NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE

QUALIFICATION: BACHELOR OF COMPUTER SCIENCE	
QUALIFICATION CODE: 07BACS	**LEVEL:** 6
COURSE: DATABASE PROGRAMMING AND TECHNIQUES	**COURSE CODE:** DPT621S
DATE: NOVEMBER 2019	**SESSION:** 2 (Practical)
DURATION: 2 HOURS	**MARKS:** 70

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	MR GEREON KOCH KAPUIRE
MODERATOR	PROF. JOSE QUENUM

THIS QUESTION PAPER CONSISTS OF 3 PAGES
(Including this front page)

INSTRUCTIONS

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

Section B – Practical (70 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.

<u>Question 1</u>   [5 Marks]
Yellow Square Property is a Namibian company owned by Alex, specializing in the leasing, selling and management of both commercial and residential properties (only buildings) in Namibia with operations in Windhoek, Okahandja, Swakopmund, Walvisbay, Ondangwa and Oshakati. It currently uses a traditional filling method for its data management, hence the need for a database system.

Using the description above, create a table named ESTATE_AGENCY using six fields of your choice. Choose relevant data types and include one primary key.

<u>Question 2</u>   [7 Marks]
Using the description mentioned in Question 1, write statements to create a procedure which adds a record in the table created in Question 1. The table contains six fields. Please make use of variables (use for three fields of your choice) and parameters (use for three fields of your choice) to add the values.

<u>Question 3</u>   [3 Marks]
Create a statement to invoke the procedure created in Question 2, and a statement to verify that the record was successfully added.

<u>Question 4</u>   [5 Marks]
Write a statement to create a procedure which adds the field "*amount*" to the table created in Question 1. Create a statement to invoke the procedure, and a statement to verify that the record was successfully added.

<u>Question 5</u>   [5 Marks]
The agent is paid a base amount N$ 10000.00 and 15% commission of the value of the property they sell or bring under management. Considering the value of the property is N$ 50000.00, write a statement to create a procedure which calculates the salary the agent receives. Create a statement to invoke the procedure, and a statement to verify that the record was successfully updated.

<u>Question 6</u>   [13 Marks]
Write a statement to create a procedure which accepts a discount as input. The procedure should have two conditions. Firstly, if the discount is between 1 to 15 percent, the base amount should be increased with 1000 and the increased value is printed, secondly if the discount is between 16 to 30 percent the base amount should be decreased with 500 and the decreased value is printed. Write a statement to invoke the procedure.

Question 7   [4 Marks]

Modify the procedure created in Question 6 to accept an input value. The result once processed should be returned as output for both conditions.

Question 8   [5 Marks]

Write a statement to create a procedure which accepts the result outputted from the procedure created in Question 7 and invoke the procedure. The results should be printed.

Question 9   [8 Marks]

Write a statement to create a procedure which accepts the location of the property as input. The procedure should test if the location is Windhoek and delete the record. Write a statement to invoke the procedure, and a statement to verify that the record was successfully deleted.

Question 10   [6 Marks]

Write a statement to create a procedure which displays the location of the agent three times. Please do not retype the same statement three times. Write a statement to invoke the procedure.

Question 11   [9 Marks]

Write a statement to create a procedure which performs transactions. If the property is in Tsumeb, the statement must delete the record in the ESTATE_AGENCY table; perform a ROLLBACK TRANSACTION. Create a statement to verify that the transaction was successful or not.

<<<<<<End of Exam >>>>>