# M.Tech Dissertation Guidelines of PARUL UNIVERSITY



(2015-16)

M.Tech. (\_\_\_\_)

### 1) PREAMBLE

- 1.1) The provisions in these guidelines govern the conditions for imparting dissertation work, conduction of examination and evaluation of performance of students leading to M.Tech degrees.
- 1.2) These guidelines are effective for all the batches of M.Tech students admitted in the academic year 2015-16 and onwards.
- 1.3) The Board of Studies may change any or all parts of these guidelines at any time.

# 2) GENERAL RULES OF SELECTION/ALLOTMENT OF DISSERTATION TITLE AND ITS SUBMISSION

- 2.1 The selection of dissertation title should be non-trivial, analytical, practical/hardware implementation based, application oriented (relevant to the need of industries) and should involve the elementary research and/or development effort based on a specific theme.
- 2.2) Students may be encouraged to undertake industry defined dissertation. For the industry defined dissertation there shall be one external supervisor of the industry and one internal supervisor of student's own department. It will be the sole responsibility of internal supervisor to define the research problem, scope, methodology and possible outcome from the dissertation in consultation with external supervisor.
- 2.3) Supervisors for the PG dissertation can suggest the titles of dissertation considering their long term goal for research. They can undertake research project with possible funding from DST/GUCOST/ISRO, etc and involve students in part of research project as dissertation. Also, supervisors have to deliver presentation to students on the suggested titles explaining objective, scope, methodology and possible outcome.
- 2.4) Students can also discuss the titles of their choice or titles given from industries with the supervisors and if feasible and accepted by supervisors, can be included in the list of suggested titles.
- 2.5) Consolidated list of suggested dissertation titles will be communicated to the students in semester 2.
- 2.6) Then students should apply to register the titles of their dissertation in the prescribed Performa (Annexure IV) during semester 2.
- 2.7) In case, if two students give choice for same title; title will be allotted based on merit.

- 2.8) Final allotment of titles and supervisors will be published on notice board in consultation with Head of the Department.
- 2.9) Requirement of change in the title of dissertation work should be applied to the Head of the Department with sufficient reasons for the change, before the exam of Dissertation Progress Review-I.
- 2.10) After Dissertation Progress Review-I exam, change of the title will be permitted based on the comments of external examiner. Such cases should apply for the change in titles and should get approval from the Head of the Department.

# 3) DISSERTATION WORK IN COLLABORATION WITH INDUSTRY

- 3.1) It is preferable that students, with the approval of the Head of the Department, visit industry or a Research Laboratory for data collection, discussion of the dissertation, experimental work, survey, field studies, etc. during the project period. Projects sponsored by the Industries or R&D organizations will be encouraged and a close liaison with such organizations will be maintained.
- 3.2) Students shall acknowledge the involvement and / or contribution of an Industries or R&D organizations for their dissertations.
- 3.3) Satisfactory completion certificate issued by the Industry or R&D organization should be attached with the dissertation report.
- 3.4) Internal supervisor, should monitor the progress of his/her students by remaining in contact with the students and external supervisors by emails, video conferencing and/or by making visits to the industries at least once in a month, depending on the need of particular project and as decided by concerned Head of the Department.

### 4) SUPERVISORS

- 4.1) Students shall be assigned one or two supervisors(s) from the Institute.
- 4.2) In case any supervisor leaves the Institute permanently or temporarily for a period exceeding one semester, the Head of the Department shall appoint new supervisor for the concern students. Any such arrangements made, should get approval from Head of the Institute.
- 4.3) A faculty can supervise maximum FOUR M.Tech dissertations at a time.
- 4.4) In case of interdisciplinary areas, at least one supervisor must belong to the discipline in which the student is registered.

### 5) DISSERTATION EVALUATION

5.1) Method of evaluation is as per the following examination scheme and guidelines:

			Teaching				Examir	nation	Total		
Code	Subject		Schem Irs/We	_	Cr	External		Internal			
		L	Т	Р		Th	Pr	Th	*C.E.	Pr	
	DISSERTATION PROGRESS REVIEW - I		8		8		60	-	40	-	100
	DISSERTATION PART-I		15		15		120	-	80	-	200
	TOTAL		23		23		180		120		300

				Teachi	ng		<b>Examination Scheme</b>					
Code		Subject	Scheme (Hrs/Week)		Cr	External		Internal		Total		
			L	T	P		Th	Pr	Th	*C.E.	Pr	
		DISSERTATION PROGRESS REVIEW - II		8		8		60	-	40	-	100
		DISSERTATION PART-II	-	15		15		120	1	80	-	200
		TOTAL		23		23		180		120		300

L=Lecture, T=Tutorial, P=Practical, Th =Theory, Pr=practical, \*C.E.=continuous evaluation

- 5.2) For continuous evaluation (\*CE), a comprehensive internal assessment of the dissertation work should be made by an internal review panel formed of Head of the Department, supervisor and at least 2 senior faculty with expertise in same field of dissertation work.
- 5.3) Internal review panel will review the progress of the students in the last week of 1<sup>st</sup> and 3<sup>rd</sup> month of semester III and semester IV (i.e two presentation in each semester in front of internal review panel) and finally give his/her assessment of the work done by the students for internal CE marks with comments of the review in the review card.
- 5.4) Students must prepare the spiral bound reports for DISSERTATION PROGRESS REVIEW–I, DISSERTATION PART-I and DISSERTATION PROGRESS REVIEW–II. Students have to get the reports signed by supervisor(s), Head of the Department and Head of Institute one week before the date of exam. Every student must follow the guidelines for preparation of dissertation report as given in Annexure I.

5.5) Work to be completed by the students till the internal review (Internal CE) and external viva (External Pr) exam should be as follows:

Sem	Subject and Sub. Code	Details	Work to be complete	mark s	Format for evaluation
Sem 3	DISSERTATION PROGRESS REVIEW - I	Internal review 1 for continuous evaluation (Internal-CE) (To be taken at the end of 1 <sup>st</sup> month of sem 3)	Students should demonstrate in-depth knowledge and thoughtful application in stating an in-depth analysis of key theories supporting the study, problem definition must be complete. In this	40	Annexure V

	T	T			T ·
			presentation students have to teach the theory related to dissertation title.		
		DISSERTATION PROGRESS REVIEW – I (External-Pr) (To be taken at the end of 2 <sup>nd</sup> month of sem 3)	Literature review and problem definition with objectives should be complete. Presentation of literature review should be in terms of table comparing different points.	60	Annexure VI
	DISSERTATION PART-I	Internal review 2 for continuous evaluation (I-CE) (To be taken at the end of 3 <sup>rd</sup> month of sem 3)	Demonstrate understanding, application of relevant methodology, techniques and analysis with 20% of work completion.	80	Annexure VII
	.,,,,,	DISSERTATION PART-I (External- Pr) (To be taken at the end of sem 3)	40% of work should be complete, future action plan/methodology and outcomes must be clear.	120	Annexure VIII
	DISSERTATION PROGRESS REVIEW - II  DISSERTATION PROGRESS REVIEW - II  DISSERTATION PROGRESS REVIEW - (External-Pr) (T be taken at th end of 2 <sup>nd</sup> mont of sem 4)  Internal review for continuou evaluation (I-Cl (To be taken a the end of 3 month of sem 4  DISSERTATION PART-II (External-Pr) (T	evaluation (I-CE) (To be at the end of 1 <sup>st</sup> month of	60% of work to be complete (If dissertation is based on simulation/analysis and hardware then 100% simulation/analysis work should be complete)	40	Annexure IX
Sem 4		PROGRESS REVIEW – II (External-Pr) (To be taken at the end of 2 <sup>nd</sup> month	80% of work should be complete.	60	Annexure X
		Internal review 4 for continuous evaluation (I-CE) (To be taken at the end of 3 <sup>rd</sup> month of sem 4)	90% of work should be complete.	80	Annexure XI
		PART-II (External-Pr) (To be taken at the	100% of work should be complete, reporting the study's main results/findings with clear interpretation and discussion of the results.	120	Annexure XII

### 5.6) Dissertation and External Viva-Voce:

- a) If any student has not done satisfactory work then internal review panel may not allow the student for external practical exam.
- b) Review Cards for all the previous reviews along with remedial review (if applicable) should be submitted along with the dissertation report.

- c) Students must submit a dissertation report on the project work carried out by him/her. The guidelines for preparation of dissertation report shall be followed by every student as per guidelines given in Annexure I.
- d) The final dissertation report for DISSERTATION PART-II shall be submitted on or before the submission date mentioned in academic calendar.
- e) For DISSERTATION PART-II, three hard bound copies (for external examiner, department library and student copy) along with a soft copy (in CD containing pdf of the report, certificate of paper published and detailed paper, with name, enrollment number, branch, year of admission of the student written on the CD) of the dissertation report shall be submitted to the Head of the Department before final examination of DISSERTATION PART-II on or before the date notified by the University. Reports must be certified by the supervisor, Head of the Department and the Head of the Institution.
- f) Dissertation viva voce will be held within the date fixed in the academic calendar and the grades will be finalized. External examiner will evaluate dissertation work in semester III and semester IV for DISSERTATION PROGRESS REVIEW-I, DISSERTATION PART-I, DISSERTATION PROGRESS REVIEW-II and DISSERTATION PART-II; he/she shall be from outside the Institution. The external expert who examines the dissertation will conduct the viva voce.
- g) Details of the all internal review (Internal CE) and external exams (External Pr) shall be adequately notified so as to enable interested faculty members and students to attend the same.

# Guidelines for writing the PG dissertation report

### **Preamble**

While utmost attention must be paid to the content of the thesis/dissertation report (hereinafter called the 'thesis'), which is being submitted in partial fulfillment of the requirements of the M.Tech degree, it is imperative that a standard format be prescribed. The same format shall also be followed in preparation of all dissertation exam reports and the final soft copies to be submitted.

