

GUJARAT TECHNOLOGICAL UNIVERSITY**MBA - SEMESTER-II • EXAMINATION – WINTER 2013****Subject Code: 2820002****Date: 24-12-2013****Subject Name: Management Information System (MIS)****Time: 2.30 pm – 5.30 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1 Read the case given below and answer the questions:

The Spark Batteries Ltd. (SBL) is a leading alternate energy solution provider that provides services to various companies in North India and house holds in NCR region. SBL supplies Generators, Inverters, Batteries and spare parts required for these product lines. Spark Batteries has 30 sales cum service offices in North India. SBL also has a major service workshop based in Mayapuri Industrial Area of west Delhi. All major service requests are processed and maintained in the service workshop. SBL service workshop provides two kinds of services - one a preventive-cum-routine maintenance and second on call basis. SBL tries to offer an uptime of 98% for most of its products that are covered under preventive maintenance scheme. SBL also offer a warranty of one month on all call basis repairs.

Customers who have SBL products are quite happy, but the services offered are not as per claims. SBL has a large workforce of 100 employees at its service workshop who handle on an average about 300 complaints on daily basis. Because of large number of service requirements, they need to maintain large amount of inventory of spares.

The basic challenge that the Spark Batteries Ltd. is facing is to manage the spare parts inventory and to keep the service schedule for better customer satisfactions. This requires the replacements of the critical spares, testing of the various systems and regular servicing, etc. The items received at the service workshop, it was found that most of the items were not serviced properly during the preventive maintenance stage as a result it leads to increase load at the service workshop.

SBL maintains a manual card based system to keep track of services being performed. They record the basic information about the product and customer in the service card like, the model, the type, the customer name and address and last service done on etc. It also tries to maintain the history of the services carried out on the product for future planning.

Company also wants to use the card data for preventive maintenance, but that is not happening as these cards are available only at service workshop. Some of the customers also request for similar kind of information for

getting their generators/invertors serviced on time. For inverters, battery is an important component and one needs to maintain it properly with appropriate water levels. For SBL battery sales is a major source of revenue.

Preventive maintenance is mostly handled by the sales offices. Each sales office has at least one service engineer. Service Engineer maintains its own record of preventive calls. There is no check about the preventive process at the central level and it is not certain that it is done for all customers on regular interval or not. If it is not being done by the service engineer based at the sales location, customer had to register a complaint only at the service workshop.

For complaints received at the service workshop, following procedure is being followed by the Spark Batteries Ltd.:

Each complaint is recorded by the service support based at the workshop. A complaint number generated to the customer. Customer is requested to in their equipment for necessary service as per the pre-defined date and time. When the customer brings their equipment at the Spark Batteries service work- shop, the Service Manager opens the job card as per the pre-registered complaint number. After necessary verification of the equipment estimate is given to the customer with expected time of delivery. The job card is then handed over to the concerned service department for necessary repair/replacement of parts.

At each of the service departments, after the necessary work is completed a delivery note is written with the complaint number mentioning the tasks carried out in terms of the parts replaced, manpower time and labour charges etc. Based on the delivery notes collected from each service department, a consolidated bill is made for the customer for payment.

Though company wants to maintain the service level of 98%, but they are unable to do so because of manual cumbersome process. Most of the time it has been observed that the necessary spares is not available. In one of the instances the battery water was not available. Another major concern that the customer has is that they need to bring their equipment every time to the service workshop for necessary maintenance/repair.

The management of the Spark Batteries Ltd. wants a system which will provide all the information so that the arrival of the Equipment can be planned to ensure the availability of all the service facilities including necessary spare parts. The SBL also wants to integrate their sales offices with the service workshop. They also want to have a central knowledge about the health of their products sold to customers for better planning.

- (a)** Identify the problems being faced by die Spark batteries Ltd. and discuss what kind of information system the SBL would need. **07**
- (b)** Suggest the type of data they should capture and manage at sales office level and at service work shop level. **07**

- Q.2** (a) Define Information. Discuss criteria for information to help in decision making. Also discuss various types of information. **07**
- (b) 'MIS supports a manager in his functional responsibilities'. Explain. **07**
- OR**
- (b) Describe various characteristics of MIS as an instrument for organisational Change. **07**
- Q.3** (a) Define DSS and illustrate three basic components of DSS with special emphasis on model base. **07**
- (b) Define Networking. Discuss various types of network and network topologies for business networking. **07**
- OR**
- Q.3** (a) "Expert System will fill up the vacuum created in absence of specialist." Discuss. **07**
- (b) Differentiate between Physical LAN and Wireless LAN. Discuss various tools required for Wireless networking with their merits and demerits. **07**
- Q.4** (a) Define E-commerce. Discuss various forms of e-commerce present in market. Also discuss factors affecting success of e-commerce business. **07**
- (b) Discuss various reasons for selecting and implementing ERP software in organisation. **07**
- OR**
- Q.4** (a) Define BPR. How does it help in getting business a competitive advantage? **07**
- (b) Illustrate various softwares that can be integrated with ERP for leveraging more benefits for business. **07**
- Q.5** (a) Whether personal Emails and contents should be watched by employees in Organisation or blocked. Discuss. **07**
- (b) Write short note: Hacking and Business implications **07**
- OR**
- Q.5** (a) A person from Pune replied to an e-mail of winning lottery of \$50 million. And submitted Rs.5 lac in a bank account mentioned in the instruction of bank. What kind of crime is this? Comment what are the precautions and remedies for such incidence. **07**
- (b) Write short note: CRM and its role in Business Decision **07**
