

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

## **UNIVERSITY EXAMINATION 2013**

# FIRST YEAR FIRST SEMESTER EXAMINATION 2013 FOR DIPLOMA IN LINUX ENGINEERING KISUMU LEARNING CENTRE

**COURSE CODE: ICT 2114** 

COURSE TITLE: INTRODUCTION TO MYSQL

DATE: 18/4/2013 TIME: 9.00-10.30AM

**DURATION: 1.5 HOURS** 

# **INSTRUCTIONS**

- 1. This paper contains FIVE questions.
- 2. Answer question 1(compulsory) and ANY other TWO questions
- 3. Write all your answers in the booklet provided

#### Question 1 (20marks)

- 1. MySQL runs on which operating systems?
  - a) Linux and Mac OS-X only
  - b) Any operating system at all
  - c) Unix, Linux, Windows and others
  - d) Unix and Linux only
- 2. Which of the following can add a row to a table?
  - a) Add
  - b) Insert
  - c) Update
  - d) Alter
- 3. To use MySQL on your computer, you'll need?
  - a) FTP and Telnet
  - b) Some sort of client program to access the databases
  - c) A Browser
  - d) Perl, PHP or Java
- 4. Which SQL statement is used to insert a new data in a database?
  - a) INSERT INTO
  - b) UPDATE
  - c) ADD
  - d) INSERT NEW
- 5. A NULL value is treated as a blank or 0.
  - a) True
  - b) Fasle
  - c) None of the above
- 6. MySQL is
  - a) A Programming language
  - b) A Programming language
  - c) A technique for writing reliable programs
  - d) A Relational Database Management System
- 7. The result of a SELECT statement can contain duplicate rows.
  - a) False
  - b) True
  - c) None of the above
- 8. Which function used to get the current time in mysql?
  - a) getTime()
  - b) Time()

- c) NOW() 9. A table may be joined to itself. a) True b) false c) None of the above 10. Which of the following is not a valid aggregate function? a) COUNT b) MIN c) MAX d) COMPUTE 11. mysql\_pconnect() is used to make a persistent connection to the database which means a SQL link that do not close when the execution of your script ends. a) True b) False 12. What SQL clause is used to restrict the rows returned by a query? a) AND b) WHERE c) HAVING d) FROM 13. Which of the following is used to delete an entire MYSQL database? a) mysql\_drop\_database b) mysql\_drop\_entiredb c) mysql\_drop\_db d) mysql\_drop\_dbase 14. MySQL supports the complete SQL99 standard a) false b) true 15. Primary Key does allow the Null Values. where as in Unique key doesn't accept the Null values a) False b) True 16. How much character are allowed to create database name? a) 55 b) 72
- 17. Which of the following commands should be used to create a database named "student"?
  - a) CREATE ?I student

c) 64

b) CREATE DATABASE student

- c) DATABASE /student
- d) DATABSE student
- 18. Which one will delete the table data as well as table structure?
  - a) TRUNCATE
  - b) DROP
- 19. The USE command?
  - a) Is used to load code from another file
  - b) Has been deprecated and should be avoided for security reasons
  - c) Is a pseudonym for the SELECT command
  - d) Should be used to choose the database you want to use once you've connected to MySQL
- 20. Given an employees table as follows:

emp_id	emp_name
1	Brush
2	Jerrin

What value will be return by below query?

Select count(\*) from employees

- a) 3
- b) 2
- c) 1
- d) none of the above

#### **Question 2 (20marks)**

- 1. What Is MySQL? (1mark)
- 2. What is a syntax (1mark)
- 3. What Is SQL? (1mark)
- 4. What Is Table? (1mark)
- 5. What Is Column? (1mark)
- 6. What Is Row? (1mark)
- 7. What Is Primary Key? (1mark)
- 8. What Is Foreign Key? (1mark)
- 9. What Is Index? (1mark)
- 10. What Is View? (1mark)
- 11. What Is Join? (1mark)
- 12. What Is Union? (1mark)
- 13. What is the one main rule MYSQL expects to be followed(1mark)

- 14. Why do we Capitalize the reserve word in MYSQL
- 15. How would you log into MSQL(1mark)
- 16. Before creating a database, you will want to check through any existing databases in order to confirm that your database does not already exist. How would you do this(1mark)
- 17. How would you quit a MSQL session(1mark)
- 18. What syntax can you use to create tables in a database (1mark)
- 19. What's the difference between "SHOW TABLES;" & "DESCRIBE tablename;".( 2marks)

# **Question 3 (20marks)**

As a database administrator you are required to come up with a database that would store data about PETS, come up with the syntax that would achieve the following steps in relation to MSQL relational database.

- 1. Come up with a database known as pets (1mark)
- 2. Now that you have created the database what are the two ways you can select it for use. (2marks)
- 3. After logging in, if at any time you forget what database you are using how you would go about it to know it.( 1mark)
- 4. Create a table Known as pets with the following columnnames and don't forget to include their attributes: **id,name, breed,gender, dateofbirth, description,pedigree,medicalrecord,PRIMARY KEY** (10marks)
- 5. Explain the following statement below (4 marks)
  - i. Admission INT NOT NULL AUTO INCREMENT,
    - 1. firstname VARCHAR (75),
    - 2. middlename VARCHAR (75),
    - 3. lastname VARCHAR (75),
    - 4. sex VARCHAR (7)
    - 5. dob VARCHAR (25),
    - 6. comments TEXT,
    - 7. PRIMARY KEY (id)
- 6. What command would you use do delete the database table "pets" you've created above and secondly the entire database (2mark)

#### Question 4 (20marks)

1. What is the latest version of MySQL ?( 1mark)

- 2. What values do you personally use to connect to MySQL?(1mark)
- 3. What function returns MySQL-reported errors? (1mark)
- 4. How do you select which database to use?(1mark)
- 5. What function should string values be run through to prevent SQL injection attacks? (2marks)
- 6. How does a PHP script connect to a MySQL server? How does it disconnect?(2marks)
- 7. What is the error suppression operator? What does it do?(2marks)
- 8. What are some of the MSQL errors you might encounter (4marks)
- 9. What SQL command is used to create a table? To add new records? To retrieve records? To modify records? To remove records? (5marks)

### Question 5 (20marks)

- 1. What are the four primary arithmetic operators? (4marks)
- 2. Why will the following code below not work: What must be done instead? (2marks) print "The total is \$\$total";
- 3. Why must an HTML page that contains a form that's being submitted to a PHPscript be loaded through a URL?(2marks)
- 4. What functions can be used to format numerical values? (1mark)
- 5. How do you format numbers to a specific number of decimals? (1mark)
- 6. What is the importance of operator precedence? (1mark)
- 7. What are the incremental and decremental operators? (1mark)
- 8. What is CSS and what is it used for? (1mark)
- 9. What file extension should PHP scripts have for your particular server?(1mark)
- 10. What is meant by "Web root directory"? What is the Web root directory for your server?(2marks)
- 11. How do you test PHP scripts? What happens when PHP scripts are not run through a URL?(2marks)
- 12. Name two ways comments can be added to PHP code. Identify some ways you would use comments.( 2marks)