### **General rules of formatting**

1	D : 11:1:	G : 11 1 C
1	Paper, size and binding	Spiral bound for <b>DISSERTATION PROGRESS REVIEW – I,</b>
		DISSERTATION PART-I and DISSERTATION PROGRESS
		REVIEW – II, A4 size and
		Hard bound with bond paper, A4 size for
		DISSERTATION PART-II.
2	Cover	(Please refer annexure II for the format)
		For DISSERTATION PART-II, tan/black, water proof
		bind, with "title and batch-year of admission"
		written on one edge.
3	Total number of pages	For <b>DISSERTATION PART-II</b> , not less than 60
		(including references, questionnaires and other
		annexure)
4	Page margins	Top and bottom margins should be 24.5 mm (i.e
		1"=24.5mm), right margin should be 20 mm, and the
		left margin should be 35 mm for both textual and
		non textual (figures, tables, etc) pages. The header
		footer should be 10 mm each.
5	Line spacing	double line/1.5
6	Font	1) Main Heading (section):-
		16 font size(Times New Roman, Bold)
		2) Sub Heading (subsection):-
		14 font size(Times New Roman, Bold,
		Italic)
		3) Details after sub heading (sub subsections) :-
		12 font size(Times New Roman)
7	Front Covers	The front covers shall contain the following
		details:
		#Full title of thesis in 6 mm 22 point's size font
		properly centered and positioned at the top.
		#Full name of the candidate in 4.5 mm 15 point's

	1	
		size font properly centered at the middle of the
		page.
		#Replica of the Institute symbol followed by the
		name of department, name of the Institute and the
		year of submission, properly centered and located
		at the bottom of page.
		For dissertation part-II,
		Lettering
		All lettering shall be embossed in gold.
		Bound back
		Title and batch-year of admission (i.e. Batch 2015)
		shall also be embossed on one edge in gold.
		Blank Sheets
		In addition to the white sheets (binding
		requirement) two white sheets shall be put at the
		beginning and the end of the thesis.
8	Paragraph	The first line of each paragraph should normally
		be indented by five characters or 12mm. A
		candidate may, however, choose not to indent if
		he/has has provided sufficient paragraph
		separation.
9	Chapter format	Each chapter shall begin on a fresh page (odd
		number page in case of double sided printing) with
		an additional top margin of about 1". Chapter
		number and title shall be printed at the center of
		the line in 6mm font size (18pt) in bold face using
		both upper and lower case (all capitals or small
		capitals shall not be used). A vertical gap of about
		25mm shall be left between the Chapter number
		and Chapter title lines and between chapter title
		line and the first paragraph.
10	Sections and Subsections	A chapter can be divided into Sections,
		Subsections and Sub subsections so as to present
		different concepts separately. Sections and
		subsections can be numbered using decimal
		points, e.g. 2.2 for the second section in Chapter 2
		and 2.3.4 for the fourth Subsection in third Section
		of Chapter 2. Chapters, Sections and Subsections
		shall be included in the contents with page
		numbers flushed to the right. Further subsections
		need not be numbered or included in the contents.
		The Section and Subsections titles along with their
		numbers in 5 and 4mm (14 pt) fonts, respectively,
		in bold face shall be flushed to the left with 15 mm
		space above and below these lines. In further
		subdivisions character size of 12 pt with bold face,
		=
		small caps and italics may be used for the titles
		flushed left. These shall not feature in the contents.

11	Table / Figure Format	As far as possible tables and figures should be
		presented in portrait style. Small size table and
		figures (less than half of writing area of a page)
		should be incorporated within the text, while larger ones may be presented on separate pages.
		Table and figures shall be numbered chapter wise.
		For example, the fourth figure in chapter 5 will
		bear the number Figure 5.4 or Fig 5.4 Table
		number and title will be placed above the table
		while the figure number and caption will be
		located below the figure. Reference for Table and
		Figures reproduced from elsewhere shall be cited
		in the table and figure caption, e.g. [12].
12	Page numbering	In footer with right aligned Numerals, Pagination
		for pages before the Introduction chapter shall be
		in lower case Roman numerals, e.g., "iv" and for
		other pages write number as "1".
13	Footer	Footer should include "M.Tech (Name of
		Program), Name of Institute, Parul University"
14	References	All references must be cited in the text by the
		reference number using superscripts. No links
		between superscripts in the text and actual
		references in the Reference Sections may be used.

### Parts of the dissertation report:

### Organization of the Thesis/Dissertation report

This thesis shall be presented in a number of chapters, starting with introduction and ending with summary and conclusion. Each of the other chapters will have a precise title reflecting the contents of the chapter. A chapter can be subdivided into *sections*, *subsections and sub subsection* so as to present the content discretely and with due emphasis. When the work comprises two or more mutually independent investigations, the thesis may be divided into two or more parts, each with an appropriate title. However, the numbering of chapters will be continuous right through, for example Part 1 may comprise Chapters 2-5, Part Two, Chapters 6-9.

Please follow the following sequence in the report:

**1.** Page 1 should contain the title of the dissertation on the top of the page with **B**old font, name of the candidate, department, institution and the university to which affiliated. (Please refer Annexure II for the format.)

### **Title**

- a. What is it for? More than just an arbitrary label for naming your work, a dissertation title serves as the first summary of what your piece is all about. A good dissertation title must communicate the essence of your research project and give an accurate sense of what follows.
- b. **Language.** Take time and effort to formulate a dissertation title in good English. Consult a language specialist if needed.
- c. **Clarity.** Ambivalence and ambiguity have no place here; a clear, lucid and descriptive title is the best way to make a confident opening statement to the person who will eventually mark the work.
- d. **Focus. Keep the title short and relevant** to the aims of your research. There is no room whatsoever for extraneous material and padding. The specificity of your title will indicate the focus of your approach as a whole, and therefore demonstrate certain clarity of thought.
- e. **Scope.** The full extent of the reach of your research will be discussed in the introductory chapter of your dissertation, but in an impressionistic sense the title can serve to give an idea as to the breadth of your purview. Indicate the span of your dissertation if possible.
- f. **Distinctiveness.** A good dissertation title will be instantly recognisable and distinct from those of other extended pieces of writing on the same or related topics. To this end it is advisable to avoid dry and generic vocabulary where possible and mark out your dissertation as being somewhat unique.
- g. **Avoidance of proper names of the persons or institutions.** Do not include proper names of individuals or institutions involved in the research.
- **2. Certificate:** certificate should contain the following.
  - a. Name of the candidate
  - b. Enrollment number
  - c. Branch of study
  - d. Institution where the work was carried out
  - e. Title of dissertation
  - f. Signature and name of the supervisor.

- g. Signature and name of the Head of the Department.
- h. Signature and name of the Head of the Institute.
- i. **Originality:** Certificate that this is an original work done by the student and no part of this work was used as basis for obtaining any other degree or publication or part thereof. Check originality of thesis with help of open source anti-plagiarism database. This report lists % similarity with other published literatures. Preferably it should be <20%. Students have to take a print out of 1st page of plagiarism report and it is required to be signed by himself/herself as well as by respective supervisor and attach at the end in the reports of all external exams for dissertation.

All dissertation thesis will be made available on University website. Later on if there is any genuine complaint regarding plagiarism then in this case respective student and his/her supervisor should be liable for all consequences. As per norms, University can revoke M.Tech degree conferred to such students.

i. Please use the formats of Annexure III for the certificates.

### 3. Acknowledgements

Generally, all help and assistance, like guidance, inspiration, moral support etc., can be acknowledged, in this order.

- a. Scientific, theoretical, practical guidance
- b. Encouragement-both authoritative and inspirational
- c. Support with recording data and statistical analysis
- d. Help with graphics, charts and tables
- e. Insightful comments and corrections
- f. Cooperation from peers/seniors/other faculty
- g. Technical, instrumental laboratory support
- h. Broad institutional support

### The order, therefore would be:

Supervisor

Co-supervisors by seniority

Head of the department, if different

Senior faculty

Senior postgraduates

Statistician

Sponsors if any

Technicians

Head of the Institute.

Acknowledgements to one's family and friends are out of place in a dissertation, as it is an official document.

**4. Table of contents:** This should contain the names of sections and page numbers against them.

Sr. No.	Content	Page Number
	Cover Page	i
	Certificate	ii
	Abstract	iii
	Acknowledgement	iv
	Table of Contents	V
	List of Abbreviations	vii
	List of Figures	viii
	Chapter 1: Introduction	1
	Chapter 2: Aim and Objectives of the study	3
	Chapter 3: Review of Literature	4
	Chapter 4: Methodology: Materials and Methods	
	Chapter 5: Observations, results and Discussion	
	Chapter 6: Conclusions & Summary	
	Annexure	
	References	
	Dissertation Review Card	
	Compliance Report of all previous exam comments	

### 5. List of abbreviations used in the text

This avoids the need to explain the full terminology at every step. Abbreviations should be taken from standard terminology so that the need to consult this page is reduced to the minimum.

### 6. Aims and objectives of the study

This should be expressed as points. Brief about what you want to do, point by point and what result do you expect to achieve. It shall justify and highlight the problem posed, define the topic and explain the aim and scope of the work presented in the thesis. It may also highlight the significant contributions from the investigation.

### 7. Review of literature

This should not be more than 20 pages. The review should be comprehensive and should be confined to the topic of study, and should compulsorily include the most recent articles published in relation to your study from reputed journals. Every effort must be made to collect as much information as possible. One or two of the most relevant pictures may be included. A table containing comparison of similar studies done earlier may also be included. It shall present a critical appraisal of the previous work published in the literature pertaining to the topic of the investigation.

The author cannot put forward his/her own ideas/ suggestions, or use his own derivations in review of literature. The section should contain only the facts of already done research in this area.

### 8. Methodology (Report on the present investigation)

- a. Due importance shall be given to experimental setups, procedures adopted, techniques developed, methodologies developed and adopted.
- b. While important derivations/formulae should normally be presented in the text of these chapters, extensive and long treatments, copious details and tedious information, detailed results in tabular and graphical forms may be presented in Appendices. Representative data in table and figures may, however, be included in appropriate chapters.
- c. Figures and tables should be presented immediately following their first mention in the text. Short tables and figures (say, less than half the writing area of the page) should be presented within the text, while large table and figures may be presented on separate pages.
- d. Tables should be serially numbered, accurately named with reference to the data presented and the statistical analysis (if any).
- e. Equations should form separate lines with appropriate paragraph separation above and below the equation line, with equation numbers flushed to the right. It should include every detail of how the work is undertaken. Minute details of

standard procedures may be omitted and are given at the end of the report under annexure. Mention ethical issues and methods adopted for statistical analysis.

### 9. Observations and Results

The findings of the study should be analysed and should be arranged in tables, charts and diagrams. The photographs of observations taken during the course of study should also be included. The text in this chapter should explain the observations, table wise.

### 10. Discussion

- a. Analyze data and relate them to other studies.
- b. Possible explanations for any variation in the results
- c. Significance of results in terms of hypothesis and their practical implications
- d. Evaluate strengths and weaknesses of work
- e. Recommendations for further work

This section should be in more than 20 pages. The findings of the study should be analysed along with the already known information about the problem studied. The implications of the observations of the study should be projected. The limitations of the study and recommendations of areas for further study in future can also be discussed.

The student can use his ideas and derivations based on the findings of his/her study. He/she can also project the difficulties faced by him/her during the course of study, and suggest methods to overcome them.

### 11. Conclusions & Summary

This will be the final chapter of the thesis. A brief report of the work carried out shall form the first part of the Chapter. Conclusions derived from the logical analysis presented in the Results and Discussions Chapter shall be presented and clearly enumerated, each point stated separately. Scope for future work should be stated lucidly in the last part of the chapter.

### 12. Annexure

This section contains: the Performa used for the study, ethical clearance certificate, consent forms used in the study, master chart of all the data, details of the standard procedures used (which are avoided in materials and methods), and any other information which is relevant.

Detailed information, lengthy derivations, raw experimental observations etc. are to be represented in the separate annexure, which shall be numbered in Roman Capitals (e.g. "Annexure IV").

### 13. References

The word 'references' is appropriate for dissertations, rather than 'bibliography'.

This should follow the Annexure, if any, otherwise the Summary and Conclusions chapter. References cited should follow the style given below:

### **PAPERS**

- 1. Thiel WJ and Nguyen LT, "Fluidized bed film coating of an ordered powder mixture to produce micro encapsulated ordered units." *J. Pharm. Pharmacol.* **1984**, *36*, 145-152.
- 2. Isyumov N, "Criteria for acceptance of wind induced motionsof tall buildings", International Conference on Tall buildings, Rio DeJanerio, CTBUH, 2003.

