



MACHAKOS UNIVERSITY

University Examinations for 2021/2022

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

SECOND YEAR SPECIAL / SUPPLEMENTARY EXAMINATIONS FOR

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

BACHELOR OF SCIENCE (COMPUTER SCIENCE)

SIT 225: WEB APPLICATION DEVELOPMENT

SCO 207: WEB DEVELOPMENT TECHNOLOGY

DATE: 26/8/2022

TIME: 2.00-4.00 PM

INSTRUCTIONS:

Answer question ONE and any other TWO questions

QUESTION ONE (30 MARKS)

- a) Differentiate between client and server scripting languages (2 marks)
- b) Explain the major four component of Cookie. (4 marks)
- c) Differentiate between post and get methods (4 marks)
- d) Discuss internet infrastructure and routing (4 marks)
- e) Using an example explain the term Proxy in web application (4 marks)
- f) Using a real-life scenario explain how 3 tier system is implemented in a learning Institution environment. (4 marks)
- g) Write a simple PHP program code that prints out your name. (5 marks)
- h) Discuss THREE benefits of client server interactions (3 marks)

QUESTION TWO (20 MARKS)

- a) Highlight the main features of VB script. (4 marks)
- b) i) Define the term “Event” in relation to VB script (2 marks)
- ii) Explain “OnClick Event Type” and “on submit event type”. (4 marks)
- iii) Write sample program in each. (4 marks)
- c) Describe Apache and compare it with other web server packages. (6 marks)

QUESTION THREE (20 MARKS)

- a) There are two ways the browser client can send information to the web server include; The GET method and the POST method. Elaborate on the two methods giving an example in each. (10 marks)
- b) Explain the output of the following code; (6 marks)

```
<!DOCTYPE html>
<html>
<head>
<meta charset=utf-8 />
<title>JS nested for loop example</title>
</head>
<body>
  var x,y,chr;
  for(x=1; x <=6; x++)
  {
    for (y=1; y < x; y++)
    {
      chr=chr+("*");
    }
    console.log(chr);
    chr="";
  }
</body>
</html>
```

- c) Briefly highlight on servlets. (4 marks)

QUESTION FOUR (20 MARKS)

- a) State four uses of PhP (4 marks)
- b) Write a PHP code that will output “Have a good day!” if the current time is less than 20, and “Have a good night” otherwise. (6 marks)
- c) Explain any four types of Servers in Web Applications. (4 marks)
- d) Write a function in JavaScript to display the product of 5*5. (4 marks)
- e) State the purpose of HTTP:// and HTTPS:// protocols used in the internet. (2 marks)

QUESTION FIVE (20 MARKS)

- a) Explain scripting languages using examples (4 marks)
- b) Using a suitable diagram example Client-Server architecture. (4 marks)
- c) Using a real-life scenario explain how 3 tier system is implemented in a learning Institution environment (6 marks)
- d) Write a simple Php code to generate even numbers between 1 and 100, the program should compute the sum of the numbers (6 marks)