible in finding alternative solutions for problems encountered such as computer crashes and instrument failure.
e) To adhere all assessments element on time with no exception as follows:
    i. Logbook
    ii. Proposal Defence
    iii. Interim Report
    iv. Pre-SEDEX
    v. Technical Paper
    vi. Final Report
    vii. Viva
    viii. Dissertation

3.2 Supervisor

Students will be supervised by one main supervisor, who is knowledgeable in relevant field of expertise. Their responsibilities can be summarised as follows:

a) To work together with students until the submission of the final report.
b) To assist students on the accessibility of the tools needed in the project.
c) To monitor the schedule and progress of the students and their projects.
d) To assist and guide students on the project and the preparation of interim report, final report and dissertation according to the approved format.
e) To assess students' performance.
f) To deliver their part of evaluation. Please refer to evaluation structure Section 2.1.
g) To nominate a co-supervisor if needed and notify the FYP Coordinator.
h) To forward proposal to FYP Coordinator for endorsement on purchasing consumables and equipment, technical support, nomination of advisors and other related resources for the project. Please refer to Form 03 in Appendix 3-3.
i) To nominate Examiner(s) to FYP Committee.
j) To compile and retain all evaluation for at least one year after graduation for auditing purposes.

3.3 Co-supervisor

The Co-Supervisor may be nominated by the Supervisor to assist students in very specialized areas. The Co-Supervisor can be internal or external (from outside UTP). The Co-Supervisor must be officially appointed and is entitled for payment. The Co-Supervisor's responsibility is to guide students in solving specific task within his expertise as and when necessary within the project time frame. In certain cases, the Co-Supervisor may represent on behalf of the Supervisor in oral presentation, evaluating the students' progress and final dissertation.

3.4 Panel of examiners

The FYP Committee appoints the Panel of Examiners. The Examiners will function as project evaluators who are responsible to evaluate the oral presentation and final report. Refer to Table 2.1.2 in Section 2.1. The Examiners will be one from industry and one is an internal examiner. If it is not possible to get an External Examiner from industry, FYP Committee can appoint another lecturer from the same programme as a replacement.

3.5 FYP Committee

The Chairman of the FYP Committee for ICT/BIS Programme is the respective Head of Department. The FYP Coordinator and committee members are appointed by the Head of Department.

a) The main tasks and responsibilities of the FYP Coordinator are as follows:

i. To produce a milestone for managing final year project as shown in Appendix 2-1 and 2-2.
ii. To identify the students who have registered for a final year project.
iii. To distribute the FYP Guidelines to students and supervisors.
iv. To plan and manage the final year project process.
v. To collect the suggestions of project title proposal from the lecturers, trainee lecturers, other staff and students. Please refer to Form 01 in Appendix 3-1.
vi. To submit all the project proposals to FYP Committee for approval and to assign supervisor(s).
vii. To release the list of approved projects for students' selection.
viii. To collect the list of project titles selected by students. Please refer to Form 02 in Appendix 3-2.
ix. To forward Form 02 to FYP Committee for approval.
x. To release the FYP Committee's decision on project titles and supervisor(s).
xi. To brief the students and supervisors on the project requirements based on the guidelines.
xii. To co-ordinate a committee meeting to appoint panel of examiners.
xiii. To endorse Form 03 and forward the form to FYP Committee Chairman for approval on purchasing consumables and equipment, technical support, nomination of advisors and other related resources for the project. Please refer to Form 03 in Appendix 3-3.
xiv. To arrange students' oral presentation at the end of the semester.
xv. To collect the interim report, final report and dissertation from students and forward it to the examiner for evaluation during oral presentation at the end of the semester.
xvi. To compile the students' assessment marks.
xvii. To collect three (3) hard cover copies and (1) CD-ROM of final dissertation from students.
xviii. To compile and retain Form 01, 02, 03, 04, 05, 06, 07, 08, 09 and 10 for at least one year after graduation for auditing purposes.

b) The tasks of the FYP Committee Chairman and Committee Members are as follows:
   i. The Chairman is responsible for all final decision based on the committee's recommendations.
   ii. To ensure the initial project proposal is relevant to student's field of study.
   iii. To approve project title proposals.
   iv. To assign project supervisor(s).
   v. To assign project titles to students.
   vi. To appoint Panel of Examiners.
   vii. To endorse final project grades.
   viii. To approve proposal on purchasing consumables and equipment, technical support, nomination of advisors and other resources related to projects.

4. PROJECT PROCESS FLOW

The final year Project Flow Sheet is shown in Appendix 1-2.

4.1 Submission of Titles and Project Synopsis

(a) Students are encouraged to propose their own project proposals based on their interest and experience.
(b) Students are assigned to Supervisor based on his/her research interest.
(c) All proposals must be submitted to the FYP Coordinator for each department using Form 01 as in Appendix 3-1 before the start of the new semester.

4.2 Approval on Project Title, Synopsis and Assignment of Supervisor

(a) The FYP Coordinator will forward the list to the FYP committee for approval.
(b) The project proposal will be reviewed by the FYP Committee to ensure the viability of the project.
(c) The proposer will be called by the FYP Committee, if any clarification is required.
(d) Once the project is approved, the FYP Committee will endorse the project.
(e) The FYP Coordinator will advertise the list of approved projects to the students.

4.3 Selection of Project Titles

(a) Students who do not submit a project proposal or have their proposals rejected by the FYP committee of the department, will have to select a maximum of three (3) titles from the given list in any order of preference and submit it to the FYP Coordinator using Form 02 in Appendix 3-2.
(b) The FYP Coordinator will forward the students' selection to the FYP Committee for them to assign approved projects or Supervisors to students.

4.4 Allocation of Approved Project Title

Students will be informed by the FYP Coordinator on the awarded project or assigned Supervisors.

4.5 Approval for Purchase and Usage of Resources and Services

(a) If required, the Supervisor will forward Form 03 (Appendix 3-3) to the FYP Coordinator for the purchase of consumables and equipment, nomination of Advisor(s), request for technical support, visit and other resources related to the project as necessary. The FYP Coordinator will then forward the form to the FYP Chairman for approval.

(b) For projects involving experimental works, students are required to register with the Laboratory Facilities and Services Unit (LFSU). Students are expected to conduct risk assessment, comply with laboratory rules and regulations, and perform good laboratory practices.

4.6 Submission of Logbook (FYP 1 and FYP 2)

The logbook contains weekly and detailed reports prepared by the students and endorsed by the Supervisor (Appendix 3-4 Form 04). The students should describe the tasks that they are undertaking, how these tasks contribute towards achieving the project objectives, the problems and challenges they face, the lessons learn from the experience, and provide any comments or recommendations they wish to make. The logbook should also record any points discussed with the Supervisor in relation to the project. The logbook will be assessed by Supervisor every two weeks and the compilation of logbook to be submitted to FYP Coordinator.

4.7 Submission of Interim Report (FYP 1)

Towards the submission, students should be able to:

(a) Write an abstract of the study
(b) Identify the problem statement, objective and scope of the study
(c) Write the literature review
(d) Explain the methodology to be used in the study
(e) Discuss on system modelling and expected project outcome

The procedures for submission are as follows:

(a) Students will submit an Interim Report to the FYP Coordinator for endorsement prior to submission to the supervisor and internal examiner.
(b) The supervisor and internal examiner will evaluate the Interim Report and submit the marks to the FYP Coordinator using Form 06 as in Appendix 3-6.

4.8 Proposal Defence (FYP 1)

In this seminar students should be able to verbally report the progress of their project to the supervisor, fellow students and other lecturers attending the seminar. The seminar is also an avenue for the student to get feedback on how to improve their project. The seminar can be organised in small or large groups. The students need to do the oral presentation to the supervisor and one internal examiner. The examiners will evaluate the presentation and submit the marks to the FYP Coordinator using Form 05 (Appendix 3-5). If the students fail to attend the oral presentation, the students will be barred and will not be able to continue the course.

4.9 Pre-SEDEX

In this section, students should be able to:

(a) Explain verbally to the audience about their project, through the poster that they have designed.
(b) Demonstrate their ability to answer questions from the audience effectively.

The procedures of project exhibition are as follows:

(a) Students are required to produce a poster for an exhibition at departmental level.
(b) The appointed internal examiners within the department will evaluate the students' posters and submit the marks to the FYP Coordinator using Form 07 as in Appendix 3-7.

4.10 Submission of Technical Paper

Towards the submission, students should be able to explain in writing about the contents of the project and its significance, the problem statement, objectives, scope, literature review, methodology used, results, conclusions and recommendations. The technical paper format or guidelines are attached in Appendix 10-1.

The procedures for submission are as follows:

(a) Students are required to submit the technical paper to the Supervisor/s and send a copy to the FYP Coordinator.
c) The Supervisor/s will evaluate the technical paper and submit the marks to the FYP Coordinator using Form 08 as in Appendix 3-8.

4.11 Submission of Dissertation (Final Draft Report)

Towards the submission, students should be able to explain in writing about the contents of the project and its significance, the problem statement, objectives, scope, literature review, methodology used, results, conclusions and recommendations.

The procedures for submission are as follows:

(a) Students are required to submit a draft of the final report to the Supervisor/s and send a copy to the FYP Coordinator.
(b) The FYP Coordinator will distribute one copy to the Examiners.
(c) The Supervisor and Examiners will evaluate the draft final report and submit the marks to the FYP Coordinator using Form 09 as in Appendix 3-9 after the viva.

4.12 Viva

In this session, students should be able to:

(a) Verbally report the outcome of their final year project.
(b) Demonstrate how well they are able to explain and understand the project that they have been working on.
(c) Utilize their skills in oral presentation.

The procedures are as follows:

(a) The Viva evaluation will be conducted (at a scheduled time) using Form 10 in Appendix 3-10.
(b) The Supervisor/s and Examiners will give comments on the final draft of the report and the oral presentation of the project.
(c) Students have to defend their findings in the reports and make necessary amendments as suggested by the Supervisors and Examiners before submitting the final dissertation.
(d) The presentation contents may focus on the following items:
    - Problem Statement
    - Objectives and Scope of Study
    - Literature Review
    - Procedure/Methodology
    - Results and Findings
    - Conclusion and Recommendation
(e) The Panel of Examiners comprise of an external examiner and an internal examiner.
(f) The Supervisor and Examiners will evaluate the viva and submit the marks to the FYP Coordinator by using Form 10 as in Appendix 3-10 after the viva.

4.13 Submission of Dissertation (Hardbound)

(a) Students must submit two (2) hard-bound copies and three (3) softcopies of the project dissertation in CD-ROM format to the FYP Coordinator.
(b) Students who fail to submit the hard-bound dissertation will not receive their results transcript from the Examination Unit.

4.14 Grading of Project

(a) The FYP Coordinator will compile all the marks and obtain endorsement from the FYP Chairman.
(b) The FYP Coordinator will submit the endorsed result or grading to the Exam Unit as mentioned in Section 2.2.

5. WRITING FORMAT

The writing of the interim report and dissertation should adhere to the following format. The report consists of many parts arranged in a certain order. It is recommended that the contents be arranged in the following order:

5.1 Interim Report

(a) Title Page
(b) Abstract
(c) Chapter 1: Introduction
    - Background
    - Problem Statement
    - Objectives and Scope of Study
(d) Chapter 2: Literature Review and/or Theory
(e) Chapter 3: Methodology/Project Work
(f) Chapter 4: Results and Discussion
(g) Chapter 5: Conclusion and Recommendation
(h) References
(i) Appendices

5.2 Poster for Pre-SEDEX

The poster should be in A1 format that contain the following:

(a) Title
(b) Introduction
    - Background and Problem Statement
    - Objectives and Scope of Study
(c) Literature Review and/or Theory
(d) Methodology/Project Work
(e) Results and Discussion
(f) Conclusion and Recommendation

5.3 Technical Paper

Students are allow to follow is either IEEE technical writing format or any Journal which has potential for publication.

