V. HIGHER ORDER THINKING SKILLS

Question 1. Explain why break-even analysis is of reduced value to a multi-product firm? Analyse the factors that any business should take into consideration before using break-even analysis as a basis for decision making.

Answer: Break -even analysis is a technique widely used in the manufacturing unit by the production manager It is based on categorising production costs between two types of cost:

1. Fixed cost
2. Variable cost

Let us take an example. There are three companies each producing different commodities like:

| | ABC Co. | LMN Co. | XYZ Co. |
|---|---|---|---|
| **Product** | Plastic Bottles | Lunch Box | Pencil Box |
| **Unit Price** | ₹ 40 | ₹ 80 | ₹ 20 |
| **Unit Cost** | ₹ 20 | ₹ 40 | ₹ 10 |
| **Contribution margin** | ₹ 20 | ₹ 40 | ₹ 10 |

The above examples show that there are three firms and all three firms are producing single product, single selling price and single variable cost and single contribution margin. Now if we take another example of a company "Mohit Plastic Ltd Co." producing three products:

| **Product** | **Plastic Bottles** | **Lunch Box** | **Pencil Box** | |
|---|---|---|---|---|
| Unit Price | ₹ 40 | ₹ 80 | ₹ 20 | |
| Unit Cost | ₹ 20 | ₹ 40 | ₹ 10 | |
| Contribution Margin | ₹ 20 | ₹ 40 | ₹ 10 | |
| Sales mix | 30% | 40% | 30% | |
| Weighted Selling Price | 12 | 32 | 6 | Weighted selling price = 50 |
| Weighted Variable Cost | 6 | 16 | 3 | Weighted marginal cost = 25 |
| Gross Contribution Margin | 6 | 16 | 3 | 25 |

From the above two examples we can understand that unit price of single product is comparatively higher than the unit price of a multiple product.

Businesses dealing with multiple products must reduce all the selling prices down to one selling price and bring down to one variable cost. This is accomplished by calculating a weighted average selling price and a weighted average product cost (variable cost). Further, when the weighted average selling price and weighted average variable cost are calculated, only then can a business, selling multiple products, determine their break-even point. Moreover, businesses selling multiple products will determine their break-even point using the following Break Even formula:

Break-even point =Fixed Costs/(Weighted Average Selling Price - Weighted Average Variable Costs)

As you can see, the break-even point formula for businesses selling multiple products is similar to the formula used by businesses selling a single product. The only difference is the term "weighted average" placed in front of the selling price and variable cost. It is important to understand the concept of weighted averages.

1. Calculating the break-even point (through break-even analysis) can provide a simple, yet powerful quantitative tool for managers.
2. The analysis provides insight into whether or not revenue from a product or service has the ability to cover the relevant costs of production of that product or service.
3. Entrepreneurs can use this information in making a wide

range of business decisions, including setting prices, preparing competitive bids, and applying for loans.
4. It also helps in profit planning and goal setting.

Question 2. Explain the factors determining the working capital requirements.
Answer: Following factors determine the working capital requirements:

1. Turn over: Higher is the sales turn over, lower is the requirement of working capital. The revenue is obtained from the current assets. On the other hand, lower is the sales turn over; higher is the requirement of working capital.
2. Tax liability: Increase in the tax liability increases the requirement of working capital and decrease in the tax liability of the enterprise decreases the need of working capital.
3. Size of enterprise: Larger is the size of enterprise; larger is the requirement of working capital. On the contrary, smaller is the size of enterprise; smaller is the requirement of working capital.
4. Nature of the enterprise: Requirement of working capital is different type of enterprises. Restaurants, hotels, etc. have less working capital requirements due to cash sales. Enterprise producing heavy machines needs more working capital, as their operating cycle is longer.
(a) Operating cycle: Longer is the length of operating cycle larger is the requirement of working capital. This is due to the fact that more money is needed for making stocks, purchasing raw materials, etc.
5. Stock of inventory: If the enterprise prefers to make a larger stock of finished, semi-finished goods and raw materials, the requirement of working capital also matters. On the other hand, lesser is the stock of such materials, lesser is the requirement of working capital.

