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: NOVEMBER 2022	**SESSION:** 2 (PRACTICAL)
DURATION: 2 HOURS	**MARKS:** 60

FIRST OPPORTUNITY 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 the 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)

(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 EMPLOYEE_SALARY using the fields *(Employee_ID, LastName, FirstName, Title, Salary, and Gender)*. Choose relevant data types and include one primary key.

Question 2   [10 Marks]
Write statements to create a procedure that adds an employee record (The value of Employee_Id is 1, while the rest of the values are your choice) to the EMPLOYEE_SALARY table. Make use of variables to INSERT the values rather than hardcoded values. Create a statement to invoke the procedure, and a statement to verify that the employee was successfully added.

Question 3   [7 Marks]
Write a statement to modify the procedure created in Question 2. Make use of parameters to add an employee record (The value of Employee_Id is 2, while the rest of the values are your choice) to the EMPLOYEE_SALARY table. Create a statement to invoke the procedure, and a statement to verify that the employee was successfully added.

Question 4   [10 Marks]
Write a statement to create a procedure that accepts an Employee ID as input. Two conditions should be added: firstly test if the first Employee ID entered in Question 2 matches the value inputted, and their salary is incremented with a 500 bonus, and the bonus is printed; Secondly test in the second Employee ID entered in Question 3 matches the value inputted, and their salary in incremented with 1000 bonus, and the bonus is printed.
Invoke the procedure to test the procedure.

Question 5   [7 Marks]
Write a statement to create a procedure that accepts an input value. Two conditions should be tested for the values *Mr* and *Dr*. If none of the values are met, display the text "*The title does not exist*". Invoke the procedure to test the procedure.

Question 6   [2 Marks]
Transform the procedure written in *Question 5* to demonstrate the usage of XML.

Question 7   [7 Marks]
Write a statement to display the title of the employees five times. Please do not retype the same statement. Invoke the procedure to test the procedure.

Question 8 [5 Marks]

Write a statement to create a trigger. Print a message to the employee when anyone tries to add data to the Employee_Salary table. Create a statement to verify that the trigger is fired successfully.

Question 9 [2 Marks]

Write a statement to disable the trigger created in *Question 8*.

Question 10 [6 Marks]

Write a statement to create a procedure that performs transactions. The statement must update the gender of the employee created in Question 2; perform a ROLLBACK TRANSACTION. Create a statement to verify whether the transaction was successful or not.

<<<<<<End of Practical Exam Memo>>>>>