5.4 Final Draft Report

(a) Title Page
(b) Abstract
(c) Acknowledgements
(d) Table of Contents
(e) List of Figures
(f) List of Tables
(g) Abbreviations and Nomenclatures
(h) Chapter 1: Introduction
    - Background
    - Problem Statement
    - Objectives and Scope of Study
(i) Chapter 2: Literature Review and/or Theory
(j) Chapter 3: Methodology/Project Work
(k) Chapter 4: Results and Discussion
(l) Chapter 5: Conclusion and Recommendation
(m) References
(n) Appendices

5.5 Dissertation

(a) Title Page
(b) Certification
(c) Abstract
(d) Acknowledgements
(e) Table of Contents
(f) List of Figures
(g) List of Tables
(h) Abbreviations and Nomenclatures
(i) Chapter 1: Introduction
- Background
- Problem Statement
- Objectives and Scope of Study

(j) Chapter 2: Literature Review and/or Theory
(k) Chapter 3: Methodology/Project Work
(l) Chapter 4: Results and Discussion
(m) Chapter 5: Conclusion and Recommendation
(n) References
(o) Appendices

5.6 General Writing Format

Students must follow specific guidelines for writing all the reports as indicated in Section 5.

(a) Language

The dissertation must be written in acceptable and formal English. Use the passive voice.

(b) Font and Spacing

All text should be 1.5 spacing between lines and 3 spacing between paragraphs (Times New Roman regular font-style, size 12) typed on a white A4 paper. Interim report should be in the form of double-sided printing. The hard-bound printed copy of the dissertation should be in the form of single sided printing.

The following however should be single spaced:
- Tables and figures
- Computer programs/source codes (must be reduced to font size 8)

(c) Length

Below are suggested length of the report, excluding appendices is as follows:

Interim Report	20 pages
Dissertation	50 pages

Students are encouraged to use brief and straightforward wordings, use passive voice and avoid using jargon as much as possible.

(d) Pagination

All pages must be numbered in proper sequence from introduction to the end of the report including pages on figures, tables, computer programs and appendices. All front materials are numbered in small Roman numerals (e.g. i, ii, iii). Page numbers appear by themselves and are not to be enclosed in parenthesis, hyphens or other decorative symbols. Page numbers must be positioned at the bottom and must be centred. Please refer to Appendix 4-1.

(e) Margin

The top, bottom and right margins are 25 mm except the left margin, which is 40 mm. Please refer to Appendix 4-1. All paragraphs should start from the left margin.

(f) Mathematical Equations

Mathematical equations must be spaced out; superscript and subscript must be clearly shown and numbered.

(g) Heading

The report should not have more than three levels of numbered headings as follows:

1. FIRST-LEVEL HEAD

1.1 Second-Level Head

1.1.1 Third-Level Head

All headings should be in Times New Roman and bold. Chapter and major headings should be in capitals and in 14 font size and 12 font size, respectively. Secondary and tertiary headings should be in title case and in 12 font size.

(h) Tables and Figures

Tables and figures are considered part of the report if it is within the main text. If it is of the size that is less than a page, it should be inserted into the text near the point of reference with a 3 spacing from the text. Tables should be on the same page. Margin limits of figures and tables should be the same as the full-page text. All tables and figures should be numbered consecutively. Table heading should be positioned at the top and centred. The numbers for figure should be positioned at the bottom and centred. Please refer to Appendix 4.2. Refer to each table or figure clearly in the text before placing it on the page. (For example, “Figure 1 shows ….)

(i) Documenting Sources

Students are required to cite the sources from which ideas were taken. Please refer to Appendix 5-1. The documentation system to be used is the American Psychological Association (APA) or International Electrical Electronic Engineering (IEEE) format.

(j) References

The method of writing references must follow the standard format. The sample reference format is in Appendix 5-2. This sample is using the APA and IEEE format.

(k) Title Page

The title page of the interim report and dissertation should be set out in accordance with the attached sample sheet in Appendix 6-1 and should include the following:

- The title of the reports/ dissertation.
- The name of the candidate in FULL.
- The degree for which he/she is submitting the reports/ dissertation.
- The semester in which the reports/dissertation is submitted.
- The University name and address.

Students must submit two (2) hard cover copies and three (3) softcopies (CD-ROM) of their dissertation to the FYP Coordinator. The hard cover colour for ICT and BIS programme is dark blue. Please refer to Appendix 6-2 for the writing format for the front hard cover.

5.7 General Content

This section will elaborate the general content needed in each part for each report format.

(a) Title Page

The title of the report should reflect the focus on core issues of the project work or issued related to it.

(b) Certification

This section is divided into two: certification of approval and certification of originality, as in Appendix 7-1 and 7-2. The certification of approval should be signed by the Supervisor after he/she is satisfied with the corrections or amendments done by the student.

(c) Abstract

An abstract is a short version of a report. It covers the report's purpose, scope, methodology, results and conclusion. Abstracts should be no longer than one page as in Appendix 8-1.

(d) Acknowledgements

Acknowledgements should include the names of the contributors to the project work, including the supervisors and the members of the group, preferably not more than one page.

(e) Table of Contents

Table of Contents lists all headings and sub-headings, tables, figures, appendices and, bibliography with page numbers. It also includes the certification, abstract and acknowledgement (if applicable). Please refer to the sample in Appendix 9-1.

(f) Introduction

The Introduction must include the background of the project, the problem statement, the objective(s) and scope of the study. The Problem statement needs to focus on the situation of the problem and research questions which lead to the objective(s) of the study. Students are required to clarify the boundary of the project work to ensure its feasibility within the given time frame.

(g) Literature Review and/or Theory

The Literature Review is the analytical, critical and objective review of written materials on the chosen topic and area. It provides the background information on the research question and identifies what others have said and/or discovered about the question. It contains all relevant theories, hypotheses, facts and data which are relevant to the objective and findings of the project.

(h) Methodology/Project Work

The Methodology refers to methods/procedures used by the student to achieve the objective(s) of the project. The methods/procedures must be relevant and acceptable.

(i) Results and Discussion

This section presents the findings or outcomes of the project work. All gathered data from the project work must be presented in the form of tables and figures such as graphs, diagrams or appropriate formats. The data needs to be analysed, and the results need to be discussed.

(j) Conclusion and Recommendation

The Conclusion highlights the most significant findings in relation to the objective(s) of the project. This section should also include recommendations for future project work.

(k) References

This section is the list of references used in the project. The method of writing references must follow the standard format. Please refer to the sample reference format in Appendix 5-2.

(l) Appendices

Lengthy calculations, figures, raw data, computer programs/source codes, outputs, etc. are to be enclosed as appendices. They should be titled and numbered in chronological order and capital letters. The appendices and their titles need to be listed in the Table of Contents. Provide title for each appendix, for example “Appendix 1. Questionnaire Sample”.

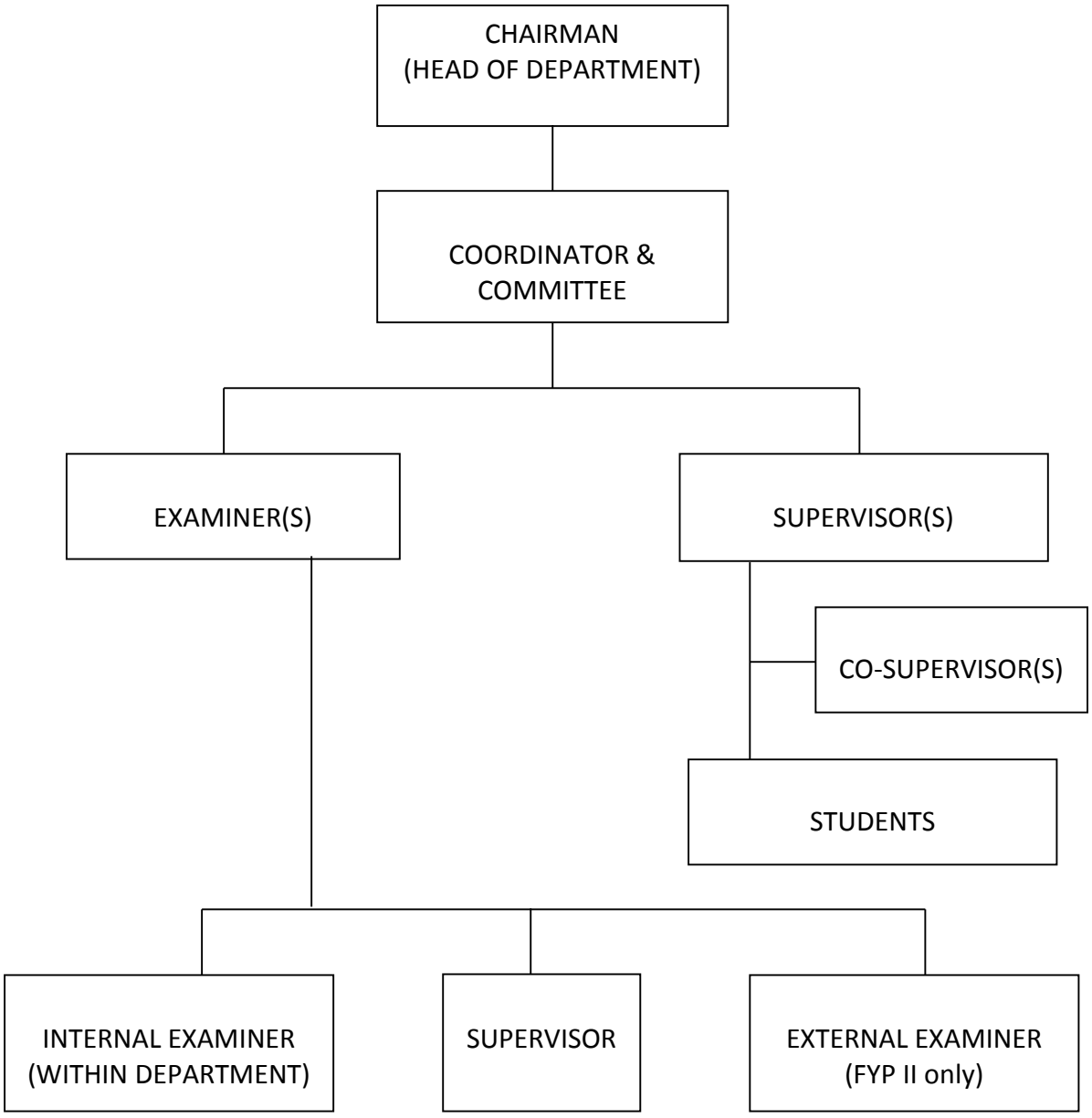
6. CLAIMS

   Students are entitled to final year project claims of RM 500 per semester for the following items.

