
**CERTIFIED PUBLIC ACCOUNTANT
FOUNDATION LEVEL 2 EXAMINATIONS**

F2.3: INFORMATION SYSTEMS

DATE: TUESDAY, 24 AUGUST 2021

INSTRUCTIONS:

1. **Time Allowed: 3 hours 15 minutes** (15 minutes reading and 3 hours writing).
2. This examination has **seven** questions and only **five** questions **should be** attempted.
3. Marks allocated to each question are shown at the end of the question.

QUESTION ONE

The FASHION Ltd is a company specialized in ladies' clothes and has many competitors in the industry. This company has an enterprise system; however, the top management has noticed that the supervisors in the company cannot perform required activities reports and it is very difficult for the executive management to conciliate business routines information with external information for strategic decisions. In addition, the team in charge of innovation does not have any supporting technology in its daily work. Considering the situation, the board of FASHION Ltd has decided to upgrade the Information system (IS) and include missing systems for more precision and efficiency in business.

Required:

Referring to the above case study answer the below questions.

- a) Describe the type of system and its characteristics that need to be added to the enterprise system to help supervisors deliver in their daily operations. (5 Marks)
 - b) Which system is required at the executive management and how will it be helpful? (5 Marks)
 - c) What system do you think will help the department in charge of innovation and what are its main features? (5 Marks)
 - d) Explain possible legal issues that could oppose FASHION Ltd against its department in charge of innovation. (5 Marks)
- (Total: 20 Marks)**

QUESTION TWO

DATA Solutions Ltd is excelling in data management and business analysis and has branches in different districts of the country. It has recently won a contract for population census data storage, management and analysis. In provision, the company wants to upgrade its hardware platform to prevent system outages during data analysis phase.

Required:

Referring to the above case study, answer the following questions.

- a) Explain how DATA Solutions can utilize grid computing technology. (5 Marks)
 - b) A part of management team of DATA Solutions thinks, they can go for cloud solutions. Highlight the major disadvantages of cloud technology. (5 Marks)
 - c) Discuss how mobile computing can be of great help in this exercise of data collection and analysis. (5 Marks)
 - d) Elaborate possible management challenges that could be associated to updating the IT infrastructure of DATA Solutions Ltd. (5 Marks)
- (Total: 20 Marks)**

QUESTION THREE

You have been hired to the position of IT intern in SOFT Ltd, a company specialized in providing IT services in the whole country. A secondary student has approached you for more clarification in concepts used in IT.

Required:

Referring to the above case study answer the below questions.

Explain clearly to the student the significance of the following terms:

- a) **NIC card** (2 Marks)
- b) **Hub.** (2 Marks)
- c) **Switch.** (2 Marks)
- d) **Router.** (2 Marks)
- e) **Transmission media and their features.** (4 Marks)
- f) **Client server computing.** (2 Marks)
- g) **Behavioral targeting techniques used by many firms in e-commerce marketing.** (2 marks)
- h) **A net marketplace.** (2 Marks)
- I) **Freemium revenue model.** (1 Mark)
- j) **E-commerce is Ubiquitous.** (1 Mark)

(Total: 20 Marks)

QUESTION FOUR

SOFT Inc. is a corporation that offers consultancy services in software engineering. It has been approached to install software platforms and it is proposing open sources. However, its clients would like to understand more on these open sources.

Required:

Referring to the above case study answer the below questions, How could you explain to clients the following terms?

- a) **Linux and Open-source software.** (3 Marks)
- b) **AJAX.** (3 Marks)
- c) **Mashups.** (3 Marks)
- d) **Service Oriented Architecture.** (3 Marks)
- e) **Software outsourcing.** (2 Marks)
- f) **Total Cost Ownership of technology assets.** (3 Marks)
- g) **Component based software development.** (3 Marks)

(Total: 20 Marks)

QUESTION FIVE

Omega Ltd is a family business company operating for the last 5 years in manufacturing sector and does not have any information system to support the business operations. Everything related to the business transactions is kept in hard copy notebooks. You are IT consultant hired by the newly appointed director to assist during the ongoing company restructuring.

Required:

Referring to the above case study answer the following questions.

- a) **Clearly explain to the director the importance of having a database in the business.** (5 Marks)
- b) **Elaborate any three types of databases and the importance of Information policy** (8 Marks)

- c) Give an explanation of performing a feasibility study before any installation of new information system. (5 Marks)
- d) Clarify on the importance of system testing. (2 Marks)
- (Total: 20 Marks)**

QUESTION SIX

As a newly appointed IT manager in CROPS Ltd, a startup company in agricultural production business and has already got many partners in the industry. CROPS Ltd has acquired a new Information System and is targeting a close online collaboration with the external environment stakeholders. However, it has neglected the reinforcement of its systems security.

Required:

Referring to the above case study answer the following questions.

- a) Clarify to the Executive board of CROPS Ltd why systems are in general vulnerable and how it is difficult to secure Internet and Wi-Fi networks. (6 Marks)
- b) Illustrate the possible existing security and controls measures and its value for the CROPS Ltd business operations. (6 Marks)
- c) Propose and explain different technologies CROPS Ltd can use to reinforce the security of its systems. (6 Marks)
- d) Explain to the company the existing strategies to mitigate risks associated to data destruction and security intrusions. (2 Marks)
- (Total: 20 Marks)**

QUESTION SEVEN

You are a system analyst and have been approached by SAFE TOURS Ltd, a company that wants to design its own Information System. The owner of the company wants first to understand different steps for the whole process the project will go through and possible impacts on current business processes, before SAFE TOURS Ltd goes for IS design.

Required:

Referring to the above case study answer the following questions.

- a) Discuss Business process management steps. (10 Marks)
- b) Elaborate on the high rate of failures for business process reengineering projects. (5 Marks)
- c) Clearly explain how establishing an adequate Information requirement is a key success factor for the new system to be designed. (3 Marks)
- d) Highlight the role of end users in system development. (2 Marks)
- (Total: 20 Marks)**

End of question paper