



University of Kelaniya - Sri Lanka
Centre for Distance and Continuing Education
Faculty of Commerce & Management Studies

Bachelor of Business Management (General) Degree Third Examination (External) – 2019
September - 2023

BMGTE 3035 – Total Quality Management

No of questions : 06 (Six)

Time: 03 Hours

Answer any **four (04)** questions.

Graph papers will be provided

Question No. 01

The XYZ corporation observed an increased staff turnover rate during the past six months. Given the aforementioned context, the human resources manager guided his assistant to conduct exit interviews. The researcher carried out a total of 300 exit interviews. The staff turnover rate of the organization, although having a workforce of 5000, is significantly higher compared to industry benchmarks. During the interview, the employer requested to identify three primary reasons based on the provided table.

Table: Summary of the exist interview from January – June 2023

Reason for Employee Exit	Number of Occurrences (Office Clerical Staff)	Number of Occurrences (Factory skilled workers)
Lack of Career Growth	28	2
Inadequate Compensation	12	25
Unhealthy Work Environment	75	30
Limited Work-Life Balance	18	1

Lack of Recognition	85	1
Poor Management	2	16
Better Job Opportunity	2	7
Commute Distance	14	1
Workplace Discrimination	30	47
Lack of Training & Development	2	3
Job Role Mismatch	1	-
Company Culture	2	1
Job Insecurity	-	1
Lack of Employee Benefits	153	115
Workload Pressure	2	2
Lack of Work Autonomy	2	-
Conflict with Co-workers	2	155
Health Issues	3	54
Changes in Management	2	1
Relocation	2	1
Additional Information		
Hiring cost per employee (Rs)	27,500.00	8,500.00
Time taken for replacement (Days)	25	7
Best recruitment method	Newspaper advertisement	Agency

Source: Exit interviews -Jan- Jun 2023, Internal records

- a) What are the quality tool/s that is/are most appropriate to use in this analysis? Justify your answer.

(05 marks)

- b) Apply those quality tools and give your conclusion.

(20 Marks)

(Total 25 marks)

Question No. 2

The Symphony of Accountability

The company found itself in a difficult situation when a customer filed a lawsuit against the product of Divarasa Industries Pvt. The company has experienced countless customer dissatisfaction with the company's products. Generally, the company undertakes repairs on certain items throughout the warranty period. However, in this case, the customer has gone further and taken legal action. In view of this situation, the Managing Director Mr. Jayasiri Fernando called a special discussion of the management team to discuss the future work. In this meeting, Mr. Fernando blamed the problem on the operations manager and claimed that it was the result of poor product quality. The marketing manager agreed with the managing director, expressing concern about the organization's inability to meet sales targets as a result of customer dissatisfaction. The production manager later blamed the procurement manager, saying that he had provided inferior raw materials. At the same time, the production manager blamed the HR manager for failing to replace workers on time, indicating that production was affected. Each group of managers tried to shift the blame to another person. A lack of collective acceptance of accountability was evident in the prevailing context. Aware that the lack of ownership and accountability could have serious consequences for the organization if the legal proceedings had a negative outcome, the director of management became frustrated with the performance of his management team.

- a) Fill in the blanks in the table below by answering the following questions.
- What are the Potential Causes of Poor Quality?
 - Which Deming Principle is recommended by Dr. Deming for overcoming the causes of poor quality?
 - Briefly explain the relevant Deming principle.

(10 marks)

Potential Causes of Poor Quality (2.5 marks)	Deming Principle (2.5 marks)	Brief explanation (5 marks)
1		
2		

3		
4		
5		

(10 Marks)

- b) It is assumed that the aforementioned organization has adopted the implementation of Kaizen methodology and has established a cross-functional team to address and resolve product quality issues. Elucidate the utilization of the PDCA framework by the team in order to resolve the problem at hand, as depicted in the table provided below. The table should include the following elements: steps undertaken, the purpose of each stage, and the manner in which these stages were applied within the context of this particular organization.

Stage of the PDCA model (2.5 marks)	Purpose of the stage (05 marks)	Application (7.5 marks)
1		
2		
3		
4		
5		

(15 Marks)

(Total 25 Marks)

Question No. 03

The administration of a popular restaurant has given high importance to improving both the quality of its offerings and the level of service provided. Recommendations were sought from executive leadership for this effort. The first party suggested improving the service by integrating new supplementary features to meet customers' demands more effectively. In addition, it was proposed to conduct a customer survey and subsequently incorporate changes in accordance with the comments received. On the other hand, the second party expressed fears about the negative impact that incorporating additional product features could have on the company's profit margins. Also,

they argued in favor of implementing appropriate strategies to address the gap between planned design and actual outcomes. However, 1st party express that the 2nd party's suggestion would reduce customer dissatisfaction but it will not help to increase customer satisfaction. From Dr Joseph Juran's perspective, it is best to adopt a customer-focus strategy that is consistent with customers' needs and expectations. Suppose you are a person who adheres to Dr Joseph Juran's definition of quality.

a) Describe Dr. Joseph Juran's definition of quality and its two dimensions.