### **WEB SITE**

3. Boggs, D, "Acceleration and Drift due to Gust forces", July 2009, www.cppwind.com/papers/structural/PEAKvsRMS.pdf

### **BOOKS**

4. PelzarMJ., Chan ECS., and Krieg NR. In Microbiology; 5th Edn; Tata McGraw Hill Publishing Company Limited, New Delhi, 1993, pp 536.

### **DISSERTATIONS**

- 5. Vaishnav D.K, PhD Thesis, "....." Gujarat Technological University, July 2012.
- 6. Pathak VK. Ph.D. Thesis, "....", Gujarat University, 1979.

### **PATENTS**

7. Trevor M, Aggelos N and Helmut S.Process for the preparation of aceclofenac. European Patents EP 1082290 A1, 1999.

### 14. DISSERTATION REVIEW CARD:

Review cards should be attached after references. After review cards, students have to put compliance report of all such comments.

In nut cell, explain the answers of the following questions for different parts of your thesis:

Introduction	Why did you do it?
Aims and Objectives	What do you want to achieve?
Review of literature	What have others done?
Methods	How did you do it?
Results	What did you find?
Discussion	What does it mean?
Summary and Conclusions	What do you want to say now?
Annexure	-
References	The raw material employed in the study

### M. Tech REQUIREMENTS

M.Tech dissertation will be granted only if the student's one research paper is accepted or published in refereed National or International journal or the national/international conference. The students may also include reprints of their publications after the literature citation.

### [Thesis Title]

(6 blank lines)

By (4 lines)

Your name as found in official Parul records, i.e Patel Harsh A. Enrollment Number: xxxxxxxxxx

(three lines)
Supervised by
[Supervisor's name
Name of the Department
Name of the Institute]

(6 blank lines)

A Thesis Submitted to
Parul University in Partial Fulfillment of the Requirements for
the Degree of Master of Technology in
[Name of Program]

(3 blank lines)

Month and Year (2 blank lines)



Name of the Department,
Name of the Institute,
Parul University
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Phone: +91-2668-260312/202/300/307

Email: admissions@paruluniversity.ac.in,parultrust@paruluniversity.ac.in

### [SAMPLE THESIS CERTIFICATES]

### **DECLARATION**

$\mathbf{T}$	hesis	Tit1	۱۵۰

Degree for which the Thesis is submitted:

I give undertaking that this dissertation thesis contains my own ideas and work in my own words. I have adequately cited and listed other's ideas or words in the reference materials. All the parts of the thesis are prepared without any plagiarism. I have adhered to all principles of academic honesty and integrity. No falsified or fabricated data have been presented in the thesis. I understand that any violation of the above will cause for disciplinary action by the Institute, including revoking the conferred degree, if conferred, and can also evoke penal action from the sources which have not been properly cited or from whom proper permission has not been taken.

(Signature)
Name of the Student:
Enrollment no.:

Date: --/--/

### **CERTIFICATE**

It is certified that the work contained in this dissertation thesis entitled 'dissertation title' submitted by -----NAME OF THE STUDENT-----, ----Enrollment No.------ studying at ------ (Institute name)------ for the award of M.Tech (-----Name of Branch-------) is absolutely based on his/her own work carried out under my/our supervision and that this work/thesis has not been submitted elsewhere for any degree/diploma.

on his/her own work carried out under my/our submitted elsewhere for any degree/diploma.	pervision and that this work/thesis has not been
[Parul Universit	y Watermark]
Date:	
Place:	
Signature and Name of internal supervisor	
Signature and Name of external supervisor (if	any)
Signature and Name Head of Department	Signature and Name of Head of Institute
•	-

### **Seal of Institute**

(If the work is carried out in industry then a certificate from industry shall also be attached.)

### **COMPLIANCE CERTIFICATE**

	mbodied in this dissertation thesis entitled "
(Institute name) for partial tuniversity. He/ She has complied	fulfillment of M.Tech degree to be awarded by Paru the comments of the Dissertation Progress Review-I tion Progress Review-II with my/our satisfaction.
(Par	rul University water mark)
Date: Place:	
Signature and Name of Student	Signature and Name of internal supervisor
	Signature and Name of internal supervisor (if any)
PAPER PUB	LICATION CERTIFICATE
carried out by Mr./Ms(Institute name) for partial fulfillm has published/accepted article en	mbodied in this dissertation thesis entitled "
Date: Place:	
Signature and Name of Student	Signature and Name of internal supervisor

### THESIS APPROVAL CERTIFICATE

This is to certify that research work embodied in this dissertation thesis entitled "
(Institute name) is approved for the degree of M.Tech with specialization of(Branch name) by Parul University.
(Parul University water mark)
Date: Place:
External Examiners' Sign and Name:
1)
2)

# M.Tech (Branch: Proposal for Dissertation Title

[Title of Dissertation]:		
Submitted By: Name of the student (as f Enrollment Number:	ound in official Parul Un	iversity records):
Supervisor: [Supervisor's	s name with qualification	and designation]
Abstract: [Abstract tex	t, Maximum 300 words]	consists of
1.	Objective and scope of t	the work
2.	Experimental/ Computa	tional work required with methodology
3.	Application of selected	title
4.	Requirement of fund:	
Signature and Name of S	tudent	Signature and Name of Internal Supervisor
		Signature and Name of External Supervisor

-----Department

**M.Tech (Name of Program)** 

Mark sheet for internal review 1 for continuous evaluation (03207201)

Semester 3 (Batch: [admission year i.e. 2015])

**Date of Exam:** 

Sr. No.	Enrollment Number	Name of the Student	Technical skill on the selected title (10 marks)	Presentatio n skill ( 10 marks)	Questions and answers (20 marks)	Total (40 marks)

Sign	and 2	Name	of exa	miners:	1)
				miners:	2)
					υ,

ANNEXURE - VI

### PARUL UNIVERSITY, FACULTY OF ENGINEERING AND TECHNOLOGY

 $\hbox{------} Department \\$ 

M.Tech (Name of Program)

Mark sheet for DISSERTATION PROGRESS REVIEW - I (03207201)

Semester 3 (Batch: [admission year i.e. 2015])

Date of Exam:

Sr. No	Enrollment Number	Name of the Student	Literature Survey (10 marks)	Problem Definition with objectives (20 marks)	Presentatio n skill ( 10 marks)	Question s and answers (20 marks)	Total (60 marks)

Sign and Name of examiners: 1)

-----Department

**M.Tech (Name of Program)** 

Mark sheet for internal review 2 for continuous evaluation (03207202)

Semester 3 (Batch: [admission year i.e. 2015])

Date of Exam:

Sr. No.	Enrollment Number	Name of the Student	Progress made (20 marks)	Technical skill about the work completed (30 marks)	Presentati on skill (10 marks)	Questions and answers (20 marks)	Total (80 marks)

Sign and Name of examiners: 1)	
2)	
3)	ANNEXURE – VIII

### PARUL UNIVERSITY, FACULTY OF ENGINEERING AND TECHNOLOGY

-----Department

M.Tech (Name of Program)

Mark sheet for DISSERTATION PART-I (03207202)

Semester 3 (Batch: [admission year i.e. 2015])

**Date of Exam:** 

Sr. No	Enrollment Number	Name of the Student	Progress made (30 marks)	Technical skill about the methodology and work completed (30 marks)	Future action plan and clarity about outcome (30 marks)	Presentati on skill (10 marks)	Question s and answers (20 marks)	Total (120 marks)

Sign and Name	of examiners:	: 1) 2)	
		,	

### -----Department

M.Tech (Name of Program)

Mark sheet for internal review 3 for continuous evaluation (03207251)

Semester 4 (Batch: [admission year i.e. 2015])

**Date of Exam:** 

Sr. No	Enrollment Number	Name of the Student	Quality and quantity of work done (10 marks)	Technical skill about the methodology, work done and discussion of results (10 marks)	Presenta tion skill ( 10 marks)	Questions and answers (10 marks)	Total (40 marks)
			_				

Sign and Name of examiners	: 1)
	2) 3)

ANNEXURE - X

### PARUL UNIVERSITY, FACULTY OF ENGINEERING AND TECHNOLOGY

-----Department

M.Tech (Name of Program)

Mark sheet for DISSERTATION PROGRESS REVIEW - II (03207251)

Semester 4 (Batch: [admission year i.e. 2015])

Date of Exam:

Sr. No	Enrollment Number	Name of the Student	Quality and quantity of work done (10 marks)	Technical skill about the methodology, work done and discussion of results (20 marks)	Presenta tion skill (10 marks)	Question s and answers (20 marks)	Total (60 marks)

Sign and Name of examiners:	1) 2)	

### -----Department

### M.Tech (Name of Program)

### Mark sheet for internal review 4 for continuous evaluation (03207252)

Semester 4 (Batch: [admission year i.e. 2015])

### **Date of Exam:**

Sr. No	Enrollment Number	Name of the Student	Quality and quantity of work done (20 marks)	Technical skill about the work done and discussion of results (30 marks)	Presenta tion skill (10 marks)	Questions and answers (20 marks)	Total (80 marks)
			_			_	

Sign	and	Name	of	exam	iners:	1)
O						2)
						3)

ANNEXURE – XII

### PARUL UNIVERSITY, FACULTY OF ENGINEERING AND TECHNOLOGY

-----Department

**M.Tech (Name of Program)** 

### Mark sheet for DISSERTATION PART-II (03207252)

Semester 4 (Batch: [admission year i.e. 2015])

### Date of Exam:

Sr. No	Enrollment Number	Name of the Student	Quality and quantity of work done (30 marks)	Technical skill about the work done and discussion of results and conclusions (30 marks)	Quality of report (30 marks)	Presenta tion skill ( 10 marks)	Question s and answers (20 marks)	Total (120 marks)

Sign and Name of examiners: 1)

