



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

DEPARTMENT OF INFORMATION SYSTEMS

UNIVERSITY EXAMINATION FOR THE DEGREE BACHELOR OF SCIENCE BUSINESS

INFORMATION SYSTEMS

YEAR THREE: SEMESTER TWO

3rd YEAR 2nd SEMESTER 2020/2021 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: IIT 3326

COURSE TITLE: PROGRAMMING DISTRIBUTED COMPONENTS

DATE:

TIME:

INSTRUCTIONS

- 1. Answer Question 1 (Compulsory) and ANY other TWO questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

Question One

- a) Describe the three main types of Process Models? (6 marks)
- b) Define what a Program is and Program Execution is? (6 marks)
- c) What is a source program? (2 marks)
- d) Differentiate between method overriding and method overloading stating the examples in each
- e) What a transaction and transaction integrity? (5 Marks)
- f) Discuss the following as applied in transaction?
 - i. Identification (2 Marks)
 - ii. Authentication (2 Marks)
 - iii. Authorization (2 Marks)
 - iv. Audit (2 Marks)
- g) Explain the following
 - i. Transaction integrity and load balancing (4 Marks)
 - ii. Asynchronous Messaging and synchronous Messaging (4 Marks)

Questions Two

- a) What should one consider before designing an E-Store like Amazon (5 Marks)
- b) Create a simple valid PHP that will create a login form of user name and password and submit button (10 Marks)
- c) What is the differences between static website and Dynamic website (5 Marks)

Question Three

- a) PHP has a total of eight data types which we use to construct our variables, describe them with examples (4 Marks)
- b) Discuss what a variable scope is? (2 Marks)
- c) Differentiate with example between Local scope and Global scope Variable types(6 Marks)
- d) Describe the practical ways of how to create a MSQL database and a table with the guide of the below image (8 Marks)

Question Four

- a) Write a PHP script that creates the following table using for loops. Add cell padding="3px" and cells spacing="0px" to the table tag. **(5 Marks)**

Sample Output:

1 * 1 = 1	1 * 2 = 2	1 * 3 = 3	1 * 4 = 4	1 * 5 = 5
2 * 1 = 2	2 * 2 = 4	2 * 3 = 6	2 * 4 = 8	2 * 5 = 10
3 * 1 = 3	3 * 2 = 6	3 * 3 = 9	3 * 4 = 12	3 * 5 = 15
4 * 1 = 4	4 * 2 = 8	4 * 3 = 12	4 * 4 = 16	4 * 5 = 20
5 * 1 = 5	5 * 2 = 10	5 * 3 = 15	5 * 4 = 20	5 * 5 = 25
6 * 1 = 6	6 * 2 = 12	6 * 3 = 18	6 * 4 = 24	6 * 5 = 30

- b) Write a PHP script to display the following strings below **(5 Marks)**
'Tomorrow I \\'ll learn PHP global variables.'
'This is a bad command: del c:*. *'
c) Create a simple HTML form and accept the user name and display the name through PHP echo statement. **(5 Marks)**

Sample output of the HTML form:

Please input your name:

Hello

- d) Write a PHP script, which will return the following components of the url 'http://www.Google.com' **(5 Marks)**

Question Five

- a) Write a PHP script to display string, values within a table. Note: Use HTML table elements into echo. **(5 Marks)**

Expected Output :

Salary of Mr. A is	1000\$
Salary of Mr. B is	1200\$
Salary of Mr. C is	1400\$

- b) Write a PHP script to print current PHP version. **(2 Marks)**
Note : Do not use phpinfo() function
c) Come with a code that will Create a HTML webpage containing 2 horizontal frames occupying 30%, 70%screen area respectively. In the first frame embed an Image or logo of the Company such that browser displays a "Welcome" message as user puts mouse on It. Divide the second frame again in 30%, 70%

ratio. Color the first of these Frame red and create two hyperlink each of which opens in the other frame.

(8 Marks)

d) Write a PHP script to delay the program execution for the given number of seconds

(5 Marks)