Assessment Types (Theory)

<table>
<thead>
<tr>
<th>Assessment Code</th>
<th>Assessment Type</th>
<th>Duration of each</th>
<th>Occurrence</th>
<th>Each of marks</th>
<th>Weightage in CIE of 40 marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Quiz</td>
<td>55 mins.</td>
<td>01</td>
<td>20</td>
<td>04 x 01=04</td>
</tr>
<tr>
<td>A2</td>
<td>Unit Test</td>
<td>1.5 hrs.</td>
<td>02</td>
<td>30</td>
<td>07 x 02=14</td>
</tr>
<tr>
<td>A3</td>
<td>Model the Requirement</td>
<td>-</td>
<td>02</td>
<td>20</td>
<td>04 x 02=08</td>
</tr>
<tr>
<td>A4</td>
<td>Internal Examination</td>
<td>3 hrs.</td>
<td>01</td>
<td>60</td>
<td>14 x 01=14</td>
</tr>
</tbody>
</table>

Assessment Types (Practical)

<table>
<thead>
<tr>
<th>Assessment Code</th>
<th>Assessment Type</th>
<th>Duration of each</th>
<th>Occurrence</th>
<th>Each of marks</th>
<th>Weightage in CIE of 50 marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A5</td>
<td>Practical Unit Test</td>
<td>2 hrs.</td>
<td>02</td>
<td>20</td>
<td>04 x 02=08</td>
</tr>
<tr>
<td>A6</td>
<td>Section Test</td>
<td>4 hrs.</td>
<td>01</td>
<td>30</td>
<td>12 x 01=12</td>
</tr>
<tr>
<td>A7</td>
<td>Semester End Examination</td>
<td>4 hrs.</td>
<td>01</td>
<td>30</td>
<td>20 x 01=20</td>
</tr>
<tr>
<td>A8</td>
<td>Journal/Viva</td>
<td>-</td>
<td>01</td>
<td>16 x 15=240</td>
<td>10 x 01=10</td>
</tr>
</tbody>
</table>
Course Outcomes:

CO1: Design good relational database design.
CO2: Use of IF, CASE, LEAVE, LOOP, WHILE and REPEAT control flow statements.
CO3: Design user defined functions and stored procedures using procedural SQL.
CO4: Demonstrate creating and firing of triggers.
CO5: Determine the conflict Serializability of a schedule.
CO6: Use object relational features to handle complex data types.

Programme Outcomes:

PO1: Ability to understand the concepts of key areas in computer science.
PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society.
PO3: Effective communication and presentation skill.
PO4: Ability to understand professional and ethical responsibility.
PO5: Recognition of the need for life-long learning.

Execution plan of Assessment:

<table>
<thead>
<tr>
<th>Assessment Code</th>
<th>Assessment Type</th>
<th>Weightage of Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Quiz (Online in SRIMoodle)</td>
<td>Unit 1(100%)</td>
</tr>
</tbody>
</table>

Tentative Date: 30/01/2020

Question Format: Q.1 Multiple Choice Questions (MCQ) of understanding and analysis type where each Multiple Choice Questions (MCQ) consists of 1 marks. [01x20=20 marks]

Question Type:

<table>
<thead>
<tr>
<th>Category</th>
<th>Weightages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding</td>
<td>50</td>
</tr>
<tr>
<td>Analysis</td>
<td>50</td>
</tr>
</tbody>
</table>

Course Outcome mapping: CO1

Programme Outcome mapping: PO1, PO2, PO5

Objective: To test students knowledge on consequences of poor database design and its impact and advantages of good relational database design.
Assessment Code: A2
Assessment Type: Unit Test -1 & 2 (Theory)
Weightage of Unit:
- Unit Test -1:
  - Unit -1: 30%
  - Unit -2: 70%
- Unit Test -2:
  - Unit -1 & 2: 30%
  - Unit -3: 35%
  - Unit -4: 35%
Tentative Date:
- Unit Test -1: 11/02/2020
- Unit Test -2: 10/03/2020
Question Format:
Q-1: (A) [4 questions of compulsory nature. Marks will be 01 X 04 = 04 marks]
   Short answer questions of 1 mark each. These questions shall be of understanding type so as to evaluate conceptual understanding of the students.
   (B) [Attempt any 3 out of 4 questions. Marks will be 02 X 03 = 06 marks]
   Answer to the questions in brief. Each question consists of 2 marks. These questions shall be of understanding type to test knowledge.

