



**INDIAN INSTITUTE OF MATERIALS MANAGEMENT**  
**Post Graduate Diploma in Materials Management– 2years**  
**Paper 22(Enrollment code: CPM)[OFFLINE EXAM]**  
**Business Process Re-Engineering & ERP**

**Dec 2023**

Date: 22.12.2023  
 Time: 2.00 p.m. to 5.00 p.m

Max. Marks 70  
 Duration 3 hours

**Instructions**

1. Part A is compulsory. Each sub question carries one mark.
2. In Part B answer any 3 questions .Each question carries 10 marks
3. Part C is a case study with sub questions and it is compulsory.

Total marks-20  
 Total marks-30  
 Total marks-20

**PART A**

**(20 marks)**  
**[ 5 marks]**

**Q. 1. Fill in the blanks.**

- a) BPR is radical \_\_\_\_\_ of business processes. Redesign.
- b) Hammer and Champy consider poor management and \_\_\_\_\_ objectives as the main problems to BPR success. Unclear.
- c) \_\_\_\_\_ is the understanding that dramatic changes are needed to meet the needs of organizations. Realization.
- d) The six step methodology is used for process improvement. Six.
- e) An information system where all information are stored in a database is \_\_\_\_\_ information system. Centralized.

**Q. 2. State True or False**

**[ 5 marks]**

- a) Business strategy implies where the business to get to in the long run.
- b) Michael Porter developed the concept of value adding.
- c) MRP is not the fundamental aspect of production management.
- d) Plant maintenance supports the activities associated with planning and performing repairs and preventative maintenance.
- e) Internationalization and globalisation are intensifying the expectation of customers.

**Q. 3. Match the following:**

**[ 5 marks]**

|   | Column A                          |   | Column B                  |
|---|-----------------------------------|---|---------------------------|
| A | Continuous Improvement            | 1 | Process orientation       |
| B | New Regulation                    | 2 | Process approach          |
| C | BPR Organizations                 | 3 | Total quality management  |
| D | A client's application for loan   | 4 | Need for reengineering    |
| E | Objective overview of the process | 5 | Rethinking of the process |

**Q.4. Expand the following:**

**[ 5 marks]**

- a) ICT                      b)QFD                      c)DFSS                      d)CSFA                      e)MRP II

**PART B**

**(30 marks)**

**(Answer any three. Each question carries 10 marks)**

Q.5.a) Compare and contrast between pure BPR and channeled BPR.

**[5 marks]**

b) What is customization?

**[5 marks]**

**Q.6.a)**What are the key roles of effective process management? **[5 marks]**

b) What is modularity and interfaced package? **[5 marks]**

**Q.7.a)** Explain the concept of business model. **[5 marks]**

b)What are the features of third generation ERP? **[5 marks]**

**Q.8.a)**Describe in brief various ERP modules. **[5 marks]**

b)Explain advantages and disadvantages of ERP. **[ 5 marks]**

**Q.9. Write Short Notes any two** **[2 x 5 =10 marks]**

A)Value Chain

B)PEST Analysis

C)McKinsey's 7S analysis

D)Maximizing Success

## **PART C**

**(20 marks)**

### **Q.10 Case Study (compulsory)**

#### **Case Study-Make-to-Order Steel Manufacturing**

ThyssenKrupp is one of the world's largest technology groups. Worldwide, more than 190,000 employees work in the group's main areas of steel, capital goods and services, realizing sales of more than 53 billion EUR in the 2007/2008 fiscal year. The ThyssenKrupp Stainless segment is the world's market leader in flat-rolled stainless products and holds leading positions in high-performance material markets. In the ThyssenKrupp Stainless segment eight business units in stainless-steel products are concentrated, two of which serve the market for high-performance alloys: ThyssenKrupp Titanium and ThyssenKrupp VDM. ThyssenKrupp VDM is a leading international supplier of high-performance nickel alloys, cobalt alloys, and special stainless steels. The company supplies these products in the form of sheet, strip, bar, and wire to customers mainly in the energy, oil, gas, plant construction, aerospace, and electronics sectors. Products of high-performance alloys are used whenever extreme conditions are faced, for instance in fuel cells, turbine blades or high-precision molds.

#### **ThyssenKrupp VDM's manufacturing streams**

With about 1,800 employees, ThyssenKrupp VDM accounts for shipments of 36,100 metric tons and sales of 1,177 million EUR in the 2007/2008 fiscal year. Starting with the melting and casting of the raw material in the common upstream melting plant, the material is distributed in the form of ingots into different manufacturing streams. Thus, the production process can be described as a combination of process and discrete production. Within the above-described production process, the capacities of the finishing sections are the limiting factors. In particular, the sheet finishing section experiences a demand exceeding the capacity on a regular basis.

In this context, a product is defined as a specific set of specifications ordered by the customer, including type of alloy, type of forming, quality norms, and geometric measurements. Sheet finishing begins with annealing, a heat treatment in which the recrystallization is conducted. The duration of the annealing process depends on the type of alloy and the order-specific thickness of the sheet. Afterwards, the sheets are blasted to prize the layer of scales and leveled in order to assure quality in further processing.

#### **Questions**

1. Write a short note on ThyssenKrupp technology groups.
2. Explain the process of manufacturing streams at ThyssenKrupp technology groups.

\*\*\*\*\*