# Shrimad Rajchandra Institute of Management and Computer Application, Uka Tarsadia University MCA 4th Semester/MScCA 2<sup>nd</sup> Semester, July 2015

Prerequisites: Search intelligence on Internet, technical writing skills, analytical skills, novel attitude.

#### **Course Objective:**

To provide an opportunity to the student to do exhaustive study, investigation and experiment on modified approaches in the domain of his/her area of interest.

#### Paper No.: 040010406/040020210 [Lectures:0;Tutorial:0;Practical:4] Subject: Dissertation

#### 1. INTRODUCTION

As a partial requirement for the award of the degree of M.C.A. at Uka Tarsadia University, a dissertation submission will be carried out by students in their 4<sup>th</sup> and 5<sup>th</sup> semester of study.

The dissertation provides the students with the opportunity to design, under-take or conduct an independent piece of research or study related to their subject/area of interest under the guidance of a guide.

The 'Dissertation' is a comprehensive description of the aims, objectives of the work, a review of the literature on the subject matter, the investigation/planning and methodology, the results and findings, and concrete recommendations and conclusions.

The dissertation is a major document that reflects the skills of the student to investigate critically a topic/problem, the ability to gather and analyze information, and to present and discuss the results/investigation concisely and clearly.

#### 2. TEAM FORMATION AND ALLOCATION OF GUIDE

- 1. A student team for dissertation shall comprise of atleast 5 and not more than 6 members.
- 2. The team formation shall be done by students themselves and cannot span divisions.
- 3. The team shall submit their area of interest during the first week of the semester.
- 4. Guide shall be allocated to the teams in the third week of the semester.

# 3. Depending on interest, dissertation titles will be proposed/ identified either by students or by guide during the 4<sup>th</sup>semester in which the dissertation should start.

The two main criteria that must drive a dissertation proposal are:

- Feasibility of the dissertation (time, supervision, availability of resources, and literature)
- Novelty

#### 4. DISSERTATIONS PROPOSED BY STUDENTS

For dissertation titles proposed/identified by students, the latter shall discuss with the potential guide. The dissertation title shall be approved by the potential guide. The domain of the dissertation shall be from the following areas:

- Artificial Intelligence
- Digital Image Processing
- Networking Technologies
- Security
- Wireless Technologies

In the **4**<sup>th</sup> semester students are required to work upon:

- 1. Course study for dissertation
- 2. Title (problem definition)
- 3. Aims and objectives
- 4. Literature review (atleast 5 research papers)
- 5. Conclusions

# [Note]:

- It is mandatory for a student to implement the model/algorithm/method suggested or proposed by him/her in the 5<sup>th</sup> semester.
- Atleast one research paper should be published regarding his/her dissertation work in a referred journal or present his/her work in a conference per semester.

# 5. IMPORTANT POINTS:

#### [A] Time and Duration:

- 1. Dissertation shall be an accomplishment by a student at the institute.
- 2. The broad area of dissertation shall be finalized with the guide during the 4<sup>th</sup> semester.
- 3. A student has to strictly follow the deadlines. For better execution, dissertation plan shall be prepared along with the division of work amongst teammates be approved within first week of inception of the dissertation.
- 4. In case, of failure to meet the deadlines, a student shall be restricted to appear in Internal/External Dissertation Viva.

# [B] Reporting:

- 1. A student team shall report about the progress in dissertation work to the internal guide twice in a week.
- 2. For any query, a student can approach to the Dissertation Guide and Coordinator.
- 3. A student shall maintain a log book to help them to plan their own dissertation and to record the outcomes timely.

Following is the format of the log book.