## **Dissertation Rubrics**

Sr. No	Description	Criteria for scores above 90%	Criteria for scores between 80% and 89%	Criteria for scores between 70% and 79%	Criteria for scores between 60% and 69%	Criteria for scores between 50% and 59%	Criteria for scores below 50%
1	Technical Skill	Demonstrates in- depth knowledge and thoughtful application in stating an in- depth analysis of key theories supporting the study.	The candidate is generally clear in stating an indepth analysis of key theories supporting the study.	The candidate has done sufficient analysis of key theories supporting the study.	The candidate has studied the theories and done some level of analysis supporting the study.	The candidate has studied the theories but lacking the indepth analysis.	Demonstrates minimal knowledge and application of presenting the theoretical frame work of the study.
2	Problem Definition with objectives	The title, scope and objectives of the dissertation are innovative and original.	The title, scope and objectives of the dissertation are original.	The title, scope and objectives of the dissertation are sufficiently defined and are original.	The title, scope and objectives of the dissertation are defined but are not original.	Although the title, scope and objectives of the dissertation are defined but are not original.	The title, scope and objectives of the dissertation are poorly defined and are not original.
3	Literature Survey	Excellent knowledge about the previous works, ,interpretation and applications of the relevant literature.	Convincing knowledge, coverage, interpretation and applications of the relevant literature.	Sufficient knowledge, interpretation and applications of the relevant literature.	Sufficient knowledge of the relevant literature. Interpretation and applications of the literature need to improve.	A basic overview of the literature, with limited interpretation and applications.	Knowledge, interpretation and applications of the literature are not proper, used irrelevant literature.
4	Methodology	Demonstrates advanced control, understanding, depth and insight in the application of relevant research methodology, techniques and analysis.	Demonstrates very good control and understanding in the application of relevant research methodology, techniques and analysis.	Thorough knowledge and understanding of the significance of the research. Demonstrates effective application of relevant research methodology, techniques and analysis.	Adequate knowledge and understanding of the significance of the research. Good organization and application of research methodology.	Satisfactory understanding of the significance of the research and a reasonably effective interpretation and application of the methodology.	The work displays such a low level of research methodology, interpretation, findings and layout that it can be regarded as unacceptable.
5	Results/Findings	The chapter organizes and reports the study's main results/findings, including the clear presentation of relevant quantitative (statistical) and /or qualitative (narrative) data.	The chapter organizes and reports the study's main results/findings, but presentation of relevant quantitative (statistical) and /or qualitative (narrative) data is not proper.	The chapter organizes and reports the study's main results/findings without the supportive data.	Discussion about the results/finding s can be still better explained.	All the results/finding of the study are not discussed.	results/findin gs of the study are not clearly or sufficiently discussed with appropriate data. Findings are poorly organized and

							statistical analyses (if used) are not appropriate or accurate.
6	Discussion/ Conclusions	The chapter clearly interprets and discusses the results in light of the study's research questions, literature review, and conceptual framework, concluding with recommendations for policy and practice.	The chapter clearly interprets and discusses the results in light of the study's research questions, literature review. The connections to the purpose of the study and relevance to the existing body of knowledge are clear.	The discussion, conclusions and recommendation s are clearly explained or substantiated by the results/findings. The connections to the purpose of the study and relevance to the existing body of knowledge are clear.	The discussion, conclusions and recommendati ons are clearly explained or substantiated by the results/finding s.	The discussion, conclusions and recommendatio ns are clearly explained but for some results it is lacking the support by the results/findings .	The discussion, conclusions and recommendat ions are not clearly explained or substantiated by the results/findin gs. The connections to the purpose of the study and relevance to the existing body of knowledge are not clear.
7	Report	The report follows all the standards of the format. There are no or extremely few linguistic and typographical errors, grammatical and almost no rectifications are required.	The report is of good quality. There are few linguistic and typographical errors, and few linguistic and/or typographical rectifications required.	The report is of acceptable quality. There are less important omissions and linguistic and/or typographical errors. Editing would improve the text.	The report requires attention. There are omissions and linguistic and/or typographical errors. Editing/revisi on would improve the work and errors should definitely be rectified.	The report requires serious attention, as there are numerous linguistic and typographical mistakes. These errors should definitely be rectified.	There are serious, conspicuous and unacceptable linguistic and typographical errors. The writing style and layout are plagued by serious problems and should be reviewed as a whole. Most of the material is copied from others without citing.
8	Questions and answers	Student could accurately and firmly answer each question asked to him.	Student could accurately and firmly answered most of questions.	Student could accurately and firmly answer more than 50% questions.	Student could accurately and firmly answer a few questions.	Student could accurately and firmly answer only one or two questions.	Student could not answer all the question asked to him.
9	Presentation Skill	Shows a full understanding of the topic. Presentation is very easy to follow and content very well explained. Additional information included. Very Good	Shows a good understanding of the topic. Presentation is easy to follow and content well explained. All information included. Very Good intonation, body language and use	Shows a good understanding of parts of the topic. Most information included. Average intonation, body language and use of the space.	Shows a good understanding of parts of the topic. Presentation is little confusing to follow and content not clearly explained. Most	Does not seem to understand the topic very well. Presentation is hard to follow and content not effectively explained. Missing	Does not seem to understand the topic very well.  Presentation is hard to follow and content not effectively

		1		Τ			
		intonation, body	of the space.		information	information.	explained.
		language and use			included.	Incorrect	Missing
		of the space.			Sometimes	intonation,	information.
					show good	body language	Inappropriate
					intonation,	and use of the	intonation.
					body		body
					language and	space.	-
					use of the		language and
					space.		use of the
							space.
10	Overall	Deserves a	Deserves a	The dissertation	Seen as a	The academic	The
		distinction	distinction. In the	is a very	whole, the	standard	dissertation
		without reserve.	top 20% of all	acceptable piece	dissertation is	of the	does
		A really excellent	master's degree	of work, but	of an	dissertation is	not meet the
		dissertation.	dissertations.	needs that	acceptable	sufficient to	minimum
		In the top 10% of		extra spark to	academic	merit a	academic
		all master's		turn it into an	standard and	pass mark. The	requirements,
		degree		above-average	deserves	work, however,	and it is
		dissertations.		dissertation.	an average	is in need of	unlikely that
					mark. Some	serious editing.	even large
					parts requires		scale
					revision/editin		revision/editi
					g.		ng would
							bring the
							dissertation
							up to
							scratch.
							Additional
							research may
							be required.





### (Dissertation Review Card)

Name of Student:	
Enrollment No.:	
Student's Mail ID:-	
Student's Contact No. :	
College Name:	
College Code:	
Branch Code: Branch Name:	
Broad area of Title:	
Title of Dissertation:	
Supervisor's Details	Co-Supervisor's Details OR External Supervisor's Details
Name:	Name:
Institute:	Institute/Organization:
Institute Code:	Institute Code (in case of co-supervisor):
Mail ID:	Mail ID:
Mobile No.	Mobile No.

# Comments for Internal Review 1 Date: (Internal-CE for DISSERTATION PROGRESS REVIEW - I) (03207201)(Semester 3) (To be taken in the last week of 1st month of the semester 3)

Sr. No.	Comments given by internal review panel	Modification done based on Comments (To be filled by Supervisor)
		Name of Supervisor:
		Sign of Supervisor:

Particulars		Internal Review Panel				
	Expert 1	Expert 2	Expert 3			
Name:						
Institute:						
Institute Code:						
Mobile No.:						
Sign:						

# Dissertation Progress Review-I (03207201) Date: (External PR) (Semester 3)

Enro	ollment No. of Student:
Title	e:
	1. Problem Definition (title) is appropriate or not (Yes/ No)
	2. Clarity of objectives. (Yes/No)

# Comments for Dissertation Progress Review-I (03207201) Date: (External PR) (Semester 3)

(To be taken in the last week of 2<sup>nd</sup> month of the semester 3)

Sr. No.	Comments given by E (Dissertation Prog (03207)	gress Review - I)	Modification done based on Comments (To be filled by Supervisor)			
				_		
				_		
				_		
				_		
				_		
				_		
				_		
				_		
			Name of Supervisor:			
			Sign of Supervisor:			
*Approved						
Approved with suggested recommended changes Please tick on any one  Not Approved						
Particulars		Expert 1	Expert 2			
Name:						
Institute/	University/Organization:					
Mobile No	).:					
Sign:						

### **Details of External Examiners:**

### **Comments for Internal Review 2**

(Internal-CE for DISSERTATION PART- I) (03207202) (Semester 3) (To be taken in the last week of 3<sup>rd</sup> month of the semester 3)

Sr. No.	Comments given by internal review panel	Modification done based on Comments (To be filled by Supervisor)
		27 00
		Name of Supervisor:
		Sign of Supervisor:

Particulars		Internal Review Panel			
	Expert 1	Expert 2	Expert 3		
Name:					
Institute:					
Institute Code :					
Mobile No. :					
Sign:					

Date:

### Comments for Dissertation Part -I (03207202) (External PR) (Semester 3)

Date:

(To be taken at the end of the semester 3)							
mont No. of Student							

Enrollmer	nt No. of Student :					
Sr. No.	Comments given by E (Dissertation Part		Modification done based on Comments based on Comments (To be filled by Supervisor)			
			Name of Supervisor:			
			Sign of Supervisor:			
App	roved roved with suggested rec t Approved	rommended changes (	Please tick on any one			
Details	of External Exami	ners:				
	Particulars	Expert 1	Expert 2			
Name:						

Institute/University/Organization:

Mobile No.:

Sign:

#### Comments for Internal Review 3 Date: (Internal-CE for DISSERTATION PROGRESS REVIEW -II)(03207251)(Semester 4)

(To be taken in the last week of 1st month of the semester 4)

Sr. No.	Comments given by internal review panel	Modification done based on Comments (To be filled by Supervisor)
		N 60 :
		Name of Supervisor: Sign of Supervisor:
		Sign of Supervisor:

Particulars		Internal Review Panel				
	Expert 1	Expert 2	Expert 3			
Name:						
Institute:						
Institute Code :						
Mobile No. :						
Sign:						

## Comments for Dissertation Progress Review -II (03207251) Date: (External Pr)(Semester 4) To be taken in the last week of 2nd month of the competer 4)

(To be taken in the last week of  $2^{nd}$  month of the semester 4)

Sr. No.  Comments given by External Examiners (Dissertation Progress Review-II) (03207251):  Name:  Institute/University/Organization:  Modification done based on Comments (To be filled by Supervisor)  Name of Supervisor:  Sign of Supervisor:  Please tick on any one  Not Approved  Details of External Examiners:  Particulars  Expert 1  Expert 2  Name:  Institute/University/Organization:  Mobile No.:  Sign:	Enrollme	nt No. of Student :			
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:	Sr. No.	(Dissertation Prog	gress Review-II)		nments (To be filled by
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					_
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:				Name of	Supervicor:
Approved Approved with suggested recommended changes Please tick on any one Not Approved Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars  Expert 1  Name: Institute/University/Organization: Mobile No.:	•			orgii or o	aper visor.
Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:	Appi one	roved with suggested rec	ommended changes〔		Please tick on any
Name: Institute/University/Organization: Mobile No.:		Detail	ls of External Exa	amine	rs:
Institute/University/Organization: Mobile No.:		Particulars	Expert 1		Expert 2
Mobile No.:	Name:				
	Institute/	University/Organization:			
Sign:	Mobile No	).:			
	Sign:				

# Comments for Internal Review 4 Date: (Internal-CE for DISSERTATION PART- II) (03207252) (Semester 4) (To be taken in the last week of 3<sup>rd</sup> month of the semester 4)

Sr. No.	Comments given by internal review panel	Modification done based on Comments (To be filled by Supervisor)
_		
_		
_		
		Name of Supervisor:
		Sign of Supervisor:

Particulars	Internal Review Panel					
	Expert 1	Expert 2	Expert 3			
Name :						
Institute:						
Institute Code :						
Mobile No. :						
Sign:						

# Comments for Dissertation Part -II (03207252) Date: (External PR) (Semester 4) (To be taken at the end of the semester 4)

<b>Enrollment No. of Student:</b>			

Linonin	ent No. of Student.		
Sr. No.	Comments given by E (Dissertation Part-		Modification done based on Comments (To be filled by Supervisor)
			Name of Supervisor:
			Sign of Supervisor:
	roved	,	
_ <i>App</i>	proved with suggested rec	ommended changes (	Please tick on any one
• Not	Approved		
	Detail	ls of External Exa	aminers:
	Particulars	Expert 1	Expert 2
Name:			
Institute	/University/Organization:		
Mobile N	0.:		
Sign:			

# M.Tech Dissertation Guidelines of PARUL UNIVERSITY



(2015-16)

M.Tech. (\_\_\_\_)

#### 1) PREAMBLE

- 1.1) The provisions in these guidelines govern the conditions for imparting dissertation work, conduction of examination and evaluation of performance of students leading to M.Tech degrees.
- 1.2) These guidelines are effective for all the batches of M.Tech students admitted in the academic year 2015-16 and onwards.
- 1.3) The Board of Studies may change any or all parts of these guidelines at any time.

