

**UNIVERSITY OF RUHUNA**  
**BACHELOR OF INFORMATION AND COMMUNICATION**  
**TECHNOLOGY DEGREE**  
**LEVEL I (SEMESTER II) – Assessment 02**

**Course unit: ICT1213 - Database Management Systems**

**Duration: Up to Friday 4.00 pm. 13<sup>th</sup> week**

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Basic Outline

You are required to develop a system for faculty of technology for recording students marks and attendance.

- Your system should contain below user accounts

Admin - With All privileges with Grant

Dean - With All privileges without Grant

Lecturer – All privileges without Grant and user creation

Demonstrator - Read permissions all tables/views

Technical Officer - Read, write and update permissions for attendance related tables/views

Student - Read permission for final attendance and final marks/Grades tables/views

- Your system should include tables to store Quiz marks, Assessment Marks, Mid Semester marks(Practical and Theory), Final Marks(Practical and Theory) etc
- Your system should include tables to store data about course modules
- Your system should include tables to store data about all the users Admin to Student
- You need to go through the DDLC process and produce all the related documents for the final presentation (Requirement document, ER diagrams etc)

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- You should store data for at least 10 students, at least 04 lecturers, at least 04 instructors, at least 04 technical officers and other mentioned roles
  - You should store basic data for above roles including at least 04 different attributes
  - You should record attendance details for 06 subjects with 15 days
    - 01 subject theory only other 05 theory and practical(Assume that theory and practical both have 15 sessions)
    - If some student have submitted a medical for a day there should be a way to record it

- In attendance recording tables there should be data to cover  $\geq 80\%$  students,  $< 80\%$  students and with medical  $\geq 80\%$  students,  $< 80\%$  students
- There should be a way to view attendance details as a summary for whole batch and as individuals
- When there is both theory and practical for a subject there should be a way to check attendance only for theory, only for practical and combined (Assume all theory lectures are 2 hours and practices are 03 hours)
- You should record marks for the subjects as follows (All marks should be out of 100)

No of subjects	Quizes	Assessments	Mid term	Final theory	Final practical
02	20% (best 03 out of 04 quizzes)	-	20%	30%	30%
01	10% (best 03 out of 04 quizzes)	20% (02 out of 02)	20%	50%	
02	10% (best 03 out of 04 quizzes)	20% (best 02 out of 03 assessments)	-	40%	30%
01	10% (best 03 out of 03 quizzes)	20% (best 02 out of 03 assessments)	-	30%	40%

To obtain the eligibility CA part must have more than or equal 50%

- There should be a way to view CA marks details as a summary for whole batch and as individuals
- There should be a way to see if student/s are eligible according to the criteria of CA to sit for the final exam
- There should be a way to check eligibility (attendance + CA marks) as individuals and for the whole batch
- There should be a way to see the final marks only for individuals and whole batch
- Grade students according to the by law of the faculty
- There should be a way to see marks for each subject, student and as a whole batch
- There should be a way to see Grades for each subject, student and as a whole batch
- There should be a way to see SGPA and CGPA with the subjects and grades for each student and for the whole batch

Note: 1. If there are students who put medicals for CA, Mid exams or Final exams you must display their result as MC

2. In student table there should be a field to identify the status of the students (proper, repeat and suspended). If a student is having suspended status you must display all results of that student as WH and if a student is having repeat status maximum that they can get is a "C".