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Statask
operation
marginal

SLIATE

SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

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

low-cost leadership
customer - supplier identify

Accuracy
Reliability
Accessibility

Jumail-0035

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

Data is streams of raw facts representing events occurring in organizations or the physical environment before they have been organized and arranged into a form that people can understand and use. [Total 20 marks]

(i). Define the terms Data and Information. Information we mean data that have been shaped into a form that is (04 marks)

(ii). Briefly discuss the functions of an Information System with neat diagram. (04 marks)

Input: feed back
Processing: meaningful and useful to human beings
Output: (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)

TPS - Transaction Processing System
MIS - Management Support System
DSS - Decision Support System
ESS - Executive

Question 02

[Total 20 marks]

(i). State four (04) major enterprise applications (04 marks)

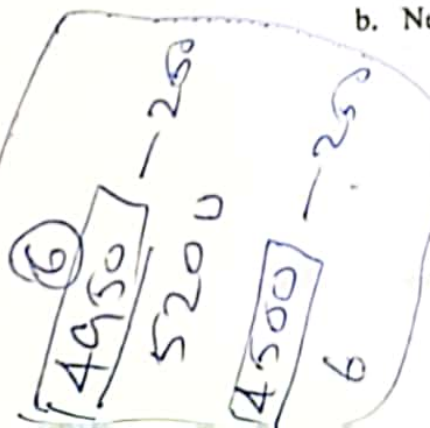
(ii). Explain the term 'business process'. are the collection of activities required to produce a product or services (04 marks)

(iii). "High-quality decisions require high-quality information." State three (03) information qualities. Increasing market share, Reducing the high-quality or low-cost production (06 marks)

(iv). Briefly describe the following strategic business objectives by providing appropriate examples. Developing new products, Increasing employee productivity. (06 marks)

a. Operational excellence

b. New products, services and business models (06 marks)



Question 03

[Total 20 marks]

- X (i). Explain the product differentiation with suitable examples. (04 marks)
- (ii). What is a Niche market? *is the subset of the market on which a specific product is focused* (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." *low-cost leadership*
- 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." *customer-supplier identification* (06 marks)
- (iv). What is Strategic Planning Process in an Enterprise? (06 marks)
The method use by organization to develop plans to achieve overall long-term goals.

Question 04

[Total 20 marks]

- (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 — *one data is copy to Tuples.*
- b. Primary Key — *is a main key*
- c. Foreign Key —
- (iv). Differentiate Data warehouse and Data Mart? (06 marks)

A database — software designed to define, manipulate, retrieve and manage data in a centralized data base

includes capabilities and tools for organization, managing, data accessing the data in the database

production and
maintenance

analysing
design
coding
testing
conversion

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". *the collection of the 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

✓ Automation
rationalization
business process design
process shift