# Record of Strategic Meetings with the Guide

Sr. No. of Meeting	Date	Points Discussed/Suggested	Comments	Guide's Signature	Student's Signature

# [C] Evaluation:

The weightage of CIE and University examination shall be as per the University regulations. Composition of CIE shall be

Assessment Code	Assessment Type	Duration of each	Each of marks	Occurrence	Weightage in CIE of 40 marks
A1	Area	1 week	03	1	03X 1 = 03
A2	Internal Presentation	25 mins	30	2	06X 2 = 12
A3	Dissertation Progress Report	Around 6 weeks	20	1	05X 1 = 05

If any of the submission seems plagiarized, then marks will be set to zero for that respective submission.

#### A1 guidelines

- Student shall submit three area of his/her interest including team details on or before 20<sup>th</sup> January 2015.
- Student shall finalize the domain after consulting potential guide.
- Guide shall submit the team detail with their domain area on or before **30<sup>th</sup> January 2015**.

#### A2 guidelines

- During presentation, a student shall use presentation slides explaining the dissertation work.
- A student shall propose a solution for the problem identified.
- Solution can be a minor or major modification to existing techniques and/or application of existing technique/methodology/approach in some new area.
- Marks for reporting shall be included.
- No make-up work shall be accepted for missed or failed presentation.
- First presentation shall be scheduled on 16<sup>th</sup> to 18<sup>th</sup> March 2015.
- Marks weighted for Presentation 1:

Parameter	Marks
Basic concepts clarity	10
Reporting	05
Presentation Skill	05
Viva	10

• Second presentation shall be scheduled during **20<sup>th</sup> to 22<sup>th</sup> April 2015**.

• Marks weighted for Presentation 2:

Parameter	Marks
Literature Review	10
Inclusion if previous suggestion	05
Presentation Skill	05
Viva	10

Note: If the examiner feels that the dissertation work has not actually being done by the student then he/she can allot zero marks for the same.

#### A3 guidelines

- Dissertation Progress Report (DPR) shall be in IEEE format.
- Hardcopy shall be submitted on or before **30<sup>th</sup> March 2015** to guide.
- Guide shall evaluate the report based on following parameter.
- DPR's first page shall comprise of Team number, Students' name, Guide name, Duration.
- Marks weighted for DPR:

Parameter	Marks
IEEE format	06
Literature review	06
Viva by guide	08

#### 5. REPORT

The dissertation work carried out during the term shall be submitted at the end of the 4<sup>th</sup> Semester in the form of a dissertation written by the student. The dissertation should be typed and may include relevant diagrams, figures, photographs, illustrations, tables and appendices. The dissertation should consist of preliminaries, main text and references/appendices.

#### A. Preliminaries

The preliminaries should abide by the following order, wherever applicable:

#### > Title Page

The title page of the dissertation should be in format given in Annexure I.

#### Dissertation Certification Form

[The form should be signed by programme co-ordinator.]The dissertation certification form should be in format given in Annexure II.

#### > Declaration of Student as well as Guide Form

[The form should be duly filled signed by the students and guide.] The declaration of student and guide should be in format given in Annexure III and IV.

#### > Table of Contents

The Table of Contents shall list in sequence with page numbers all chapters, sections/headings, subsections/headings and other sub-divisions of the dissertation, appendices, etc.

#### List of Tables, Figures, Schemes

Separate lists of each, in the above order, giving number and page reference.

#### > Abstract

The abstract constitutes an up to one-page executive summary, which provides a brief outline of the objectives, scope of the dissertation, the methodology used, the main findings and results achieved and any conclusions and recommendations made.

#### List of Abbreviations

This section should list in alphabetical order all abbreviations used in the dissertation.

#### B. Main Text

The main text of the dissertation should start with an introduction followed by chapters, subdivided into sections and sub-sections. Depending on the scope appropriate chapters may include amongst others:

- 1. Literature Review,
- 2. Experiments and Analysis
- 3. Conclusions
- 4. Title (problem definition)
- 5. Propose Solution
- 6. "Learning during Dissertation Work", i.e. "Experience of Journey during Dissertation Duration" [Limit up to two paragraphs]

Any table, figure, illustration included in the dissertation should be clearly labeled. The caption should be placed at the top of tables but below figures/illustrations.

