



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 – 2021
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 hours

Question 01

[Total 20 marks]

- (i). Define the terms Data and Information. (04 marks)
 - (ii). Briefly discuss the functions of an Information System with neat diagram. (04 marks)
 - (iii). “There are many ways to support information for an organisation.” Explain. (06 marks)
 - (iv). Briefly describe the main categories of information systems which serve in different Organizational levels. (06 marks)
- Operational
Management
Strategic*
- Strategic
tactical*

Question 02

[Total 20 marks]

- (i). State four (04) major enterprise applications (04 marks)
- (ii). Explain the term ‘business process’. (04 marks)
- (iii). “High-quality decisions require high-quality information.” State three (03) information qualities. (06 marks)
- (iv). Briefly describe the following strategic business objectives by providing appropriate examples.
 - a. Operational excellence
 - b. New products, services and business models (06 marks)

[Total 20 marks]

Question 03

- (i). Explain the product differentiation with suitable examples. (04 marks)
- (ii). What is a Niche market? (04 marks)
- (iii). Read the following description and briefly explain their business strategies.
- a. "Toyota, along with other automobile companies, allows their suppliers access to production schedules. This makes it easier for suppliers to know when to ship parts and supplies without having to communicate back and forth about fulfilling orders. This strategy makes the production process run smoother and faster because the supplier can produce the goods they need and ship them to Toyota just in time for their production of the vehicles. "
- b. "Walmart's continuous replenishment system sends orders for new merchandise directly to suppliers as soon as consumers pay for their purchases at the cash register. Point-of-sale terminals record the bar code of each item passing the checkout counter and send a purchase transaction directly to a central computer at Walmart headquarters. The computer collects the orders from all Walmart stores and transmits them to suppliers. Suppliers can also access Walmart's sales and inventory data using web technology. " (06 marks)
- (iv). What is Strategic Planning Process in an Enterprise? (06 marks)

[Total 20 marks]

Question 04

- (i). Define term, Database Management System. (04 marks)
- (ii). What are the major capabilities of DBMS? (04 marks)
- (iii). Express the following terms in Relational database management system. (06 marks)
- a. Tuples
- b. Primary Key
- c. Foreign Key
- (iv). Differentiate Data warehouse and Data Mart? (06 marks)

Question 05**[Total 20 marks]**

- (i). 'Information technology can promote various degrees of organizational change, ranging from incremental to far-reaching ', State four (04) levels of organizational changes. (04 marks)
- (ii). Explain, What type of changes to do in an organization to introduce a new information system? (04 marks)
- (iii). Describe the System Development activities. (06 marks)
- (iv). Explain the alternative methods for building information systems. (06 marks)

Question 06**[Total 20 marks]**

- (i). What is "wearable device" and explain the how its use on business? (04 marks)
- (ii). Define term "Big Data". (04 Marks)
- (iii). Write Short notes for the followings. (12 marks)
 - a. Sociotechnical system ,
 - b. Computer virus \
 - c. Worms \
 - d. Trojan horse '
 - e. Spyware
 - f. Hackers z