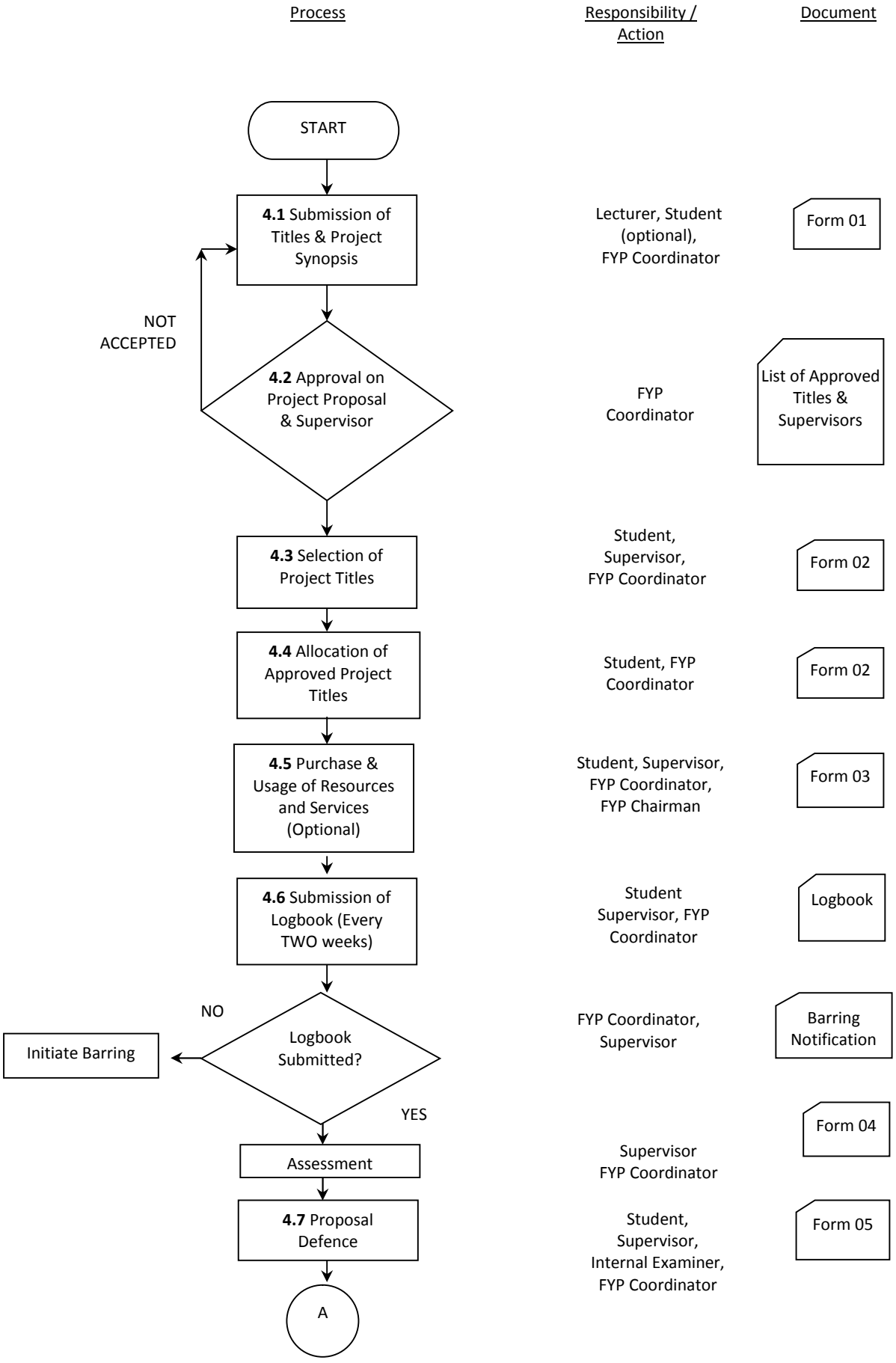
   a) Consumables and equipment
   b) Testing/technical support
   c) Consultation or other support
   d) Travel/visit for data requisition (with the most economical mode of travel)
   e) Procurement of data
   f) Exhibition posters

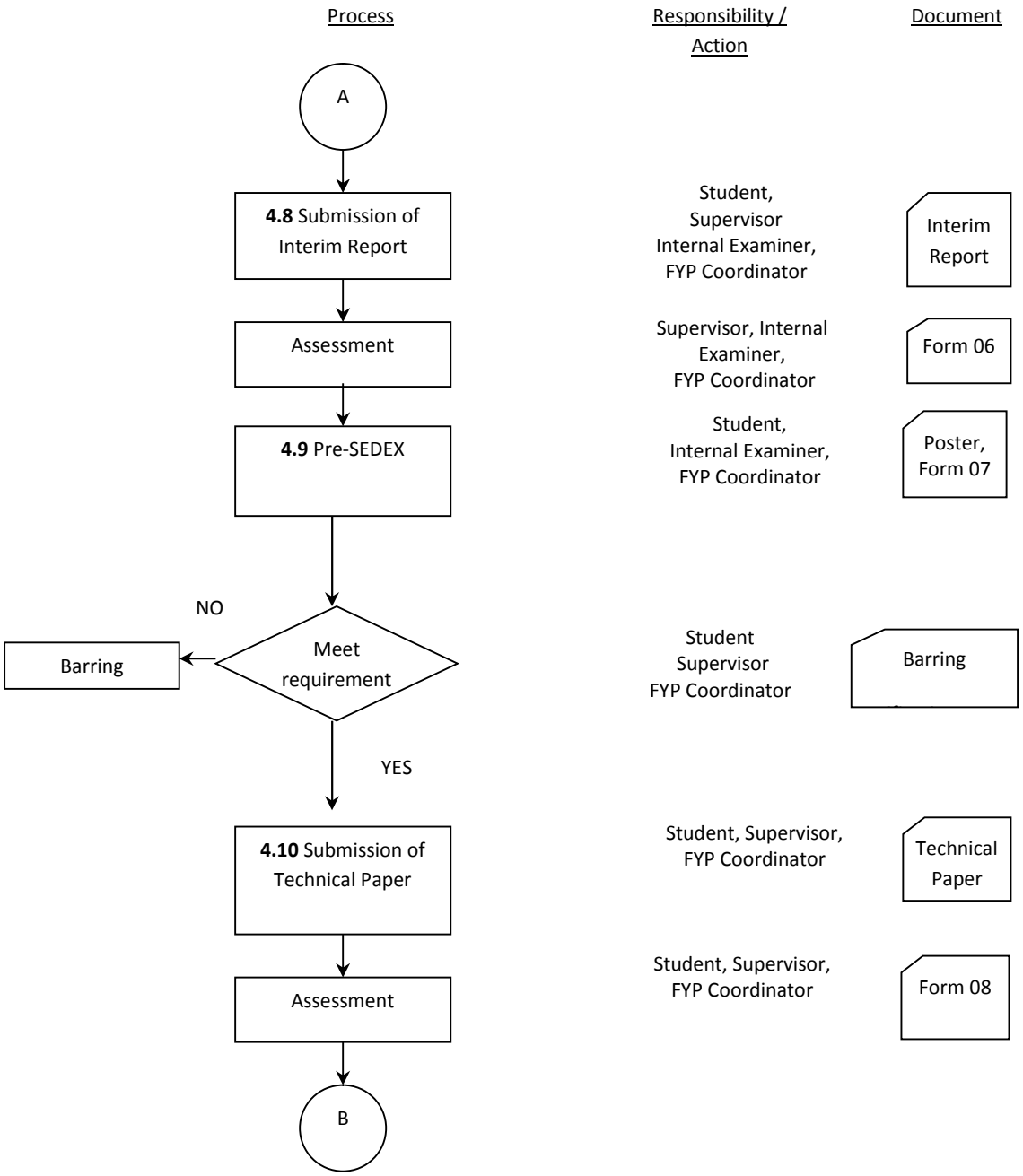
   All claims shall be submitted using Form 03 to the Supervisor, required support from the FYP Coordinator and to be endorsed by FYP Chairman.

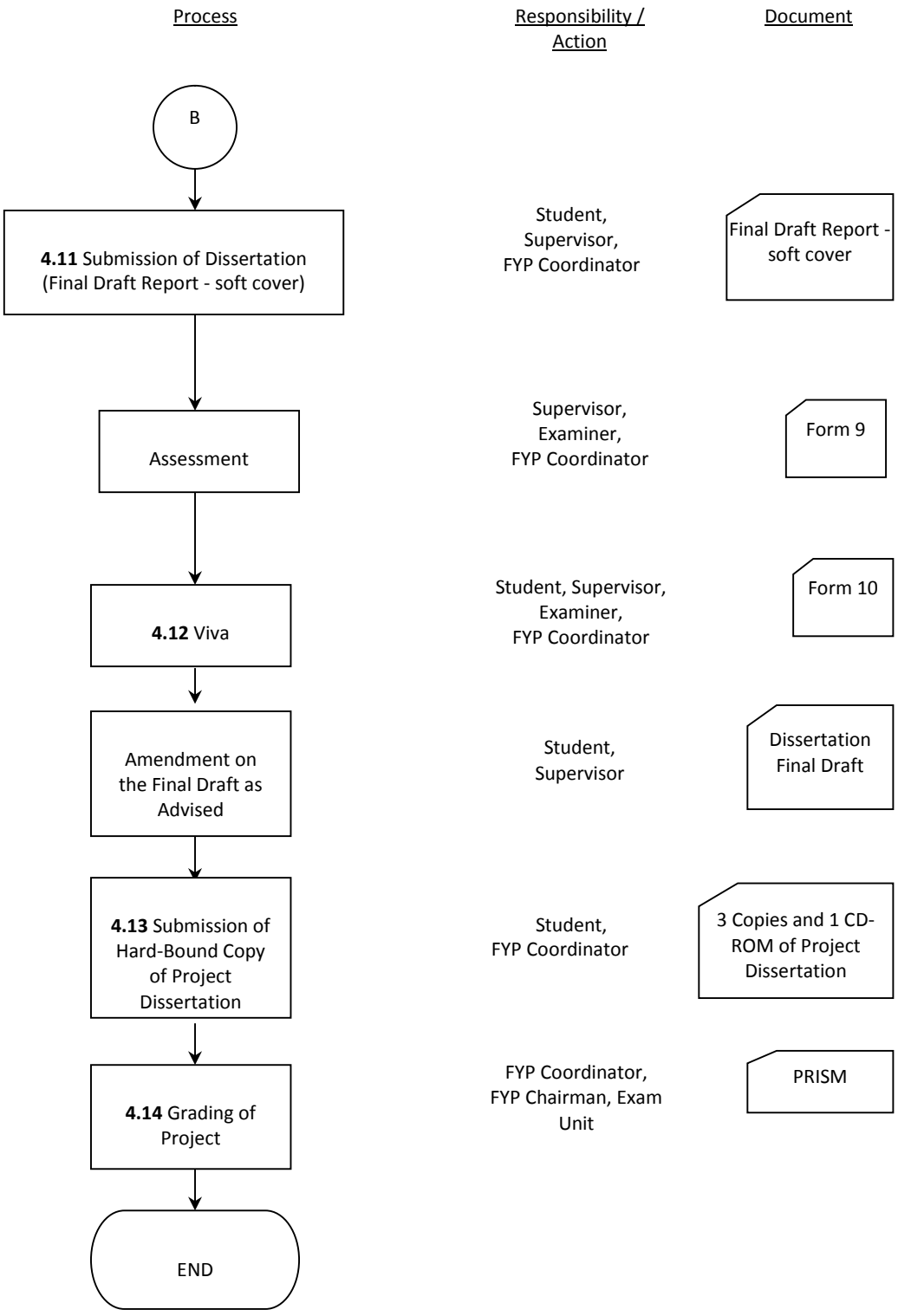
APPENDIX 1-1: Organisation Chart on Management of the Final Year Project



APPENDIX 1-2: Final Year Project Process Flow




Process
Responsibility / Action
Document
A
4.8 Submission of Interim Report
Student, Supervisor Internal Examiner, FYP Coordinator
Interim Report
Assessment
Supervisor, Internal Examiner, FYP Coordinator
Form 06
4.9 Pre-SEDEX
Student, Internal Examiner, FYP Coordinator
Poster, Form 07
NO
Meet requirement
Barring
Student Supervisor FYP Coordinator
Barring
YES
4.10 Submission of Technical Paper
Student, Supervisor, FYP Coordinator
Technical Paper
Assessment
Student, Supervisor, FYP Coordinator
Form 08
B


