Time Allowed: 2Hrs. & 30Mins.

## SECTION-A                                    (Marks: 3X5)

Q.A1 What is ERP life cycle? Briefly describe the phases of ERP life cycle.

QA2. What are the major disadvantages of individual departmental information systems?
Explain why a "process" approach is better than a "functional" approach?

QA3. What comes first BPR or ERP? Justify your answer.

QA4. Explain the following:
(a) Source List
(b) Condition Master
(c) RFP and RFQ
(d) MRP

QA5. Describe in brief the application of SDLC approach to the development of ERP system
in an organization.

## SECTION-B                                    (Marks: 2X10)

QB1. Explain four common ERP implementation strategies. Explain pros and cons of each

QB2. Explain a typical Sales order management cycle. How does ERP system support such
a cycle.

QB3. Discuss the various reasons why ERP project fails and explain the reasons for
success. Explain with examples.

## SECTION-C                                    (15 Marks)

### Case Study

### Ranbaxy: Taking the ERP Pill

### Case Study

Ranbaxy Laboratories Ltd started its operations in 1961. It is one of the leading pharmaceutical
companies in India, and also has significant presence the world over. Before the
implementation of the ERP package, SAR used legacy systems to run its variopus operations.

Tally was used by the finance department, while the inventory and product planning departments used MRP-I and MRP-II for material requirement planning and to schedule the inventory processes and activities of various departments. MRP-II also focused on the processes related to product planning, inventory management, and manufacturing. There were several issues with these legacy systems, the major problem being that of disconnection among all of them. Tally, the accounting software, was used by the finance teams only. It had no link to the processes followed by the other departments. As a result, it was difficult for managers to avail a streamlined flow of information. The MRP systems kept stock at Ranbaxy at a very rudimentary level, leading to frequent ordering of materials.

In order to integrate the processes of various departments, Ranbaxy decided to implement the SAP ERP package. Since Ranbaxy is a manufacturing organization and works in a competitive market, it is important that it increases organizational efficiency, controls its inventory levels through proper planning, reduces cost, increases profits, and streamlines its business flow. With SAP, the information generated by these departments is more accurate and available in real time. Each project manager is l'6Sp0l'lSibl8 for the exact planning, forecasting, and budgeting for a particular project. All the other departments work according to the plan for the project, or products and services. All functional departments have the clearest understanding of the operations to be performed, right from procurement to finance, project management, and sales.

SAP divides a single process into smaller sub-processes. For example, the process for stocking the store is further divided into generation of item codes, assigning item codes to the appropriate location, defining the stock levels, receipt and delivery of materials, and so on. Keeping track of every sub-process is important, especially since coordination between so many different departments may cause delays if proper tracking systems are not in place. The activity or department that slows down performance is identified early, and appropriate decisions are taken in order to enhance the efficiency of that department.

Maintaining the quality of the medicines and healthcare products is of utmost importance at Ranbaxy. SAP focuses on each process involved in the manufacturing of medicines, and identifies the processes that are responsible for defects. Through this information, the management takes effective decisions to overcome problems, thereby ensuring the quality of medicines. SAP has also helped reduce various kinds of costs. It has enhanced organizational productivity. Over time, labor costs have been minimized. Ranbaxy now also uses standard processes to raise purchase orders. Unlike the MRP systems that placed orders haphazardly, the orders in SAP are placed in accordance with the min-max plan of the inventory department. This has reduced the ordering and transportation costs of the company to a great extent. SAP has also integrated the various suppliers or vendors. Communication among different departments and the vendors has improved vastly.

Information is the backbone of an organization. Accurate, timely information helps the management take decisions at the right time. SAP provides timely information related to inventory, project planning, project costs, sales, and production.

The processes followed at Ranbaxy after the implementation of the SAP ERP are as follows:
1. **Project planning and forecasting:** The SAP helps managers plan the manufacturing process effectively. It lets them know the exact quantity of the medicines to be manufactured along with the date of exhaustion of stock.
2. **Raising Indent:** Whenever there is a need to procure material for manufacturing, the

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manager raises an indent contains the material is requisitioned and 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 the material.

**3. RFQ (request for quotation):** This module of SAP sends requests 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, and other relevant factors.

**4. Creation of purchase orders (POs):** Once the quotation is finalized, the purchase department generates a PO for the approved indent. This PO contains the terms and conditions laid out by the legal department. A copy of this PO is forwarded to the finance department through the notification summary feature in the SAP for approval.

**5. Receiving and delivering material:** The ordered material is finally received, inspected, and 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 the necessary approvals for the move, the material is issued to the requester.

**7. Invoice creation:** Finally, the SAP generates invoices for the finance department and records the entries into the GL (General Leaders).

This is how SAP has been successfully implemented to achieve integration among all the functional departments at Ranbaxy and increase the efficiency of the business processes.

## Case Study Questions

1. Discuss the flow of information before the implementation of the ERP system at Ranbaxy.
2. Discuss how the SAP has helped Ranbaxy overcome its previous problems.
3. Discuss the process flow after the implementation of the SAP ERP system.