

AS-819

**M.B.A. Semester—IV Examination**  
**SERVICE OPERATIONS MANAGEMENT**  
**Paper—MBA/4401/OM**

Time : Three Hours]

[Maximum Marks : 70

- Note :—**(1) Figures to the right indicate marks.  
(2) Use of non-programmable calculator is permitted.

**SECTION—A**

1. (A) What are the challenges in front of service operations managers ? Discuss how service operations managers can deal with these challenges. 14

**OR**

- (B) Different organization have different service operations. Selecting a service with which you are familiar, identify and explain distinctive characteristics of service operation that it has. 14

**SECTION—B**

2. (A) Discuss any 7 points of Deming's 14 point program of quality control. 7  
(B) The workmen of an engineering company are expected to work for 400 minutes in a shift of 8 Hours. The remaining time is used for rest and personal needs.

Determine the standard time per piece of a job whose normal time is 2 minutes. Also calculate no. of pieces to be produced per day. 7

**OR**

- (C) Discuss the usefulness of work measurement technique for service quality. 7  
(D) 10 samples, each of size 50, of pipe were inspected in pressure testing. The results of the inspection are given below :

| Sample No.        | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------------|---|---|---|---|---|---|---|---|---|----|
| No. of defectives | 2 | 3 | 2 | 0 | 2 | 3 | 2 | 1 | 2 | 3  |

Determine the limits for P chart and state your conclusion. 7

3. (A) What are the different distribution channels in a service business ? Explain. 7
- (B) The arrival rate of customers at a petrol pump follows Poisson distribution with a mean of 45 customers per hour. The service rate of the serviceman also follows Poisson distribution with a mean of 60 per hour. Find average waiting time of customers in the system. 7

**OR**

- (C) Discuss the characteristics of a waiting line system. 7
- (D) "In a competitive market, excessive waiting or the expectations of long wait can lead to lost sales". What strategy will you use to avoid lost sales in the case of restaurant ? 7

**SECTION—C**

4. (A) Discuss the key elements of service delivery system. 7
- (B) Discuss the main components of service delivery system. 7

**OR**

- (C) What is service scheduling ? Discuss. 7
- (D) Discuss the difference between personnel and vehicle services. 7

**SECTION—D**

5. Anchor is one of the largest providers of social housing for older people in UK with over 40 years experience of residential care homes working with over 40,000 older people each week. Ian Williams service provider have developed a long term partnership with Anchor and undertake work covering planned maintenance, responsive and void repairs including out of hours, and aids and adaptations. This contract covers Anchor schemes across the Midlands, London and South East. Ian Williams assisted Anchor in improving services delivery in line with Audit commission recommendations by providing a 'Handiman service' for the completion of repairs. Company also used joint working to drive down the cost of the service, multiskilled operatives and soft skill training for operatives for dealing with older residents. After several months of KPI monitoring company felt that it could deliver additional value and innovation for Anchor Trust.

Ian Williams also created a "Responsive Repairs Forum (RRF) who was tasked with finding ways to improve efficiency and effectiveness on the contract. The RRF used bottom up approach

involving operatives, Anchor's helpdesk staff and Residents to discuss ways in which they felt the service could be improved and where they believed there were currently inefficiencies within the repair process. The forum provided a great success allowing Ian Williams to identify areas that would have the most impact on the performance of the service delivered. It identified that through the introduction of a diagnostics software tool the helpdesk staff would be better able to correctly identify and prioritize repairs at first contact. Company integrated its IT system with Anchors using remote access, providing them with direct access to system to view individual job details and costs.

**Questions :**

- (1) How did Ian Williams successfully earn the trust of Anchor ? Discuss. 4
- (2) What initiatives are taken to improve the maintenance of service by Ian Williams ? Explain. 10

