



UNIVERSITY OF RUHUNA

FACULTY OF MANAGEMENT AND FINANCE

Bachelor of Business Administration Degree 1000 Level First Semester

End Examination (Nov/Dec 2021)

Academic Year 2020/2021

BBA 11043 - Information and Communication Technology

Duration: Three hours

Total Marks: 70

The Question Paper contains four (04) questions

Answer all questions

1.

[a]. Write the number of the correct answer for the relevant question in the answer book.

i. A new laptop has been produced that weighs less, is smaller and uses less power than previous laptop models Which of the following technologies has been used to accomplish this?

1. Blu-ray drive
2. Faster random access memory
3. Universal serial bus mouse
4. Solid-state hard drive

ii. Which of the following statement(s) is/are true in respect of wireless technology?

- A. Bluetooth is a wireless technology that can be used to connect a headset to a mobile phone
- B. Bluetooth is a long-range wireless technology and is a low-cost means of data transfer

1. A only
2. B only
3. Both A and B
4. Neither A nor B

iii. Why would BCC: be used in an e-mail?

1. BCC: allows the sender to indicate who the email is for if there is more than one recipient
2. BCC: allows the recipient to identify all other recipients in the list when a group email address is used
3. BCC: allows the sender of a message to conceal the recipient entered in the BCC: field from the other recipients
4. BCC: allows recipients to be visible to all other recipients of the message

iv. Which of the following is/are major issues arising out of the growing reliance on information technology.

- a) Profitability
- b) Security threats
- c) Privacy concerns

1. (a) and (b) only
2. (a) and (c) only
3. (b) and (c) only
4. (a), (b) and (c)

v. Match List-I with List-II in the context of computer networking.

List-I	List-II
(a) VoIP	(i) Makes use of light pulses to transmit data
(b) Fiber-optic cable	(ii) Use of the internet to make phone calls
(c) URL	(iii) Most appropriate to connect computers in a small building
(d) UTP cable	(iv) Text used by web browsers to locate a web address on the internet

1. (a)-(iv), (b)-(i), (c)-(ii), (d)-(iii)
2. (a)-(ii), (b)-(i), (c)-(iv), (d)-(iii)
3. (a)-(ii), (b)-(iii), (c)-(iv), (d)-(i)
4. (a)-(iv), (b)-(iii), (c)-(ii), (d)-(i)

[1 mark each X 5]

[b]. Write short answers for the following questions.

- i. What is known as 'Web hosting'? [01 Mark]
- ii. List two advantages of using computerized information systems for the daily activities of business organizations. [01 Mark]
- iii. Name two types of computer operating systems. [01 Mark]
- iv. List two advantages of using databases. [01 Mark]
- v. What is 'Telnet' in networking? [02 Marks]
- vi. Why analog to digital conversion is needed when computers are used in monitoring and measuring? [02 Marks]
- vii. After an information system has been implemented, it needs to be evaluated. State two reasons why the evaluation is needed. [02 Marks]
- viii. Mention three advantages of using a computer rather than a nurse to monitor a patient. [03 Marks]
- ix. Saman and his family have three computers in their home. He wants to connect the computers to a network that will have access to the internet. Give three advantages of doing this. [03 Marks]
- x. The students in a class wanted the print records of the computer readings for an experiment. Their teacher has suggested a dot matrix printer. The students suggested an inkjet printer.
 - a. Give two reasons why the teacher has suggested a dot matrix printer. [02 Marks]
 - b. Give two reasons why the students have suggested an inkjet printer. [02 Marks]

[Total 25 Marks]

2. [a]. Internet service provides a way for data to be transferred from Internet servers to your computer.

i. Briefly explain the difference between the Internet, Intranet and Extranet.

[03 Marks]

ii. Explain four different methods to develop a website.

[04 Marks]

[b].

i. Briefly explain the three types of computers classified according to the technology.

[03 Marks]

ii. Why are biometrics more secure? Explain by providing four reasons.

[05 Marks]

[Total 15 Marks]

3. [a].

i. Briefly explain three differences between physical and virtual memory. [03 Marks]

ii. Explain four security measurements that can protect our computers without spending money. [04 Marks]

[b]. A database is an organized collection of structured information, or data, typically stored electronically in a computer system.

i. Briefly explain the three-tier architecture in a software application. [04 Marks]

ii. Assume that you have to develop a database to manage the details of items and their suppliers of a book shop.

a. Propose suitable tables for the above database.

b. Identify suitable fields for each table entering five rows of data to each table.

c. Identify suitable primary key, foreign key (if any) for each table, and illustrate the relationships for the proposed tables. [04 Marks]

[Total 15 Marks]

4. [a]. Networking, also known as computer networking, is the practice of transporting and exchanging data between network nodes.

i. Briefly explain three different types of network topologies with diagrams. [03 Marks]

ii. A large company has a LAN. The manager of the company wants to replace it with a WLAN. Explain two differences between a LAN and a WLAN, giving advantage and a disadvantage of a WLAN. [04 Marks]

[b]. A computer program is a set of instructions on how to solve a problem or perform a task.

i. Briefly explain three steps of program development life cycle.

[03 Marks]

ii. Create a simple flowchart for the following process.

An organization allows its customers to access their blood test reports through the internet. At the time of payment, the system creates a unique user ID and password which is printed on the payment receipt. The customer is allowed to log on to the website of the organization on or after the specified date, to access the report. After logging on to the website the customer is required to input his email address after which the system automatically sends the test report to that email address.

After sending the email, the system automatically signs off the customer and displays the message: "Your report has been sent to your email address".

If the customer tries to log on before the report receiving date, the system displays the message: "Your report would be available on the date which the report becomes available".

[05 Marks]

[Total 15 Marks]
