

**GUJARAT TECHNOLOGICAL UNIVERSITY****MBA(PT) - SEMESTER-II EXAMINATION – WINTER 2020****Subject Code:4529902****Date:05/02/2021****Subject Name:Management Information Systems****Time:10:30 AM TO 12.30 PM****Total Marks: 47****Instructions:**

1. Attempt any two questions from Q1 to Q4.
2. Q5 & Q6 are compulsory.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

- Q.1 (a)** Explain following Terms **06**
1. E-Commerce
  2. Cloud computing
  3. Digital Dashboard
- Q.1 (b)** Explain following Terms **06**
1. Firewall
  2. Artificial Intelligence
  3. Expert System
- Q.2 (a)** Define DSS. Evaluate the role of DSS serving at the middle level of management & its relationship with other system. **06**
- (b)** Difference between ethical and unethical hacking **06**
- Q.3 (a)** What is ERP? Explain Basic module of ERP. **06**
- (b)** Explain application of information system in finance and marketing function. **06**
- Q.4 (a)** Explain application of information system in HR and function. How its useful for smooth functioning of it. **06**
- (b)** How do customer relationship management system help achieve customer intimacy? Illustrate with example. **06**
- Q.5** A waiter takes an order at a table, and then enters it online via one of the six terminals located in the restaurant dining room. The order is routed to a printer in the appropriate preparation area: the cold item printer if it is a *salad*, the hot-item printer if it is a hot *sandwich* or the bar printer if it is a *drink*. A customer's meal check-listing (bill) the items ordered and the respective prices are automatically generated. This ordering system eliminates the old three-carbon-copy guest check system as well as any problems caused by a waiter's handwriting. When the kitchen runs out of a food item, the cooks send out an 'out of stock' message, which will be displayed on the dining room terminals when waiters try to order that item. This gives the waiters faster feedback, enabling them to give better service to the customers. Other system features aid management in the planning and control of their restaurant business. The system provides up-to-the-minute information on the food items ordered and breaks out percentages showing sales of each item versus total sales.

This helps management plan menus according to customers' tastes. The system also compares the weekly sales totals versus food costs, allowing planning for tighter cost controls. In addition, whenever an order is voided, the reasons for the void are keyed in. This may help later in management decisions, especially if the voids consistently related to food or service. Acceptance of the system by the users is exceptionally high since the waiters and waitresses were involved in the selection and design process. All potential users were asked to give their impressions and ideas about the various systems available before one was chosen.

- (a) In the light of the system, describe the decisions to be made in the area of strategic planning, managerial control and operational control? What information would you require to make such decisions? **5.5**
- (b) What would make the system a more complete MIS rather than just doing transaction process? **5.5**

**OR**

- Q.5** (a) Explain the probable effects that making the system more formal would have on the customers and the management. **5.5**
- (b) Which system was used for transaction processing before implementing atomization? What were the issues related with old system? **5.5**

**Q.6** The products of Fairchild Semiconductor are installed in a large array of items, from satellites and motor vehicles to cell phones, medical devices, and home appliances. It is the world's largest supplier of power semiconductors.. It maintains 36 offices in 17 countries. The products are then shipped to customers around the globe. Customers can order products online at the company's Web site. Over the past decade, Fairchild established additional design and manufacturing facilities in Korea and China. With facilities as well as customers in a growing number of countries, complying with both U.S. and other countries' export and import laws became complex. Work in- progress is often shipped from one country to another, and then to another or back to the original country for further processing. Logistics managers decided to use the services of a company that specializes in software that helps manage such complex operations. Fairchild approached Management Dynamics, Inc. (formerly Nextlinx, Inc.), a company with expertise in software that supports online logistics. Together, the companies configured and implemented Management Dynamics software called Trade Export Solution, which automates Fairchild's global logistics. The software provides information on laws and regulations of each country where Fairchild transacts, as well as customs duties. For each shipment it determines the fastest and least costly carriers as well as the minimum duties to be paid. The application provides digital forms that enable employees to enter details on content, value, and destination of a shipment. The various costs are calculated automatically for the country and particular seaport or airport. The system ensures full compliance with the country's regulations. In recent years, many new U.S. regulations have focused on homeland security issues. As a result, Fairchild could reduce the amount of raw materials inventory it carries.

The use of the new system reduced the number of employees involved in shipping processes, but it also had another positive effect it standardized shipping procedures and records worldwide. The same shipping procedures and records are maintained at every company facility, anywhere in the world. This enables Fairchild to easily implement the procedures and documentation in new facilities it might establish in the future.

They may forbid the export of certain types of microchips to some countries, or the export of certain items from some countries. All this information is closely monitored by Management Dynamics and added to the documentation and automated forms. The software has been implemented in every facility of the company in the world. It is integrated into Fairchild's enterprise resource planning (ERP) systems as well as the shipment application of its major shipping carrier. Shipping clerks can easily retrieve trade documentation and be sure that all shipping complies with the destination country's regulations. This saves the typical labour intensive search for trade compliance documentation, helping the company to clear 90 percent of its shipments with the proper authorities before the shipment reaches the destination country. The system also shortened shipping durations and reduced shipping delays.

- (a) The software Fairchild integrated into its ERP system reduces risk. What risk? **06**
- (b) List the cost savings provided by the software. **06**

**OR**

- Q.5**
- (a) Why is it important to integrate an application such as Management Dynamics' to the ERP system of the adopting global company? **06**
  - (b) Why is standardization of processes so important to a company such as Fairchild? **06**

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