

Sample

THE OPEN UNIVERSITY OF SRI LANKA
 B.Sc. (IT) DEGREE PROGRAMME 2023/2024
 LEVEL 03
 ISU3300 – FUNDAMENTALS OF INFORMATION SYSTEMS
 FINAL EXAMINATION
 DURATION: TWO HOURS ONLY (02 HOURS)



Date: 07.12.2024

Time: 09.30 a.m. - 11.30 a.m.

General Instructions.

1. Read all instructions carefully before answering the questions.
2. This question paper consists of 06 questions on 02 pages.
3. Answer any 04 questions only. All questions carry equal marks.
4. The answer for each question should commence from a new page.
5. Involvement in any activity that is considered an exam offense will lead to punishment.
6. Use blue or black ink to answer the questions.
7. Clearly state your index number in your answer script.

Q1.

- a) Define the term "Information System". [04 Marks]
 - b) Provide four (04) examples of quantitative data. [04 Marks]
 - c) Briefly explain two (02) types of knowledge. [05 Marks]
 - d) Briefly discuss two (02) disadvantages of computer-based information systems. [06 Marks]
 - e) Differentiate between data and information using three (03) aspects. [06 Marks]
- [Total 25 Marks]**

Q2.

- a) Briefly explain the following two (02) strategies for competitive advantage.
 - i. Cost Leadership
 - ii. Differentiation [04 Marks]
 - b) Briefly explain Porter's five (05) competitive forces. [08 Marks]
 - c) Briefly explain the term "extranet" and mention two (02) disadvantages of it. [06 Marks]
 - d) What is e-commerce? Mention four main types of e-commerce. [07 Marks]
- [Total 25 Marks]**

Q3.

- a) Briefly explain the following steps of the order fulfillment process.
 - i. Order confirmation
 - ii. Billing
 - iii. Return [06 Marks]
 - b) Briefly explain two (02) advantages and two (02) challenges due to the globalization of companies. [08 Marks]
 - c) State the three (03) levels of management and provide an example of an information system used at each level. [06 Marks]
 - d) Explain what a decentralized organizational structure is and provide two (02) examples. [05 Marks]
- [Total 25 Marks]**

Q4.

- a) Define the term "Value Chain". [03 Marks]
 - b) What is the role of support activities in Porter's value chain analysis? [02 Marks]
 - c) Briefly explain "outsourcing" and provide two (02) benefits of outsourcing. [06 Marks]
 - d) List three (03) challenges of downsizing. [06 Marks]
 - e) How many components are there in the primary activities of Porter's value chain analysis? Briefly discuss each component. [08 Marks]
- [Total 25 Marks]**

Q5.

- a) State four (04) SDLC models other than Waterfall and Prototype models. [04 Marks]
 - b) What are the seven (07) stages of the Waterfall model? [07 Marks]
 - c) Mention three (03) advantages of the Prototype model. [06 Marks]
 - d) What is Supply Chain Management? [03 Marks]
 - e) Briefly discuss two (02) benefits for organizations of maintaining ethical practices in supply chain management. [05 Marks]
- [Total 25 Marks]**

Q6.

- a) Define the term "Visual Analytics". [03 Marks]
 - b) Mention two (02) benefits of using dashboards. [04 Marks]
 - c) Briefly explain the following careers in the field of information systems.
 - i. Network Architect
 - ii. Software Engineer [06 Marks]
 - d) Briefly explain the following computer attacks:
 - i. Ransomware
 - ii. Trojan Horses
 - iii. Viruses [12 Marks]
- [Total 25 Marks]**

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