PGDM, 2013-15 Service Operations Management a DM544/IB-514 Trimester-V, End-Term Examination, December 2014

Time allowed: 2 Hrs 30 Min

Max Marks: 50

Closed book system

Use of calculators is permitted

| Roll N | lo |
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Instructions: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. In case of rough work please use answer sheet

| Sections | No. of Questions to attempt | Marks | Marks |
|----------|------------------------------|---------------|-----------|
| A | 3 out of 5 (Short Questions) | 5 Marks each | 3*5 = 15 |
| В | 2 out of 3 (Long Questions) | 10 Marks each | 2*10 = 20 |
| С | Compulsory Case Study | 15 Marks | 15 |
| | Section of American Poly | Total Marks | 50 |

Section A

Q1: Intangibility is an important distinctive characteristics of service operations that differentiates service operations from manufactured goods. What management problems does this pose in Service Operations Management?

Q2:How do the front office and back office operations differ? What are the major objectives in the design of each? Discuss in the context of a post office.

Q3:Jetlift Airways is assessing its overbooking policy for its Delhi- Mumbai service. The number of customers who don't show up after reserving a ticket is uniformly distributed from 1 to 10 (10% chance of 1 no show, 10% chance of 2 no show etc.) Fare tickets cost Rs.8,000 and if a particular flight is full, a passenger with a reservation is given passage on rival Airlift Airways, at cost of Rs. 10,000. Jetlift Airways must pay the difference. What should Jetlift Airways overbooking policy be? Use Marginal Cost Approach only.

Q4: For most service systems, the customer is present when the service is being performed. What are some drawbacks of increased customer participation in the service operation?

Q5: Michael Porter has argued that three generic competitive strategies exist: overall cost leadership, differentiation, and focus. Discuss with examples how the strategy of overall cost leadership is used by service firms to outperform their competition.

Section B

Q1: Bharat Bank is planning to open its rural branches in five identified villages A,B,C,D, and E. The Bank decides that it will open first one branch, gain experience and then will go for the second, third, fourth and the fifth branch..

Pursuing Pradhan Mantri's Jan Dhan Yojna, the banks has identified that village 'A' attracts social weight (that is its need of banking service) two times of the other four villages, which are equal in social criteria.

The distance between each of the villages and their population are given in table below. Use **Ardalan Heuristic** and advise the bank about the priorities of opening branches. Consider uniform rate per kilometer of travel in all the villages.

| | Dista | nce to (| Population | | | |
|---------|-------|----------|------------|----|---|------|
| Village | A | В | C | D | E | 6000 |
| A | 0 | 10 | 12 | 15 | 8 | 12 |
| В | 10 | 0 | 20 | 11 | 7 | 10 |
| C | 12 | 20 | 0 | 16 | 6 | 20 |
| D | 15 | 11 | 16 | 0 | 9 | 16 |
| E | 8 | 7 | 6 | 9 | 0 | 8 |

Q2: Thirty bedded Jeevandan Hospital was founded by Dr. Kamal Rai in 1950 in East Delhi with a basic objective of providing low cost cure to the poor and the middle class in neighborhood societies. It hardly faced any competition and earned a name in providing sure-cure. Environment over the years, especially in the last decade has changed drastically. The economic condition of the people has improved, a number of new hospitals have been established which are excelling today in providing both care and cure. It is the second generation in command at the hospital, and understands the need of improving service quality to the its customers for sheer survival.

Please suggest a multi-item scale for measuring the service quality at the hospital.

O3.

(a). Fitzsimmons and Fitzsimmons refer, 'The manufacture of products is conducted in controlled environment. The process design is totally focused on creating a continuous and efficient conversion of inputs into products without consumer involvement'.

How will you as service manager design service operations to achieve efficiencies of manufacturing when customers participate in the process? Discuss some approaches to be adopted in service delivery systems in the context of a bank branch.

(b). Preet Vihar with a population of 250,000 has V3S shopping mall situated at Poorvi Sanskritic Kendra complex situated centrally in Preet Vihar.

Anand Vihar with a population of 200,000 has Cross River Shopping Mall at Karkardooma situated centrally in Anand Vihar. Distance between the two shopping malls is 5 Kilometers. Use Reilly's law of gravity to determine point of indifference of V3S from Cross River Mall. (5,5Marks)

Section C

Case Study: The Icehotel

Jukkas AB is a company offering a wide range of activities, such as white-water rafting, fishing, reindeer and dog-sledding tours, cross—country skiing, snowmobile safaris and guided tours. It is based in Jukkasjarvi, a small village in Swedish Lapland, which lies 200 kilometers north of the Arctic Circle by the river Tone. The problem was that visitors were few and far between in the long., dark winter months, when the temperature drops to -40 degrees centigrade. Manager Yngve Bergqvist, now president of Icehotel, saw this as an opportunity. In the winter of 1989 he invited a group of Japanese ice artists to come to Jakkasjarvi to carve sculptures from the crystal clear ice that forms from the pure waters of the rive Tone. He then built a60—square meter cylinder-shaped igloo, made out of clear ice blocks, to protect the sculptors. Visitors flocked to see the exhibits in his 'ice-gallery'. One day when his hotel was full he was pressed by a good friend to find accommodation for ten colleagues. Yngve could only offer them space in his' ice gallery' with sleeping bags on reindeer skins. In the morning the guests enthused about 'the warm and intense experience'. The icehotel was born.

In winter the icehotel covers approximately 5,000 square meters and is built out of 30,000 tonnes of snow and 4,000 tonnes office. The hotel has a reception, around 40 rooms and 25 suites. It has its own Iceart exhibition, Icebar and Icechurch. Since the hotel melts every spring the number of rooms, as well as the exhibits, varies from year to year!

The temperature in the bedrooms is relatively warm -5 degrees centigrade. Guests sleep on a bed of warm insulating reindeer hides in an ultra —warm sleeping bag. In the morning they can enjoy an early morning sauna followed by breakfast. Toilets are located in asmall hated building adjacent to the Icehotel. In the evening the guests drink in the Icebar from Iceglasses sculpted from the pure ice of the river Tome. During the day guests eat in the restaurant 100 meters away and take part in the adventure activities such as dog sledding and snowmobile safaris.

Each year a new Icehotel is constructed by around 30 local artists and builders before the arrival of the first guests in mid-December. Snow cannons are used to blast snow on to a frame of arched steel sections, and ice pillars are added for extra support. The walls are made from huge, clear blocks of ice, weighing almost 2 tonnes, cut from the frozen river with special saws and moved by front-loading tractors. Work on the interior strarts in early December, when sculptors cut and work the ice to create windows, doors, pillars, beds and ice sculptors. Guest artists are invited each tear to design the ice décor in some of the rooms.

When April comes the roof of the Icehotel begins to drip. The hotel is closed and it slowly melts into the river whence it came.

(Source: Robert Johnston & Graham Clark, Service Operations Management)

Questions

- 1. What is the Icehotel's service concept?
- 2. 'Customers buy concept': discuss
- 3. Define service concept.

(5,5,5 Marks)