



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY
DEPARTMENT OF INFORMATION & MEDIA TECHNOLOGY

SECOND SEMESTER 2014/2015 EXAMINATION

COURSE CODE: CIT 324
COURSE TITLE: STRUCTURED QUERY LANGUAGE
CREDIT UNITS: 3
TIME ALLOWED: 2½ Hours
COURSE LECTURER(S): I. O. ALABI
NUMBER OF QUESTIONS: 3
NUMBER OF PAGES: 3 (INCLUDING THIS PAGE)

INSTRUCTIONS

- Answer all questions
- Do **not** use red pen
- Please use a clear handwriting
- This exam is closed book, closed notes, closed laptop and closed cell phone
- Please use non-programmable calculators only



1. a. Explain the three methods of populating database tables. (5 marks)
- b) Consider the database which consists of the three tables below and write the following SQL statements:
 - i) Retrieve the age of the youngest sailor.
 - ii) Retrieve the names of Sailors who reserved a boat on the following days:
10/10/2008, 10/11/2008, 12/11/2008.
 - iii) Retrieve the names of Sailors who have reserved a Blue boat.
 - iv) Re-assign all the reservations made by the sailor with Sid 22 to the sailor with Sid 29.
 - v) Delete the sailor named 'David'. (3 marks each)

Sailors Table

Sid	Sname	Rating	Age
22	David	7	45
29	Bala	1	33
31	Lukman	8	55
32	Andy	8	25
58	Richard	10	35
64	Harold	7	35
71	Zubair	10	16
74	Helen	9	35
85	Ali	3	25
95	Bob	3	63

Reservations Table

Sid	Bid	Day
22	101	10/10/2008
22	102	10/10/2008
22	103	8/10/2008
22	104	7/10/2008
31	102	10/11/2008
31	103	6/11/2008
31	104	12/11/2008
64	101	5/9/2008
64	102	8/9/2008
64	103	8/9/2008

Boats Table

Bid	Bname	Colour
101	Interlake	Blue
102	Interlake	Red
103	Clipper	Green
104	Marine	Red

2. a. What are the three classes of SQL statements. (5 marks)
- b. Explain the function of the following SQL statements:
 - i) `SELECT * FROM student WHERE matric_no = 41709;`
 - ii) `CREATE TABLE courses (C_code VARCHAR(6), c_title VARCHAR(20), c_unit number(1), c_semester) FOREIGN KEY (C_code) REFERENCES student;`
 - iii) `INSERT INTO courses VALUES ('CIT324', 'SQL',3, 'Alabi',NULL);`
 - iv) `USE sict;`



v) `SELECT DATABASE();` (3 marks each)

3. a. Describe the function of the two transaction processing statements that can ensure the consistent state of a database. (5 marks)

b. Define the following terms:

i. Priviledges

ii. Roles

iii. GRANT and REVOKE

iv. Deadlock

v. Locks

(3 marks each)