



UNIVERSITY OF RUHUNA
FACULTY OF MANAGEMENT AND FINANCE

No. of Pages : 02
No. of Questions: 05
Total Marks : 70

BACHELOR OF BUSINESS ADMINISTRATION HONOURS DEGREE

1000 LEVEL FIRST SEMESTER END EXAMINATION – AUG./SEP. 2025

Three Hours

**BBA 11043 – Information and Communication Technology
(2017 Syllabus) - Repeat**

Academic Year 2024/2025

Instructions

- Calculators are not allowed.
- Answer all questions.

Question 01

- i. List three advantages of using computer systems in the education sector. [06 Marks]
- ii. Briefly explain two advantages and two disadvantages of employees using Information and Communication Technology (ICT) tools to work remotely from home instead of working physically in the office. [08 Marks]

[Total: 14 Marks]

Question 02

- i. “Operating system is the core component of system software”. Briefly explain any three functions of an operating system. [06 Marks]
- ii. A university plans to expand its internet access by providing connectivity not only inside computer labs but also across open areas of the campus. Identify and explain two transmission media that could be used, highlighting their advantages and limitations in terms of distance, speed, cost, and reliability. [08 Marks]

[Total: 14 Marks]

Question 03

- i. Perform the following calculations according to the conversions given.
 - a) 582_{10} : Decimal to Binary
 - b) 246_{10} : Decimal to Octal
 - c) 3157_8 : Octal to Decimal

- d) 1101011_2 : Binary to Octal
- e) $4F_{16}$: Hexadecimal to Octal
- f) $7C3_{16}$: Hexadecimal to Binary

[06 Marks]

- ii. ABC Pvt. Ltd., a medium-sized company, wants to improve how it stores and manages customer and sales information. The management is considering using a database management system instead of traditional paper records or spreadsheets. Discuss how implementing a database management system can help ABC Pvt. Ltd. to improve decision-making with four examples.

[08 Marks]

[Total: 14 Marks]

Question 04

- i. Briefly describe how integrating interactive features such as contact forms, chat support, and social media links can improve user experience and business performance on a website.

[06 Marks]

- ii. Malicious software (malware) is considered a major threat that can damage computer systems and compromise data security. Explain any four types of malware, describing how each can affect users or computer systems.

[08 Marks]

[Total: 14 Marks]

Question 05

- i. Why are biometric systems considered secure? Briefly explain three key factors that make them difficult to compromise.

[06 Marks]

- ii. Intimate Solutions (Pvt) Ltd, a software company in Colombo, has faced data breaches, misuse of customer information, and irresponsible employee behaviour, leading to loss of customer trust and reputation. To address these challenges, the General Manager expects to hire a professional to find solutions.

- a) Identify the type of professional the company should hire. [02 Marks]

- b) Suggest and explain three solutions this professional may recommend to overcome the issues. [06 Marks]

[Total: 14 Marks]