Process
Responsibility / Action
Document
B
4.11 Submission of Dissertation (Final Draft Report - soft cover)
Student, Supervisor, FYP Coordinator
Final Draft Report - soft cover
Assessment
Supervisor, Examiner, FYP Coordinator
Form 9
4.12 Viva
Student, Supervisor, Examiner, FYP Coordinator
Form 10
Amendment on the Final Draft as Advised
Student, Supervisor
Dissertation Final Draft
4.13 Submission of Hard-Bound Copy of Project Dissertation
Student, FYP Coordinator
3 Copies and 1 CD-ROM of Project Dissertation
4.14 Grading of Project
FYP Coordinator, FYP Chairman, Exam Unit
PRISM
END

APPENDIX 2-1: Suggested Milestone for the First Semester of a 2 Semester FYP

No	Details/Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Selection of Project Topic														
2	Preliminary Research Work														
3	Submission of Logbook				●		●		●		●		●		●
4	Design project outcome														
5	Submission of Interim Report											●			
6	Project work continues														
7	Proposal Defence													●	

APPENDIX 2-2: Suggested Milestone for the Second Semester of a 2 Semester FYP

No	Details/Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Project Work Continues															
2	Submission of Logbook		●		●		●		●		●		●			
3	Project Work Continues															
4	Pre-SEDEX										●					
5	Submission of Technical Paper										●					
6	Submission of Dissertation (soft bound)											●				
7	Oral Presentation															
8	Submission of Project Dissertation (Hard Bound)															●

APPENDIX 3-1: FORM 01

UNIVERSITI TEKNOLOGI PETRONAS

FORM 01

FINAL YEAR PROJECT TITLE PROPOSAL

Project Title:

Proposer's Name : _____Student ID: _____
Proposer's e-mail address: _____H/P No: _____
CGPA: _____Total Credit Hours This Semester: _____
Area / specialization:

☐ Information System ☐ Multimedia ☐ Software Engineering
☐ Knowledge Management ☐ Data Communication ☐ Computational Intelligence

Suggested supervisor (if any):_____
Collaborator(s) (if any): _____
Problem Statement:

_____
_____
_____
_____

Objectives:

_____
_____
_____

Pre-requisite (if any):

_____
_____

Short summary of the research project (project background):

Tools/equipment required:

_____
_____

APPENDIX 3-2: FORM 02

UNIVERSITI TEKNOLOGI PETRONAS

FORM 02

TOPIC SELECTION

(To be completed by student in 2 copies.)

Semester : _____ Year: _____
Name : _____
Student No : _____ Programme: _____

List of topic chosen (ranking in order of preference):

	Project No.	Project Title	Supervisor
1			
2			
3			

Justification for the chosen topics:

_____
_____
_____
_____
_____

Students should return this form within three days on the first week of the semester to respective department Final Year Project Coordinator

COMMITTEE DECISION

Topic approved: _____

Approved by FYP Coordinator *(only for Supervisor-allocated titles)*	
Signature:	
Official stamp:	
Date:	

APPENDIX 3-3: FORM 03

UNIVERSITI TEKNOLOGI PETRONAS

FORM 03

FINAL YEAR PROJECT REQUISITION FORM

(Note: Supervisor can use this form to request; (a) purchasing consumables and equipment;, (b) testing / technical support; (c) consultations fees and other related resources to the project; (d) visit for data collection.)

REQUESTED BY	
Supervisor's Name	
Project Title	
Supervisor's Signature	
Student's Name	
Date	

No.	Description	Purpose	Quantity

ENDORSEMENT BY CO-ORDINATOR		**APPROVAL BY COMMITTEE CHAIRMAN**	
Name		Name	
Programme		Programme	
Signature		Signature	
Date		Date	
Comment:		Approval ☐ Approve ☐ Not Approve Comment:	

** Please attach this form with original receipt or any proof of purchase.*

FORM 04: CIS-FYP LOGBOOK SCORE SHEET

Student's Name: Student ID: Programme: ICT/BIS
Week:

Current Progress:

[Type your progress report in point form with support of attachment as proof of work if necessary. Create a new page should you require more space. Supervisor must endorsed EACH page]

Next Task:

[Write your next tasks as instructed by supervisor here. Please write this on page 1 should you have multiple pages report.]

Assessment:

CATEGORY	Criteria for Judging Quality	Please tick or circle the appropriate mark for each category					Mark Awarded	Multiplication Factor	Total Marks
		5 [Excellent]	4 [Good]	3 [Average]	2 [Below Average]	1 [Unsatisfactory]			
Current Progress [3%]	- Task reporting and creativity - Technical and factual accuracy; Grasp of subject	Comprehensive amount of work done or ongoing, with highly achievable activities using highly appropriate methods	Substantial amount of work done or ongoing, with achievable activities using suitable methods	Sufficient amount of work done or ongoing, with moderately achievable activities using adequate methods	Insufficient amount of work done or ongoing, with fairly achievable activities using inadequate methods	Inappropriate amount of work done or ongoing, with unachievable activities using inappropriate methods		2	
TOTAL SCORE									/10

Supervisor	Co-Supervisor	FYP Coordinator
Signature: Official Stamp:	Signature: Official Stamp:	Signature: Official Stamp:

UNIVERSITI TEKNOLOGI PETRONAS

FORM 05: FYP 1 - PROPOSAL DEFENSE SCORE SHEET

(To be completed by Supervisor/Examiner)
Student's Name: **Student ID:** **Programme:**
Project Title:

CATEGORY	Criteria for Judging Quality	Please tick or circle the appropriate mark for each category					Mark Awarded	Multiplication Factor	Total Marks (%)
		5 [Excellent]	4 [Good]	3 [Average]	2 [Below Average]	1 [Unsatisfactory]			
Presentation [10%]	Presentation quality	Highly attractive presentation materials with very clear flow; very clear voice and pronunciation	Attractive presentation materials with clear flow; clear voice and pronunciation	Acceptable presentation materials with moderately clear flow; acceptable clarity of voice and pronunciation	Unattractive presentation materials with poor flow; unclear voice and pronunciation	Highly unattractive presentation materials with very poor flow; very unclear voice and pronunciation		1	
	Presenter quality	Well groomed with appropriate attire; excellent presentation skills	Pleasantly groomed with appropriate attire; good presentation skills	Adequately groomed with appropriate attire; acceptable presentation skills	Fairly groomed with inappropriate attire; poor presentation skills	Poorly groomed with inappropriate attire; very poor presentation skills		1	
Content [30%]	Clear project background, concise objectives and organized content	Well-presented background and objectives; and well organized content	Good presentation of background and objectives; and good organization of content	Adequate presentation of background and objectives; and adequate organization of content	Poor presentation of background and objectives; and some organization of content	Fail presentation of background and objectives; and unorganized content		2	
	Critical analysis, relevancy and recentness of the literature review	Comprehensive and up-to-date literature review with critical analysis	Substantial and up-to-date literature review with sufficient analysis	Adequate and up-to-date literature review with some analysis	Insufficient and not up-to-date literature review with inadequate analysis	None or unacceptable and not up-to-date literature review with no analysis		2	
	Conclusions and future work	Effectively summarizes the presentation with extensive future work	Adequately summarizes the presentation with reasonable future work	Mostly summarizes the presentation with acceptable future work	Minimally summarizes the presentation with the least future work	Fail to summarize the presentation with no future work		2	
Project Deliverable [40%]	Project methodology, activities and study plan	Comprehensive with highly achievable activities using highly appropriate methods	Substantial with achievable activities using suitable methods	Sufficient with moderately achievable activities using adequate methods	Insufficient with fairly achievable activities using inadequate methods	Inappropriate with unachievable activities using inappropriate methods		2	
	Design and project modeling	Complete system architecture/ modeling which contains all elements	Good system architecture/ modeling which contains most elements	Sufficient system architecture/ modeling which contains several elements	Incomplete system architecture/ modeling which contains some unfinished elements	Poor system architecture/ modeling which contains many unfinished elements		4	
	Discussion on project simulation and workflow	Critically analyzed and thoroughly discussed the work performed	Sufficiently analyzed and discussed the work performed	Moderately analyzed and discussed the work performed	Fairly analyzed and discussed the work performed	Poorly analyzed and discussed the work performed		2	
Question and Answer [20%]	- Technical and factual accuracy; Grasp of subject - Creativity and ability to handle question – Use of example	Impressive understanding of the subject matter and answered all questions fluently and confidently	Good understanding of the subject matter and answered all questions fluently and confidently	Average understanding of the subject matter and answered most questions fairly confident	Poor understanding of the subject matter and answered some questions unconfidently	Lack of understanding of the subject matter and unable to answer some questions and unprepared		4	
						TOTAL SCORE			/100

Comments:		
Supervisor/Examiner Signature	**Name**	**Date**

UNIVERSITI TEKNOLOGI PETRONAS

FORM 06: FYP 1 - INTERIM REPORT SCORE SHEET

(To be completed by Supervisor/Examiner)
Student's Name: **Student ID:** **Programme:**
Project Title:

CATEGORY	Criteria for Judging Quality	Please tick or circle the appropriate mark for each category					Mark Awarded	Multiplication Factor	Total Marks (%)
		5 [Excellent]	4 [Good]	3 [Average]	2 [Below Average]	1 [Unsatisfactory]			
Abstract [5%]	Project summarization	Comprehensive abstract content	Substantial abstract content	Sufficient abstract content	Insufficient abstract content	No or unacceptable abstract		1	
Introduction [10%]	Clear background, concise objectives and project relevancy	Very clear and detailed objective(s), scope of study, problem statement which relates to the project	Clear and detailed objective(s), scope of study, problem statement which relates to the project	Moderately clear and detailed objective(s), scope of study, problem statement which relates to the project	Fairly and not detailed objective(s), scope of study, problem statement which relates to the project	Failed to provide suitable objective(s), scope of study, problem statement which relates to the project		2	
Literature Review [20%]	- Critical analysis, relevancy and recentness of the literature review - Quality of references, citation, cross referencing	Comprehensive and up-to-date literature review with critical analysis	Substantial and up-to-date literature review with sufficient analysis	Adequate and up-to-date literature review with some analysis	Insufficient and not up-to-date literature review with inadequate analysis	None or unacceptable and not up-to-date literature review with no analysis		4	
Methodology [20%]	Project methodology, activities and study plan	Comprehensive with highly achievable activities using appropriate methods	Adequate with achievable activities using suitable methods	Sufficient with moderately achievable activities using adequate methods	Insufficient with fairly achievable activities using inadequate methods	Inappropriate with unachievable activities using inappropriate methods		2	
	Design and project modeling	Complete system architecture/ modeling which contains all elements	Substantial system architecture/ modeling which contains most elements	Sufficient system architecture/ modeling which contains several elements	Incomplete system architecture/ modeling which contains some unfinished elements	Poor system architecture/ modeling which contains many unfinished elements		2	
Results and Discussion [30%]	Findings and data gathering	Comprehensive results/findings which are highly relevant to objective(s)	Good results/findings which are mostly relevant to objective(s)	Sufficient results/findings which have some relevancy to objective(s)	Insufficient results/findings which have minimal relevancy to objective(s)	None or unacceptable result/findings which have no relevancy to objective(s)		4	
	Project discussion	Critically presented and thoroughly discussed	Well-presented and discussed	Moderately presented and discussed	Fairly presented and discussed	Poorly presented and discussed		2	
Conclusion [5%]	Relevancy to the objectives, suggested future work for expansion and continuation	Comprehensive conclusion and highly relevant future work	Substantial conclusion and substantially relevant future work	Sufficient conclusion and sufficiently relevant future work	Insufficient conclusion and irrelevant future work	Poor conclusion and irrelevant future work		1	
Report Writing [10%]	- Flow of content - Standard guideline and format	Excellent report that complied with the standard guideline and format	Substantial report that complied with the standard guideline and format	Acceptable report that has minor mistake with the standard guideline and format	Insufficient report that has major mistake with the standard guideline and format	Poor report that has not complied with the standard guideline and format		2	
						TOTAL SCORE			/100

