

CODE: 17CE00206

MBA I Year II Semester (R17) Regular Examinations, June - 2018

OPERATIONS MANAGEMENT

Time : 3 hours

Max Marks : 60

PART-A

Answer all **five** units ($05 \times 10 = 50$ Marks)

UNIT-I

1. Discuss the scope of the operations management in detail.

OR

2. What is the significance of operations management ? How operations management is interrelated to other functional department.

UNIT-II

3. Discuss the various differences between product layout and process layout

OR

4. Explain the various steps in aggregate planning

UNIT-III

5. Write a short on production controls

OR

6. Briefly discuss the world class manufacturing techniques

UNIT-IV

7. Explain various steps in method study in brief.

OR

8. What do you mean by SQC. What is role of charts in control quality

UNIT-V

9. Discuss the various selective inventory control techniques with their applicability in the industry.

OR

10. Explain the various activities of material management in brief.

PART-B

Compulsory Question. ($01 \times 10 = 10$ Marks)

11. **Case Study:**

Walking through the Business Ashrama of his company after everybody else had left, Suresh B. Hundre, Chairman and Managing Director of Polyhydron Private Limited (PPL), felt pride on what had been achieved to date and especially on how it had been achieved. The company has grown to Rs. 25 crores in annual revenues in 2005-06 since it was founded in 1981, and was known all over India for its innovative management and manufacturing systems and exceptionally high ethical standards towards all its stakeholders.

STRATEGIES: In addition to his efforts to set high ethical standards, Hundre was restless in constantly improving the management systems within PPL, making the company a better organization to work for and delivering high quality at low prices to its customers.

In 1987-1988, Japanese management techniques started to catch his attention. When practicing clean administration, Hundre understood the need to improve practices in other areas as well and started reading on innovative management and manufacturing approaches, such as just-in-time manufacturing. A first step was to make processes simple and transparent. He then started experimenting with the just-in-time (JIT) concept and finally implemented his version of it in

PPL without the help of any consultant. While changing the whole manufacturing system, Hundre implemented Japanese management techniques like Kaizen (continuous improvement), the quality circle and independent and self managed working groups.

KAIZEN: The management never stopped implementing new ideas at every level of the company and was therefore striving to educate each member of the workforce to learn the new philosophy and adapt rapidly to the new systems. Furthermore, every employee was encouraged to read books - PPL provided books on a variety of topics in their own wellstocked library. In fact in order to promote reading habits, the company held two hour classes in English, after working hours for which the employees were paid overtime. When Hundre implemented the Japanese management system Kaizen, the upper managers had to undergo different training programmes and attend corresponding courses which were organized by TI Bangalore.

INDEPENDENT WORK STATIONS: Long the way to empower the workers of PPL and give them more responsibilities, Hundre implemented the system of independent work stations for his manufacturing units. Each cell of the factory was a unit by itself with work stations and machining centres. The Manager (WS) had a computer with him for processing data, updating product range, and incorporating any changes. All the supply components and raw materials were brought from the sub-contractors in the specified batch sizes directly by the work stations. The workers in each cell formed a group and were responsible for maintaining the equipment in the cell, attending to machine breakdowns, cleanliness including sweeping floors, cleaning window panes, etc. The shop floor was kept clean in spite of various operations like milling, drilling, grinding, and turning.

GROWTH: The improvement of the system and the good quality of PPL's products increased demand. Furthermore, Hundre lead his company into new markets - with his focus not on a complete product range, but only on fast moving items. These were produced in big quantities by customers and allowed PPL to get huge shares of the markets that they entered.

EXCELLENCE AND QUALITY: At the same time as he tried to instil an ethical culture in Polyhydron, Hundre tried to reach the same high standards in manufacturing and quality: "I want to be excellent in what I do because excellence is a way of avoiding competition. I do not want people competing with me. Excellence can be measured in terms of price, delivery, quality, and service." While he saw that PPL was strong in pricing, delivery, and service, he believed that there was scope for improvements in quality.

The company was proud to have stable relationships with its suppliers and it was widely acknowledged that trust played a key role in these relationships - for example, components did not need to go through an inspection process after they were delivered. Thus far, PPL had not obtained any certification, such as ISO. This was because the whole organization was built upon trust and Hundre had not seen the need until now. He felt that ISO was based on a philosophy which contradicted PPL's trust based approach, in that it required checks and proof for every activity. Nevertheless, PPL did follow some quality systems according to the requirements of their big clients, like Larsen & Toubro, John Deere and TELCON.

WEALTH SHARING: The mission statement of the company emphasized good and fair treatment of all its stakeholders. Therefore, Hundre started very early on to look for some material on the issue of profit sharing. He came to know about the Nikkerin system and started to introduce schemes of sharing the wealth that the company generated. He was searching for a formula for profit-sharing. He adapted the Nikkerin system and came up with the Value Addition Scheme, which was introduced in 1991-92 and employees profited from it until 1996-1997, when the value addition bonus was 74% of the basic salary plus 20% statutory bonus, which summed up to a bonus of 94% of base salary for each employee.

RELATIONSHIP WITH SUPPLIERS: The company placed great importance on having a close and intensive relationship with its suppliers - and followed the policy "one supplier for one product". Furthermore, vendors stated that PPL took care of any technical, non-technical, or personal problem. For example if there were any training programs for any of the vendors, these training programs were offered at PPL. Some vendors described their own relationship to PPL as so close that they considered themselves a part of the Polyhydron Group, although there was no legal connection between them. There was also no need to follow-up payments for orders from PPL. "Not even a single phone call is needed for this - automatically the cheque is posted."

PRICING The customers were also treated with simple and transparent rules, such as "everybody has to pay the same price for a product" (all prices were publicly listed on the webpage of PPL). Some dealers reported that this was a bad policy. The complaint was that Polyhydron did not support its own dealers because it did not guarantee them a good margin. It was difficult for dealers to sell PPL products, since a customer could go directly to Polyhydron and buy the product - at an even lower price, due to savings in some taxes.

- a) Do the SWOT analysis for the above company?
- b) What are the strategies to be learn from the above company

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