## 2) GENERAL RULES OF SELECTION/ALLOTMENT OF DISSERTATION TITLE AND ITS SUBMISSION

- 2.1 The selection of dissertation title should be non-trivial, analytical, practical/hardware implementation based, application oriented (relevant to the need of industries) and should involve the elementary research and/or development effort based on a specific theme.
- 2.2) Students may be encouraged to undertake industry defined dissertation. For the industry defined dissertation there shall be one external supervisor of the industry and one internal supervisor of student's own department. It will be the sole responsibility of internal supervisor to define the research problem, scope, methodology and possible outcome from the dissertation in consultation with external supervisor.
- 2.3) Supervisors for the PG dissertation can suggest the titles of dissertation considering their long term goal for research. They can undertake research project with possible funding from DST/GUCOST/ISRO, etc and involve students in part of research project as dissertation. Also, supervisors have to deliver presentation to students on the suggested titles explaining objective, scope, methodology and possible outcome.
- 2.4) Students can also discuss the titles of their choice or titles given from industries with the supervisors and if feasible and accepted by supervisors, can be included in the list of suggested titles.
- 2.5) Consolidated list of suggested dissertation titles will be communicated to the students in semester 2.
- 2.6) Then students should apply to register the titles of their dissertation in the prescribed Performa (Annexure IV) during semester 2.
- 2.7) In case, if two students give choice for same title; title will be allotted based on merit.

- 2.8) Final allotment of titles and supervisors will be published on notice board in consultation with Head of the Department.
- 2.9) Requirement of change in the title of dissertation work should be applied to the Head of the Department with sufficient reasons for the change, before the exam of Dissertation Progress Review-I.
- 2.10) After Dissertation Progress Review-I exam, change of the title will be permitted based on the comments of external examiner. Such cases should apply for the change in titles and should get approval from the Head of the Department.

## 3) DISSERTATION WORK IN COLLABORATION WITH INDUSTRY

- 3.1) It is preferable that students, with the approval of the Head of the Department, visit industry or a Research Laboratory for data collection, discussion of the dissertation, experimental work, survey, field studies, etc. during the project period. Projects sponsored by the Industries or R&D organizations will be encouraged and a close liaison with such organizations will be maintained.
- 3.2) Students shall acknowledge the involvement and / or contribution of an Industries or R&D organizations for their dissertations.
- 3.3) Satisfactory completion certificate issued by the Industry or R&D organization should be attached with the dissertation report.
- 3.4) Internal supervisor, should monitor the progress of his/her students by remaining in contact with the students and external supervisors by emails, video conferencing and/or by making visits to the industries at least once in a month, depending on the need of particular project and as decided by concerned Head of the Department.

#### 4) SUPERVISORS

- 4.1) Students shall be assigned one or two supervisors(s) from the Institute.
- 4.2) In case any supervisor leaves the Institute permanently or temporarily for a period exceeding one semester, the Head of the Department shall appoint new supervisor for the concern students. Any such arrangements made, should get approval from Head of the Institute.
- 4.3) A faculty can supervise maximum FOUR M.Tech dissertations at a time.
- 4.4) In case of interdisciplinary areas, at least one supervisor must belong to the discipline in which the student is registered.

#### 5) DISSERTATION EVALUATION

5.1) Method of evaluation is as per the following examination scheme and guidelines:

		Teaching				Examir	nation	Scheme			
Code	Subject		Scheme (Hrs/Week)		Cr	External		Internal		Total	
		L	Т	Р		Th	Pr	Th	*C.E.	Pr	
	DISSERTATION PROGRESS REVIEW - I		8		8		60	-	40	-	100
	DISSERTATION PART-I		15		15		120	-	80	-	200
	TOTAL		23		23		180		120		300

			Teaching			Examination Scheme					
Code	Code Subject		Scheme (Hrs/Week)		Cr	External		Internal			Total
		L	T	P		Th	Pr	Th	*C.E.	Pr	
	DISSERTATION PROGRESS REVIEW - II		8		8		60	-	40	-	100
	DISSERTATION PART-II	-	15		15		120	1	80	-	200
TOTAL			23		23		180		120		300

L=Lecture, T=Tutorial, P=Practical, Th =Theory, Pr=practical, \*C.E.=continuous evaluation

- 5.2) For continuous evaluation (\*CE), a comprehensive internal assessment of the dissertation work should be made by an internal review panel formed of Head of the Department, supervisor and at least 2 senior faculty with expertise in same field of dissertation work.
- 5.3) Internal review panel will review the progress of the students in the last week of 1<sup>st</sup> and 3<sup>rd</sup> month of semester III and semester IV (i.e two presentation in each semester in front of internal review panel) and finally give his/her assessment of the work done by the students for internal CE marks with comments of the review in the review card.
- 5.4) Students must prepare the spiral bound reports for DISSERTATION PROGRESS REVIEW–I, DISSERTATION PART-I and DISSERTATION PROGRESS REVIEW–II. Students have to get the reports signed by supervisor(s), Head of the Department and Head of Institute one week before the date of exam. Every student must follow the guidelines for preparation of dissertation report as given in Annexure I.

5.5) Work to be completed by the students till the internal review (Internal CE) and external viva (External Pr) exam should be as follows:

Sem	Subject and Sub. Code	Details	Work to be complete	mark s	Format for evaluation
Sem 3	DISSERTATION PROGRESS REVIEW - I	Internal review 1 for continuous evaluation (Internal-CE) (To be taken at the end of 1 <sup>st</sup> month of sem 3)	Students should demonstrate in-depth knowledge and thoughtful application in stating an in-depth analysis of key theories supporting the study, problem definition must be complete. In this	40	Annexure V

	T	T			T .
			presentation students have to teach the theory related to dissertation title.		
		DISSERTATION PROGRESS REVIEW – I (External-Pr) (To be taken at the end of 2 <sup>nd</sup> month of sem 3)	Literature review and problem definition with objectives should be complete. Presentation of literature review should be in terms of table comparing different points.	60	Annexure VI
	DISSERTATION PART-I	Internal review 2 for continuous evaluation (I-CE) (To be taken at the end of 3 <sup>rd</sup> month of sem 3)	Demonstrate understanding, application of relevant methodology, techniques and analysis with 20% of work completion.	80	Annexure VII
		DISSERTATION PART-I (External- Pr) (To be taken at the end of sem 3)	40% of work should be complete, future action plan/methodology and outcomes must be clear.	120	Annexure VIII
	DISSERTATION PROGRESS REVIEW - II	Internal review 3 for continuous evaluation (I-CE) (To be at the end of 1 <sup>st</sup> month of sem 4)	60% of work to be complete (If dissertation is based on simulation/analysis and hardware then 100% simulation/analysis work should be complete)	40	Annexure IX
Sem 4		DISSERTATION PROGRESS REVIEW – II (External-Pr) (To be taken at the end of 2 <sup>nd</sup> month of sem 4)	80% of work should be complete.	60	Annexure X
	DISSERTATION PART-II	Internal review 4 for continuous evaluation (I-CE) (To be taken at the end of 3 <sup>rd</sup> month of sem 4)	90% of work should be complete.	80	Annexure XI
		DISSERTATION PART-II (External-Pr) (To be taken at the end of sem 4)	100% of work should be complete, reporting the study's main results/findings with clear interpretation and discussion of the results.	120	Annexure XII

#### 5.6) Dissertation and External Viva-Voce:

- a) If any student has not done satisfactory work then internal review panel may not allow the student for external practical exam.
- b) Review Cards for all the previous reviews along with remedial review (if applicable) should be submitted along with the dissertation report.

- c) Students must submit a dissertation report on the project work carried out by him/her. The guidelines for preparation of dissertation report shall be followed by every student as per guidelines given in Annexure I.
- d) The final dissertation report for DISSERTATION PART-II shall be submitted on or before the submission date mentioned in academic calendar.
- e) For DISSERTATION PART-II, three hard bound copies (for external examiner, department library and student copy) along with a soft copy (in CD containing pdf of the report, certificate of paper published and detailed paper, with name, enrollment number, branch, year of admission of the student written on the CD) of the dissertation report shall be submitted to the Head of the Department before final examination of DISSERTATION PART-II on or before the date notified by the University. Reports must be certified by the supervisor, Head of the Department and the Head of the Institution.
- f) Dissertation viva voce will be held within the date fixed in the academic calendar and the grades will be finalized. External examiner will evaluate dissertation work in semester III and semester IV for DISSERTATION PROGRESS REVIEW-I, DISSERTATION PART-I, DISSERTATION PROGRESS REVIEW-II and DISSERTATION PART-II; he/she shall be from outside the Institution. The external expert who examines the dissertation will conduct the viva voce.
- g) Details of the all internal review (Internal CE) and external exams (External Pr) shall be adequately notified so as to enable interested faculty members and students to attend the same.

# Guidelines for writing the PG dissertation report

#### **Preamble**

While utmost attention must be paid to the content of the thesis/dissertation report (hereinafter called the 'thesis'), which is being submitted in partial fulfillment of the requirements of the M.Tech degree, it is imperative that a standard format be prescribed. The same format shall also be followed in preparation of all dissertation exam reports and the final soft copies to be submitted.

#### **General rules of formatting**

1	D : 11:1:	G : 11 1 C
1	Paper, size and binding	Spiral bound for <b>DISSERTATION PROGRESS REVIEW – I,</b>
		DISSERTATION PART-I and DISSERTATION PROGRESS
		REVIEW – II, A4 size and
		Hard bound with bond paper, A4 size for
		DISSERTATION PART-II.
2	Cover	(Please refer annexure II for the format)
		For DISSERTATION PART-II, tan/black, water proof
		bind, with "title and batch-year of admission"
		written on one edge.
3	Total number of pages	For <b>DISSERTATION PART-II</b> , not less than 60
		(including references, questionnaires and other
		annexure)
4	Page margins	Top and bottom margins should be 24.5 mm (i.e
		1"=24.5mm), right margin should be 20 mm, and the
		left margin should be 35 mm for both textual and
		non textual (figures, tables, etc) pages. The header
		footer should be 10 mm each.
5	Line spacing	double line/1.5
6	Font	1) Main Heading (section):-
		16 font size(Times New Roman, Bold)
		2) Sub Heading (subsection):-
		14 font size(Times New Roman, Bold,
		Italic)
		3) Details after sub heading (sub subsections) :-
		12 font size(Times New Roman)
7	Front Covers	The front covers shall contain the following
		details:
		#Full title of thesis in 6 mm 22 point's size font
		properly centered and positioned at the top.
		#Full name of the candidate in 4.5 mm 15 point's

	1	
		size font properly centered at the middle of the
		page.
		#Replica of the Institute symbol followed by the
		name of department, name of the Institute and the
		year of submission, properly centered and located
		at the bottom of page.
		For dissertation part-II,
		Lettering
		All lettering shall be embossed in gold.
		Bound back
		Title and batch-year of admission (i.e. Batch 2015)
		shall also be embossed on one edge in gold.
		Blank Sheets
		In addition to the white sheets (binding
		requirement) two white sheets shall be put at the
		beginning and the end of the thesis.
8	Paragraph	The first line of each paragraph should normally
		be indented by five characters or 12mm. A
		candidate may, however, choose not to indent if
		he/has has provided sufficient paragraph
		separation.
9	Chapter format	Each chapter shall begin on a fresh page (odd
		number page in case of double sided printing) with
		an additional top margin of about 1". Chapter
		number and title shall be printed at the center of
		the line in 6mm font size (18pt) in bold face using
		both upper and lower case (all capitals or small
		capitals shall not be used). A vertical gap of about
		25mm shall be left between the Chapter number
		and Chapter title lines and between chapter title
		line and the first paragraph.
10	Sections and Subsections	A chapter can be divided into Sections,
		Subsections and Sub subsections so as to present
		different concepts separately. Sections and
		subsections can be numbered using decimal
		points, e.g. 2.2 for the second section in Chapter 2
		and 2.3.4 for the fourth Subsection in third Section
		of Chapter 2. Chapters, Sections and Subsections
		shall be included in the contents with page
		numbers flushed to the right. Further subsections
		need not be numbered or included in the contents.
		The Section and Subsections titles along with their
		numbers in 5 and 4mm (14 pt) fonts, respectively,
		in bold face shall be flushed to the left with 15 mm
		space above and below these lines. In further
		subdivisions character size of 12 pt with bold face,
		=
		small caps and italics may be used for the titles
		flushed left. These shall not feature in the contents.