Comments:		
Supervisor/Examiner Signature	**Name**	**Date**

UNIVERSITI TEKNOLOGI PETRONAS

FORM 07: FYP 2 - PRE-SEDEX SCORE SHEET

(To be completed by Supervisor/Examiner)
Student's Name: **Student ID:** **Programme:**
Project Title:

CATEGORY	Criteria for Judging Quality	Please tick or circle the appropriate mark for each category					Mark Awarded	Multiplication Factor	Total Marks (%)
		5 [Excellent]	4 [Good]	3 [Average]	2 [Below Average]	1 [Unsatisfactory]			
Presentation [10%]	Clarity of presentation with suitable personality and appearance	Excellent presentation and very confident, comprehensive use of aid and well groomed	Good presentation and confident, appropriate use of aid and pleasantly groomed	Average presentation and fairly confident with some presentation aid and adequately groomed	Poor presentation and lack confidence with little use of aid and fairly groomed	Unsatisfactory presentation and no confidence with no presentation aid and poorly groomed		2	
Poster [30%]	Clear background, concise objectives and continuity of content	The background and objectives are well presented and organized	The background and objectives are in good organization	The background and objectives are implied and organized fairly well	Unclear background and objectives but showed some organization	Fail to explain the background or objectives and unorganized		2	
	Dissemination of information	Effectively summarizes the project with extensive content design	Adequately summarizes the project with good content design	Mostly summarizes the project with acceptable content design	Minimally summarizes the project with minimal content design	Fail to summarize the project with impropriate content design		2	
	Originality, commercial value and contribution to knowledge	Excellent and has significant evidence of originality and inventiveness	Substantial and extends beyond that collection (others work) to offer new insights	Sufficient and has some evidence of new thought or inventiveness	Has little evidence of new thought or inventiveness	There is no evidence of new thought or inventiveness		2	
Demo/Prototype [40%]	Results and Discussion	Results/findings are comprehensive and relevant to objective(s) with accurate data modeling	Good results/findings are produced and mostly relevant to objective(s) with substantial data modeling	Sufficient of results/findings with some relevency to objective(s) and data modeling	Results/findings are minimal and incomplete and insufficient data modeling	No or unacceptable results/findings are produced with few or no data modeling		4	
	Completion of Prototype	Complete and contains all elements	Good and contains most elements	Sufficient and contains several elements	Incomplete and contains some unfinished elements	Poor and contains many unfinished elements		4	
Question and Answer [20%]	- Technical and factual accuracy; Grasp of subject - Creativity and ability to handle question – use of example	Impressive understanding of the subject matter and answered all questions fluently and confidently	Well understanding of the subject matter and answered all questions fluently and confidently	Average understanding of the subject matter and answered most questions fairly confident	Poor understanding of the subject matter and answered some questions unconfidently	Lack of understanding of the subject matter and unable to answer some questions and unprepared.		4	
						TOTAL SCORE			/100

Comments:

Supervisor/Examiner Signature	Name	Date

UNIVERSITI TEKNOLOGI PETRONAS

FORM 08: FYP 2 - TECHNICAL REPORT SCORE SHEET

(To be completed by Supervisor/Examiner)
Student's Name: **Student ID:** **Programme:**
Project Title:

CATEGORY	Criteria for Judging Quality	Please tick or circle the appropriate mark for each category					Mark Awarded	Multiplication Factor	Total Marks (%)
		5 [Excellent]	4 [Good]	3 [Average]	2 [Below Average]	1 [Unsatisfactory]			
Abstract [5%]	Project summarization	Comprehensive abstract content	Substantial abstract content	Sufficient abstract content	Insufficient abstract content	No or unacceptable abstract		1	
Introduction [10%]	Clear background, concise objectives and research relevancy	Very clear and detailed objective(s), scope of study, problem statement which relates to the project	Clear and detailed objective(s), scope of study, problem statement which relates to the project	Moderately clear and detailed objective(s), scope of study, problem statement which relates to the project	Fairly clear and not detailed objective(s), scope of study, problem statement which relates to the project	Unclear and incomplete/irrelevant objective(s), scope of study, problem statement which relates to the project		2	
Literature Review [20%]	- Critical analysis, relevancy and recentness of the literature review - Quality of references, citation, cross referencing	Comprehensive and up-to-date literature review with critical analysis	Substantial and up-to-date literature review with sufficient analysis	Adequate and up-to-date literature review with some analysis	Insufficient and not up-to-date literature review with inadequate analysis	None or unacceptable and not up-to-date literature review with no analysis		4	
Methodology [20%]	Proposed method and activities	Comprehensive with highly achievable activities using appropriate methods	Substantial with achievable activities using suitable methods	Sufficient with moderately achievable activities using adequate methods	Insufficient with fairly achievable activities using inadequate methods	Inappropriate with unachievable activities using inappropriate methods		2	
	Design and project modeling	Complete system architecture/ modeling which contains all elements	Substantial system architecture/ modeling which contains most elements	Sufficient system architecture/ modeling which contains several finished elements	Incomplete system architecture/modeling which contains some unfinished elements	Poor system architecture/ modeling which contains many unfinished elements		2	
Results and Discussion [30%]	Findings and data gathering	Comprehensive results/findings which are highly relevant to objective(s)	Good results/findings which are mostly relevant to objective(s)	Sufficient results/findings which have some relevancy to objective(s)	Insufficient results/findings which have minimal relevancy to objective(s)	None or unacceptable result/findings which have no relevancy to objective(s)		4	
	Research discussion	Critically presented and thoroughly discussed	Well-presented and discussed	Moderately presented and discussed	Fairly presented and discussed	Poorly presented and discussed		2	
Conclusion [5%]	Relevancy to the objectives, suggested future work for expansion and continuation	Comprehensive conclusion and highly relevant future work	Substantial conclusion and substantially relevant future work	Sufficient conclusion and sufficiently relevant future work	Insufficient conclusion and irrelevant future work	Poor conclusion and irrelevant future work		1	
Report Writing [10%]	- Conclusion and future plan - Flow of content - Standard guideline and format	Excellent report that complied with the standard guideline and format	Substantial report that complied with the standard guideline and format	Acceptable report that has minor mistake with the standard guideline and format	Insufficient report that has major mistake with the standard guideline and format	Poor report that has not complied with the standard guideline and format		2	
						TOTAL SCORE			/100

Comments:

Supervisor/Examiner Signature	**Name**	**Date**

UNIVERSITI TEKNOLOGI PETRONAS

FORM 09: FYP 2 - VIVA SCORE SHEET

(To be completed by Supervisor/Examiner)
Student's Name: **Student ID:** **Programme:**
Project Title:

CATEGORY	Criteria for Judging Quality	Please tick or circle the appropriate mark for each category					Mark Awarded	Multiplication Factor	Total Marks (%)
		5 [Excellent]	4 [Good]	3 [Average]	2 [Below Average]	1 [Unsatisfactory]			
Presentation [10%]	Presentation quality	Highly attractive presentation materials with very clear flow; very clear voice and pronunciation	Attractive presentation materials with clear flow; clear voice and pronunciation	Acceptable presentation materials with moderately clear flow; acceptable clarity of voice and pronunciation	Unattractive presentation materials with poor flow; unclear voice and pronunciation	Highly unattractive presentation materials with very poor flow; very unclear voice and pronunciation		1	
	Presenter quality	Well groomed with appropriate attire; excellent presentation skills	Pleasantly groomed with appropriate attire; good presentation skills	Adequately groomed with appropriate attire; acceptable presentation skills	Fairly groomed with inappropriate attire; poor presentation skills	Poorly groomed with inappropriate attire; very poor presentation skills		1	
Content [30%]	Clear background, concise objectives and organized content	Well-presented background and objectives; and well organized content	Good presentation of background and objectives; and good organization of content	Adequate presentation of background and objectives; and adequate organization of content	Poor presentation of background and objectives; and some organization of content	Fail presentation of background and objectives; and unorganized content		2	
	Critical analysis, relevancy and recentness of the literature review	Comprehensive and up-to-date literature review with critical analysis	Substantial and up-to-date literature review with sufficient analysis	Adequate and up-to-date literature review with some analysis	Insufficient and not up-to-date literature review with inadequate analysis	None or unacceptable and not up-to-date literature review with no analysis		2	
	Conclusions and future work	Effectively summarizes the presentation with extensive future work	Adequately summarizes the presentation with reasonable future work	Mostly summarizes the presentation with acceptable future work	Minimally summarizes the presentation with the least future work	Fail to summarize the presentation with no future work		2	
Project Deliverable [40%]	Project methodology, activities and study plan	Comprehensive with highly achievable activities using highly appropriate methods	Substantial with achievable activities using suitable methods	Sufficient with moderately achievable activities using adequate methods	Insufficient with fairly achievable activities using inadequate methods	Inappropriate with unachievable activities using inappropriate methods		2	
	- Design and project modeling - Simulation/prototype and demonstration	Complete demonstration and modeling which contain all finished elements.	Good demonstration and modeling which contain most finished elements	Sufficient demonstration and modeling which contain several finished elements	Incomplete system demonstration and modeling which contain some unfinished elements	Poor demonstration and modeling which contain many unfinished elements		4	
	Discussion on results/findings	Critically analyzed and thoroughly discussed	Well analyzed and discussed	Moderately analyzed and discussed	Fairly analyzed and discussed	Poorly analyzed and discussed		2	
Question and Answer [20%]	- Technical and factual accuracy; Grasp of subject - Creativity and ability to handle question – Use of example	Impressive understanding of the subject matter and answered all questions fluently and confidently	Good understanding of the subject matter and answered all questions fluently and confidently	Average understanding of the subject matter and answered most questions fairly confident	Poor understanding of the subject matter and answered some questions unconfidently	Lack of understanding of the subject matter and unable to answer some questions and unprepared		4	
						TOTAL SCORE			/100

