Questions

- 1. Compare Deming quality philosophy with that of Juran.
- 2. What do you mean by quality circle?
- 3. How do you define quality of an educational institute?
- 4. How can you measure quality of service sector?
- 5. What is the difference between control charts for variables and attributes?
- 6. Provide the factors that contribute to variations due to common causes.
- 7. In your opinion, which quality philosophy is more applicable in services?
- 8. Does ISO9000 certification ensure world class quality?
- 9. What do you mean by DPMO is the context of six sigma?
- 10. Describe DMAIC process.
- 11. Explain how Quality Function Deployment (QFD) approaches help organizations to design better services.
- 12. Identify the problems in banking industry which can be managed by using Poke-Yoke.
- 13. How statistical process control can help in managing quality issues?
- 14. Explain the term Benchmarking. What steps can be followed to improve the quality of Bus transport service of your city using Benchmarking.
- 15. Explain various types of cost of quality. Give examples for each type from a service sector.
- 16. What are the various dimensions of quality?
- 17. How QFD can be applied in Indian Railways?
- 18. What are quality standards? List the benefits of ISO certification.
- 19. A manager has asked her employee to make a report on a particular industry's growth over last five years. A manager finds 5 typographical errors in a report of 300 pages. There are 300 words per page of report. Manager wants to achieve zero typographical mistakes achieved by six-sigma. What is DPMO in this case?

20. An ITES company provides training to the employees so that the employee better understand the customer requirements and provides better softwares. The number of training programmes undergone by each employee per month and the number of tickets or complaints realized by the company are given below. Draw a scatter diagram and find the relation between number of training programmes and complaints.

Number of training programmes (per month)	Number of complaints (per month)		
0	40		
1	35 33		
2			
3	27		
4	37		
5	20		

21. A hotel is observing a decline in the booking (number of guests visiting per month). The manager is interested to find the reasons for this decline. The manager finds 5 reasons and the corresponding frequency of the reason.

Reasons for decline in hostel booking	Frequency
Inability of a receptionist to cater to the guest's preference for room	20
Delay in room deliver service	35
Cleanliness of the rooms	12
Quality of food	17
Insufficient fitness amenities	10

Construct a Pareto chart to analyze the reasons of decline in hotel booking mistakes achieved by six-sigma. What is the DPMO in this case?

22. A post office is concerned about delivering mails to the wrong addresses, which result in lot of complaints from customers. The post office planned to analyze whether the process in under control. The data on wrong address delivery was taken on daily basis for 10 days where total of 100 mails are received daily as given in table below. Construct p-chart for this process.

Day	Number of wrong address deliveries				
1	2				
2	5				
3	3				
4	7				
5	3				
6	4				
7	2				
8	3				
9	6				
10	1				

23. A vehicle driver of a call center company picks employees from their residence and drops them to office. The employees are allocated to the driver so that it should take one hour for the driver so that it should take one hour for the driver starting from first picking till he/she

reaches office. The vehicle makes 5 rounds daily with same population parameters. The data for last 12 days have been recorded to construct control chart. The process beyond upper limit is not acceptable to the company. The data points below lower control limits will lead to employee frustration as he/she cannot start work by reach early due to ongoing previous shift. Analyze this process with following data.

Time taken to reach office (minutes)						
Day	1	2	3	4	5	
1	55	70	62	50	63	
2	58	59	64	52	64	
3	57	75	50	61	59	
4	50	51	55	49	70	
5	72	64	59	50	60	
6	64	62	50	52	56	
7	53	50	63	67	59	
8	65	52	52	48	68	
9	59	59	70	64	51	
10	60	65	62	55	67	
11	61	66	57	48	50	
12	58	64	50	68	55	