Question 3. Classify the following into fixed cost and variable cost:
(i) Rent of a Godown
(ii) Minimum telephone bill
(iii) Interest on capital invested by an entrepreneur
(iv) Salary to permanent staff
(v) Cost of raw-material, payment of transportation of goods.
(vi) Daily wages of sweepers
(vii) Telephone charges beyond the minimum.
Answer:

| S.No. | Items | Fixed/Variable |
|---|---|---|
| 1. | Rent of a Godown | Fixed Cost |
| 2. | Minimum telephone bill | Fixed Cost |
| 3. | Interest on capital invested by an entrepreneur | Fixed Cost |
| 4. | Salary to permanent staff | Fixed Cost |
| 5. | Cost of raw-material | Variable Cost |
| 6. | Payment of transportation of goods | Variable Cost |
| 7. | Daily wages of sweepers | Variable Cost |
| 8. | Telephone charges beyond the minimum | Variable Cost |

Question 4. State whether the following require small or large working capital. Answer should be supported by a valid reason:
(i) Selling ice-creams
(ii) Following a liberal credit policy
(iii) Dealing in stainless steel wares
(iv) Using capital intensive technology
Answer:

| S.No. | Items | Small/Large Working Capital | Reasons |
|---|---|---|---|
| 1. | Selling ice-creams | Small working capital | It is a retail shop and the product is sold in cash. Therefore it requires less working capital. |
| 2. | Following a liberal credit policy | Large working capital | When the market is competitive, then the enterprises/entrepreneur believes in selling goods on credit, needs more working capital. |
| 3. | Dealing in stainless steel wares | Large Working capital | He needs to stock up inventories. The larger the stocks of finished goods (steel wares) required to be kept, more will be the need for working capital. |
| 4. | Using capital intensive technology | Large working capital | Using capital intensive technique means it is a manufacturing unit which gives a indication that large amount of working capital is required. |

Question 5. On the basis of duration, classify the sources of finance.
Answer: Sources of finances can be classified on the basis of duration:

| Sources of Long-term Finance | Sources of Short-term Finance |
|---|---|
| There are a number of sources of Long term finance which are listed below:<br>Venture capital –<br>• Debentures –<br>• Share issues –<br>• Owners savings –<br>• Bank loans – medium or long term loans<br>• Leasing –<br>National level Financial Institutions<br>State level Financial Institutions | There are a number of sources of short-term finance which are listed below:<br>1. Trade credit<br>2. Bank credit<br>– Loans and advances<br>– Cash credit<br>– Overdraft<br>– Discounting of bills<br>3. Customers' advances<br>4. Installment credit<br>5. Loans from co-operatives |

VI. VALUE BASED QUESTIONS
Question 1. How does pilferage of material affect the enterprise and entrepreneur?
Answer: Pilferage of material means - theft. In any enterprises or a business theft raises your costs, lowers your profits, makes you less competitive and affects morale.

Question 2. How can an entrepreneur or an enterprise can take preventive measures to reduce pilferage in an enterprise? What values can lead to a successful implementation of these measures?
Answer. In many enterprises/organisations generally most of employees are honest and disapprove of theft, pilferage of materials and resources in many organisations. But every enterprise must keep some strategies for prevention of pilferage within your company could include:

1. Install adequate inventory and control measures to account for all material, supplies and equipment.
2. One control method is the requirement, register and signing for all tools and equipment to be issued by individuals.
3. Identify all tools and equipment by some mark or code.
4. Conduct a meeting in the form of workshop to convince and educate the employees that they have much more to lose than gain by stealing.
5. Make them understand and realize all employees that pilferage is morally wrong no matter how insignificant the value of the item taken.
6. Demand that supervisory personnel set a proper example and maintain a desirable moral climate for all employees.
7. In extreme situations, propose spot searches of employees and vehicles leaving the installation at unannounced times and places. Publicize widely.
8. Impress upon all employees that they have a responsibility to report any loss to proper authorities.
9. Value Points:
   (a) Spirit of enquiry
   (b) Discipline
   (c) Sincerity
   (d) Unwillingness to hurt by employer
   (e) Duty and loyalty to duty.

Question 3. How cash flow projections will be helpful for an entrepreneur? What values can lead to a successful implementation of these programmes? (Value Points)
Answer:

1. For an entrepreneur it is an important tool for cash management.
2. He will be able to verify when his outlays/outflows are too high or when you might want to arrange short term investments to deal with a cash surplus.
3. A cash flow projection will give a much better idea of how much capital investment a business idea needs.
4. Measurement is essential to analyse performance of any business. Given below are some businesses and items being sold/serviced by them.
5. Value Points:
(a) Self- control
(b) Duty and loyalty to duty
(c) Discipline id) Self-support
(e) To protect national property
(f) Concentration.

