NATIONAL OPEN UNIVERSITY OF NIGERIA
University Village, 91 Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja
FACULTY OF SCIENCES
COMPUTER SCIENCE DEPARTMENT ᵤₘ
2020_2 EXAMINATIONS

DAM401: ORACLE DATABASE   **Credit:** 2 units
TIME ALLOWED: 2 Hours
INSTRUCTION: Answer Question 1 and any other THREE (3) Questions

1a) Define DML. Give five examples of DML commands*(4 ½ marks)*

1b) Discuss the various data dictionary views you are familiar with *(7 ½ marks)*
1c) Write short notes on the following:
i. User-defined data type   *(3 marks)*
 ii. Index   *(3 marks)*
iii. Cluster   *(3 marks)*

1d)   **(i) What is deadlock?** *(2 marks)*
            (ii) Explain how Oracle handles deadlock situations *(2 marks)*

2a) Briefly describe the following stating examples where necessary:
i) DML locks (datalocks)   *(2 marks)*
ii) DDL locks (dictionary locks)   *(2 marks)*
iii) Internal locks and latches   *(2 marks)*

2b)Extensively discuss the operations of Share Row Exclusive Table Locks (SRX)*(6 marks)*

2c)) **State the three common uses of Triggers** *(3 marks)*

3a) Produce the SQL commands that accomplish the following tasks:
    i.   **Completely remove a table named tbl** (1 *mark*)
    ii. **Change the structure of a table named tbl by adding a column named col2***(1 mark)*
    iii. **Amend the content of table tbl by changing a record with ID=123. Set a new value of field fld as fld*2** *(1 mark)*
    iv. **Query table tbl for records with field values fld > 10***(1 mark)*
    v.   **Create a view named vw1 from record of a table tbl with field fld =20***(1 mark)*
    vi. **Display all the content of table tbl** *(1 mark)*
3b)Outline any six data types supported by Oracle database *(3 marks)*
3c) **The execution of a SQL statement goes through a number of stages. Discuss** *(6 marks)*

4a) Explain the task performed by each of the following SQL codes:
  i.   DELETE FROM *emp* WHERE empno=0001;*(2 marks)*
  ii.   INSERT INTO *customers* VALUES(1,'John'); *(2 marks)*
  iii.   DELETE FROM emp WHERE last_name='Don';*(2 marks)*
  iv.   SELECT first_name, last_name FROM emp *(2 marks)*
4b)Explain the file formats/types generated by Data Pumps *(7 marks)*

5a)Discuss how SQL Loader can be used to upload data into Oracle databases (8 marks)

5b) Explain the following PL/SQL code:

1 CREATE PACKAGE numb
2 AS
3 FUNCTION odd_even (v1 NUMBER) RETURN VARCHAR2;
4 PROCEDURE ins_ints (v1 in NUMBER);
5 END num;
6/   *(7 marks)*