



Online PGDM
First Year, Trimester 2, Sept,2024

Course Name: OPERATIONS MANAGEMENT
Course Code : 2103

Max Marks : 70
Max Time : 2 hrs

Instructions for Students:

This is a closed book examination. No external resource material allowed.

The Question Paper consists of 3 Sections- A, B, C. All sections to be attempted.

Allocated marks for each of the Section and Questions indicated.

Answers should be rich in content, pointwise and precise. Avoid unnecessary long answers.

Section A : Objective Type Questions

(Answer all Questions, each question of 2 marks each, Total Marks: 2x12=24)

Q 1. Identify the correct answer

1.1

The _____ classification system classifies inventory according to its Rupees or Dollar value to the firm.

- a. periodic
- b. continuous
- c. ABC
- d. EOQ

1.2

All fixed costs that do not vary with size of order are included in

- A. Inventory carrying costs
- B. Ordering costs
- C. Material costs
- D. Stockout costs

1.3

The major component of inventory carrying cost is

- A. Storage and handling costs
- B. Receiving costs
- C. Financing costs
- D. Damage & Obsolescence costs

1.4

_____ inventory exists as producing, transporting and purchasing in large lots allows a stage of supply chain to exploit economies of scale and thus lower costs.

- A. Safety Inventory
- B. Pipeline Inventory
- C. Seasonal Inventory
- D. Cycle Inventory

1.5

A _____ breaks down a project into work components and subcomponents.

- A. work breakdown structure (WBS)
- B. responsibility assignment matrix (RAM)
- C. resource breakdown structure (RBS)
- D. organizational breakdown structure (OBS)

1.6

Critical path is the _____ path through a project network and gives the _____ possible time to complete the project

- A. shortest, minimum.
- B. longest, maximum
- C. longest, minimum

D. shortest, maximum

1.7

For a project schedule network diagram made using precedence diagramming method-

- A. arrows represent activities and nodes represent events.
- B. nodes represent activities and arrows indicate precedence relationships.
- C. arrows represent events and nodes indicate precedence relationships.
- D. nodes indicate precedence relationships and arrows indicates the length of the activity time.

1.8

Malfunctioning equipment which results in process variation and defective output is an example of _____

- A. Random cause of process variation
- B. Special cause of process variation
- C. Natural cause of process variation
- D. None of the above

1.9

Which of the following quality tools display the steps in a process on a graph

- A. Process flow chart
- B. Fishbone diagram
- C. Histogram
- D. Scatter diagram

1.10

Making sure that the product meets the design specifications during production is referred to as

- A. quality of design
- B. process capability
- C. fitness for use
- D. quality of conformance

1.11

Which of the following quality tools display major causes and sub-causes of poor quality on a graph?

- A. Process flow chart

- B. Fishbone diagram
- C. Histogram
- D. Scatter diagram

1.12

Barrier gates installed at the start of a restricted road /street to prevent access to heavy vehicles through the road/street is an example of _____quality tool.

- a. SPC
- b. 5S
- c. Pareto Analysis
- d. Pokayoke

Section B:

(Answer all questions, Total Marks= 5x2=10)

Q 2. Discuss Lean Management and various practices employed to achieve lean production. (Marks – 5)

Q 3. Discuss briefly Work Breakdown Structure (WBS). Also elaborate on various steps in developing Project schedule as per global best practices. (Marks – 5)

Section C

(Answer all three questions, Total Marks= 36)

(Marks: 12x3=36)

CASE

José's Authentic Mexican Restaurant

“Two bean tacos, a chicken burrito grande, and a side order of Spanish rice, please.” Ivan Karetski called his table’s order into the kitchen as he prepared the beverage orders. Business was brisk. Karetski liked it that way. Lots of customers meant lots of tips and, as a struggling graduate student, the extra income was greatly appreciated. Lately, however, his tips had been declining.