#### C. Guideline for Report Formatting:

- Use A4 size page with 1" margin all sides
- Header should include Dissertation title and footer should contain page number and enrollment numbers
- Chapter Name should be of Cambria font, 26 points, Bold
- Main Heading should be of Cambria font, 16 points, Bold
- Sub Heading should be of Cambria font, 12 points, Bold
- Sub Heading of sub heading should be of Cambria font, 12 points, Bold, Italic
- Paragraph should be of Cambria font, 12 points
- Line spacing 1.5, before 0, after 0
- No chapter number for references
- Before chapter 1, give page number in roman letter

#### D. References/Appendices

The list of references should follow the main text.

1. Documentation Style: IEEE referencing standards shall be followed.

The appendices shall consist of any base material, which would break the flow of the dissertation due to its length or partial irrelevance. Some examples are:

- 1. Raw data
- 2. Survey sheets
- 3. Charts and data tables from books
- 4. Lengthy mathematical derivations

All appendices should be listed in sequence, i.e. Appendix 1, 2, 3, etc.

# E. Physical format and layout

- 1. Certificate shall be collected from dissertation team during 16<sup>th</sup> to 18<sup>th</sup> April 2015.
- 2. Spiral Bound

Annexure I

# Title Page:

Shrimad R	ajchandra Institute of Management and
	Computer Application
	Uka Tarsadia University
	< <title capital="" in="" letters="">&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;A Dissertation on Literature Review&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Submitted By,&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;*&lt;/td&gt;&lt;td&gt;Student's Name (Enrollment Number)&gt;&gt;,&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;&lt;/td&gt;&lt;td&gt;&lt;Student's Name (Enrollment Number)&gt;&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Contraction in a straining of&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;ig, Partial Fulfillment of the Requirements&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;fec.4*&lt;/td&gt;&lt;td&gt;Semester of Master of Computer Application at&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Shrimad Baichan&lt;/td&gt;&lt;td&gt;dga Institute of Management and Computer Application&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Uka Tacsadia University.&lt;br&gt;Bardoli Surat.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Darbon anter&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;May, 2015.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;······&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Guided By,&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;&lt;Guide Name&gt;&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title>

#### Annexure II

#### **Dissertation Certificate:**

Shrimad Rajchandra Institute of Management and Computer Application,UTU UKA TARSADIA CERTIFICATE This is to certify that the Dissertation entitled <title> is submitted by students (enrollment no.), students (enrollment no.) as the partial fulfillment for 4th semester of Master of Science (Information Technology) has been carried out at Shrimad Rajohandra Institute of Management and Computer Application in 2015. Rate : Dr. Kaleesh Lad RT ogramme Coordinator

Annexure III

# **Guide Declaration Form:**

	ajchandra
	anagement and UKA TARSADIA
Computer App	plication,UTU
Guide's Declaration:	
above named student(s), an Master of Computer Appl	certify that the work entitled < <title>b was prepared by th&lt;br&gt;d was submitted as a partial fulfillment for the 4&lt;sup&gt;th&lt;/sup&gt; Semester of&lt;br&gt;location, and the aforementioned work, to the best of m&lt;br&gt;lent's work. The matter embodied in this dissertation is no&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Date:&lt;/td&gt;&lt;td&gt;&lt;&lt; Signature of Guide&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;«Cuide Name»&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;The work entitled "«Title&lt;br&gt;approved&lt;/td&gt;&lt;td&gt;&lt;math&gt;\gg&lt;/math&gt;", prepared by above named student(s) is evaluated an&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;&lt;Signature of Guide&gt;&gt;&lt;/td&gt;&lt;td&gt;Examiner(s) name with Signature:&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;«Guide Name&gt;&gt;&lt;/td&gt;&lt;td&gt;1&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Z&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title>

**Annexure IV** 

**Student Declaration Form:** 