Comments:		
Supervisor/Examiner Signature	**Name**	**Date**

UNIVERSITI TEKNOLOGI PETRONAS

FORM 10: FYP 2 - DISSERTATION SCORE SHEET

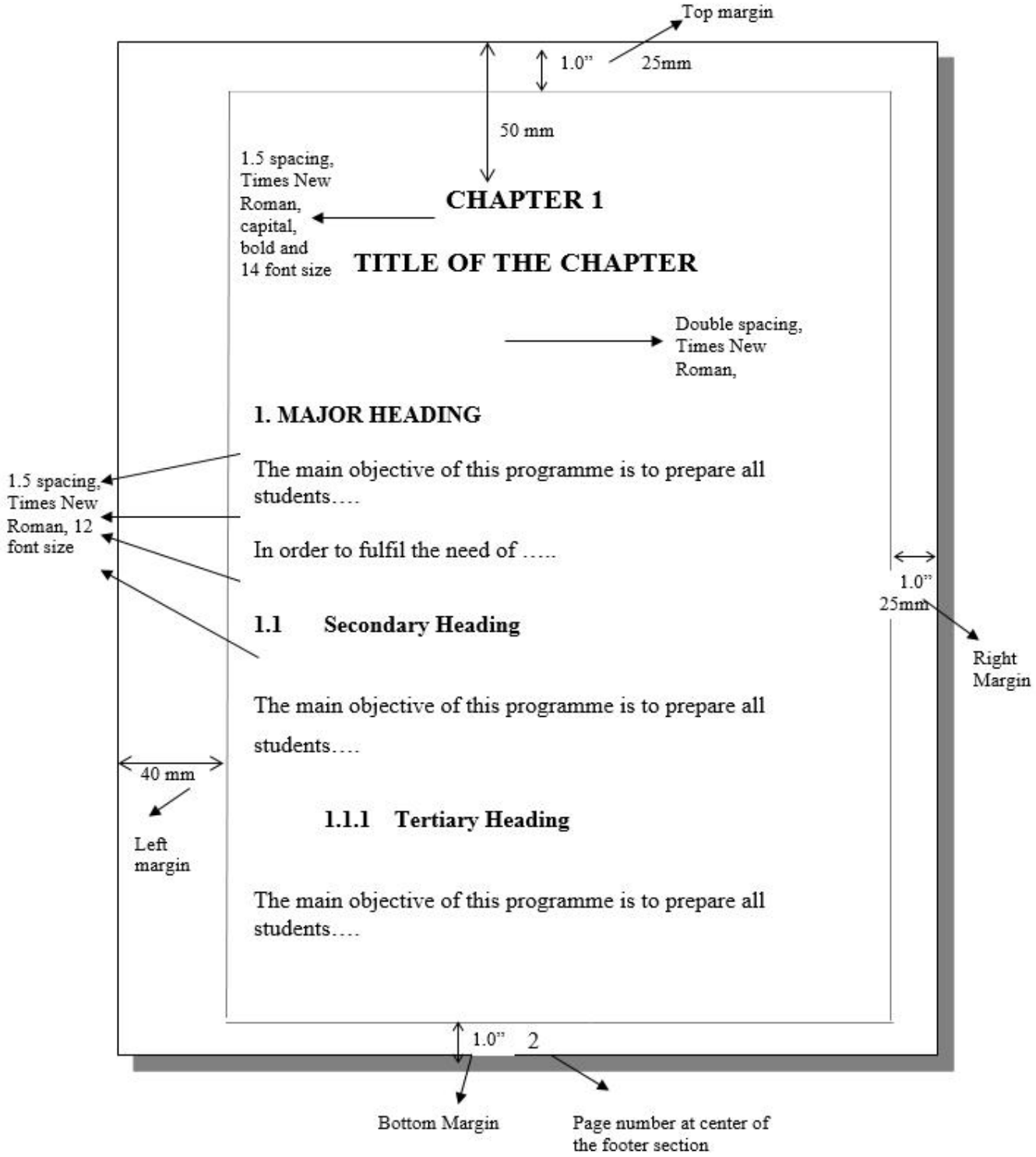
(To be completed by Supervisor/Examiner)
Student's Name: **Student ID:** **Programme:**
Project Title:

CATEGORY	Criteria for Judging Quality	Please tick or circle the appropriate mark for each category					Mark Awarded	Multiplication Factor	Total Marks(%)
		5 [Excellent]	4 [Good]	3 [Average]	2 [Below Average]	1 [Unsatisfactory]			
Abstract [5%]	Project summarization	Comprehensive abstract content	Substantial abstract content	Sufficient abstract content	Insufficient abstract content	No or unacceptable abstract		1	
Introduction [10%]	Clear background, concise objectives and project relevancy	Very clear and detailed objective(s), scope of study, problem statement which relates to the project	Clear and detailed objective(s), scope of study, problem statement which relates to the project	Moderately clear and detailed objective(s), scope of study, problem statement which relates to the project	Fairly and not detailed objective(s), scope of study, problem statement which relates to the project	Failed to provide suitable objective(s), scope of study, problem statement which relates to the project		2	
Literature Review [20%]	- Critical analysis, relevancy and recentness of the literature review - Quality of references, citation, cross referencing	Comprehensive and up-to-date literature review with critical analysis	Substantial and up-to-date literature review with sufficient analysis	Adequate and up-to-date literature review with some analysis	Insufficient and not up-to-date literature review with inadequate analysis	None or unacceptable and not up-to-date literature review with no analysis		4	
Methodology [20%]	Proposed method and activities	Comprehensive with highly achievable activities using highly appropriate methods	Substantial with achievable activities using suitable methods	Sufficient with moderately achievable activities using adequate methods	Insufficient with fairly achievable activities using inadequate methods	Inappropriate with unachievable activities using inappropriate methods		2	
	Design and project modeling	Complete system modeling which contains all elements	Substantial system modeling which contains most elements	Sufficient system modeling which contains several finished elements	Incomplete system modeling which contains some unfinished elements	Poor system modeling which contains many unfinished elements		2	
Results and Discussion [30%]	Simulation/Prototype and demonstration	Excellent system development which is highly relevant to objective(s)	Good system development which is mostly relevant to objective(s)	Sufficient system development which has some relevancy to objective(s)	Insufficient or incomplete system development which has minimal relevancy to objective(s)	None or unacceptable system development		4	
	Discussion on results/findings	Critically presented and thoroughly discussed	Well-presented and discussed	Moderately presented and discussed	Fairly presented and discussed	Poorly presented and discussed		2	
Conclusion [5%]	Relevancy to the objectives and suggested future work for expansion and continuation	Comprehensive conclusion and highly relevant future work	Substantial conclusion and substantially relevant future work	Sufficient conclusion and sufficiently relevant future work	Insufficient conclusion and irrelevant future work	Poor conclusion and irrelevant future work		1	
Report Writing [10%]	- Conclusion and recommendation - Flow of content - Standard guideline and format	Excellent report that complied with the standard guideline and format	Substantial report that complied with the standard guideline and format	Acceptable report that has minor mistake with the standard guideline and format	Insufficient report that has major mistake with the standard guideline and format	Poor report that has not complied with the standard guideline and format		2	
						TOTAL SCORE			/100

Comments:

Supervisor/Examiner Signature	**Name**	**Date**

APPENDIX 4-1: Sample of Page Setup



APPENDIX 4-2: Sample of Table and Figure

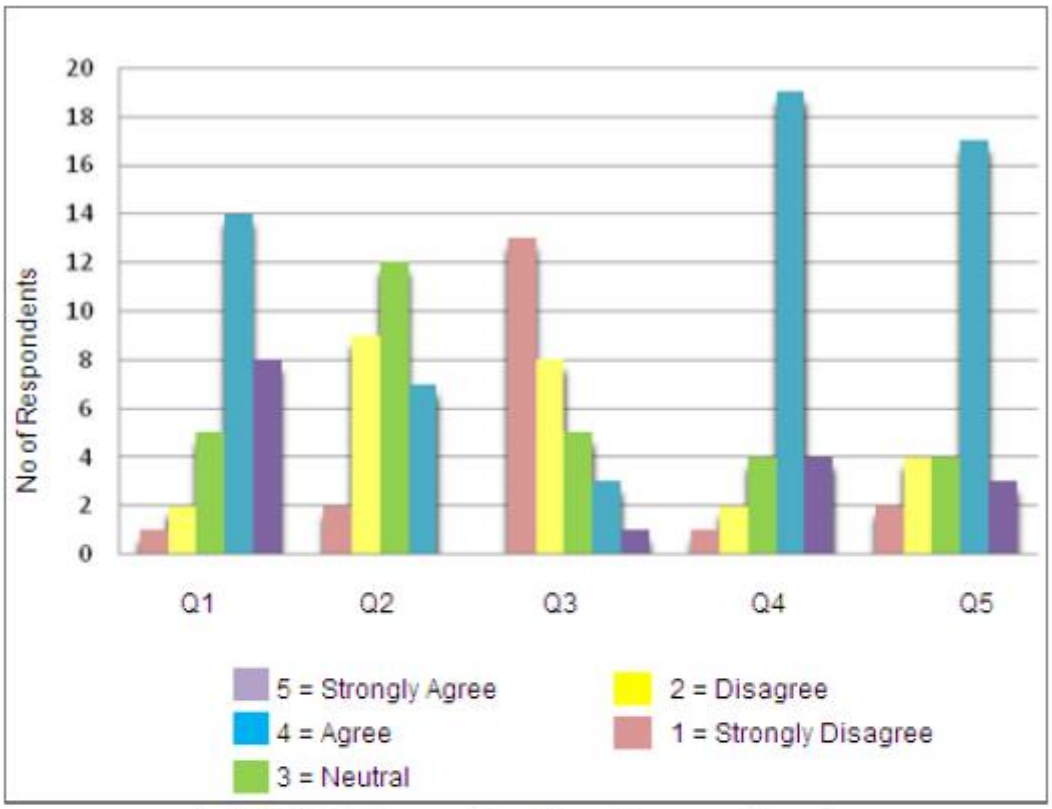


FIGURE 1. Pre-Test Survey Result

TABLE 1. Table Type Styles

Table Head	Table Column Head		
	Table column subhead	*Subhead*	*Subhead*
text	text	text	text

APPENDIX 5-1: Sample of Documenting Sources

A. The followings are the variations of APA Citations. For further reference, please refer to the internet under Documenting Sources.

1. The author's name appears as part of the introduction to the quotation or paraphrase.

   Gilster (1993) is very definite: "Simply put, the Internet is changing so rapidly, with so many new databases, services, addresses, and projects, that it can't be neatly encapsulated in any one set of commands or maxims" (p.2).

2. The author is not named in the introduction to the quotation or paraphrase.

   What is entirely clear is that the Internet "can't be neatly encapsulated in any one set of commands or maxims" (Gilster, 1993, p.2).

3. The author has several works listed in the References. If they have different dates, no special treatment is necessary; if an author has two works dated the same year, differentiate them in the text and in the References with a lower-case letter after each date (1993a,1993b).

   Gilster (1993a) points out that the Internet " can't be encapsulated in any one set of commands or maxims" (p.2).

4. Paraphrases are handled like quotations. Give the author's last name, the date, and the appropriate page numbers.

   Gilster (1993) says that the Internet changes so fast that you must come to see your experience with it as daily learning process.

5. When citing block quotations, the period is placed before the page parentheses. Do not place quotation marks before and after a block quotation. Indent the left margin 5 spaces and double-space. Do not indent the right margin.

   According to Gilster (1993)

   > There can be no complete printed directory of the Internet. Those who write about this globe-spanning network are destined to labor forever behind the technological wave. Simply put, the Internet is changing so rapidly, with so many new databases, services, addresses, and projects, that it can't be neatly encapsulated in any one set of commands or maxims. The more you use the Internet, the more you will realize that each day is itself a learning process.(p. 2)

B. The followings are the variations of IEEE Citations. For further reference, please refer to the internet under Documenting Sources.

   For IEEE referencing, please refer to Appendix 5-2

APPENDIX 5-2: Sample of Reference Format

A. APA

The formats of references for the respective sources are as follows:

1. Journal

   Meguid, S.A. and Zhu, Z.H., 1995, "A novel finite element for treating inhomogeneous solids," *International Journal Numerical Methods Engineering* **38 (2)**: 1579-1592

2. Book

   Glister P. 1993, *The Internet Navigator*, New York, John Wiley & Sons

3. Book in series

   Ochoa, O.O and Reddy, J.N. 1989. *Finite Element Analysis of Composite Laminates*, **(7)**, New York, Pergamon Press

4. Article in book/conference proceedings

   Eskey, D and Grabe, W. 1988, "Interactive models for second language reading" in P. Carrell, J. Devine and D. Eskey (Eds) *Interactive approaches to Second Language Reading*, Cambridge; Cambridge University Press

5. Thesis

   Mohd Shariff, A. 1995, *Steam Regeneration of A Fixed Bed Adsorption System*, Ph.D. Thesis, Leeds University, United Kingdom

6. Interview

   Abu Bakar, R. Manager of Technical Services. Intel, Penang. Personal Interview. Dec. 14. 2003.

