



INDIAN SCHOOL AL WADI AL KABIR

Class: XII	Department: Commerce
Subject:	Entrepreneurship - 2024
Worksheet: 1	Chapter 5: Business Arithmetic Numericals Worksheet

1. The Fancy Store' a readymade garments retail shop sold 8,000 shirts at Rs 400/- per shirt during the year ended 31st March, 2014. Cost of placing an order and receiving goods is Rs 200 per order. Inventory holding cost is Rs 500/- per year. Calculate the 'Economic Order Quantity' for 'the Fancy Store
2. Jalalji an entrepreneur started a new website 'Fashionate Shirts' to sell readymade shirts. In the first year he sold 1200 shirts at the rate of Rs 500 each. His cost of placing an order and receiving the shirts is Rs1000 per order. If the Economic Order Quantity is 200 shirts, find out the inventory holding cost per year.
3. A book shop sells pens – 30,000 qty per year. Demand is uniform. Purchase cost is Rs.6/- per pen. Holding cost per annum is 20% of purchase cost. Ordering cost is Rs.500/- per order. What should be the EOQ for the shop keeper?
4. Harsha started her herbal beauty products shop in Chandigarh with a capital of Rs.9,00,000. She took a loan of Rs.5,00,000 from the State Bank of India at 9% p.a. interest. During the year ended 31st March, 2016 her sales were Rs.20,90,000 and the cost of goods sold was Rs.15,30,000. She paid monthly rent of the shop Rs.11,000 and a monthly salary of Rs.25,000 to the employees. The tax rate is 30%. Calculate the Return on Investment and Return on Equity.
5. Raj started a restaurant on a National Highway in the name of 'Desi Dhaba' by spending Rs.25,00,000. He invested Rs.10,00,000 of his own and took a loan of Rs.15,00,000 from Dena Bank, @ 6% per annum. His monthly sales revenue is Rs.17,00,000 and cost of goods sold is Rs.9,00,000. He pays monthly salary of Rs.3,00,000 to his employees. The tax rate is 25%. You are required to calculate : (a) Return on Investment and (b) Return on Equity for Raj.
6. Aditi started a beauty parlor business. She spends Rs.30,00,000/- to open the parlour of which she invested Rs.14,00,000/- of her own money and borrowed a loan for Rs.16,00,000. Interest rate per annum is 14%. Sales revenue per month is Rs. 1,60,000. Cost of goods sold is Rs. 60,000/- per month. Fixed expenses for that month is Rs. 60,000 (salary Rs.40,000, rent and utility Rs. 20,000), depreciation Rs.30,000 and tax @ 15%. Calculate ROI and ROE

7. Calculate working capital Raja & Co. has the following items in its Balance sheet Stock - 50,000; Trade creditors – 32,000; debtors – 75,000; cash – 1,00,000 Dividend payable – 50,000; Provision for Tax – 44,000; Short term loan – 61,000; Short term investments – 76,000 Calculate gross and net working capital.
8. Following information is related to sales mix of product A, B and C.

Product	A	B	C
Sales price per unit	₹15/-	₹21/-	₹36/-
Variable cost per unit	₹9/-	₹14/-	₹19/-
Sales mix percentage	20%	20%	60%
Total fixed cost	₹40,000/-		

Calculate the break-even point in units and in rupees.

9. 'Flavouright Foods Ltd.' started a business of making nachos (corn chips) in three variants, Classic Cheese, Toasted Corn and Tangy Tomato.

To start with, all the three variants will be sold in a standard packing of 100 gm each, the selling price would differ due to the ingredients used. Fixed costs are Rs.38,000.

Sales price and variable costs per unit are as follows :

Products	Classic Cheese	Tasty Corn	Tangy Tomato
Selling Price	80	45	60
Variable Cost	40	15	20
Packet Sold	100	40	60

From the above information calculate :

- (a) Weighted contribution margin per unit.
(b) Breakeven point – total and per product.

10. Breezolit Pvt. Ltd.' started a business of making three varieties of designer fans – Vitara, Grand, Quadraflow. From the following information, calculate Breakeven point in units for the company and state which variety is most revenue generating. Fixed costs are Rs.15,20,000.

Details	Vitara	Grand	Quadraflow
Sale Price (₹)	800	450	600
Variable Cost (₹)	400	150	200
Sales Mix	50%	20%	30%

11. Happy Hands Ltd.' manufactures liquid hand was for children with minimal chemicals. They have three varieties of liquid soap. The fixed cost for the production process is Rs. 2,49,000

Variety	Scrub Hand Wash	Gel Hand Wash	Foam Hand Wash
Selling Price per 100 ml in (₹)	155	175	195
Variable Cost per 10 ml in (₹)	75	95	105
Sales Mix	40%	30%	30%

From the above data, calculate the following:

- Total weighted average contribution margin.
- Break-even quantity for each variety of liquid hand wash.
- Break-even point in rupees for Scrub Hand Wash.

12. Toy craft produces toy alligators and toy dolphins. Fixed costs are Rs. 12,90,000 per year. Sales revenue and variable costs per unit are as follow:

	Alligators	Dolphins
Sales Price per unit	Rs.20	Rs.25
Variable Costs per unit	Rs.8	Rs.10

- Suppose the company currently sells 140,000 alligators per year and 60,000 dolphins per year (Sales Mix Percentage 14:6). Assuming the sales mix stays constant how many alligators and Dolphins must the company sell to break even?
- Suppose the company currently sells 60,000 alligators per year and 140,000 dolphins per year (Sales mix percentage 6:14). Assuming the sales mix stays constant, how many alligators and dolphins must the company sell to break even per year?