School of Business
MBA
ETE - May 2023

Time : 3 Hours   Marks : 50

Sem IV - MBOP6015 - Management of Services
Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary

1.	Explain heterogeneous and simultaneous characteristics of services with example.	K2 CO1 (2)
2.	What motivate to design new service? Discuss.	K2 CO2 (2)
3.	Examine the role of "Discount offers" in influencing the customer demands.	K4 CO3 (2)
4.	Identify and explain four important dimension of service quality.	K4 CO4 (2)
5.	Explain 5S framework of lean management.	K4 CO5 (2)
6.	Illustrate the service classification based on (i) Degree of labour intensity (ii) Degree of customer interaction and service customization giving examples for each type.	K4 CO1 (5)
7.	Design a Service Blueprint diagram and illustrate its application in service design for a multi-specialty hospital.	K4 CO2 (5)
8.	Assess the 5S+1 framework of TPS application in a warehouse management.	K5 CO5 (6)
9.	Ashoka Hotel, New Delhi is concerned about more empty rooms. They decided to introduce special discount non-refundable 10-day advance booking for Rs.5500 for one-night stay. Regular one night stay charges are Rs.8000. Hotel has capacity of 150 rooms. Management wants to limit the discount room so that full rate room can be booked. Demand for full rate follow normal distribution with mean 85 and standard deviation 15. Determine how many full rate rooms to be booked to maximize the revenue using Critical Fractile model. Standard normal curve is given below.	K5 CO3 (8)

Z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
−2.0	0.0228	0.0222	0.0217	0.0212	0.0207	0.0202	0.0197	0.0192	0.0188	0.0183
−1.9	0.0287	0.0281	0.0274	0.0268	0.0262	0.0256	0.0250	0.0244	0.0239	0.0233
−1.8	0.0359	0.0351	0.0344	0.0336	0.0329	0.0322	0.0314	0.0307	0.0301	0.0294
−1.7	0.0446	0.0436	0.0427	0.0418	0.0409	0.0401	0.0392	0.0384	0.0375	0.0367
−1.6	0.0548	0.0537	0.0526	0.0516	0.0505	0.0495	0.0485	0.0475	0.0465	0.0455
−1.5	0.0668	0.0655	0.0643	0.0630	0.0618	0.0606	0.0594	0.0582	0.0571	0.0559
−1.4	0.0808	0.0793	0.0778	0.0764	0.0749	0.0735	0.0721	0.0708	0.0694	0.0681
−1.3	0.0968	0.0951	0.0934	0.0918	0.0901	0.0885	0.0869	0.0853	0.0838	0.0823
−1.2	0.1151	0.1131	0.1112	0.1093	0.1075	0.1056	0.1038	0.1020	0.1003	0.0985
−1.1	0.1357	0.1335	0.1314	0.1292	0.1271	0.1251	0.1230	0.1210	0.1190	0.1170
−1.0	0.1587	0.1562	0.1539	0.1515	0.1492	0.1469	0.1446	0.1423	0.1401	0.1379
−0.9	0.1841	0.1814	0.1788	0.1762	0.1736	0.1711	0.1685	0.1660	0.1635	0.1611
−0.8	0.2119	0.2090	0.2061	0.2033	0.2005	0.1977	0.1949	0.1922	0.1894	0.1867
−0.7	0.2420	0.2388	0.2358	0.2327	0.2296	0.2266	0.2236	0.2206	0.2177	0.2148
−0.6	0.2743	0.2709	0.2676	0.2643	0.2611	0.2578	0.2546	0.2514	0.2482	0.2451
−0.5	0.3085	0.3050	0.3015	0.2981	0.2946	0.2912	0.2877	0.2843	0.2810	0.2776
−0.4	0.3446	0.3409	0.3372	0.3336	0.3300	0.3264	0.3228	0.3192	0.3156	0.3121
−0.3	0.3821	0.3783	0.3745	0.3707	0.3669	0.3632	0.3594	0.3557	0.3520	0.3483
−0.2	0.4207	0.4168	0.4129	0.4090	0.4052	0.4013	0.3974	0.3936	0.3897	0.3859
−0.1	0.4602	0.4562	0.4522	0.4483	0.4443	0.4404	0.4364	0.4325	0.4286	0.4247
−0.0	0.5000	0.4960	0.4920	0.4880	0.4840	0.4801	0.4761	0.4721	0.4681	0.4641

Entry represents area under the cumulative standardized normal distribution from − ∞ to Z.

10.	A University account office has single counter for accepting forms and accepting various types of fees. During admission period, the student arrival is estimated to follow Poisson distribution with an average of 4 students per hour. The service time to accept payment is exponentially distributed with an average of 12 students per hour. Determine (i) Average no. of students in the system (Ls) (ii) Average no. of students in the queue waiting (Lq) (iii) Average time a student spends in the system (Ws) (iv) Average time a student spends in the queue waiting (Wq)	K5 CO4 (8)
11.	Compare the benefits and challenges to Franchiser (Principal) and Franchisee in Service delivery through franchising mode.	K6 CO5 (8)