

TEST PROJECT
PRACTICAL SKILLS

**MODULE 1: SYSTEM ANALYSIS AND DESIGN &
DATABASE DESIGN**

MAJORS: SOFTWARE TECHNOLOGY

Exam Paper Code: SAT03

SCHOOL LEADERSHIP	CHIEF SUBCOMMITTEE ON EXAM DEVELOPMENT
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Guide contestants

Student's name	Date of birth	Placement	Module 1
			System Analysis and Design & Database Design

GUIDE CONTESTANTS

Module 1: System Analysis and Design & Database Design

Time:

- Preparation Time: 05 minutes
- Time Duration: 150 minutes
- Break Time: 10 minutes

Scores:

Exam content		Marks
1	System Analysis and Design	50
2	Database Design	50
Total Marks		100

Candidates are required to note:

- Ensure safety standards of health and computer
- Do the test independently without discussing while doing the test
- Comply with regulations of exam room and proctor's instructions
- Fill the information in the form
- Complete all requirements in the content of the exam
- Do not use documents, the Internet and other communication devices during the assignment
- If the exam does not have special requirement for the file name and storage location, contestants save all exam file name in the folder as following format:

D:\WorkSkills\System Analysis and Design & Database Design

<Student's Name>_< Student code >[.< extension >]

Student's name	Date of birth	Placement	Module 1
			System Analysis and Design & Database Design

CONTENT OF THE TEST

Question 1:

Considering the restaurant management problem as follows:

A restaurant needs to build a restaurant work management system. The restaurant sells many dishes. Each dish has information such as name of the dish, unit of calculation and price. The dishes are classified according to each category such as rice, seafood, grilled, hot pot, ... Each type of dish has information such as type name, lowest price, highest price. The restaurant also sells drinks such as beer, wine, soft drinks, mineral water,... Each type of drink includes many drinks and has information such as name type, lowest price, highest price. Each drink has information such as name of the drink, unit of calculation and price. Each drink is only produced by one manufacturer. The manufacturer's information includes the manufacturer's name, address and phone number.

Customers will come to eat at the restaurant. Each customer has information such as ID number, full name, address and gender. If the customers come in groups then count as only one customer and choose one person from the group to be the representative. Every time to eat at a restaurant, customers will receive a bill. Each bill contains a variety of dishes and drinks and has information such as code of the bill, date of issuance and price.

Please do the following request:

- a. Draw ER model for the above system.
- b. Convert ER model to logical data model.

Question 2:

Based on the previous ER model (Question 1), write SQL statements to do the following:

1. Create a database and name it ***RestaurantManagement*** then create tables with reasonable data types.
2. Create constraints on tables to ensure the accuracy and reliability of the data.
3. Insert 4 valid records into each table.
4. Based on the ***dish*** table, select dish's name and price that are in the grill category.
5. Create a view that selects all fields from ***customer*** table and sorts the results in ascending order by customer's name.
6. Create a procedure that updates data of a customer from the ***customer*** table with the input parameter customer's code.

Assessment guidelines

Student's name	Date of birth	Position
		Computer Network Design

GENERAL TRANSCRIPT

Exam content		Maximum Marks	Achieved Marks
1	System Analysis and Design	50	
2	Database Design	50	
Total Marks		100	

TEST TIME

Get to know the equipment		Time Duration		Break Time			
Starting time		Starting time		Starting time		Starting time	
Ending time		Ending time		Ending time		Ending time	

TEACHERS' SIGNATURE

1	2	3	4	5