



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

**FACULTY OF COMPUTING AND INFORMATICS
SCHOOL OF COMPUTING**

DEPARTMENT OF SOFTWARE ENGINEERING

QUALIFICATION: BACHELOR OF COMPUTER SCIENCE; BACHELOR OF INFORMATICS; BACHELOR OF GEOINFORMATION TECHNOLOGY	
QUALIFICATION CODE: 07BCMS; 07BACS 07BAIT; 07BAIF; 07GITB	LEVEL: 6
COURSE: DATABASE PROGRAMMING	COURSE CODE: DPG621S
DATE: JANUARY 2023	SESSION: 2 (PRACTICAL)
DURATION: 2 HOURS	MARKS: 60

SECOND OPPORTUNITY/SUPPLEMENTARY EXAMINATION QUESTION PAPER	
EXAMINER:	MR GEREON KOCH KAPUIRE
MODERATOR:	PROF JOSE QUENUM

THIS QUESTION PAPER CONSISTS OF 2 PAGES
(Excluding this front page)

INSTRUCTIONS

1. Answer all questions.
2. When writing take the following into account: The style should inform than impress, it should be formal, in third person, paragraphs set out according to ideas or issues and the paragraphs flow in a logical order. The information provided should be brief and accurate.
3. Please, ensure that your writing is legible, neat and presentable.

Section B – Practical (60 Marks)

(NOTE: Use SQL Server Management System (SSMS) on your computer for this section)

Instructions: Copy and Paste your final code onto notepad and save it on the exam drive (z). The drive is the drive with your student number.

Question 1 [4 Marks]

Create a table named VehicleRegistration using the fields (*RegistrationNo, Make, VehicleCategory, FuelType, MainColour, DateOfRegistration*) provided. Choose relevant data types and include one primary key.

Question 2 [5 Marks]

Write a statement to create a procedure which adds a new vehicle record (values of your choice) to the VehicleRegistration table. Create a statement to invoke the procedure, and a statement to verify that the vehicle was successfully added.

Question 3 [10 Marks]

Modify the statement in Question 2 to allow the INSERT to be inserted five times. No repetition of the same statement. Create a statement to invoke the procedure, and a statement to verify that the employee was successfully added.

Question 4 [9 Marks]

Write a statement to create a procedure which test input and output parameters. Your procedure should accept the registration number, and then output the make of the vehicle. Invoke the procedure to test the input value, and the output value.

Question 5 [7 Marks]

Write a statement to create a procedure which accepts the FuelType and RegistratioNo as input. The procedure should update the FuelType with the one inputted, only where the registration number matches the one inputted. Invoke the procedure with test values. Test whether the update was successful.

Question 6 [7 Marks]

Write a statement to create a procedure testing if the fuel is Diesel then it should print "*The vehicle is Diesel*", else if the fuel is Petrol, than it should print "*The vehicle is petrol*". Invoke the procedure to test the procedure.

Question 7 [3 Marks]

Write a statement to create a procedure which performs transactions. The statement must delete all vehicles where the make is Nissan in the VehicleRegistration table; perform a ROLLBACK TRANSACTION. Create a statement to verify that the transaction was successful or not.

Question 8

[3 Marks]

Create a table called VehicleAudit to record changes in the main table. The table should contain the fields (*RegisterNumber, Make*).

Question 9

[10 Marks]

Write a statement to create a trigger. The trigger keeps logs after a row is inserted in the VehicleRegistration table. For audit logs, the registration number and make is inserted in a table called VehicleAudit. Print a message "*after insert trigger*" after insertion. Create a statement to verify that the trigger is fired successfully.

Question 10

[2 Marks]

Write a statement to delete the trigger created in Question 9.

<<<<<End of Practical Exam Paper>>>>>