Q-2: [Two questions with internal choice. A or A and B or B. Marks will be 05 X 02 = 10 marks]
   Do as directed. Answer the questions in detail based on the situation given in the questions. Each question consists of 5 marks. Both the questions shall be of analysis type to test the student's analytical skill.

Q-3: Answer any two questions out of given three in detail. Marks will be 05 X 02 = 10 marks. Each question consists of 5 marks. All the three questions shall be of remembering type in nature to test the student's conceptual clarity.

Question Type:

<table>
<thead>
<tr>
<th>Category</th>
<th>Weightages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding</td>
<td>33</td>
</tr>
<tr>
<td>Analysis</td>
<td>34</td>
</tr>
<tr>
<td>Remembering</td>
<td>33</td>
</tr>
</tbody>
</table>

Course Outcome mapping:
- Unit Test - 1: CO1, CO2
- Unit Test - 2: CO1, CO2, CO3, CO4
Programme mapping:
Unit Test - 1
Programme mapping:
Unit Test - 2
Outcome:
- PO1, PO2, PO5
- PO1, PO2, PO4, PO5

Objective:
To measure their comprehension and analysis skill on relational database design and implementation of procedure and functions.
Assessment Code: A3
Assessment Type: Model the Requirement
Tentative Date:
Phase 1: 18/02/2020
Phase 2: 06/04/2020

Question Format and Remarks
Student team of 5 students shall be formed by the student's during the 1st week of the semester and submit the name at the end of 1st week. During second week, each team will submit a valid bill/receipt/form from a registered vendor used in day-to-day life. Bill should consist purchased/sale of at least five items in it along with taxation detail of state and central. Students have to prepare a document and followed format of document given by the course teacher.

Document Format: Document shall be create using following format:

i. Title Page/ Front Page
ii. Project Certification Form
iii. Declaration
iv. Table of Contents with page numbering

Chapter 1. Introduction
1.1 Identification of the entities, their attributes, and their relationship
1.2 [Students have to describe the entities, its attribute, and relationship related to that bill]
1.3 E-R diagram based on identified entities and attributes
   [After identification of entities and their attribute, students have to construct the Entity Relationship Diagram of the same. Using an appropriate tool.]
1.4 E-R diagram to Relational modeling
   [Convert the Entity Relationship Diagram to Relational modeling.]
1.5 Apply the normalization on the designed table with appropriate justification.
   [Apply the normalization on created relation with a detail description of steps followed by students.]

Chapter 2. Implementation
2.1 Script of table creation and record insertion
   [Team shall submit the script of table creation and record insertion for the database design approved by the teacher at the end of phase 1.]
2.2 Coding of report generation
   [Two relevant reports must be generated based on the available data through Procedural SQL. Reports shall be designed in a manner that can help in taking a managerial level decision.]
2.3 Output of generated report/ Screenshots of a generated report

Chapter 3. References
**Guideline for document formatting:**

- Use A4 size page with 1" margin all sides.
- Header should include Bill tile and footer should contain page number and enrollment numbers.
- Chapter Name should be of Cambria font, 20 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 lines, before - 0, after - 0.

**Note:**

- Phase 1 submission must contain chapter 1 including Title Page/ Front Page.
- **Submission Date of Phase 1:** 18/02/2020
- In phase 2, students have to submit the full document.
- **Submission Date of Phase 2:** 06/04/2020
- Late submission of document for both phases shall be penalized as 10% of total marks of in time submission parameter per day for a maximum three days after the deadline. In case, if a student has failed to meet the deadlines, he/she shall receive zero marks and no document shall be accepted.
- After submission of the document of both phases, the course teacher will verify the document and give suggestions and the course teacher will give the document to students after 5 days from the submission date of both phases. Students will resubmit the document after 5 days from the given date by the course teacher. Viva must be taken during the first submission time of students for both phases. Viva shall be conducted during the laboratory session.
- Title Page/Front Page is attached at the end of Assessment Policy.

