

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

THIRD YEAR FIRST SEMESTER EXAMINATION FOR THE AWARD OF BACHELOR
OF SCIENCE APPLIED COMPUTER SCIENCE

ACSC 327: WEB PROGRAMMING AND ADMINISTRATION

STREAMS: BSC. APPLIED COMPUTER SCIENCE

TIME: 2 HOURS

DAY/DATE: FRIDAY 07/12/2018

8.30 A.M – 10.30 A.M

INSTRUCTIONS:

- Answer Question **ONE** and any other **TWO** questions.
- Diagrams should be used whenever they are relevant to support an answer.
- Sketch maps and diagrams may be used whenever they help to illustrate your answer
- Do not write anything on the question paper
- This is a **closed book exam**, No reference materials are allowed in the examination room
- There will be **No** use of mobile phones or any other unauthorized materials
- Write your answers legibly and use your time wisely

SECTION A

ANSWER ALL THE QUESTIONS IN THIS SECTION

QUESTION ONE [30 MARKS]

- a) Explain the importance of web standards in web design and development. [2 Marks]
- b) List and describe any four W3C standards important to web designers and developers. [8 Marks]

- c) A string “Web Programming and Administration” is to be displayed as a Heading 2 with a text color of blue and with a line passing across the string. Write the HTML code to implement this. [3 Marks]
- d) Explain the concept of DHTML in web programming. [4 Marks]
- e) Giving an example present and explain the structure of a CSS rule. [4 Marks]
- f) Write the full meaning of the following abbreviations:
- i. HTML. [2 Marks]
 - ii. CSS. [2 Marks]
 - iii. XML. [2 Marks]
- g) Write a JavaScript program that welcomes visitors to a website when the index page loads. [3 Marks]

SECTION B

ANSWER ANY TWO QUESTIONS FROM THIS SECTION

QUESTION TWO [20 MARKS]

- a) A driving school only accepts students who are aged eighteen and above. Write a PHP program that tests age and responds with an appropriate message. [4 Marks]
- b) You are designing a Registration form for a Student Management System. Describe in detail how you would apply each of Schneidermann’s rules of interface design in the design of the form. [8 Marks]
- c) Write a JavaScript code that through a function alerts users when they are about to leave a web page and then goes ahead to ask the user for a confirmation whether to leave the page or not. [8 Marks]

QUESTION THREE [20 MARKS]

- a) Highlight the role of Ajax in web development. [3 Marks]
- b) “System status should be visible”.
- i. Explain what is meant by this heuristic. [2 Marks]
 - ii. Give examples of how you could design your web application to meet this heuristic. [4 Marks]

- c) Using HTML and PHP code, write a program to find Area of any circle. [6 Marks]
- d) Write MySQL code to create a user named Admin with a password adminadmin on a machine Localhost. [5 Marks]

QUESTION FOUR [20 MARKS]

- a) The following comments are made depending on a grade a student attains in an exam.

Grade	Comment
A	EXCELLENT
B	GOOD
C	FAIR
D	POOR

Write a JavaScript Switch... Case program that takes in Grade as an input then gives appropriate comment. [10 Marks]

- b) Write CSS code as well as explain the usage of the following CSS styles:
- Universal Selector. [4 Marks]
 - Type Selector. [3 Marks]
 - Class Selector. [3 Marks]

QUESTION FIVE [20 MARKS]

- a) Headings 1, 2 and 3 are to be bold, of font type Arial, white in color and have a black background. All paragraphs are to be blue in color and of size 36 points. The background color of the web page is to be pink. Implement this in a web page using:
- Inline CSS styles. [4 Marks]
 - External CSS styles. [5 Marks]
 - Internal CSS styles. [4 Marks]
- b) Discuss the impact of the following colors when used in a website:
- Blue. [3 Marks]
 - Grey. [2 Marks]
 - Orange. [2 Marks]
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