University of Ruhuna- Faculty of Technology

Bachelor of Biosystems Technology Honours Degree
Level 1 (Semester I) Examination, July 2023
Academic year 2021/2022

Course Unit: BST 1112 - Information Technology I (Written)
Duration: 1.5 hours

Index no:..........................

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Please **read** and **follow** the instructions given below.

- There are five (5) questions in twelve (12) pages and answer all questions in the space given in the paper. Please check all the pages are there and printed properly before start answering.
- Marks assigned to questions within a question are given.
- Calculators and mobile phones are not allowed.

1. **This question is based on the basics of IT specially computer hardware and software. Write your answers briefly and clearly. [75 marks]**

    i. What is Information Technology? (5 marks)

    ii. State three (3) uses of Information Technology in your university life. (9 marks)

    iii. State two (2) names of biometric input devices. (9 marks)

    iv. Fill a, b, c, d, e, and f with suitable device names. Also, state their functions briefly. (24 marks)

Output Devices	Function
a.	
b.	
c.	
Storage Devices	**Function**
d.	
e.	
f.	

    v. Name two (2) main types of computer software. Give an example for each type. (12 marks)

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vi. What do the following abbreviations stand for with respect to the Information Technology?

(10 marks)

Abbreviation	Stand for
ALU	
CLI	
LMS	
DVD	
URL	

vii. State the most appropriate file extensions when saving by using the following application software. (6 marks)

MS Excel 2013:..

MS PowerPoint 2013:...

MS Access 2013:..

2. This question is based on word processing and spreadsheet applications. Write your answers briefly and clearly. [75 marks]

i. What is a word processor? Give three (3) examples for word processors. (9 marks)

ii. Mention three (3) advantages of using a word processing software. (8 Marks)

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iii.Briefly explain the functions of the following terms with respect to MS Word.   (15 marks)
  a.   **Undo & Redo:**

  b.   **Find and Replace:**

  c. **Backspace & Delete:**

  iv. Name four (4) different tabs of MS Word.   (8 marks)

  v.   Define the following terms used in MS Excel   (6 marks)
a. **Workbook:**

b. **Worksheet:**

  iv.   State three (3) different chart types available used in MS Excel   (6 marks)

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v. The following Excel sheet displays the result sheet of five students and their final marks for two main subjects.

Name	Mathematics	Science	Total	Average	Minimum
Dayan	75	65	a	b	c
Nipuni	50	40			
Gayani	68	78			
Mahinda	35	55		d	
Kamal	78	56			e

a. State cell reference for a, c, d and e: (8 marks)

	cell reference
a	
c	
d	
e	

b. Write the correct equations to get proper values for *a, d and e*. (9 marks)

a:	
d:	
e:	

vi. State the function of the following keyboard shortcuts. (6 marks)

Ctrl+N	
Ctrl+S	
Ctrl+W	

3. **This question is based on presentation and database management system applications. Write your answers briefly and clearly. [75 marks]**

i. State four (04) advantages of using a computer-based presentation applications   (8 marks)

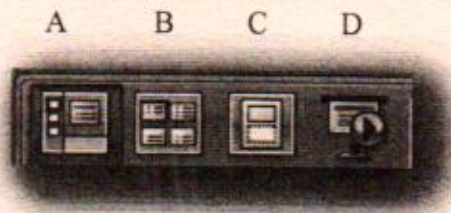ii. Name four (4) computer-based presentation tools.   (8 marks)

iii. Briefly explain the following terms with respect to the MS PowerPoint.   (10 marks)

   a. **Slide Transitions:**

   b. **Animation**

iv. The following figure shows the different view buttons of MS PowerPoint. Identify the "B" view and state available three (3) functions of the view.   (12 marks)

A   B   C   D

B	
Functions	

v. What is a "Database Management System"? Give three (3) examples for Database Management System Applications. (11 marks)

vi. Define the following terms. (8 marks)
   Primary key:

   Table:

vii. Following are database tables that are used to store marks for different subjects of student in a class. (18 marks)

Table: Student			
DoB	Name	Stu_No	Class
20/12/2002	Mala	926	9E
15/10/2002	Ruwan	930	9E
08/08/2002	Nalin	945	9E
12/04/2002	Kokila	950	9B

Table: Subject	
Sub_Code	Subject
01	Art
02	Maths
03	English

Table: Marks		
Sub_Code	Stu_No	Marks
01	926	85
02	926	80
01	930	65
03	945	65

a. How many *fields* are there in the *Student* table? ....

b. What would be the most suitable field as the primary key for,

   Student Table?...