Question 4. Explain the main objectives of financial management which is helpful to the enterprise? (Give four value points)
Answer: Financial management is needed because of the following:

1. To protect against unforeseen circumstances: Entrepreneur minimizes the risks by making a estimate of risks. For this purpose, he prefers to manage his money (finance) by keeping in mind its requirement in the future.
2. To maximise profit: By managing the finance effectively, the entrepreneur tries to maximize his profit. Finance like other resources is available in limited quantity. Efficient utilization of finance is the only way for profit maximization.
3. To acquire assets: Any type of asset whether tangible or intangible, need finance for acquiring them. As the enterprise grows, develops or diversifies, the requirement of finance also increases. Thus more is the finance available, more are the chances of acquiring new assets. Moreover from the present income the provision is to make for meeting future obligations. This needs proper management of finance.
4. To maximise wealth: As the profit increases the wealth of the entrepreneur and the enterprise both are maximized. Goal of wealth maximization is realized by entrepreneur by making optimum utilization of resources, by maintaining the faith of the shares, by properly utilizing the undistributed profit etc.
5. To ensure ready availability of funds: The flow of funds must take place as and when needed. At any point of time the shortage of funds is undesirable for the growth of enterprise.
6. Value points:
(a) Proper utilization of time
(b) Universal
(c) Awareness of responsibility of others and employees
(d) Sincerity
(e) Team work and team spirit.

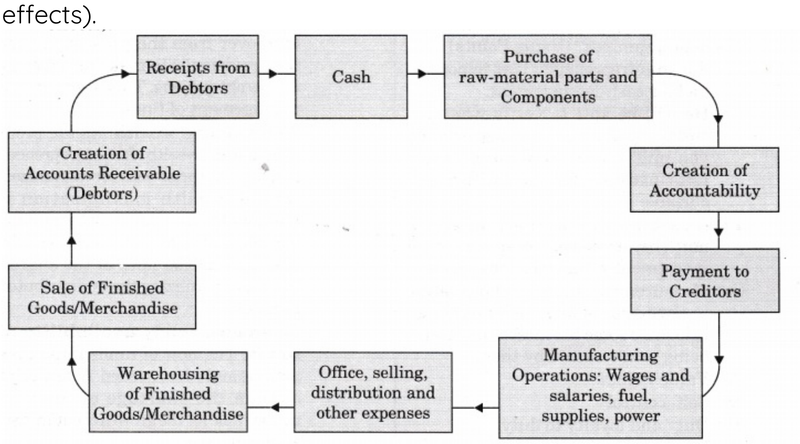
Question 5. Explain the benefits of budgeting. Give some value points.
Answer:

1. For start up entrepreneurs, a budget is like a road map that can help them set goals and assess the validity of their business concept.
2. For established small businesses, a budget can be used to take the pulse of the business, determining how the business is performing through the years, and helping identify possible

future investments.

3. By regularly consulting a budget, business leaders can compare actual figures and catch potential business shortfalls or other problems early. Budgets can also be instrumental in winning over investors, convincing banks your business is a good loan risk, or bringing on new partners or customers.
4. The single-most potential benefit of formal budgeting lies in ensuring that responsible managers take time each year (and then at fixed intervals throughout the year) in thinking about their operation by looking at all of its aspects. Budgeting creates a comprehensive picture of the future and makes both opportunities and barriers conscious. This foreknowledge then helps guide day-to-day activities.
(a) Value Points:
(a) Regularity
(b) Positive performance
(c) Responsibility of managers and others
(d) Feasibility
(e) Deal with other problems and find solutions to it.

Question 6. Draw a diagram of an operating cycle or cash conversion cycle for large scale manufacturing business (in Detail). And explain how it is important for business (positive and adverse effects).




Answer:
Positive Effects:

1. Working capital is a life-blood of manufacturing unit. Its working capital financing can eliminate.
2. Any gap between cash flowing into operations and cash flowing out.
3. An adequate supply of raw material for smooth functioning of the process.
4. Cash to meet the wage bill.
5. Ability to grant credit facility to customer.

Adverse Effects:

1. Due to inadequate funds. Growth of a firm may stop and it will become difficult for the firm to undertake important projects.
2. Attractive credit opportunity may have to be lost due to paucity of working capital.
3. It will be very difficult for meeting day-to-day expenses.
4. Sometimes even fixed assets may not be efficiently utilized, it may affect low rate of return on investment in the working process.
5. Firm may loose its reputation when sometimes not able to meet short term obligations.

Effects of Excess Working Capital:

1. It may result in unnecessary accumulation of stock of raw materials and finished goods, leads to mishandling, waste,

theft, value may depreciate.
2. It shows managerial inefficiency.
3. It may lead for making speculative profits.
4. Undue incentive to adopt liberal credit policy.

Value Points:

1. Regularity
2. Positive performance
3. Responsibility of managers and others
4. Feasibility
5. Social awareness
6. Proper and maximum utilization of resources
7. National awareness
8. Self-discipline
9. Concentration and social justice.

