

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF  
SCIENCE IN APPLIED COMPUTER SCIENCE**

**ACSC 327: WEB PROGRAMMING AND ADMINISTRATION**

**STREAMS: ACSC**

**TIME: 2 HOURS**

**DAY/DATE: FRIDAY 13/12/2024**

**2.30 P.M. – 4.30 P.M.**

**INSTRUCTIONS:**

- **Answer Question 1 and any other Two Questions**

**Question 1 [30 Marks]**

- (a) Explain why XAMPP is needed in web programming. [3 Marks]
- (b) Write a PHP code that stores the first name, last name and age of a person. These details are then displayed on the output interface. [4 Marks]
- (c) Highlight two ways through which to determine whether the Apache web server is running. [4 Marks]
- (d) Describe any six privilege tables found within the MySQL system defined database in a MySQL server environment. [6 Marks]
- (e) Explain the purpose of the **PHP.ini** file. [3 Marks]
- (f) Write code that shows the two ways of beginning and ending of PHP code in html environment. [2 Marks]
- (g) Write the MySQL command to view all records of a table tbCitizens. [2 Marks]
- (h) A MySQL database dbPractice is to be created in a local MySQL server under the privileges of a user 'dbAdmin' with a password 'dbAdminPass'. Use PHP language to create this database. [6 Marks]

**Question 2 [20 Marks]**

- (a) A new employee Asha has joined the organization and requires access to the MySQL server for various tasks. To create the account, Asha is assigned the username 'asha' and the password 'asha\_password'. Asha is to be given select, insert and update rights on all components of all databases in the MySQL environment. Write down the steps and respective commands followed by the MySQL server administrator to perform this task. [8 Marks]
- (b) Identify and describe any four superglobal variables in the PHP language. [4 Marks]
- (c) Write the MySQL command to rename a table tbCountry to tbKenya. [2 Marks]
- (d) The first name of a person is Ann and the last name Achieng. Show through PHP how to concatenate the variables representing the first name and the last name to produce the string "Your name is firstname lastname". [6 Marks]

**Question 3 [20 Marks]**

- (a) Write the MySQL code that creates a table with the following student details: Registration Number, Student Name, Age, Email Address and Course. [6 Marks]
- (b) Describe the differences between PHP's echo and print statements. [4 Marks]
- (c) Consider the given fragment and use it to answer the questions that follow:
- 1 times 2 is 2**
- 2 times 2 is 4**
- 3 times 2 is 6**
- 4 times 2 is 8**
- 5 times 2 is 10**
- 6 times 2 is 12**
- 7 times 2 is 14**
- i. Write a PHP For Loop to output the fragment. [5 Marks]
- ii. Write a PHP While Loop to output the fragment. [5 Marks]

**Question 4 [20 Marks]**

- (a) The basic salary of employees in an organization are stored in a field `basic_salary` of a MySQL table named `tbEmployees`. All employees have been given a salary increment of 5% of the basic salary. Implement a MySQL operation to reflect the new basic salary of all employees. [4 Marks]
- (b) Explain the importance of the IP Address 127.0.0.1 to web programmers. [4 Marks]
- (c) Consider the following table capturing details associated with students performance and use it to answer the questions that follow:

Marks	Grade	Remark
70-100	A	Excellent
60-69	B	Very Good
50-59	C	Good
40-49	D	Poor
0-39	F	Fail

- i. Using PHP if statements, write a program that takes the Marks as inputs and outputs the Grade and the Remark. [6 Marks]
- ii. Using PHP switch statements, write a program that takes the Grade as input and outputs the Remark. [6 Marks]

### Question 5 [20 Marks]

- (a) Using examples, explain various ways of implementing comments in the PHP programming language. [6 Marks]
- (b) The database administrator of a MySQL server environment would like to know details of users of the server. Write the command the administrator would use to show these details. [4 Marks]
- (c) A table `tbCourses` has a field `course_code` which was intended to be the primary key but this was not specified when the table was created. Write the MySQL command to make `course_code` the primary key. [4 Marks]
- (d) Explain how you can test whether the PHP installation was successful. [6 Marks]
- .....