**Evaluation:**

**Phase 1 [50 marks]:**

- In time submission [05]
- Quality of database design [20]
  - Identification of Entity, Attribute and its relationship [10]
  - E-R Diagram to Relational Model [10]
- Document formatting [05]
- Description of process [12]
  - Steps of Normalization of Database upto 3rd Normal Form [08]
- **Viva [08]**

**Phase 2 [50 marks]:**

- In time submission [05]
- Documentation describing the tasks done in phase 2 [10]
- Demonstration of report generation [20]
<table>
<thead>
<tr>
<th>Course Outcome mapping:</th>
<th>CO1, CO2, CO3, CO4, CO6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme Outcome mapping:</td>
<td>PO1, PO2, PO3, PO4, PO5</td>
</tr>
<tr>
<td>Objective:</td>
<td>To measure their conceptual and analysis skill required to solve real world problems.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment Code: A4</th>
<th>Assessment Type:</th>
<th>Weightage of Unit:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal Examination</td>
<td>Unit -1(20%), Unit - 2(15%), Unit - 3(15%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unit -4(15%), Unit- 5(20%), Unit - 6(15%)</td>
</tr>
<tr>
<td>Tentative Date:</td>
<td></td>
<td>13/04/2020</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question Format:</th>
<th>Section 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q-1: (A) [4 questions of compulsory nature. Marks will be 01 X 04 = 04 marks]</td>
<td>Short answer questions of 1 mark each. These questions shall be of understanding type so as to evaluate conceptual understanding of the students.</td>
</tr>
<tr>
<td></td>
<td>(B)[Attempt any 3 out of 4 questions. Marks will be 02 X 03 = 06 marks]</td>
</tr>
<tr>
<td></td>
<td>Answer to the questions in brief. Each question consists of 2 marks. These questions shall be of understanding type to test knowledge.</td>
</tr>
<tr>
<td>Q-2: [Two questions with internal choice. A or A and B or B. Marks will be 05 X 02 = 10 marks]</td>
<td>Do as directed. Answer the questions in detail based on the situation given in the questions. Each question consists of 5 marks. Both the questions shall be of analysis type to test the student’s analytical skill.</td>
</tr>
<tr>
<td>Q-3: Answer any two questions out of given three in detail. Marks will be 05 X 02 = 10 marks. Each question consists of 5 marks. All the three questions shall be of remembering type in nature to test the student’s conceptual clarity.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q-4: (A) [4 questions of compulsory nature. Marks will be 01 X 04 = 04 marks]</td>
</tr>
<tr>
<td>Short answer questions of 1 mark each. These questions shall be of understanding type so as to evaluate conceptual understanding of the students.</td>
</tr>
<tr>
<td>(B)[Attempt any 3 out of 4 questions. Marks will be 02 X 03 = 06 marks]</td>
</tr>
<tr>
<td>Answer to the questions in brief. Each question consists of 2 marks. These questions shall be of understanding type to test knowledge.</td>
</tr>
</tbody>
</table>
Q-5: [Two questions with internal choice. A or A and B or B. Marks will be 05 X 02 = 10 marks] 
Do as directed. Answer the questions in detail based on the situation given in the questions. Each question consists of 5 marks. Both the questions shall be of analysis type to test the student’s analytical skill.

Q-6: Answer any two questions out of given three in detail. Marks will be 05 X 02 = 10 marks. Each question consists of 5 marks. All the three questions shall be of remembering type in nature to test the student’s conceptual clarity.

**Question Type:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Weightages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding</td>
<td>33</td>
</tr>
<tr>
<td>Analysis</td>
<td>34</td>
</tr>
<tr>
<td>Remembering</td>
<td>33</td>
</tr>
</tbody>
</table>

**Course Outcome mapping:** CO1, CO2, CO3, CO4, CO5, CO6

**Programme Outcome mapping:** PO1, PO2, PO4, PO5

**Objective:** To measure their comprehension and analysis skill on relational database management system.

**Assessment Code:** A5  
**Assessment Type:** Practical Unit Test – 1  
**Weightage of Unit:** Unit -1(50%), Unit- 2(50%)

**Tentative Date:** 11/02/2020  
**Minimum number of practicals to be certified as eligibility to appear:** 6

**Question Format:**

Q-1: Design a good database design based on given requirements. [10 marks]
Q-2: Using the relations created in 1, solve the queries using procedural SQL. [10 marks]

**Question Type:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Weightages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding</td>
<td>30</td>
</tr>
<tr>
<td>Analysis</td>
<td>70</td>
</tr>
</tbody>
</table>