7. Technical report

   Wawrznek, P.A. and Ingraffea, A.R. 1991. *Discrete modeling of crack propagation: theoretical aspects and implementation issues in two and three dimensions*. Report Number 91-5, Cornell University, New York, USA

8. Website

   Duncan, Donna. 6 Sept 1998 <http://www.geocities.com/SoHo/Coffe/1652/>.
   Klein-Smith, Sarah. 6 Sept 1998 <http://members.aol.com/~sklein2/>

B. IEEE

The formats of references for the respective sources are as follows:

Sample IEEE Documentation Style for References
(Monash University (2012, May) Institute of Electrical and Electronics Engineers (IEEE) style examples [online]. Available: http://guides.lib.monash.edu/citing-referencing/ieee)

References to sources should be numbered sequentially by order of mention in the text, with the number placed in brackets and printed on line (not as a super- or subscript) like [1]. The list of all references used in the text should appear in numerical order of mention at the end of the document. Further examples in this style can be found in the Institute of Electrical and Electronics Engineers site http://www.ieee.org/index.html.

In-text references
Using this system, references are numbered in the order in which they are first cited in the text. If the same reference is cited later in the text, the same number is given. For example

"The theory was first put forward in 1987 [1]"
"Scholtz [2] has argued that....."
"Several recent studies [1], [3], [4], [15], [16] have suggested that..."

Preferred Acceptable
[1], [3], [5] [1, 3, 5]
[1] - [5] [1-5]

1. Books

Elements of the citation:
Author(s) First name or initials. Surname, or name of organisation, *Title of book followed by full stop if no edition statement, or comma if there is an edition statement*, ed., Edition (except the first). Place of Publication City: Publisher, Year of Publication.

In addition, to the above citation details, provide page numbers if you have quoted specific facts or materials e.g. pp. 28-30.

Example:
C. W. Lander, *Power Electronics*, 3rd. ed., London: McGraw-Hill, 1993.
B. Hancock, *Advanced Ethernet/802.3 Network Management and Performance*. Boston: Digital Press, 1994, pp. 5-8.

2. Sections / chapters of books

Elements of the citation:
Author(s) First name or initials. Surname, "Title of the chapter," in *Title of the book*, ed., Edition (except the first) vol., volume if available, Ed. editor if available, Place of publication: Publisher, Year of Publication, pp. Chapter/s or First and Last pages of the article.

Example:
G. K. Knopf and A. S. Bassi, "Biological-based optical sensors and transducers," in *Opto-mechatronic Systems Handbook: Techniques and Applications*, Hyungsuck Cho, Ed. Boca Raton, FL: CRC Press, 2003, pp. 195-210.

3. Papers from conferences

Elements of the citation:
Author(s) First name or initials. Surname, "Title of paper," in *Title of the Conference*, Editor/s firstname last name if available, Ed. Place of publication: Publisher if available, Date of publication, pp. first and last pages of the paper.

Example:
A. H. Cookson and B. O. Pedersen, "Thermal measurements in a 1200kV compressed gas insulated transmission line," in *Seventh IEEE Power Engineering Society Transmission and Distribution Conference and Exposition*, 1979, pp. 163-167.

4. Journal articles

Elements of the citation:
Author(s) First name or initials. Surname, "Title of article," *Title of journal*, vol. volume, (issue number), pp. first and last pages of the article, Date of issue month if available year.

Example:
K. P. Dabke and K. M. Thomas, "Expert system guidance for library users," *Library Hi Tech*, vol. 10, (1-2), pp. 53-60, 1992.

5. Theses or dissertations

Elements of the citation:
Author(s) First name or initials. Surname, "Title of thesis," Type of thesis PhD dissertation or doctoral dissertation or master's thesis, Department, University, Place, State, Country, Year of Publication.

Example:
S. Birch, "Dolphin-human interaction effects: frequency mediated psychophysiological responses in biological systems," doctoral dissertation, Dept. Electrical and Computer Systems Engineering, Monash University, Victoria, Australia, 1997.

6. Electronic sources (Electronic book)

Elements of the citation:
Author(s) First name or initials. Surname. (date of publication year, month day). Title. (ed. edition except the first) [Type of medium]. *Volume number if needed. (issue number if needed)*. Available: site/path/file

Example:
A. K. Salkintzis. (2004). *Mobile Internet: enabling technologies and services*. [Online]. Available: http://www.engnetbase.com/books/1253/1631_fm.pdf

V. Guruswami. (2004). *List decoding of error-correcting codes: winning thesis of the 2002 ACM doctoral dissertation competition*. (2nd ed.) [Online]. 3282. Available: http://portal.acm.org/3540240519.pdf
Note: Fictitious examples

7. Online journal article

Elements of the citation:
Author(s) First name or initials. Surname. (year, month). Title of article. *Title of Journal*. [Type of medium]. *volume number (issue number)*, pp. pages. Available: site/path/file

Example:
J. S. Fulda. (2000, Mar.). The Internet as an engine of scholarship. *ACM SIGCAS Computers and Society*. [Online]. 30 (1), pp. 17-27. Available: http://doi.acm.org/10.1145/572217.572222

J. Farrell. (2007, May). In Wikipedia we trust? *Cosmos Online* [Online]. Available: http://www.cosmosmagazine.com/node/1339

8. Electronic conference paper

Elements of the citation:
Author(s) First name or initials. Surname. (year, month). Title. Presented at Conference title. [Type of Medium]. Available: site/path/file

Example:
X. Yang. (2003, Aug.). NIRA: a new Internet routing architecture. Presented at ACM SIGCOMM FDNA 2003 Workshop. [Online]. Available: http://www.isi.edu/newarch/DOCUMENTS/yang.nira.pdf

9. Website

Elements of the citation:
Author. (year, month). Title. [Type of Medium]. Available: site/path/file

Example:
Dr Jean Armstrong. (2007, March): Brief Biography [Online]. Available: http://www.ecse.monash.edu.au/staff/jeana/aboutarmstrong.html

Reference list - sample format:

References must be listed in the order in which they were cited (numerical order) not in alphabetical order.

[1] C. W. Lander, *Power Electronics*, 3rd. ed., London: McGraw-Hill, 1993.

[2] B. Hancock, *Advanced Ethernet/802.3 Network Management and Performance*. Boston: Digital Press, 1994, pp. 5-8.

[3] G. K. Knopf and A. S. Bassi, "Biological-based optical sensors and transducers," in *Opto-mechatronic Systems Handbook: Techniques and Applications*, Hyungsuck Cho, Ed. Boca Raton, FL: CRC Press, 2003, pp. 195-210.

[4] A. H. Cookson and B. O. Pedersen, "Thermal measurements in a 1200kV compressed gas insulated transmission line," in *Seventh IEEE Power Engineering Society Transmission and Distribution Conference and Exposition*, 1979, pp. 163-167.

[5] K. P. Dabke and K. M. Thomas, "Expert system guidance for library users," *Library Hi Tech*, vol. 10, (1-2), pp. 53-60, 1992.

[6] S. Birch, "Dolphin-human interaction effects: frequency mediated psychophysiological responses in biological systems," Ph.D. dissertation, Dept. Electrical and Computer Systems Engineering, Monash University, Victoria, Australia, 1997.

[7] A. K. Salkintzis. (2004). *Mobile Internet: enabling technologies and services*. [Online]. Available: http://www.engnetbase.com/books/1253/1631_fm.pdf

[8] V. Guruswami. (2004). *List decoding of error-correcting codes: winning thesis of the 2002 ACM doctoral dissertation competition*. (2nd ed.) [Online]. 3282. Available: http://portal.acm.org/3540240519.pdf

[9] J. S. Fulda. (2000, Mar.). The Internet as an engine of scholarship. *ACM SIGCAS Computers and Society*. [Online]. 30 (1), pp. 17-27. Available: http://doi.acm.org/10.1145/572217.572222

[10] J. Farrell. (2007, May). In Wikipedia we trust? Cosmos Online [Online]. Available: http://www.cosmosmagazine.com/node/1339

[11] X. Yang. (2003, Aug.). NIRA: a new Internet routing architecture. Presented at ACM SIGCOMM FDNA 2003 Workshop. [Online]. Available: http://www.isi.edu/newarch/DOCUMENTS/yang.nira.pdf

[12] Dr Jean Armstrong. (2007, March): Brief Biography [Online]. Available: http://www.ecse.monash.edu.au/staff/jeana/aboutarmstrong.html

APPENDIX 6-1a: Format of Title Page

Project Title

by

Student Name
Student ID

Dissertation submitted in partial fulfilment of
the requirements for the
Bachelor of Technology (Hons)
(Programme)

FYPII Semester and Year

Universiti Teknologi PETRONAS
Bandar Seri Iskandar
31750 Tronoh
Perak Darul Ridzuan

APPENDIX 6-1b: Sample of Title Page

FYP Online Viva System

by

Ahmad Bin Salman
123456

Dissertation submitted in partial fulfilment of
the requirements for the
Bachelor of Technology (Hons)
(Business Information System)

JANUARY 2015

Universiti Teknologi PETRONAS
Bandar Seri Iskandar
31750 Tronoh
Perak Darul Ridzuan

APPENDIX 6-3: Sample of Front Hard Cover

AHMAD BIN SALMAN B. TECH (HONS) BUSINESS INFORMATION SYSTEM MAY 2015

FYP ONLINE VIVA SYSTEM

AHMAD BIN SALMAN

BUSINESS INFORMATION SCIENCES
UNIVERSITI TEKNOLOGI PETRONAS
MAY 2015

APPENDIX 7-1: Sample of Certification of Approval

CERTIFICATION OF APPROVAL

FYP Online Viva System

by

Ahmad Bin Salman
123456

A project dissertation submitted to the
Business Information System Programme
Universiti Teknologi PETRONAS
In partial fulfilment of the requirements for the
BACHELOR OF TECHNOLOGY (Hons)
(BUSINESS INFORMATION SYSTEM)

Approved by,

_____
(Name of Main Supervisor)

UNIVERSITI TEKNOLOGI PETRONAS

TRONOH, PERAK

May 2015

APPENDIX 7-2: Sample of Certification of Originality

CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.

_____

AHMAD BIN SALMAN

APPENDIX 8-1: Sample of Abstract

The following abstract is taken from Ramos, Juan, Florentina Davalos, and Jorge Sandoval. High-brightness CMP from *Eucalyptus globulus* using a nitric acid pretreatment. TAPPI Journal 79 (12 December 1996): 169-177. Copyright TAPPI 1996.

A high-brightness, high-yield cheminmechanical pulp was obtained from *Eucalyptus globulus* using low-environmental-impact chemical reagents. The pulping chemicals were nitric acid and sodium hydroxide, and bleaching chemical was hydrogen peroxide. Chips were impregnated for 24 h in nitric acid, cooked under variable conditions, washed, impregnated with soda for 24 h, cooked again, rewashed, defibrated, refined, screened, and finally bleached under variable conditions. Under the optimal pulping conditions identified in this study, pulp strength was not especially high (tensile strength 2.04 km, tea strength 3.9 mN m^2/g), but the ease of bleaching and final pulp brightness were impressive enough (light-scattering coefficient 49.3 m^2kg, brightness 81.3% Elrepho) to warrant further research.

