

**CSC&CSM – Database and
Web Design**

T034

Wednesday, 05/11/2014

08:30 - 11:30 AM

WORKFORCE DEVELOPMENT AUTHORITY



P.O. BOX 2707 Kigali, Rwanda Tel: (+250) 255113365

**ADVANCED LEVEL NATIONAL EXAMINATIONS, 2014
TECHNICAL AND PROFESSIONAL TRADES**

EXAM TITLE : Database and Web Design

OPTIONS :

- **Computer Science (CSC)**
- **Computer Science and Management (CSM)**

DURATION : 3hours

INSTRUCTIONS:

The paper consists of **three (3) Sections** :

Section I: Ten **(10)** questions, all **Compulsory**. **55marks**

Section II: Five **(5)** questions, **Choose any Three (3)**. **30marks**

Section III: Three **(3)** questions, **Choose any One (1)**. **15marks**

For multiple choice question, write the full sentences/words corresponding to the right answer.

SECTION I. TEN (10) COMPULSORY QUESTIONS

01. What are the roles of TCP/IP? **4marks**
02. What is a Database? **3marks**
03. What are the three types of relationships between entities? **3marks**
04. What are the 4 techniques for transmitting data? **4marks**
05. Insert a code comment of the following SQL commands. **6marks**
- a. SELECT getdate ();
 - b. CREATE DATABASE MyDatabase;
 - c. INSERT INTO orders VALUES ('A+Maintenance','8/16/08','Hanging Files', 12);
06. Differentiate the process-oriented and Data-Oriented approaches. **4marks**
07. Differentiate HTTP and WWW. **4marks**
08. Outline the Advantages and Disadvantages of Web technologies? **10marks**
09. Describe what needs to be done to create and browse "My first webpage using the below HTML code. **12marks**

```
<html>
<head>
</head>
<body>
<h2>My first webpage! </h2>
</body>
</html>
```

10. Give five (5) examples of SQL clauses? **5marks**

SECTION II. ATTEMPT ANY THREE (3) QUESTIONS

11. A. List and explain the three SQL components. **6marks**
B. Define a browser and explain its main functions. **4marks**
12. A. EXPLAIN <html> AND </html>. **4marks**
B. Explain a Web Page. **6marks**
13. A. List the three SQL processing Flow. **6marks**
B Explain Data integrity management. **4marks**
14. A. Explain Data security Management. **4marks**

B. Differentiate DDL from DML in RDBMS.

4marks

C. Which of the following are useful to host a website to the internet?

2marks

i) FTP

ii) Webserver

iii) Mozilla

iv) Internet explorer

15. A) Write an SQL command to extract employees' details only for those whose education level is equal to Master's degree from the table below.

4marks

EMPLOYEE_1

EMP_ID	NAME	DOB	ADDRESS	ENG_DATE	EDUC_LEVEL
2331	ALOYS	1990	BUJUMBURA	20/02/2011	Master's Degree
2332	MANZI	1970	NAIROBI	30/01/2013	A2
2333	KIZA	1981	KAMPALA	11/11/2007	A0
2334	MAGWA	1972	KIGALI	23/07/2000	Master's Degree

B) Write an HTML code to create and browse "Rwanda country of thousand hills" and insert a Green background color to your web page.

6marks

SECTION III. ATTEMPT ANY ONE (1) QUESTION

16. A) Write a SQL command to delete the table below.

5marks

EMPLOYEE_1

EMP_ID	NAME	DOB	ADDRESS	ENG_DATE	EDUC_LEVEL
2331	ALOYS	1990	BUJUMBURA	20/02/2011	Master's Degree
2332	MANZI	1970	NAIROBI	30/01/2013	A2
2333	KIZA	1981	KAMPALA	11/11/2007	A0
2334	MAGWA	1972	KIGALI	23/07/2000	Master's Degree

B) How do you make a picture as a background on your web pages?

5marks

C) Write a SQL command to retrieve all staffs with SAL=1250.

5marks

Retrieve necessary rows from a table (selection)

EMP TABLE							
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-Dec-80	800		20
7499	ALLEN	SALESMAN	7698	20-Feb-81	1600	300	30
7521	WARD	SALESMAN	7698	22-Feb-81	1250	500	30
7566	JONES	MANAGER	7839	2-Apr-81	2975		20
7654	MARTIN	SALESMAN	7698	28-Sep-81	1250	1400	30
7698	BLAKE	MANAGER	7839	1-May-81	2850		30
7782	CLARK	MANAGER	7839	9-Jun-81	2450		10

17. A. Discuss the 3 types of relationship between entities in RDBMS?

9marks

B. Explain A WEB SERVER.

6marks