		I. a				
11	Table / Figure Format	As far as possible tables and figures should be				
		presented in portrait style. Small size table and				
		figures (less than half of writing area of a page)				
		should be incorporated within the text, while				
		larger ones may be presented on separate pages.				
		Table and figures shall be numbered chapter wise.				
		For example, the fourth figure in chapter 5 will				
		bear the number Figure 5.4 or Fig 5.4 Table				
		number and title will be placed above the table				
		while the figure number and caption will be				
		located below the figure. Reference for Table and				
		Figures reproduced from elsewhere shall be cited				
		in the table and figure caption, e.g. [12].				
12	Page numbering	In footer with right aligned Numerals, Pagination				
		for pages before the Introduction chapter shall be				
		in lower case Roman numerals, e.g., "iv" and for				
		other pages write number as "1".				
13	Footer	Footer should include "M.Tech (Name of				
		Program), Name of Institute, Parul University"				
14	References	All references must be cited in the text by the				
		reference number using superscripts. No links				
		between superscripts in the text and actual				
		references in the Reference Sections may be used.				

#### Parts of the dissertation report:

#### Organization of the Thesis/Dissertation report

This thesis shall be presented in a number of chapters, starting with introduction and ending with summary and conclusion. Each of the other chapters will have a precise title reflecting the contents of the chapter. A chapter can be subdivided into *sections*, *subsections and sub subsection* so as to present the content discretely and with due emphasis. When the work comprises two or more mutually independent investigations, the thesis may be divided into two or more parts, each with an appropriate title. However, the numbering of chapters will be continuous right through, for example Part 1 may comprise Chapters 2-5, Part Two, Chapters 6-9.

Please follow the following sequence in the report:

**1.** Page 1 should contain the title of the dissertation on the top of the page with **B**old font, name of the candidate, department, institution and the university to which affiliated. (Please refer Annexure II for the format.)

#### **Title**

- a. What is it for? More than just an arbitrary label for naming your work, a dissertation title serves as the first summary of what your piece is all about. A good dissertation title must communicate the essence of your research project and give an accurate sense of what follows.
- b. **Language.** Take time and effort to formulate a dissertation title in good English. Consult a language specialist if needed.
- c. **Clarity.** Ambivalence and ambiguity have no place here; a clear, lucid and descriptive title is the best way to make a confident opening statement to the person who will eventually mark the work.
- d. **Focus. Keep the title short and relevant** to the aims of your research. There is no room whatsoever for extraneous material and padding. The specificity of your title will indicate the focus of your approach as a whole, and therefore demonstrate certain clarity of thought.
- e. **Scope.** The full extent of the reach of your research will be discussed in the introductory chapter of your dissertation, but in an impressionistic sense the title can serve to give an idea as to the breadth of your purview. Indicate the span of your dissertation if possible.
- f. **Distinctiveness.** A good dissertation title will be instantly recognisable and distinct from those of other extended pieces of writing on the same or related topics. To this end it is advisable to avoid dry and generic vocabulary where possible and mark out your dissertation as being somewhat unique.
- g. **Avoidance of proper names of the persons or institutions.** Do not include proper names of individuals or institutions involved in the research.
- **2. Certificate:** certificate should contain the following.
  - a. Name of the candidate
  - b. Enrollment number
  - c. Branch of study
  - d. Institution where the work was carried out
  - e. Title of dissertation
  - f. Signature and name of the supervisor.

- g. Signature and name of the Head of the Department.
- h. Signature and name of the Head of the Institute.
- i. **Originality:** Certificate that this is an original work done by the student and no part of this work was used as basis for obtaining any other degree or publication or part thereof. Check originality of thesis with help of open source anti-plagiarism database. This report lists % similarity with other published literatures. Preferably it should be <20%. Students have to take a print out of 1st page of plagiarism report and it is required to be signed by himself/herself as well as by respective supervisor and attach at the end in the reports of all external exams for dissertation.

All dissertation thesis will be made available on University website. Later on if there is any genuine complaint regarding plagiarism then in this case respective student and his/her supervisor should be liable for all consequences. As per norms, University can revoke M.Tech degree conferred to such students.

i. Please use the formats of Annexure III for the certificates.

#### 3. Acknowledgements

Generally, all help and assistance, like guidance, inspiration, moral support etc., can be acknowledged, in this order.

- a. Scientific, theoretical, practical guidance
- b. Encouragement-both authoritative and inspirational
- c. Support with recording data and statistical analysis
- d. Help with graphics, charts and tables
- e. Insightful comments and corrections
- f. Cooperation from peers/seniors/other faculty
- g. Technical, instrumental laboratory support
- h. Broad institutional support

#### The order, therefore would be:

Supervisor

Co-supervisors by seniority

Head of the department, if different

Senior faculty

Senior postgraduates

Statistician

Sponsors if any

Technicians

Head of the Institute.

Acknowledgements to one's family and friends are out of place in a dissertation, as it is an official document.

**4. Table of contents:** This should contain the names of sections and page numbers against them.

Sr. No.	Content	Page Number
	Cover Page	i
	Certificate	ii
	Abstract	iii
	Acknowledgement	iv
	Table of Contents	V
	List of Abbreviations	vii
	List of Figures	viii
	Chapter 1: Introduction	1
	Chapter 2: Aim and Objectives of the study	3
	Chapter 3: Review of Literature	4
	Chapter 4: Methodology: Materials and Methods	
	Chapter 5: Observations, results and Discussion	
	Chapter 6: Conclusions & Summary	
	Annexure	
	References	
	Dissertation Review Card	
	Compliance Report of all previous exam comments	

#### 5. List of abbreviations used in the text

This avoids the need to explain the full terminology at every step. Abbreviations should be taken from standard terminology so that the need to consult this page is reduced to the minimum.

#### 6. Aims and objectives of the study

This should be expressed as points. Brief about what you want to do, point by point and what result do you expect to achieve. It shall justify and highlight the problem posed, define the topic and explain the aim and scope of the work presented in the thesis. It may also highlight the significant contributions from the investigation.

#### 7. Review of literature

This should not be more than 20 pages. The review should be comprehensive and should be confined to the topic of study, and should compulsorily include the most recent articles published in relation to your study from reputed journals. Every effort must be made to collect as much information as possible. One or two of the most relevant pictures may be included. A table containing comparison of similar studies done earlier may also be included. It shall present a critical appraisal of the previous work published in the literature pertaining to the topic of the investigation.

The author cannot put forward his/her own ideas/ suggestions, or use his own derivations in review of literature. The section should contain only the facts of already done research in this area.

#### 8. Methodology (Report on the present investigation)

- a. Due importance shall be given to experimental setups, procedures adopted, techniques developed, methodologies developed and adopted.
- b. While important derivations/formulae should normally be presented in the text of these chapters, extensive and long treatments, copious details and tedious information, detailed results in tabular and graphical forms may be presented in Appendices. Representative data in table and figures may, however, be included in appropriate chapters.
- c. Figures and tables should be presented immediately following their first mention in the text. Short tables and figures (say, less than half the writing area of the page) should be presented within the text, while large table and figures may be presented on separate pages.
- d. Tables should be serially numbered, accurately named with reference to the data presented and the statistical analysis (if any).
- e. Equations should form separate lines with appropriate paragraph separation above and below the equation line, with equation numbers flushed to the right. It should include every detail of how the work is undertaken. Minute details of

standard procedures may be omitted and are given at the end of the report under annexure. Mention ethical issues and methods adopted for statistical analysis.

#### 9. Observations and Results

The findings of the study should be analysed and should be arranged in tables, charts and diagrams. The photographs of observations taken during the course of study should also be included. The text in this chapter should explain the observations, table wise.

#### 10. Discussion

- a. Analyze data and relate them to other studies.
- b. Possible explanations for any variation in the results
- c. Significance of results in terms of hypothesis and their practical implications
- d. Evaluate strengths and weaknesses of work
- e. Recommendations for further work

This section should be in more than 20 pages. The findings of the study should be analysed along with the already known information about the problem studied. The implications of the observations of the study should be projected. The limitations of the study and recommendations of areas for further study in future can also be discussed.

The student can use his ideas and derivations based on the findings of his/her study. He/she can also project the difficulties faced by him/her during the course of study, and suggest methods to overcome them.

#### 11. Conclusions & Summary

This will be the final chapter of the thesis. A brief report of the work carried out shall form the first part of the Chapter. Conclusions derived from the logical analysis presented in the Results and Discussions Chapter shall be presented and clearly enumerated, each point stated separately. Scope for future work should be stated lucidly in the last part of the chapter.

#### 12. Annexure

This section contains: the Performa used for the study, ethical clearance certificate, consent forms used in the study, master chart of all the data, details of the standard procedures used (which are avoided in materials and methods), and any other information which is relevant.

Detailed information, lengthy derivations, raw experimental observations etc. are to be represented in the separate annexure, which shall be numbered in Roman Capitals (e.g. "Annexure IV").

#### 13. References

The word 'references' is appropriate for dissertations, rather than 'bibliography'.

This should follow the Annexure, if any, otherwise the Summary and Conclusions chapter. References cited should follow the style given below:

#### **PAPERS**

- 1. Thiel WJ and Nguyen LT, "Fluidized bed film coating of an ordered powder mixture to produce micro encapsulated ordered units." *J. Pharm. Pharmacol.* **1984**, *36*, 145-152.
- 2. Isyumov N, "Criteria for acceptance of wind induced motionsof tall buildings", International Conference on Tall buildings, Rio DeJanerio, CTBUH, 2003.

