

C 43513

(Pages : 3)

Name.....

Reg. No.....

SECOND SEMESTER M.B.A. DEGREE EXAMINATION, JULY 2023

M.B.A. (CUCSS)

BUS 2C 12—OPERATIONS MANAGEMENT

(2016 Scheme)

Time : Three Hours

Maximum : 36 Weightage

*Answer all the Parts.***Part A***Answer all questions.**Each question carries 1 weightage.*

1. Which are the statistical methods used in quality control ?
2. What is the concept of 'JIT' ?
3. What is the scope of materials management ?
4. What are the principles of material handling ?
5. What is quality audit ?
6. What are the basis elements of Total quality management ?

(6 × 1 = 6 weightage)

Part B*Answer any four questions.**Each question carries 3 weightage.*

7. Distinguish between production and operations management.
8. How does ISO 9000 ensure improvement in quality ?
9. What is line balancing ?
10. Illustrate control in batch/job order manufacturing with the suitable example.
11. What is process planning ? Describe the steps for effective process planning ?
12. Explain the concept of Break Even Analysis.

(4 × 3 = 12 weightage)

Turn over

Part C

Answer any **three** questions.

Each question carries 4 weightage.

13. How is production planning and control implemented in mass production ?
14. Explain the concept of Aggregate Planning.
15. You are managing a group of 10 Electricians. These individuals undertake in-home servicing of electrical systems and are called by telephone for either emergency or prearranged visits. They charge a minimum call out fee that covers the first 15 minutes of their visit plus travelling time. Beyond the first fifteen minutes they charge in minimum blocks of 15 minutes plus any materials that might be necessary to carry out the job. The average call out takes 1 hour. The workers usually are available for eight hours a day but with 2 coffee breaks of 15 minutes each and a half hour lunch break, they actually work a 7 hour day. Taking time off and illness into account reduces the electricians' available time by 20 %. This means the 7 hours per day is reduced to a 5 hour and 36 minute day (5.6 hours) If actual work is only 200 hours billed in the week then
- What is the capacity utilisation of the team ?
 - What is their efficiency ?
16. From the following particulars, calculate :
- Break-even point in terms of sales value and in units.
 - Number of units that must be sold to earn a profit of Rs. 90,000.

		₹
Fixed Factory Overheads Cost	...	60,000
Fixed Selling Overheads Cost	...	12,000
Variable Manufacturing cost per unit	...	12
Variable Selling cost per unit	...	3
Selling price per unit	...	24

17. What are the different types of production and operation systems ? Where would each one of them be applicable ? Give examples :

(3 × 4 = 12 weightage)

Part D

18. Answer the *compulsory* question (6 weightage) case study :

Orient is a noted manufacturer of berge wood furniture, which is popular in Germany and Italy ; as a result, it exports almost 90% of its manufactured furniture items to these two countries. *Orient* gets a tremendous cost advantage by sourcing berge wood at very competitive rates from the northeastern states of India, where the local people use it as firewood.

Italy is famous for furniture design. Most of *Orient's* designers are trained in Italy after they graduate from institutions like the National Institute of Design. Furniture, designing is a very high profile job with a good pay package. Some of *orient's* designers are paid as much as its Directors.

Orient recently introduced assembly lines for furniture manufacturing, replacing their age-old job shop type manufacturing systems. It had to take this decision to switch over to batch production. The company's workers are highly skilled and competent enough to manufacture any furniture item with high accuracy and precision. Workers use their creative instincts to shape furniture as per the design.

At times, workers' inputs are used by the designers of the company. Along with the assembly line, simultaneous change to the CNC machining centres was introduced, which were capable enough to perform the tasks as per the programmed design. The company trained its workers on the new systems of production and on CNC machine operation. To the workers, initially, it was fascinating. However, when they began using the new method of production, they started resenting the changes and requested the company go back to the earlier work process. Workers argued that such fragmentation of job content, in an assembly line with the back-up of CNC machining centres, reduced their job to a routine, repetitive one, which they felt was an insult to their skill and craftsmanship. Many *Orient* workers are carpenters by profession. Carpenters in India are traditionally viewed as respected members of society.

Question :

Experts retained by the company attributed this to an ergonomic problem, namely, the lack of man—machine interface. Do you agree ? Justify your answer.

(6 weightage)