BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE AND ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE

BSc HONOURS DEGREE IN COMPUTER SCIENCE (HBScCSc), INFORMATION TECHNOLOGY (HBScIT), SOFTWARE ENGINEERING (HBScSWE), NETWORK ENGINEERING (HBScNWE), PHYSICS (HBScPH) AND ENGINEERING.

CS214/SWE214/NWE214: INTERNET AND WEB DESIGNING

DURATION: ......3 HOURS..............   TOTAL MARKS: ...100...........

INSTRUCTIONS TO CANDIDATES

1. Answer all questions.
2. Use the answer booklet for section A questions and the computer for section B.
3. Create a folder on the desktop named as <your registration number.course code e.g b01234567.CS214>

SECTION A (Theory use an answer booklet) [40 marks]

Question 1

   a. Define URL.   [2]

   b. With the aid of an example, describe the elements of a URL.   [8]

   c. Give an account of the history of the internet.   [10]

Question2

   a. Define the following:

      i.   Intranet.   [2]

      ii.   World Wide Web.   [2]

      iii.   Search Engine.   [2]

      iv.   Fully qualified domain name.   [2]

b. Describe the Domain Name System structure. [6]

c. An IP address is a 32-bit string composed of two parts. What are the two parts of an IP address? [2]

d. Classify the following network addresses giving reasons for your answer

   i.   127.0.0.1. [2]

   ii. 132.112.3.66. [2]

SECTION B(60 MARKS)

Question 3

Design the following web page in figure1 and validate all its input fields using JavaScript. [15]

Contact Name:

Email address:

Gender: ◉ Male   ◎ F

Select your age: select your age ▾

select your favourites

- Fruits
  - bananas ☐
  - Mangoes ☐
  - Oranges ☐
- Drinks
  - i. Mahewu ☐
  - ii. Coke ☐
  - iii. Fruit juice ☐

[Send]

Figure 1:Food and Drinks.

Question 4

Design your personal web site using frames with the design in figure 2. On the left banner are links and on the right is your main page where all your links are loaded.
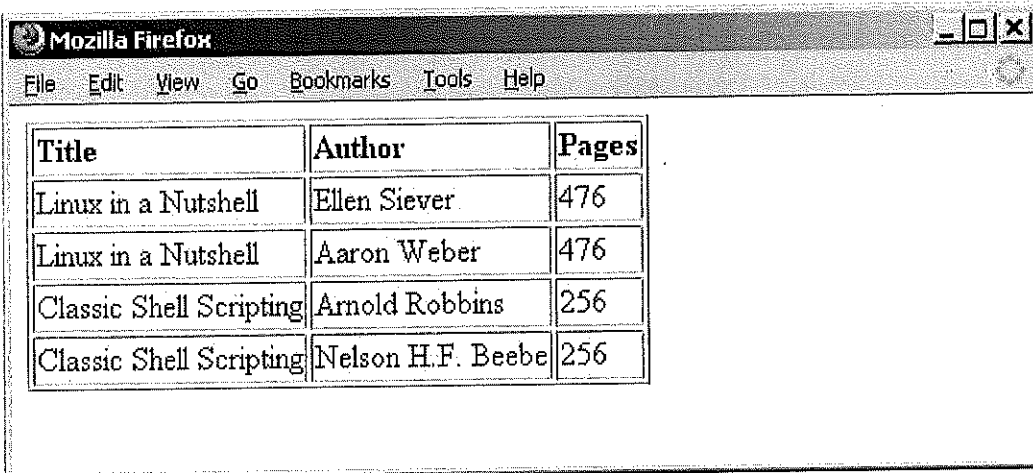
Include a page for you're the courses you registered for this semester, the courses should be bulleted or numbered, a page for your student details and another one for downloads with at least two downloadable files. [30]

Home	# Personal web site for <your name>	
My registered courses **My Student details** **Downloads**	<your picture or any picture>	**Contact Details** <your Address> <your Cell number> <your email address>
	Powered by copyright©<your registration number>2023	

Figure 2: Personal page template

Home Page

Question 5

The web page in figure3 shows a display of the library database after a query of the books file. Create the database and web site with a form to enter the displayed information and a page to display it as shown in figure3 below.   [15]

Title	Author	Pages
Linux in a Nutshell	Ellen Siever	476
Linux in a Nutshell	Aaron Weber	476
Classic Shell Scripting	Arnold Robbins	256
Classic Shell Scripting	Nelson H.F. Beebe	256

Figure 3: The library database.

***********END OF PAPER***************