

**K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH,  
Vidyavihar, Mumbai- 400077**

**Program: PGDM (IB) 2017-19 : 2<sup>nd</sup> Trimester  
Subject: Design & Management of Information System (D & MIS)**

**Maximum Marks: 50**

**Duration: 3 hours**

**Date: 30 Dec 2017**

**Question 1**

**[12]**

DgEQUIP are into sales and services of photocopiers. For an additional payment of Rs 2500/-, a customer at the time purchase, can opt for a three-year service contract. The contract provides free repair service and parts using an authorized DgEQUIP service provider. When a customer with DgEQUIP service contract needs a repair, s/he calls the DgEQUIP Repairs and Parts department to schedule an appointment. The department makes an appointment and gives the caller the date and approximate time of the appointment. The repair technician arrives during the designated time framework and diagnosis the problem. If the problem is caused by the faulty part, the technician either replaces the part if he is carrying the part with him or orders the part and gives customer an approximate time when the part will arrive. The part is shipped directly to the customer. After the part has arrived, the customer must call DgEQUIP to schedule a second appointment for a repair technician to replace the ordered part. The process is very lengthy. It almost takes 2 week to schedule the first repair visit, another two week to order and receive the required part, and another week to schedule a second repair visit after the order part has been received.

- a. Create “AS-IS” process specification diagram
- b. Analyze the problems this process creates for the company
- c. What changes can suggest to make the process more efficient?

**Question 2**

**[10]**

Vikay runs a taxi service having a fleet of two well-maintained fancy cars. Most part of his business gets generated thorough family, relatives, friends and references. He normally rents it to them during formal occasion. Recently, he decided to expand his business and placed an advertisement in yellow pages and also distributed pamphlets in local newspapers. The business saw sudden increase and he started receiving more inquiries. To deal with new business opportunity, he leased another luxury segment car and hired a driver.

Until now, Vikay would keep track of his “sales” in ad-hoc manner through collection of notes and would mostly depend upon his memory recall ability. However, of late as his business picked up after the advertisement he began to forget. In fact, recently he missed someone’s wedding as he double scheduled one of his cars. He wants to set up an information system to solve his problem.

What do you think is the problem of Vikay? In what way the creation of information system will help him improve the business? Suggest some formats for formally booking of the car and keeping track of his fleet.

### **Question 3**

**[10]**

**Create Decision table/s for the following**

Risk is assessed and declared in three categories – High (H), Medium (M), and No Risk (N). The risk is assessed on the following basis: If the total point is between zero and 10 it is classified as No Risk. For the total point within the range 11 to 30 it is classified as Medium. And for the points greater than 30 it is classified as High Risk. The factors for risk assessment and its rating are:

- i. Credit Card: Yes (zero), No (10)
- ii. Net Income: two times greater than 12 months EMI (zero)
- iii. Net Income: equal to 12 months EMI (10)
- iv. Other Bank Borrowings: Yes (5), no (zero)
- v. Income Tax Slab: Top 10% bracket (zero), Next 30% bracket (5), Rest (10)
- vi. Credit Balance: Always 2 times EMI (zero), Less than 2 times EMI (5)
- vii. Cheque Operations: No Cheque bounced (zero), Bounced (10)

### **Question 4**

**[18]**

Answer any **SIX** of the following

1. What are the phases in system development life cycle? Enlist the deliverables of each phase.
2. State the distinct features of traditional information system and a digital firm.
3. Explain briefly the characteristics of TPS and MIS
4. Explain giving example/s how the business applications of information systems can support a firm’s business processes and managerial decision making.
5. List and describe the major costs and benefits of information systems.
6. What are the challenges posed by strategic support systems and how should they be addressed?

7. How do business intelligence and business analytics support decision making?
8. What are different types of decisions? Explain giving suitable example.

-X-X-X-