JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -3 EXAMINATIONS-2022

B.Tech-IV Semester (All branches)

COURSE CODE (CREDITS): 18B1WHS611 (3)

MAX. MARKS: 35

COURSE NAME: Quality Management

COURSE INSTRUCTORS:

Triambica Gautam

MAX. TIME: 2

Hours

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Q1. Explain the concept of Business Process Reengineering in context of the Ford company case.

[5]

Q2. How can a hotel operating in Shimla benefit from the Benchmarking process? Explain briefly how they should be conducting this process.

[3+2]

- Q3. Elaborate the core philosophy in the concept of six sigma. Also differentiate six sigma and TQM. [3+2]
- Q4. Explain the Kano model and show how it contributes to Total Quality Management in any organization. [3+2]
- Q5. Evaluate the success of Google/Apple/Tesla from the quality management perspective.

[5]

Q6. In context of the following case study, what could have been the need for KLM to go for ISO certification. Support with evidence from the case study.

[5]

Q7. Discuss with a specific example how any other organization can put to use the learning from the KLM case. [5]

Case study

In 1999, the Dutch airline KLM became the first airline to achieve ISO14001 certification of its environmental management system, leading to measures that have reduced noise, in-flight water consumption, and use of toxic dry cleaning chemicals, led to 40% cabin paper recycling, improved waste water quality, and saved 1.6 million kilograms of fuel in the year 2000.

Environmental issues such as fuel and energy saving, reduction in noise, emissions, wastewater, and waste separation, are just a few that arise from the daily operation of an airline. The fuel efficiency of air transport is determined by such factors as the specification of the aircraft, the optimal design of the timetable, the route, altitude and flight speed, original loading, the onboard service, and measures to reduce noise pollution. Hence, a coordinated and systematic approach is required to achieve the environmental objectives effectively and efficiently.

Looking around the cabin during a KLM flight, passengers may find it difficult to see how thinking green has affected the nature of KLM's service. "That's as it should it be," says corporate Environmental Manager, Udeke Huiscamp, 'We can't push for environmental efficiency at the expense of service. The quality of service remains paramount.' Nevertheless, if you look very carefully the signs are there. In the duty-free selection on board, for example, lowturnover goods have been eliminated in order to reduce weight and increase fuel efficiency. Our research showed that a single bottle of whisky was travelling the equivalent of three times round the world before being sold! Discarded newspapers are now recycled rather than bundled with other cabin refuge, and flight crew uniforms are now made from fabric which no longer requires dry cleaning- a simple detail which significantly reduces the amount of toxic dry cleaning chemicals released into the environment. After closely monitoring water consumption on flights, they now have a much better idea of actual water requirement and can avoid leading planes with excess barrels. This alone led to a saving of about 1.6 million kilograms of fuel last year, helping KLM achieve a fuel efficiency some 20% higher than the average European airline. For KLM, as for any other airline, the major environmental impact lies in the efficient use of fuel. Given that there is no immediate prospect of 'greening' aviation fuel, airlines must make the most of what they use. Jet aircraft may be seen as gas guzzlers, but on long distances they are more economical than the average car (Huiskamp 2001).