Question 7. In the following cases (statements) identify the type of budgets related to it:

1. It always estimates of future sales, often broken down into both units and currency.
2. It estimates the various costs involved with manufacturing those units, including labour and material.
3. It is used to determine an organization's long term investments.
4. It also estimates the investment for research and development.
5. It estimates the funds for promotion and advertising.
6. It shows a cost estimated/associated and is used to establish a particular company project.
7. An estimate of the number of units that must be manufactured to meet the sales goals.
8. A budget which details the amount of cash you collect and pay out.
9. This is generally tallied on a monthly basis, but some businesses tabulate this weekly.
10. It helps you figure out how much money you need to put in place new equipment or procedures to launch new products or increase production or services.
11. It estimates the value of capital purchases you need for your business to grow and increase revenues.

Answer:

1. Sales budget
2. Production budget
3. Capital budget
4. Capital budget
5. Marketing budget
6. Project budget
7. Production budget
8. Cash flow budget
9. Cash flow budget
10. Capital budget
11. Capital budget

Question 8. Explain the concept of ABC Analysis.
Answer: The ABC approach states that a company should rate items from A to C, basing its ratings on the following rules:

1. A-items are goods which annual consumption value is the highest; the top 70-80% of the annual consumption value of the company typically accounts for only 10-20% of total inventory items.
2. B-items are the inter class items, with a medium consumption value; those 15-25% of annual consumption value typically

accounts for 30% of total inventory items.
3. C-items are, on the contrary, items with the lowest consumption value; the lower 5% of the annual consumption value typically accounts for 50% of total inventory items.

Through this categorization, the supply manager can identify inventory which is more important and more profitable, and separate them from the rest of the items, especially those that are numerous but not that profitable.

Steps involved in ABC Analysis:

1. Find out the unit cost and the usage of each material over a given period.
2. For each item calculate the total cost = Annual demand x Item cost per unit.
3. Arrange all items in a progressively decreasing order of the cost (descending value).
4. Calculate and tabulate the cumulative total cost.
5. Calculate percentage on total inventory in value and in number.
6. Compute the individual items as a percentage of the total number of items.
7. Tabulate.

Question 9. Explain the concepts of working capital with the help of an example.
Answer: Concept of Working Capital: Generally, there are two concepts of working capital i.e. gross concept and net concept.

1. Gross Concept of Working Capital: According to gross concept, working capital refers to all the current assets and represents the amount of funds invested in current assets.
(a) Thus, gross working capital is the capital invested in current assets. Current assets are those
assets which can be converted into cash within the short-time period, (say for 12 months )
(b) Gross working capital = Total current assets
Gross working capital refers to the firm's investment in current assets. Gross working capital represents total of current assets which includes cash in hand, cash at bank, inventory, prepaid expenses, bills receivable, etc.
2. Net Concept of Working Capital: According to the net concept, working capital is the excess of current assets over current liabilities. In other words, the difference between current assets and current liabilities is called net working capital.
Net Working Capital = Current Assets - Current liabilities Net working capital is the difference of current assets and current liabilities.
(a) Gross Working Capital = Total Current Assets
(b) Net Working Capital/Funds/Net Current Assets = Current Assets - Current Liabilities
Example: Working capital of Raja and Co. has the following items in its
Balance Sheet: Stock - 50,000;
Trade creditors - 32,000;
Debtors - 75000;
Cash - 1,00000;
Dividend payable - 50,000;
Tax - 44,000;
Short term loan - 61,000;
Short term investments - 76,000.
Calculate gross and net working capital.
Total Current Assets = Debtors + Stock + Cash + Short term investment

= (Rs75000 + Rs 50,000 + Rs 1,00000 + Rs 76,000)
= Rs 3,01,000.
Total Current Liabilities =Sundry Creditors + Dividend Payable + Tax + Short Term loan
= Rs 32,000 + Rs 50,000 + Rs 44,000 + Rs 61,000
= Rs 1,87,000.
Gross Working Capital = Total Current Assets
= Rs 3,01,000 Net Working Capital
= Total Current Assets - Total Current Liabilities
= Rs 3,01,000 - Rs 1,87,000 = Rs 1,14,000
Gross Working Capital = Rs3,01,000 Net Working Assets = Rs 1,14,000.