#### **WEB SITE**

3. Boggs, D, "Acceleration and Drift due to Gust forces", July 2009, www.cppwind.com/papers/structural/PEAKvsRMS.pdf

#### **BOOKS**

4. PelzarMJ., Chan ECS., and Krieg NR. In Microbiology; 5th Edn; Tata McGraw Hill Publishing Company Limited, New Delhi, 1993, pp 536.

#### **DISSERTATIONS**

- 5. Vaishnav D.K, PhD Thesis, "....." Gujarat Technological University, July 2012.
- 6. Pathak VK. Ph.D. Thesis, "....", Gujarat University, 1979.

#### **PATENTS**

7. Trevor M, Aggelos N and Helmut S.Process for the preparation of aceclofenac. European Patents EP 1082290 A1, 1999.

#### 14. DISSERTATION REVIEW CARD:

Review cards should be attached after references. After review cards, students have to put compliance report of all such comments.

In nut cell, explain the answers of the following questions for different parts of your thesis:

Introduction	Why did you do it?			
Aims and Objectives	What do you want to achieve?			
Review of literature	What have others done?			
Methods	How did you do it?			
Results	What did you find?			
Discussion	What does it mean?			
Summary and Conclusions	What do you want to say now?			
Annexure	-			
References	The raw material employed in the study			

#### M. Tech REQUIREMENTS

M.Tech dissertation will be granted only if the student's one research paper is accepted or published in refereed National or International journal or the national/international conference. The students may also include reprints of their publications after the literature citation.

#### [Thesis Title]

(6 blank lines)

By (4 lines)

Your name as found in official Parul records, i.e Patel Harsh A. Enrollment Number: xxxxxxxxxx

(three lines)
Supervised by
[Supervisor's name
Name of the Department
Name of the Institute]

(6 blank lines)

A Thesis Submitted to
Parul University in Partial Fulfillment of the Requirements for
the Degree of Master of Technology in
[Name of Program]

(3 blank lines)

Month and Year (2 blank lines)



Name of the Department,
Name of the Institute,
Parul University
P.O.Limda, Ta.Waghodia - 391760
Dist. Vadodara, Gujarat(India)

Phone: +91-2668-260312/202/300/307

Email: admissions@paruluniversity.ac.in,parultrust@paruluniversity.ac.in

#### [SAMPLE THESIS CERTIFICATES]

#### **DECLARATION**

$\mathbf{T}$	hesis	Tit1	۱۵۰

Degree for which the Thesis is submitted:

I give undertaking that this dissertation thesis contains my own ideas and work in my own words. I have adequately cited and listed other's ideas or words in the reference materials. All the parts of the thesis are prepared without any plagiarism. I have adhered to all principles of academic honesty and integrity. No falsified or fabricated data have been presented in the thesis. I understand that any violation of the above will cause for disciplinary action by the Institute, including revoking the conferred degree, if conferred, and can also evoke penal action from the sources which have not been properly cited or from whom proper permission has not been taken.

(Signature)
Name of the Student:
Enrollment no.:

Date: --/---

#### **CERTIFICATE**

It is certified that the work contained in this dissertation thesis entitled 'dissertation title' submitted by -----NAME OF THE STUDENT-----, ----Enrollment No.------ studying at ------ (Institute name)------ for the award of M.Tech (-----Name of Branch-------) is absolutely based on his/her own work carried out under my/our supervision and that this work/thesis has not been submitted elsewhere for any degree/diploma.

on his/her own work carried out under my/our submitted elsewhere for any degree/diploma.	pervision and that this work/thesis has not been
[Parul Universit	y Watermark]
Date:	
Place:	
Signature and Name of internal supervisor	
Signature and Name of external supervisor (if	any)
Signature and Name Head of Department	Signature and Name of Head of Institute
•	-

#### **Seal of Institute**

(If the work is carried out in industry then a certificate from industry shall also be attached.)

#### **COMPLIANCE CERTIFICATE**

	mbodied in this dissertation thesis entitled "
(Institute name) for partial tuniversity. He/ She has complied	fulfillment of M.Tech degree to be awarded by Paru the comments of the Dissertation Progress Review-I tion Progress Review-II with my/our satisfaction.
(Par	rul University water mark)
Date: Place:	
Signature and Name of Student	Signature and Name of internal supervisor
	Signature and Name of internal supervisor (if any)
PAPER PUB	LICATION CERTIFICATE
carried out by Mr./Ms(Institute name) for partial fulfillm has published/accepted article en	mbodied in this dissertation thesis entitled "
Date: Place:	
Signature and Name of Student	Signature and Name of internal supervisor

#### THESIS APPROVAL CERTIFICATE

This is to certify that research work embodied in this dissertation thesis entitled "
(Institute name) is approved for the degree of M.Tech with specialization of(Branch name) by Parul University.
(Parul University water mark)
Date: Place:
External Examiners' Sign and Name:
1)
2)

## M.Tech (Branch: Proposal for Dissertation Title

[Title of Dissertation]:				
Submitted By: Name of the student (as f Enrollment Number:	ound in official Parul Un	iversity records):		
Supervisor: [Supervisor's	s name with qualification	and designation]		
Abstract: [Abstract tex	t, Maximum 300 words]	consists of		
1.	Objective and scope of t	the work		
2.	Experimental/ Computational work required with methodology			
3.	Application of selected title			
4.	Requirement of fund:			
Signature and Name of Student		Signature and Name of Internal Supervisor		
		Signature and Name of External Supervisor		

-----Department

**M.Tech (Name of Program)** 

Mark sheet for internal review 1 for continuous evaluation (03207201)

Semester 3 (Batch: [admission year i.e. 2015])

**Date of Exam:** 

Sr. No.	Enrollment Number	Name of the Student	Technical skill on the selected title (10 marks)	Presentatio n skill ( 10 marks)	Questions and answers (20 marks)	Total (40 marks)

Sign	and 2	Name	of exa	miners:	1)
				miners:	2)
					υ,

ANNEXURE - VI

#### PARUL UNIVERSITY, FACULTY OF ENGINEERING AND TECHNOLOGY

 $\hbox{------} Department \\$ 

M.Tech (Name of Program)

Mark sheet for DISSERTATION PROGRESS REVIEW - I (03207201)

Semester 3 (Batch: [admission year i.e. 2015])

Date of Exam:

Sr. No	Enrollment Number	Name of the Student	Literature Survey (10 marks)	Problem Definition with objectives (20 marks)	Presentatio n skill ( 10 marks)	Question s and answers (20 marks)	Total (60 marks)

Sign and Name of examiners: 1)

-----Department

**M.Tech (Name of Program)** 

Mark sheet for internal review 2 for continuous evaluation (03207202)

Semester 3 (Batch: [admission year i.e. 2015])

Date of Exam:

Sr. No.	Enrollment Number	Name of the Student	Progress made (20 marks)	Technical skill about the work completed (30 marks)	Presentati on skill (10 marks)	Questions and answers (20 marks)	Total (80 marks)

Sign and Name of examiners: 1)	
2)	
3)	ANNEXURE – VIII

#### PARUL UNIVERSITY, FACULTY OF ENGINEERING AND TECHNOLOGY

-----Department

M.Tech (Name of Program)

Mark sheet for DISSERTATION PART-I (03207202)

Semester 3 (Batch: [admission year i.e. 2015])

**Date of Exam:** 

Sr. No	Enrollment Number	Name of the Student	Progress made (30 marks)	Technical skill about the methodology and work completed (30 marks)	Future action plan and clarity about outcome (30 marks)	Presentati on skill (10 marks)	Question s and answers (20 marks)	Total (120 marks)

Sign and Name	of examiners:	: 1) 2)	
		,	

#### -----Department

M.Tech (Name of Program)

Mark sheet for internal review 3 for continuous evaluation (03207251)

Semester 4 (Batch: [admission year i.e. 2015])

**Date of Exam:** 

Sr. No	Enrollment Number	Name of the Student	Quality and quantity of work done (10 marks)	Technical skill about the methodology, work done and discussion of results (10 marks)	Presenta tion skill ( 10 marks)	Questions and answers (10 marks)	Total (40 marks)
			_				

Sign and Name of examiners	: 1)
	2) 3)

ANNEXURE - X

#### PARUL UNIVERSITY, FACULTY OF ENGINEERING AND TECHNOLOGY

-----Department

M.Tech (Name of Program)

Mark sheet for DISSERTATION PROGRESS REVIEW - II (03207251)

Semester 4 (Batch: [admission year i.e. 2015])

Date of Exam:

Sr. No	Enrollment Number	Name of the Student	Quality and quantity of work done (10 marks)	Technical skill about the methodology, work done and discussion of results (20 marks)	Presenta tion skill (10 marks)	Question s and answers (20 marks)	Total (60 marks)

Sign and Name of examiners:	1) 2)	

#### -----Department

#### **M.Tech (Name of Program)**

#### Mark sheet for internal review 4 for continuous evaluation (03207252)

Semester 4 (Batch: [admission year i.e. 2015])

#### **Date of Exam:**

Sr. No	Enrollment Number	Name of the Student	Quality and quantity of work done (20 marks)	Technical skill about the work done and discussion of results (30 marks)	Presenta tion skill (10 marks)	Questions and answers (20 marks)	Total (80 marks)
			_			_	

Sign	and	Name	of	exam	iners:	1)
O						2)
						3)

ANNEXURE – XII

#### PARUL UNIVERSITY, FACULTY OF ENGINEERING AND TECHNOLOGY

-----Department

**M.Tech (Name of Program)** 

#### Mark sheet for DISSERTATION PART-II (03207252)

Semester 4 (Batch: [admission year i.e. 2015])

#### Date of Exam:

Sr. No	Enrollment Number	Name of the Student	Quality and quantity of work done (30 marks)	Technical skill about the work done and discussion of results and conclusions (30 marks)	Quality of report (30 marks)	Presenta tion skill ( 10 marks)	Question s and answers (20 marks)	Total (120 marks)

Sign and Name of examiners: 1)

