

# **FACULTY OF COMPUTING AND INFORMATICS**

## DEPARTMENT OF COMPUTER SCIENCE

QUALIFICATION:	
DIPLOMA OF PROPERTY STUDIES NQF :6,	
BACHELOR OF PROPERTY STUDIES HONS. NQF :8	
QUALIFICATION CODE: 27DPRS, 27BPRS	LEVEL: 6
COURSE: INTRODUCTION TO DATABASES 1B	COURSE CODE: IDB220S
DATE: JANUARY 2019	PAPER: PRACTICAL
DURATION: 2 HOURS	MARKS: 60

SUPPLEMENTAL	RY / SECOND OPPORTUNITY EXAMINATION QUESTION PAPER
EXAMINER(S)	MRS SHILUMBE CHIVUNO-KURIA
MODERATOR:	MR GEREON KOCH KAPUIRE

#### THIS QUESTION PAPER CONSISTS OF 3 PAGES

(Excluding this front page)

#### **INSTRUCTIONS**

- 1. Answer ALL the questions in notepad with your student number on the exam drive.
- 2. Write clearly and neatly.
- 3. Number the answers clearly.

### PERMISSIBLE MATERIALS

1. Computer.

(Use iSQL\*Plus (<a href="http://itdbsrv.students.nust.na:5560/isqlplus/">http://itdbsrv.students.nust.na:5560/isqlplus/</a>) or SQLplus on your computer for this section)

Question 1 [19 Marks]

Mrs Shikongo needs your database expertise to create a simple music collection database and populate it with her favourite songs. Work with the following assumptions:

- An album is made by exactly one artist
- An artist makes one or more albums and
- An album contains one or more tracks

The current data and structure of the database are shown below:

Table 1: ARTISTS

anen_lo:	ARTIST NAME	p(0):
1000	Show, Time	07/18/1980
1001	Lili, Colins	08/19/1979

Table 2: ALBUM

ABBUM_ID	ALBUM_NAME	ARTEST_16
A125516	Rock to the world	1000
A334555	Desert to Coast	1000

Table 3: TRACK

TETTAL CH		ALBUM II
1	Easy go	A334555
2	Slow go	A334555
3	Rocky land	A125516

Write a query that will create all three tables. Choose the correct primary keys and foreign keys where necessary.

Question 2 [6 Mark]

Create a sequence called artist\_id\_seq that would be used to generate the artist IDs from 1000 incremented by 1 to 9999. It should increment by 1 and should not cache any values.

Question 3 [7 Marks]

Write the necessary SQL instructions to insert all the data into the tables created in question 1 with the appropriate data as provided. Make use of the sequence created in question 2 to insert the artist's IDs.

Question 4 [3 Marks]

Write a SQL statement to verify that the information has been inserted.

Question 5 [2 Marks]

Write a statement to ensure that all the changes are permanent.

Question 6 [2 Marks]

What are the consequences of trying to delete the table Album that has a foreign key?

Question 7 [2 Marks]

Write a statement to drop the table Artist.

The tables that will be used for the following section are: employees and departments.

Question 8 [5 Marks]

Write an SQL statement that would display the Employee\_ID, Manager\_ID and Department\_ID of all employees that are either in Departments 40, 60, 80 or 100, joining the First\_Name and Salary with the word "earns" in the middle and call this field Description.

Question 9 [4 Marks]

Write an SQL statement that would display the Employee\_ID, First\_Name, Last\_Name and Job\_ID of the employees that have their first names begin with 'M' and the second last letter 'e' and also display the Date of the Next Friday after the date they were employed.

Question 10 [10 Marks]

Write a query to display the first\_name, department\_name, city and and country where each employee is working as shown in the figure below.

Name	DEPARTMENT_NAME	CITY	COUNTRY_NAME
Steven	Executive	Seattle	United States of America
Neena	Executive	Seattle	United States of America
Lex	Executive	Seattle	United States of America
Alexander	IT	Southlake	United States of America
Bruce	IT	Southlake	United States of America
David	IT - A	Southlake	United States of America
Valli	IT	Southlake	United States of America
Diana	IT	Southlake	United States of America
Nancy	Finance	Seattle	United States of America
Daniel	Finance	Seattle	United States of America
John	Finance	Seattle	United States of America
Ismael	Finance	Seattle	United States of America
Jose Manuel	Finance	Seattle	United States of America
Luis	Public Relations	Munich	Germany
Den	Purchasing	Seattle	United States of America
Alexander	Purchasing	Seattle	United States of America
Shelli	Purchasing	Seattle	United States of America
Sigal	Purchasing	Seattle	United States of America
Guy	Purchasing	Seattle	United States of America
Karen	Purchasing	Seattle	United States of America
Matthew	Shipping	South San Francisco	United States of America
Adam	Shipping	South San Francisco	United States of America
Payam	Shipping	South San Francisco	United States of America
Shanta	Shipping	South San Francisco	United States of America

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