Question 10. Enumerate the suggested policy guidelines for A, B and C classes of items.
Answer: The table given below explains the policy guidelines for A, B and C classes of items:

| S.No. | A) Items (High Consumption Value) | B) Items (Moderate Consumption Value) | C) Items (Low Consumption Value) |
|---|---|---|---|
| 1. | Very strict consumption control | Moderate control | Moderate control |
| 2. | No or very low safety stock | Low safety stock | High safety stock |
| 3. | Phased delivery (Weekly) | Once in three months | Once in 6 months |
| 4. | Weekly control report | Monthly control report | Quarterly report |
| 5. | Maximum follow up | Periodic follow up | Exceptional |
| 6. | As many sources as possible | Too reliable | Too reliable |
| 7. | Accurate forecasts | Estimates on past data | Rough estimate |
| 8. | Central purchasing/storage | Combination purchasing | Decentralised |
| 9. | Max. efforts to control | Min. clerical efforts | LT Moderate |
| 10. | To be handled by Sr. officers | Middle level can be delegated | Middle level can be delegated |

ABC (Always Better Control) analysis can help you control your inventory better.

Question 11. “For a good inventory control system, we need to take care of both physical and fiscal aspects.” Explain the nature of items that make up the inventory.
Answer: For a good inventory control system, we need to take care of both physical and fiscal aspects. But before we deal with those two, let us understand the nature of items that make up the inventory.

1. Stock Keeping Unit (SKU) Code: Each and every item in the inventory is to be identified with a unique code which signifies certain aspects of the item.
   It can be colour, size, weight or any other characteristic that is of importance in its use. The SKU code can be a combination of alpha and numeric.
   SKU is the very basic unit for data collection and further manipulation for deriving meaningful statistics and decision-making. Bar Codes and RFID (Radio Frequency Identification) tags ' are used in tracking etc. using SKU.
2. Motley crowd:
   (a) We always refer to inventory in one monetary value in the accounting statement, behind it are myriad numbers of SKUs - that can be classified as Raw Materials, Packing Materials, Spare Parts, Semi Finished Goods (or WIP - Work In Progress), Finished Goods, Consumables, etc.
   (b) The SKU code should definitely help us identify which class the item belongs but not much else. The treatment for each class will have to be different, keeping in mind some of the factors identified here.
3. Space: Space requirement for all items will not be identical; neither will it have proportionate relationship with the cost of the item. There can be many bulky items with low value (For example, straw for use in paper mill) as well as high value items with low volume (For example, Diamonds).
4. Value: Not all SKUs have same value.
5. Lead time:

(a) Lead time to manufacture or procure an item depends on many factors. Combined effect of these factors — like standard or special raw material, processing time, scheduling of machines, distance between source and user point etc. - makes up the lead time for an item.
(b) It is not always the same for a given item; variability in different factors contributing to the total lead time can make the lead time vary.

6. Standard Made to order: Some of the items in the inventory could be commodity items - no significant differentiation and hence easy to substitute, or many suppliers produce to same specifications and hence easy to choose from.
   (a) Others may be specifically made to order and hence possibly limited sources to order from.
7. Seasonality of supply: If the item is an agricultural product (grains, vegetables, fruits, etc.), the supply would be seasonal. This can play a role in designing the inventory control system.
8. Demand neither uniform nor predictable:
   (a) Demand for an item could be seasonal — weather, festival seasons, events, school opening, etc. can play a significant part in this.
   (b) In some cases it is easy to forecast-raw material for items produced to order; but in others not so easy - requirement of a spare part.
9. Shelf life:
   (a) Items like vegetables, fruits, flowers and fish are perishable in nature. This calls for special storage conditions and equipments - cold storage, freezers, etc. These, have financial implications.
   (b) Some of the manufactured food or medicinal products have expiry dates— beyond which they are not fit for consumption. This imposes certain constraints on inventory management.
10. Safety aspects:
    (a) Some of the items are hazardous in nature and special precautions have to be taken in their storage. Examples are — gasoline, other combustible items, some hazardous chemicals, etc.
    (b) In a factory manufacturing safety matches, phosphorous and potassium chlorate are not stored in the same or even adjoining areas, for fear of accidental mix up. In fact, even their path of delivery to the respective end use points do not cross.
11. Obsolescence:
    (a) Due to advancement in technology, certain items may not be used and their demand drops off. These are the various characteristics of SKUs that have to be kept in mind while designing inventory control systems - one size will not fit all.
    (b) Different (rules and guidelines) will have to be different for raw materials, consumables, spare parts, packing materials, etc.

Question 12. Define budgetary control. State how “budgetary control” helps an entrepreneur?
Answer: Budgetary control is a technique of managerial control in which all operations are planned in advance. In the form of budget actual performance is compared with standard performance.
It also helps to achieve the organizational objective of an enterprises.

1. Provides a source of motivation to employees and employers.
2. It helps in optimum utilization of resources.
3. It also helps to maintain the coordination among all the departments.

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