

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MBA SEMESTER 1 – EXAMINATION – SUMMER 2019**

**Subject Code: 4519206**

**Date: 15/05/ 2019**

**Subject Name: Management Information System**

Time: 02:30 PM To 05:30 PM

**Total Marks: 70**

**Instructions:**

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

Q1. Define/Explain the following: 14

- (a) E-commerce
- (b) Cloud Computing
- (c) TPS
- (d) Firewall
- (e) Data & Information
- (f) Artificial Intelligence
- (g) Expert System

Q2. (a) Why are Information systems so essential for running & managing business today? **07**

(b) Explain how information system impact organisation & business firms? **07**

**OR**

(b) Using Michael Porter's five forces model describe how business can use Information System to apply competitive strategies. **07**

Q3. (a) Describe the information system supporting the major business functions. (any 2) **07**

(b) Define DSS. Evaluate the role of DSS serving at the middle level of management & its relationship with other system. **07**

**OR**

Q3. (a) Write a note on: 07

1. Machine Learning (04)
2. Internet of Things (03)

(b) How do supply chain management systems provide value for a business? Illustrate with the help of an example. **07**

Q4. (a) Explain different types of computer crimes in today's organization. **07**

(b) Explain different types of security measures that a company need to adopt to keep its transaction secure. **07**

**OR**

Q4. (a) Is there an ethical crisis in business today? What role does Information system play in unethical business practices? **07**

(b) How do customer relationship management system help achieve customer intimacy? Illustrate with example. **07**

Q5. Case Study: Ranbaxy – Taking the ERP Pill

Ranbaxy Laboratories Ltd started its operations 1961. It is one of the leading pharmaceutical companies in India having significant global presence. Before the implementation of the ERP package, SAP, Ranbaxy used legacy systems to run its various operations. Tally was used by the finance department while the inventory & product planning department used MRP-I & MRP-II for material requirement planning & to schedule the inventory processes & activities of various departments. MRP-II also focused on the processes concerning product planning, inventory management & manufacturing. Several issues were present with these legacy system, main being of disconnection. Tally was used by finance team having no link to the processes followed by other departments. It was difficult for managers to avail a streamlined flow of information. MRP system kept stock at a very basic level leading to frequent ordering of materials.

For integrating the departmental processes, Ranbaxy implemented SAP ERP package. With SAP information were generated by various departments more accurately & made available in real time. SAP divides a single process into smaller sub-process. For ex: the process for stocking store is further divided into generation of item codes, assigning item codes to appropriate location, defining stock levels, receipt & delivery of materials etc. Coordination between all the departments & keeping track of every sub-process is important as it may cause delay if proper systems are not in place.

Maintaining the quality of medicines & healthcare products is of utmost importance at Ranbaxy. SAP focuses on each process involved in the manufacturing of medicines, & identifies the processes that are responsible for defects. SAP has also helped in cost reduction such as labor cost. It has enhanced organizational productivity. Ranbaxy now uses standard processes to raise purchase orders. Unlike the MRP system that places orders haphazardly, the orders in SAP are placed in accordance with the min-max plan of inventory department resulting in reduction of

ordering & transportation cost. SAP has also integrated various suppliers & vendors with improved communication.

The processes followed at Ranbaxy after implementation of SAP ERP are as follows:

1. Project planning & Forecasting: SAP helps managers plan the manufacturing process effectively. It lets them know the exact quantity of medicines to be manufactured along with date of exhaustion of stock.
2. Raising indent: Whenever there is a need to procure material for manufacturing, the manager raises an indent using SAP. The indent contains the exact purpose for which the material is requisitioned & the location at which it is needed. This indent is forwarded to the store manager for approval, after which the procurement teams go ahead with the purchase of material.
3. RFQ (request for quotation): this module of SAP sends request for quotations to the various approved suppliers. The procurement department compares these quotations and selects the best supplier after taking into consideration cost, quality, time, shipment & other factors.
4. Creation of purchase orders (Pos): Next the purchase department generates a PO for the approved indent. This PO contains terms & conditions laid out by the legal department. Copy of PO is forwarded to finance department through the notification summary feature in the SAP for approval.
5. Receiving & delivering material. The ordered material is finally received, inspected & delivered to the store. The store generates a receipt in the SAP to acknowledge the successful delivery of material.
6. Manufacturing requests: the material needed by the manufacturing personnel is issued through a move-order request. After obtaining necessary approvals, material is issued.
7. Invoice Creation: SAP generates invoice for the finance department & records entries in general ledger.

This is how SAP accomplishes integration among all functional departments increasing efficiency at Ranbaxy.

- (a) Discuss the flow of information before the implantation of ERP system at Ranbaxy. **07**
- (b) Discuss how SAP ERP system has helped Ranbaxy overcome its previous problems & helped in enhancing its efficiency. **07**

**OR**

- (a) What issues were faced by Ranbaxy before implementation of SAP ERP system? **07**
- (b) Discuss the process flow after the implementation of SAP ERP system & their potential benefits. **07**