

EASTERN UNIVERSITY, SRI LANKA  
FACULTY OF COMMERCE & MANAGEMENT

THIRD YEAR SECOND SEMESTER EXAMINATION IN  
BACHELOR OF BUSINESS ADMINISTRATION HONOURS/ BACHELOR OF  
COMMERCE HONOURS/ BBA HONS IN HRM/ BBA HONS IN MKT MGT / BCOM  
HONS IN ACC & FIN/ BCOM HONS IN BUSINESS ECONOMICS – 2021/2022  
[AUGUST/ SEPTEMBER, 2024] (PROPER/REPEAT)

**COC 3023- SYSTEM ANALYSIS AND DESIGN**

ANSWER ALL QUESTIONS

TIME ALLOWED: 3 HOURS

- Q1).
- a) What is a *System*? [3 marks]
  - b) Consider your *home* as a system and answer the following: [6 marks]
    - i. What are the inputs to this system?
    - ii. What are the outputs of this system?
    - iii. What is the boundary to the system?
    - iv. What are the components of the system?
    - v. What are the interfaces of the systems?
    - vi. Draw a diagram of this system.
  - c) List *three stakeholders* involved in a system development project in an organisation and briefly explain their roles in the project. [6 marks]
  - d) Explain why a software is always changing. [5 marks]
- Q2).
- a) Explain the differences between *qualitative* and *quantitative* data. Provide two examples of each type. [4 marks]
  - b) List and explain *five* characteristics of valuable information. [5 marks]
  - c) List and explain *four* components of a computer-based information system. [5 marks]
  - d) List *four* major applications that constitutes an enterprise application. Explain one of them. [6 marks]

Q3).

- a) What do you understand by the *System Development Life Cycle (SDLC)*? [5 marks]
- b) System analysis is one of the phases of the System Development Life Cycle (SDLC). Explain the analysis phase, detailing the major activities carried out during this phase. [5 marks]
- c) Explain the merits and demerits of the *Rapid Application Development (RAD)* methodology. [5 marks]
- d) Explain the key principles of the Agile methodology. [5 marks]

Q4).

- a) What is *software testing*? [4 marks]
- b) List and explain different test levels. [8 marks]
- c) What are *verification* and *validation*? [4 marks]
- d) Explain the use of CASE tools in software development. Provide *two* examples of such tools. [4 marks]

Q5).

- a) What is *requirement analysis*? [4 marks]
- b) List and explain *three* advantages of identifying requirements early in the software development life cycle. [6 marks]
- c) Identify *three* functional requirements and *two* non-functional requirements from the system description given below: [10 marks]

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