   Subject Table?...

c. How many marks the student *Mala* has obtained in the Art subject? ....

d. If all students must do Music and Buddhism subjects then what **tables** need to be

   updated to address this requirement? ....

4. **This question is based on the Internet and Email. Write your answers briefly and clearly. [75 marks]**

i. Use the words given below to fill in the blanks of a, b, c, d, and e. (12 marks)
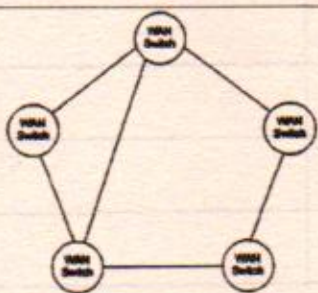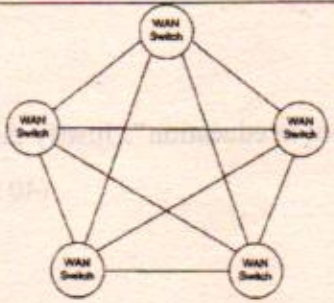
protocol	IP	TCP	packets	Web browser	domain

    a. .... is a set of rules which computers use to communicate with each other across a network.

    b. The commonly used protocols are .... and ....

    c. Every computer on the internet has a name called .... name.

    d. When information is passed from one computer system to another, it is broken up into pieces called .... using the TCP protocols.

    e. A .... is a special program that reads and interprets web pages.
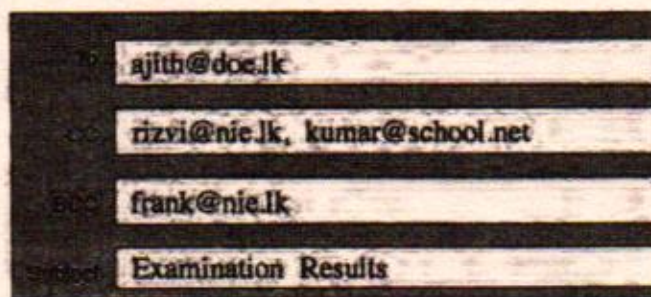
ii.   Differentiate Intranet and Extranet. (8 marks)

iii.   Define the term search engine and give three (3) examples popular search engines.
(12 marks)

iv. Identify the topologies given in figures A and B. Explain the main features of each topology briefly. Use the table given below to write your answers. (14 marks)

		Topology	Description
A			
B			

v. Consider the following segment of an email sent by someone.

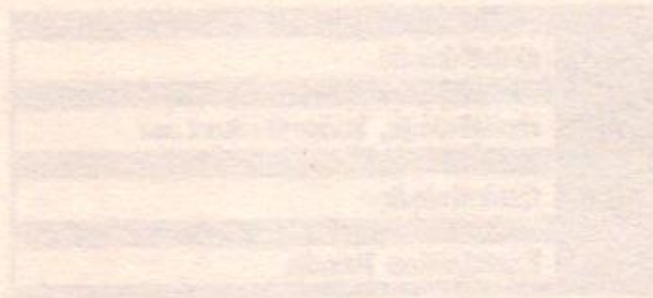|	
To	ajith@doc.lk
CC	rizvi@nie.lk, kumar@school.net
BCC	frank@nie.lk
Subject	Examination Results

What is the meaning of "BCC"? Explain the use of BCC by using above data. (5 marks)

vi. Write down the meaning (stand for) and functions of the following abbreviations
with respect to the internet protocols.   (24marks)

	Meaning	Function
TCP/IP:		
SMTP:		
HTTP:		
FTP:		

5.

i. "Information Technology (IT) is highly essential tool in education". Justify the
statement.   (40 marks)

ii.   Briefly discuss the merits and demerits of using the Zoom video conferencing for online education.   (60 marks)

++++++++++++Ed of the paper+++++++++++