Internal Assessment Test – 3
18ME835 – Product life cycle management

Date: 18.07.2021 **Sem/Sec: 8 A & B**
Marks: 50

Answer all the questions. All questions carry 10 marks each.

1. Explain technology forecasting.
2. Explain DBMS.
3. Describe briefly financial control techniques.
4. Write short notes on ‘product market entry – launching and tracking’.
5. Explain the steps involved in product redesign.

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Solutions Key - IAT - 3

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1) Explain technology Forcasting.

→ It is a planning tool or technique, applied to predict the following:

(i) The potential direction at which technology change is taking place.

(ii) the rate of technology advance,

(iii) the effects of techonological change on process, products, market, society, etc.

When possible, the prediction will be quantified, made through a specific logic, & will estimate the timing & degree of change in technology parameters, attributes & capability. For example the speed of a modified military air craft, the power in watt of a particular future engine the accuracy or precision of a measuring instrument, the number of products that could be manufactured in the current year & so on.

2) Explain DBMS.

→ The decision support system's database is a software package that contains data from various sources including internal data from the organization, the data generated by different application & the external data mined from the internet. The data or information is decision making is very important. The database system is responsible for data access & manipulation & manages internal as well as external stored data in databases.

3) Describe briefly financial control techniques.

→ Exercising financial control through various activities involved adoption of strategies & techniques. A new product is a result of various activities under continuous changing circumstances. Hence there is a need to use appropriate techniques for controlling different type of financial activities.

i. Budgetary control:

In the development of a new product a budget may be referred as a numerical estimate or a plan, prepared in advance, depicting the overall costs from the initial product development stages through its delivery.

(ii) Return - on - Investment (ROI)

Return on investment (ROI) is one of the important tool or technique for financial control. It evaluates the efficiency of an investment.

$$ROI = \frac{\text{Net profit before interest \& tax}}{\text{Total investment}} \times 100$$

(iii) Break - even - analysis:

It is an anylysis is a financial control technique, widely used to determine the number of units the business needs to sell in order to avoid losses.

(iv) Ratio Analysis:

It is one of the important tools of financial control & is used to judge the financial performance of a company. It is computed by taking the proportion of one financial variable with another related financial variable.