José’s is a small, 58-seat restaurant that offers a reasonably broad range of Mexican food prepared and presented in a traditional Mexican style. It is located in New England in a mature business district on the edge of a large metropolitan area. The site is adjacent to a central

artery and offers limited free off-street parking. The restaurant's interior decoration promotes the Mexican theme: The walls appear to be made of adobe and are draped with serapes, the furniture is Spanish–Mexican style, and flamenco guitar and mariachi alternate as background music.

Patrons enter the restaurant through a small vestibule that opens directly into the dining area; there is no separate waiting area. Upon arrival, patrons are greeted by a hostess and either seated directly or apprised of the expected wait. Seating at José's is usually immediate except for Friday and Saturday nights when waits of as long as 45 minutes can be encountered. Because space inside for waiting is very limited, patrons must remain outside until their party is called. José's does not take reservations.

After seating patrons, the hostess distributes menus and fills glasses with water. If standards are being met, the waiter assigned to the table greets the patrons within one minute of their being seated. (Being a traditional Mexican restaurant, its entire wait staff is male.) The waiter introduces himself, announces the daily specials, and takes the beverage orders. After delivering the beverages, the waiter takes the meal orders.

The menu consists of 23 main entrees assembled from eight basic stocks (chicken, beef, beans, rice, corn tortillas, flour tortillas, tomatoes, and lettuce) and a variety of other ingredients (fruits, vegetables, sauces, herbs, and spices). Before the dining hours begin, the cook prepares the basic stocks so that they can be quickly combined and finished off to complete the requested meals. The typical amount of time needed to complete a meal once it has been ordered is 12 minutes. A good portion of this time is for final cooking, so several meals may be in preparation at the same time. As can be imagined, one of the skills a good cook needs is to be able to schedule production of the various meals ordered at a table so that they are ready at approximately the same time. Once all the meals and any side dishes have been completed by the cook, the waiter checks to see that all meals are correct and pleasing to the eye, corrects any mistakes, and adds any finishing touches. When everything is in order, he assembles them on a tray and delivers them to the table. From this point on, the waiter keeps an eye on the table to detect when any additional service or assistance is needed.

When the diners at the table appear to be substantially finished with their main meal, the waiter approaches, asks if he can clear away any dishes, and takes any requests for dessert or coffee. When the entire meal has been completed, the waiter presents the bill and shortly thereafter collects payment. José's accepts cash or major credit card but no checks.

Karetski feels that his relationship with the cook is important. As the cook largely controls the quality of the food, Karetski wants to stay on good terms with him. He treats the cook with respect, tries to place the items on his order slip in the sequence of longest preparation time, and makes sure to write clearly so that the orders are easy to read. Although it is not his job, he helps out by fetching food stocks from the refrigerator or the storage area when the cook is busy and by doing some of the food preparation himself. The cook has been irritable lately,

complaining of the poor quality of some of the ingredients that have been delivered. Last week, for example, he received lettuce that appeared wilted and chicken that was tough and more bone than meat. During peak times, it can take more than 20 minutes to get good meals delivered to the table.

Karetski had been shown the results of a customer survey that management conducted last Friday and Saturday during the evening mealtime. The following table shows a summary of the responses:

Customer Survey Results		
	YES	NO
Were you seated promptly?	70	13
Was your waiter satisfactory?	73	10
Were you served in a reasonable time	58	25
Was your food enjoyable?	72	11
Was your dining experience worth the cost?	67	16

As Karetski carried the tray of drinks to the table, he wondered whether the recent falloff in tips was due to anything that he could control.

Questions:

- 4.1 How should quality be defined in this restaurant? Take into account external as well as various key internal customers.
- 4.2 What are the various costs associated with quality for the restaurant?
- 4.3 Discuss and use any two quality tools to assess the quality issues at the restaurant.

Source: This case was prepared by Larry Meile, Boston College, as a basis for classroom discussion. Reprinted by permission. ; Operations Management Process and Supply Chain, Lee J.Krajewski Larry P.Ritzman, Manoj K.Malhotra, Samir K.Srivastavas, Pearson, 11th Edition, 2016