GALGOTIAS UNIVERSITY

ADMISSION NUMBER												

School of Business

Bachelor of Business Administration Logistics and Supply Chain Management
Semester End Examination - Nov 2023

Duration : 180 Minutes
Max Marks : 100

Sem V - D1UC501T - Quality Management

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Identify the impact of quality on the business?	K1 (2)
2)	Explain Kaizen concept.	K2 (4)
3)	Describe the method of RPN calcualtion and its usage.	K2 (6)
4)	Relate the application of Philip Crosby's 5 absolutes for quality management.	K3 (9)
5)	Utilise Juran's triology for managing quality in a manufacturing organisation with examples.	K3 (9)
6)	Evaluate DMADV process in implementation of Six Sigma processes.	K5 (10)
7)	Analyse the application of 8 wastes in 3PL service organisation.	K4 (12)
8)	A 3-star hotel at Ghaziabad is famous for high end customers. It has built brand reputation from word of mouth publicity from past customers. The management of the restaurant wants to carry out a survey from the customers to know the service quality. As per Servqual model Gap5, they designed the questionnaire and carried out the survey for 5 days in June 2023 as provided in Table below. Assess the Gap 5 (Perceive Service quality) of the hotel and interpret the result.	K5 (15)

Note: Survey on a scale 1-9 (1: Highly disagree; 9: Highly agree)

	Customer Expectation Survey	**Survey dates**				
	(Questions to be answered by Customer)	01 June	08 June	15 June	22 June	29 June
E1	They should provide reliable quality food.	7	6	8	5	6
E2	They should serve quickly without much delay	5	6	5	4	5
E3	They should provide comfortable stay	7	8	7	6	8
E4	They should be caring and providing individual attention.	6	7	6	6	5
E5	Physical facilities should be clean and friendly atmosphere.	8	8	9	8	7

	Customer Perception Survey	**Survey dates**				
	(Questions to be answered by Customer)	01 June	08 June	15 June	22 June	29 June
P1	They provide reliable quality food.	6	5	7	6	5
P2	They serve quickly without much delay.	5	5	4	4	4
P3	They have facilities and offer comfortable stay	6	7	7	6	5
P4	Staff is caring and providing individual attention.	7	8	7	8	7
P5	Physical facilities are clean and friendly atmosphere.	7	7	8	6	7

9) Sushil Bakery is a producer of different variety of biscuits in Delhi to fulfill the local demands. The iscuit produced, packed and ready for distribution. It is facing recurring problem in biscuit packets. Supervisor (QA) want to investigate the quality issue by using some quality tool. He has ordered data collection over 10 days and 100 samples per day. The actual rejection of biscuit packets over 10 days are summarized in Tables 1. Develop a Pareto diagram. Table 1: Data collected for 10 days and number of defective packet in month of June 2023 (Sample size 1000). K5 (15)

S. No.	Type of defective Packets	Total Defectives
1	Improperly sealed	280
2	Over weight	110
3	Under weight	130
4	Outsized packet	60
5	No proper print on the packet	50
6	Empty packets	30
7	Broken content	40

10) A children cycle manufacturer is requires a cycle rim diameter 9 inch to be produced in the factory. QC department made sampling of 5 Rims per day for 4 days as shown in the Table below. To monitor the production process, the Quality manager wants to construct $\bar{X}$ control (mean control) chart and plot with 2? (standard deviation) control limit to ensure that rim diameters are in control. Process std. dev. is 0.08 inch. (Note: Z =2 corresponding to 2?) K6 (18)

Samples	**Cycle Rim Diameter (inch)**				
1	9.00	9.09	9.06	9.02	9.04
2	9.06	8.88	9.11	9.08	9.05
3	8.86	8.96	8.93	8.86	9.06
4	8.94	9.14	9.12	9.09	8.87
5	8.99	8.97	9.15	9.03	9.05