APPENDIX 9-1: Sample of Table of Contents

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Paper Title* (use style: ***paper title***)

Subtitle as needed ***(paper subtitle)***

Authors Name/s per 1st Affiliation (*Author*)
line 1 (of *Affiliation*): dept. name of organization
line 2-name of organization, acronyms acceptable
line 3-City, Country
line 4-e-mail address if desired

Authors Name/s per 2nd Affiliation (*Author*)
line 1 (of *Affiliation*): dept. name of organization
line 2-name of organization, acronyms acceptable
line 3-City, Country
line 4-e-mail address if desired

***Abstract*—This electronic document is a "live" template and already defines the components of your paper [title, text, heads, etc.] in its style sheet. *CRITICAL: Do Not Use Symbols, Special Characters, or Math in Paper Title or Abstract. (*Abstract*)**

Keywords—component; formatting; style; styling; insert (key words)

I. Introduction (*Heading 1*)

This template, modified in MS Word 2007 and saved as a "Word 97-2003 Document" for the PC, provides authors with most of the formatting specifications needed for preparing electronic versions of their papers. All standard paper components have been specified for three reasons: (1) ease of use when formatting individual papers, (2) automatic compliance to electronic requirements that facilitate the concurrent or later production of electronic products, and (3) conformity of style throughout a conference proceedings. Margins, column widths, line spacing, and type styles are built-in; examples of the type styles are provided throughout this document and are identified in italic type, within parentheses, following the example. Some components, such as multi-leveled equations, graphics, and tables are not prescribed, although the various table text styles are provided. The formatter will need to create these components, incorporating the applicable criteria that follow.

II. Ease of Use

A. Selecting a Template (Heading 2)

First, confirm that you have the correct template for your paper size. This template has been tailored for output on the A4 paper size. If you are using US letter-sized paper, please close this file and download the file "MSW_USltr_format".

B. Maintaining the Integrity of the Specifications

The template is used to format your paper and style the text. All margins, column widths, line spaces, and text fonts are prescribed; please do not alter them. You may note peculiarities. For example, the head margin in this template measures proportionately more than is customary. This measurement and others are deliberate, using specifications that anticipate your paper as one part of the entire proceedings, and not as an independent document. Please do not revise any of the current designations.

III. Prepare Your Paper Before Styling

Before you begin to format your paper, first write and save the content as a separate text file. Keep your text and graphic files separate until after the text has been formatted and styled. Do not use hard tabs, and limit use of hard returns to only one return at the end of a paragraph. Do not add any kind of pagination anywhere in the paper. Do not number text heads-the template will do that for you.

Finally, complete content and organizational editing before formatting. Please take note of the following items when proofreading spelling and grammar:

A. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as IEEE, SI, MKS, CGS, sc, dc, and rms do not have to be defined. Do not use abbreviations in the title or heads unless they are unavoidable.

B. Units

- Use either SI (MKS) or CGS as primary units. (SI units are encouraged.) English units may be used as secondary units (in parentheses). An exception would be the use of English units as identifiers in trade, such as "3.5-inch disk drive."
- Avoid combining SI and CGS units, such as current in amperes and magnetic field in oersteds. This often leads to confusion because equations do not balance dimensionally. If you must use mixed units, clearly state the units for each quantity that you use in an equation.
- Do not mix complete spellings and abbreviations of units: "Wb/m2" or "webers per square meter," not "webers/m2." Spell units when they appear in text: "...a few henries," not "...a few H."
- Use a zero before decimal points: "0.25," not ".25." Use "cm3," not "cc." (*bullet list*)

Identify applicable sponsor/s here. If no sponsors, delete this text box (*sponsors).*

C. Equations

The equations are an exception to the prescribed specifications of this template. You will need to determine whether or not your equation should be typed using either the Times New Roman or the Symbol font (please no other font). To create multileveled equations, it may be necessary to treat the equation as a graphic and insert it into the text after your paper is styled.

Number equations consecutively. Equation numbers, within parentheses, are to position flush right, as in (1), using a right tab stop. To make your equations more compact, you may use the solidus (/), the exp function, or appropriate exponents. Italicize Roman symbols for quantities and variables, but not Greek symbols. Use a long dash rather than a hyphen for a minus sign. Punctuate equations with commas or periods when they are part of a sentence, as in

$$a + b = \gamma \qquad (1)$$

Note that the equation is centered using a center tab stop. Be sure that the symbols in your equation have been defined before or immediately following the equation. Use "(1)," not "Eq. (1)" or "equation (1)," except at the beginning of a sentence: "Equation (1) is ..."

D. Some Common Mistakes

- The word "data" is plural, not singular.
- The subscript for the permeability of vacuum «$_0$, and other common scientific constants, is zero with subscript formatting, not a lowercase letter "o."
- In American English, commas, semi-/colons, periods, question and exclamation marks are located within quotation marks only when a complete thought or name is cited, such as a title or full quotation. When quotation marks are used, instead of a bold or italic typeface, to highlight a word or phrase, punctuation should appear outside of the quotation marks. A parenthetical phrase or statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical sentence is punctuated within the parentheses.)
- A graph within a graph is an "inset," not an "insert." The word alternatively is preferred to the word "alternately" (unless you really mean something that alternates).
- Do not use the word "essentially" to mean "approximately" or "effectively."
- In your paper title, if the words "that uses" can accurately replace the word using, capitalize the "u"; if not, keep using lower-cased.
- Be aware of the different meanings of the homophones "affect" and "effect," "complement" and "compliment," "discreet" and "discrete," "principal" and "principle."
- Do not confuse "imply" and "infer."
- The prefix "non" is not a word; it should be joined to the word it modifies, usually without a hyphen.
- There is no period after the "et" in the Latin abbreviation "et al."
- The abbreviation "i.e." means "that is," and the abbreviation "e.g." means "for example."

An excellent style manual for science writers is [7].

IV. Using the Template

After the text edit has been completed, the paper is ready for the template. Duplicate the template file by using the Save As command, and use the naming convention prescribed by your conference for the name of your paper. In this newly created file, highlight all of the contents and import your prepared text file. You are now ready to style your paper; use the scroll down window on the left of the MS Word Formatting toolbar. $\alpha + \beta = \chi.$ (1) (1)

A. Authors and Affiliations

The template is designed so that author affiliations are not repeated each time for multiple authors of the same affiliation. Please keep your affiliations as succinct as possible (for example, do not differentiate among departments of the same organization). This template was designed for two affiliations.

1) For author/s of only one affiliation (Heading 3): To change the default, adjust the template as follows.

a) Selection (Heading 4): Highlight all author and affiliation lines.

b) Change number of columns: Select the Columns icon from the MS Word Standard toolbar and then select "1 Column" from the selection palette.

c) Deletion: Delete the author and affiliation lines for the second affiliation.

2) For author/s of more than two affiliations: To change the default, adjust the template as follows.

a) Selection: Highlight all author and affiliation lines.

b) Change number of columns: Select the "Columns" icon from the MS Word Standard toolbar and then select "1 Column" from the selection palette.

c) Highlight author and affiliation lines of affiliation 1 and copy this selection.

d) Formatting: Insert one hard return immediately after the last character of the last affiliation line. Then paste down the copy of affiliation 1. Repeat as necessary for each additional affiliation.

e) Reassign number of columns: Place your cursor to the right of the last character of the last affiliation line of an even numbered affiliation (e.g., if there are five affiliations, place your cursor at end of fourth affiliation). Drag the cursor up to highlight all of the above author and affiliation lines. Go to Column icon and select "2 Columns". If you have an odd

number of affiliations, the final affiliation will be centered on the page; all previous will be in two columns.

B. Identify the Headings

Headings, or heads, are organizational devices that guide the reader through your paper. There are two types: component heads and text heads.

Component heads identify the different components of your paper and are not topically subordinate to each other. Examples include ACKNOWLEDGMENTS and REFERENCES, and for these, the correct style to use is "Heading 5." Use "figure caption" for your Figure captions, and "table head" for your table title. Run-in heads, such as "Abstract," will require you to apply a style (in this case, italic) in addition to the style provided by the drop down menu to differentiate the head from the text.

Text heads organize the topics on a relational, hierarchical basis. For example, the paper title is the primary text head because all subsequent material relates and elaborates on this one topic. If there are two or more sub-topics, the next level head (uppercase Roman numerals) should be used and, conversely, if there are not at least two sub-topics, then no subheads should be introduced. Styles named "Heading 1," "Heading 2," "Heading 3," and "Heading 4" are prescribed.

C. Figures and Tables

1) Positioning Figures and Tables: Place figures and tables at the top and bottom of columns. Avoid placing them in the middle of columns. Large figures and tables may span across both columns. Figure captions should be below the figures; table heads should appear above the tables. Insert figures and tables after they are cited in the text. Use the abbreviation "Fig. 1," even at the beginning of a sentence.

TABLE I. TABLE STYLES

Table Head	**Table Column Head**		
	Table column subhead	***Subhead***	***Subhead***
copy	More table copy[a]		

[a.] Sample of a Table footnote. *(Table footnote)*

[b.]

We suggest that you use a text box to insert a graphic (which is ideally a 300 dpi resolution TIFF or EPS file with all fonts embedded) because this method is somewhat more stable than directly inserting a picture.

To have non-visible rules on your frame, use the MSWord "Format" pull-down menu, select Text Box > Colors and Lines to choose No Fill and No Line.

Fig. 1. Example of a figure caption. *(figure caption)*

Figure Labels: Use 8 point Times New Roman for Figure labels. Use words rather than symbols or abbreviations when writing Figure axis labels to avoid confusing the reader. As an example, write the quantity "Magnetization," or "Magnetization, M," not just "M." If including units in the label, present them within parentheses. Do not label axes only with units. In the example, write "Magnetization (A/m)" or "Magnetization (A (m(1)," not just "A/m." Do not label axes with a ratio of quantities and units. For example, write "Temperature (K)," not "Temperature/K."

ACKNOWLEDGMENT *(Heading 5)*

The preferred spelling of the word "acknowledgment" in America is without an "e" after the "g." Avoid the stilted expression "one of us (R. B. G.) thanks ...". Instead, try "R. B. G. thanks...". Put sponsor acknowledgments in the unnumbered footnote on the first page.

REFERENCES

The template will number citations consecutively within brackets [1]. The sentence punctuation follows the bracket [2]. Refer simply to the reference number, as in [3]—do not use "Ref. [3]" or "reference [3]" except at the beginning of a sentence: "Reference [3] was the first ..."

Number footnotes separately in superscripts. Place the actual footnote at the bottom of the column in which it was cited. Do not put footnotes in the reference list. Use letters for table footnotes.

Unless there are six authors or more give all authors' names; do not use "et al.". Papers that have not been published, even if they have been submitted for publication, should be cited as "unpublished" [4]. Papers that have been accepted for publication should be cited as "in press" [5]. Capitalize only the first word in a paper title, except for proper nouns and element symbols.

For papers published in translation journals, please give the English citation first, followed by the original foreign-language citation [6].

[1] G. Eason, B. Noble, and I.N. Sneddon, "On certain integrals of Lipschitz-Hankel type involving products of Bessel functions," Phil. Trans. Roy. Soc. London, vol. A247, pp. 529-551, April 1955. (*references*)

[2] J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68-73.

[3] I.S. Jacobs and C.P. Bean, "Fine particles, thin films and exchange anisotropy," in Magnetism, vol. III, G.T. Rado and H. Suhl, Eds. New York: Academic, 1963, pp. 271-350.

[4] K. Elissa, "Title of paper if known," unpublished.

[5] R. Nicole, "Title of paper with only first word capitalized," J. Name Stand. Abbrev., in press.

[6] Y. Yorozu, M. Hirano, K. Oka, and Y. Tagawa, "Electron spectroscopy studies on magneto-optical media and plastic substrate interface," IEEE Transl. J. Magn. Japan, vol. 2, pp. 740-741, August 1987 [Digests 9th Annual Conf. Magnetics Japan, p. 301, 1982].

[7] M. Young, The Technical Writer's Handbook. Mill Valley, CA: University Science, 1989.