(10 Marks)

b) Which group do you belong to? Justify your answer by giving reasons.

(15 Marks)

(Total 25 Marks)

Question No. 04

The production process of ABC Manufacturing Company has been seeing a decline in productivity and a simultaneous increase in defects. In order to address these challenges, the management made the decision to implement Kaizen concepts. Three quality circles were established, and a workshop is planned to be conducted with the aim of instructing members on the effective utilization of quality tools for problem identification and the provision of scientifically-based remedies.

Assuming the employer has designated you as the facilitator of the quality circles and your first task is to create a concise one-page brochure for distribution to members. The brochure should include the following details: Name of the Quality Tool, Purpose of use, and application to the scenario.

Complete the provided form.

Quality Tools

Name of the tool	Purpose to use	Application to a specific case
1		
2		
3		
4		

5		
6		
7		

(Total 25 Marks)

Question No. 05

"The Perfect Plate" is a well-known, family-owned restaurant franchise with more than one hundred locations across the country. One of its branches (the city branch) is strategically positioned in the city's heart. Over the years, the restaurant's exceptional cuisine and welcoming atmosphere have earned it a devoted following. However, the administration of the city branch has recently observed a developing customer concern. That is a lengthy period for waiting. As The Perfect Plate's popularity grew, so did its customer base, causing a problematic bottleneck at the host stand and kitchen of the city location. Customers were unhappy with the lengthy wait times, negatively impacting their overall dining experience. The management understood the importance of a methodical approach to resolve this issue and boost customer satisfaction. The restaurant embarked on a Six Sigma journey to increase customer satisfaction and speed up processes in order to maintain its reputation for providing superior service. This produced exceptionally favourable outcomes. After this success, The Perfect Plate's upper management utilized internal benchmarking to improve processes in other branches. In response, they called a meeting and asked the city branch manager to give a presentation on how the Six Sigma methodology was implemented.

- a) Using the table below, explain two primary Six Sigma methodologies and their respective steps.

Methodology :		
Step	Name of the Step	Purpose of the step (One sentence is enough)
1		
2		
3		
4		
5		

Methodology :		
Step	Name of the Step	Purpose of the step (One sentence is enough)
1		
2		
3		
4		
5		

(10 Marks)

- b) Describe the six-sigma methodology used by Perfect Plate Restaurant to solve the problem

Methodology used and Justification for the selected methodology Name of the Methodology: ----- Justification 		
Step	Name of the Step	Activities carried out under the step
1		
2		
3		
4		
5		

(15 Marks)

(Total 25 Marks)

Question No. 06

"The Perfect Plate" implemented a quality circle to enhance the efficiency of online order fulfilment inside a restaurant setting. As part of their ongoing improvement initiative (KAIZEN), the organization has decided to employ Swimlane flowcharts, a quality tool they have acquired knowledge of, to depict the process visually. The purpose of utilizing Swimlane flowcharts is to

identify the individual or department accountable for each specific task. According to their findings,

Swimlane Participants are

1. **Customer:** Represents the customers placing orders online.
2. **Kitchen Staff:** Handles the preparation of food items.
3. **Delivery Team:** Responsible for delivering the orders to customers.
4. **Payment Processing:** Manages payment transactions and processing.
5. **Customer Support:** Addresses customer inquiries and issues.

Further, they have decided to use the following structure for the Swimlane flowchart.

Customer	
Kitchen staff	
Delivery Team	
Payment processing	
Customer Support	

Quality Circle recognised the following steps of the process.

1. **Customer Places Order:**
 - Customer accesses the restaurant's website or mobile app to place an order.
 - Selects desired food items and adds them to the cart.
 - Provides delivery address and any special instructions.
 - Proceeds to the payment gateway to make the payment.

2. Payment Processing:

- Payment gateway processes the customer's payment securely.
- Sends payment confirmation to the customer and the restaurant.

3. Order Notification:

- The kitchen staff receives an automated notification of the new order.
- The notification includes order details, delivery address, and any special instructions.

4. Order Preparation:

- Kitchen staff starts preparing the food items according to the order.
- Prepares the necessary packaging for delivery.
- Check before delivery.

5. Order Dispatch:

- The delivery team is notified about the prepared order.
- Delivery personnel picks up the order from the kitchen.

6. Delivery Process:

- Delivery team follows the route to the customer's delivery address.
- Ensures the order is delivered promptly and accurately.
- Obtains customer's confirmation upon delivery.

You are required to select the relevant steps and draw the **Swimlane flowchart**.

(Total 25 Marks)

