



SLIATE

SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

Higher National Diploma in Information Technology
First Year, First Semester Examination – 2023
HNDIT 1042 – Information Management and Information Systems

Instructions for candidates:
Answer **only five** questions
All questions carry equal marks.

No. of questions : 06
No. of pages : 03
Time : Three hour

Question 01

[Total 20 marks]

- (i). Define the term Information System. (04 marks)
- (ii). Mention two (02) real world examples of operational level information systems. (04 marks)
- (iii). Briefly explain the “Technology dimension of Information Technology”. (06 marks)
- (iv). “An information system transforming business, and they essential for running and managing a business today”. Are you agree with this statement? Explain your view. (06 marks)

Question 02

[Total 20 marks]

- (i). What is Transaction Processing System? (04 marks)
- (ii). Explain the term ‘Business intelligence’. (04 marks)
- (iii). There are four major enterprise applications. Enterprise systems and Customer relationship management systems are two of them. Explain them. (06 marks)
- (iv). Briefly explain the “virtual reality systems” with suitable examples (06 marks)

Question 03

[Total 20 marks]

- (i). How are Information Systems Transforming Business today? (04 marks)
- (ii). Before starting the strategic planning process, what do you have to know about the organization. (04 marks)

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(iii). Read the following descriptions and briefly explain their strategic business objectives.

- a. "The Mandarin Oriental hotel group which operates hotels in Asia, Europe, and the Americas. These hotels use computers to keep track of guests' preferences. When a customer arrives at one of these hotels, the system automatically changes the room conditions, such as dimming the lights, setting the room temperature, or selecting appropriate music, based on the customer's digital profile. The hotels also analyze their customer data to identify their best customers and to develop individualized marketing campaigns based on customers' preferences. "
- b. "Apple Inc. transformed an old business model of music distribution based on vinyl records, tapes, and CDs into an online, legal distribution model based on its own iPod technology platform. Apple has prospered from a continuing stream of innovations, including the iTunes music service, the iPad, and the iPhone. " (06 marks)

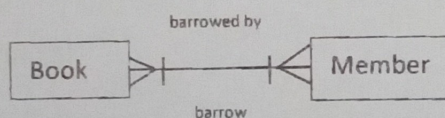
(iv). There are four Information System Strategies for dealing with Competitive Forces. Briefly explain followings with suitable examples: (06 marks)

- a. low-cost leadership
- b. Product differentiation

Question 04

[Total 20 marks]

- (i). Data Redundancy and Inconsistency is one of the problems with the Traditional File. Briefly explain it. (04 marks)
- (ii). Identify entities in following Entity relationship diagram? (04 marks)



(iii). Write the suitable terms for following expressions. (06 marks)

- a. A database built to run in a public or hybrid cloud environment to help organize, store, and manage data within an organization.
- b. A database that stores current and historical data of potential interest to decision makers throughout the company.
- c. An open source software framework managed by the Apache Software Foundation that enables distributed parallel processing of huge amounts of data across inexpensive computers.

(iv). Giving two advantages, explain what is Normalization? (06 marks)

Question 05**[Total 20 marks]**

- (i). Automation is the one of four (04) levels of organizational changes. Explain it. (04 marks)
- (ii). Name four (04) activities in Systems development? (04 marks)
- (iii). Describe the three (03) types of software testing. (06 marks)
- (iv). State two (02) advantages of using commercial software packages in an organization.
And State most important four (04) evaluation criteria of the software package. (06 marks)

Question 06**[Total 20 marks]**

- (i). Prepare four (04) list of wearable devices. (04 marks)
- (ii). Briefly explain two (02) types of cloud services. (04 Marks)
- (iii). Write Short notes for the followings. (12 marks)
 - a) Risk assessment
 - b) Intrusion Detection Systems
 - c) Authentication
 - d) Spoofing
 - e) SQL injection
 - f) Malware