### **Dissertation Rubrics**

Sr. No	Description	Criteria for scores above 90%	Criteria for scores between 80% and 89%	Criteria for scores between 70% and 79%	Criteria for scores between 60% and 69%	Criteria for scores between 50% and 59%	Criteria for scores below 50%
1	Technical Skill	Demonstrates in- depth knowledge and thoughtful application in stating an in- depth analysis of key theories supporting the study.	The candidate is generally clear in stating an indepth analysis of key theories supporting the study.	The candidate has done sufficient analysis of key theories supporting the study.	The candidate has studied the theories and done some level of analysis supporting the study.	The candidate has studied the theories but lacking the indepth analysis.	Demonstrates minimal knowledge and application of presenting the theoretical frame work of the study.
2	Problem Definition with objectives	The title, scope and objectives of the dissertation are innovative and original.	The title, scope and objectives of the dissertation are original.	The title, scope and objectives of the dissertation are sufficiently defined and are original.	The title, scope and objectives of the dissertation are defined but are not original.	Although the title, scope and objectives of the dissertation are defined but are not original.	The title, scope and objectives of the dissertation are poorly defined and are not original.
3	Literature Survey	Excellent knowledge about the previous works, ,interpretation and applications of the relevant literature.	Convincing knowledge, coverage, interpretation and applications of the relevant literature.	Sufficient knowledge, interpretation and applications of the relevant literature.	Sufficient knowledge of the relevant literature. Interpretation and applications of the literature need to improve.	A basic overview of the literature, with limited interpretation and applications.	Knowledge, interpretation and applications of the literature are not proper, used irrelevant literature.
4	Methodology	Demonstrates advanced control, understanding, depth and insight in the application of relevant research methodology, techniques and analysis.	Demonstrates very good control and understanding in the application of relevant research methodology, techniques and analysis.	Thorough knowledge and understanding of the significance of the research. Demonstrates effective application of relevant research methodology, techniques and analysis.	Adequate knowledge and understanding of the significance of the research. Good organization and application of research methodology.	Satisfactory understanding of the significance of the research and a reasonably effective interpretation and application of the methodology.	The work displays such a low level of research methodology, interpretation, findings and layout that it can be regarded as unacceptable.
5	Results/Findings	The chapter organizes and reports the study's main results/findings, including the clear presentation of relevant quantitative (statistical) and /or qualitative (narrative) data.	The chapter organizes and reports the study's main results/findings, but presentation of relevant quantitative (statistical) and /or qualitative (narrative) data is not proper.	The chapter organizes and reports the study's main results/findings without the supportive data.	Discussion about the results/finding s can be still better explained.	All the results/finding of the study are not discussed.	results/findin gs of the study are not clearly or sufficiently discussed with appropriate data. Findings are poorly organized and

							statistical analyses (if used) are not appropriate or accurate.
6	Discussion/ Conclusions	The chapter clearly interprets and discusses the results in light of the study's research questions, literature review, and conceptual framework, concluding with recommendations for policy and practice.	The chapter clearly interprets and discusses the results in light of the study's research questions, literature review. The connections to the purpose of the study and relevance to the existing body of knowledge are clear.	The discussion, conclusions and recommendation s are clearly explained or substantiated by the results/findings. The connections to the purpose of the study and relevance to the existing body of knowledge are clear.	The discussion, conclusions and recommendati ons are clearly explained or substantiated by the results/finding s.	The discussion, conclusions and recommendatio ns are clearly explained but for some results it is lacking the support by the results/findings .	The discussion, conclusions and recommendat ions are not clearly explained or substantiated by the results/findin gs. The connections to the purpose of the study and relevance to the existing body of knowledge are not clear.
7	Report	The report follows all the standards of the format. There are no or extremely few linguistic and typographical errors, grammatical and almost no rectifications are required.	The report is of good quality. There are few linguistic and typographical errors, and few linguistic and/or typographical rectifications required.	The report is of acceptable quality. There are less important omissions and linguistic and/or typographical errors. Editing would improve the text.	The report requires attention. There are omissions and linguistic and/or typographical errors. Editing/revisi on would improve the work and errors should definitely be rectified.	The report requires serious attention, as there are numerous linguistic and typographical mistakes. These errors should definitely be rectified.	There are serious, conspicuous and unacceptable linguistic and typographical errors. The writing style and layout are plagued by serious problems and should be reviewed as a whole. Most of the material is copied from others without citing.
8	Questions and answers	Student could accurately and firmly answer each question asked to him.	Student could accurately and firmly answered most of questions.	Student could accurately and firmly answer more than 50% questions.	Student could accurately and firmly answer a few questions.	Student could accurately and firmly answer only one or two questions.	Student could not answer all the question asked to him.
9	Presentation Skill	Shows a full understanding of the topic. Presentation is very easy to follow and content very well explained. Additional information included. Very Good	Shows a good understanding of the topic. Presentation is easy to follow and content well explained. All information included. Very Good intonation, body language and use	Shows a good understanding of parts of the topic. Most information included. Average intonation, body language and use of the space.	Shows a good understanding of parts of the topic. Presentation is little confusing to follow and content not clearly explained. Most	Does not seem to understand the topic very well. Presentation is hard to follow and content not effectively explained. Missing	Does not seem to understand the topic very well.  Presentation is hard to follow and content not effectively

		1		T			
		intonation, body	of the space.		information	information.	explained.
		language and use			included.	Incorrect	Missing
		of the space.			Sometimes	intonation,	information.
					show good	body language	Inappropriate
					intonation,	and use of the	intonation.
					body		body
					language and	space.	-
					use of the		language and
					space.		use of the
							space.
10	Overall	Deserves a	Deserves a	The dissertation	Seen as a	The academic	The
		distinction	distinction. In the	is a very	whole, the	standard	dissertation
		without reserve.	top 20% of all	acceptable piece	dissertation is	of the	does
		A really excellent	master's degree	of work, but	of an	dissertation is	not meet the
		dissertation.	dissertations.	needs that	acceptable	sufficient to	minimum
		In the top 10% of		extra spark to	academic	merit a	academic
		all master's		turn it into an	standard and	pass mark. The	requirements,
		degree		above-average	deserves	work, however,	and it is
		dissertations.		dissertation.	an average	is in need of	unlikely that
					mark. Some	serious editing.	even large
					parts requires		scale
					revision/editin		revision/editi
					g.		ng would
							bring the
							dissertation
							up to
							scratch.
							Additional
							research may
							be required.





#### (Dissertation Review Card)

Name of Student:	
Enrollment No.:	
Student's Mail ID:-	
Student's Contact No. :	
College Name:	
College Code:	
Branch Code: Branch Name:	
Broad area of Title:	
Title of Dissertation:	
Supervisor's Details	Co-Supervisor's Details OR External Supervisor's Details
Name:	Name:
Institute:	Institute/Organization:
Institute Code:	Institute Code (in case of co-supervisor):
Mail ID:	Mail ID:
Mobile No.	Mobile No.

# Comments for Internal Review 1 Date: (Internal-CE for DISSERTATION PROGRESS REVIEW - I) (03207201)(Semester 3) (To be taken in the last week of 1st month of the semester 3)

Sr. No.	Comments given by internal review panel	Modification done based on Comments (To be filled by Supervisor)
		Name of Supervisor:
		Sign of Supervisor:

Particulars	Internal Review Panel					
	Expert 1	Expert 1 Expert 2 Expert 3				
Name:						
Institute:						
Institute Code:						
Mobile No.:						
Sign:						

## Dissertation Progress Review-I (03207201) Date: (External PR) (Semester 3)

Enro	ollment No. of Student:
Title	e:
	1. Problem Definition (title) is appropriate or not (Yes/ No)
	2. Clarity of objectives. (Yes/No)

## Comments for Dissertation Progress Review-I (03207201) Date: (External PR) (Semester 3)

(To be taken in the last week of 2<sup>nd</sup> month of the semester 3)

Sr. No.	Comments given by E (Dissertation Prog (03207)	gress Review - I)	Modification done based on Comments (To be filled by Supervisor)	
				_
			Name of Supervisor:	
			Sign of Supervisor:	
■ Appr				
	roved with suggested rec Approved	ommended changes [	Please tick on any one	
	Particulars	Expert 1	Expert 2	
Name:				
Institute/	University/Organization:			
Mobile No	).:			
Sign:				

#### **Details of External Examiners:**

#### **Comments for Internal Review 2**

(Internal-CE for DISSERTATION PART- I) (03207202) (Semester 3) (To be taken in the last week of 3<sup>rd</sup> month of the semester 3)

Sr. No.	Comments given by internal review panel	Modification done based on Comments (To be filled by Supervisor)
		N 66
		Name of Supervisor:
		Sign of Supervisor:

Particulars		Internal Review Panel				
	Expert 1	Expert 2	Expert 3			
Name:						
Institute:						
Institute Code :						
Mobile No. :						
Sign:						

Date:

#### Comments for Dissertation Part -I (03207202) (External PR) (Semester 3)

Date:

(To be taken at the end of the semester 3)							
mont No. of Student							

Enrollmer	nt No. of Student :		
Sr. No.	Comments given by E (Dissertation Part		Modification done based on Comments based on Comments (To be filled by Supervisor)
			Name of Supervisor:
			Sign of Supervisor:
* <i>App</i>	roved roved with suggested rec t Approved	rommended changes (	Please tick on any one
Details	of External Exami	ners:	
	Particulars	Expert 1	Expert 2
Name:			

Institute/University/Organization:

Mobile No.:

Sign:

#### Comments for Internal Review 3 Date: (Internal-CE for DISSERTATION PROGRESS REVIEW -II)(03207251)(Semester 4)

(To be taken in the last week of 1st month of the semester 4)

Sr. No.	Comments given by internal review panel	Modification done based on Comments (To be filled by Supervisor)
		Name of Supervisor:
		Sign of Supervisor:

Particulars		Internal Review Panel		
	Expert 1	Expert 1 Expert 2 Expert 3		
Name:				
Institute :				
Institute Code :				
Mobile No. :				
Sign:				

## Comments for Dissertation Progress Review -II (03207251) Date: (External Pr)(Semester 4) To be taken in the last week of 3rd month of the competer 4)

(To be taken in the last week of  $2^{nd}$  month of the semester 4)

Sr. No.  Comments given by External Examiners (Dissertation Progress Review-II) (03207251):  Name:  Institute/University/Organization:  Modification done based on Comments (To be filled by Supervisor)  Name of Supervisor:  Sign of Supervisor:  Please tick on any one  Not Approved  Expert 1  Expert 2  Name:  Institute/University/Organization:  Mobile No.:  Sign:	Enrollme	nt No. of Student :			
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:	Sr. No.	(Dissertation Progress Review-II)		Comments (To be filled b	
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Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					_
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Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved Approved  Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:				Name of	Supervicor:
Approved Approved with suggested recommended changes Please tick on any one Not Approved Details of External Examiners:  Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:					
Approved with suggested recommended changes Not Approved  Details of External Examiners:  Particulars  Expert 1  Name: Institute/University/Organization: Mobile No.:	•			orgii or o	aper visor.
Particulars Expert 1 Expert 2  Name: Institute/University/Organization: Mobile No.:	Approved with suggested reco		ommended changes〔		Please tick on any
Name: Institute/University/Organization: Mobile No.:		Detail	ls of External Exa	amine	rs:
Institute/University/Organization: Mobile No.:	Particulars		Expert 1		Expert 2
Mobile No.:	Name:				
	Institute/	University/Organization:			
Sign:	Mobile No.:				
	Sign:				

# Comments for Internal Review 4 Date: (Internal-CE for DISSERTATION PART- II) (03207252) (Semester 4) (To be taken in the last week of 3<sup>rd</sup> month of the semester 4)

Sr. No.	Comments given by internal review panel	Modification done based on Comments (To be filled by Supervisor)
_		
_		
		Name of Supervisor:
		Sign of Supervisor:

Particulars	Internal Review Panel			
	Expert 1	Expert 2	Expert 3	
Name :				
Institute:				
Institute Code :				
Mobile No. :				
Sign:				

# Comments for Dissertation Part -II (03207252) Date: (External PR) (Semester 4) (To be taken at the end of the semester 4)

<b>Enrollment No. of Student:</b>			

Sr. No.	Comments given by External Examiners (Dissertation Part-II) (03207252):		Modification done based o Comments (To be filled by Supervisor)		
			Name of Supervisor:		
			Sign of Supervisor:		
	roved	,			
_ <i>App</i>	proved with suggested rec	ommended changes (	Please tick on any one		
• Not	Approved				
Details of External Examiners:					
Particulars		Expert 1	Expert 2		
Name:					
Institute	/University/Organization:				
Mobile N	0.:				
Sign:					