**Course Outcome mapping:** CO1,CO2

**Programme Outcome mapping:** PO1, PO2, PO5

**Objective:** To measure their Analysis skill on usage of conditional and looping constructs of Procedural SQL.
### Assessment Code: A5
**Assessment Type:** Practical Unit Test - 2  
**Weightage of Unit:**  
Unit -1(20%), Unit -2(10%)  
Unit -3(35%), Unit -4(35%)  
  
**Tentative Date:** 10/03/2020  
**Minimum number of practicals to be certified as eligibility to appear:** 11  
  
**Question Format:**  
Q-1: Do as directed. [5 marks]  
Q-2: Implement the solution of the given problem. [15 marks]  
  
**Question Type:**  
<table>
<thead>
<tr>
<th>Category</th>
<th>Weightages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding</td>
<td>30</td>
</tr>
<tr>
<td>Analysis</td>
<td>70</td>
</tr>
</tbody>
</table>

**Course Outcome mapping:** CO1, CO2, CO3, CO4  
**Programme Outcome mapping:** PO1, PO2, PO5  
**Objective:** To measure their Analysis skill on usage of cursor, function and procedure.

### Assessment Code: A6
**Assessment Type:** Section Test  
**Weightage of Unit:**  
Unit -1(20%), Unit -2(10%)  
Unit -3(30%), Unit -4(20%)  
Unit -5(10%), Unit -6(10%)  
  
**Tentative Date:** 01/04/2020  
**Minimum number of practicals to be certified as eligibility to appear:** 16  
  
**Question Format:**  
Q-1: Model a relational database design for given requirement. [5 marks]  
Q-2: Implement the solution of the given problem. [20 marks]  
Q-3: Viva [5 marks]  
  
**Question Type:**  
<table>
<thead>
<tr>
<th>Category</th>
<th>Weightages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding</td>
<td>30</td>
</tr>
<tr>
<td>Analysis</td>
<td>70</td>
</tr>
</tbody>
</table>

**Course Outcome mapping:** CO1, CO2, CO3, CO4, CO6  
**Programme Outcome mapping:** PO1, PO2, PO3, PO4, PO5  
**Objective:** To measure their Analysis skill in implementing procedure, function and trigger to solve type of real world problem.
<table>
<thead>
<tr>
<th>Assessment Code: A6</th>
<th>Assessment Type: Semester End Examination</th>
<th>Weightage of Unit: Unit -1(20%), Unit- 2(10%) Unit -3(30%), Unit- 4(20%) Unit -5(10%), Unit- 6(10%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tentative Date : 21/04/2020</td>
<td>Minimum number of practicals to be certified as eligibility to appear: 16</td>
<td></td>
</tr>
<tr>
<td>Question Type:</td>
<td><strong>Category</strong></td>
<td><strong>Weightages (%)</strong></td>
</tr>
<tr>
<td></td>
<td>Understanding</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Analysis</td>
<td>70</td>
</tr>
<tr>
<td>Course Outcome mapping:</td>
<td>CO1, CO2, CO3, CO4, CO6</td>
<td></td>
</tr>
<tr>
<td>Programme Outcome mapping:</td>
<td>PO1, PO2, PO3, PO4, PO5</td>
<td></td>
</tr>
<tr>
<td>Objective:</td>
<td>To measure their Analysis skill in implementing procedure, function and trigger to solve type of real world problem</td>
<td></td>
</tr>
</tbody>
</table>

**UFM policy:**

No make-up work shall be accepted for missed or failed tests. Any ascertained fact of breaking institute policy shall be associated with one or all of the following: (i) Zero marks for that CIE parameter occurrence; (ii) Restricted to appear in any further academic assessments of that same course (iii) Report to the Program coordinator; (iii) Report to the Director; (iv) Report to parents.
Bhulabhai Vanmalibhai Patel Institute of Computer Science, UTU | 2020

Refer following Title/Front-page format.

<<TITLE IN CAPITAL LETTERS>>

Submitted By,

<<Student’s Name (Enrollment Number)>>,
<<Student’s Name (Enrollment Number)>>,
<<Student’s Name (Enrollment Number)>>,
<<Student’s Name (Enrollment Number)>>,
<<Student’s Name (Enrollment Number)>>

Guided By,

<<Course Teacher Name>>

in partial fulfilment of the requirements

for the 2nd Semester

Bhulabhai Vanmalibhai Patel Institute of Computer Science,

Uka Tarsadia University, Bardoli, Surat