

PRACTICE QUESTIONS ON BUSINESS ARITHMETIC
ENTREPRENEURSHIP
CLASS 12

Q.1

- a) Define Reorder point.
- b) ABC Limited deals in the sale of scrap metal. It uses 40 tonnes of metal per day. The order lead time for purchasing scrap is 05 days. Calculate the Reorder point for placing the new order for inventory level.

Q.2

- a) Mention any one assumption for calculating Economic Order Quantity.
- b) The annual usage of an item is 2500. Ordering costs are ₹ 100 per order carrying costs are ₹ 20 per unit per annum. Calculate Economic Order Quantity.

Q.3

- a) Define Breakeven point.
- b) X Ltd sold 50,000 units @ ₹ 5.00 per unit. The company incurred a fixed cost of ₹ .80, 000 while the costs of raw materials were ₹ 75,000. Calculate Break-even point for the firm.

Q.4

- a) Define Reorder point.
- b) ABC Limited deals in the sale of scrap metal. It uses 20 tonnes of metal per day. The order lead time for purchasing scrap is 10 days. Calculate the Reorder point for placing the new order for inventory level.

Q.5

- a) Mention any one assumption for calculating Economic Order Quantity.
- b) The annual usage of an item is 3600. Ordering costs are ₹ 100 per order carrying costs are ₹ 20 per unit per annum. Calculate Economic Order Quantity.

Q.6

- a) What does Net profit ratio indicates?
- b) The following accounting equation is obtained from the books of a private firm –

Loan from bank	₹ .1, 00,000
Owner's equity	₹ 75,000
Gross profit	₹ 1, 50,000
Depreciation	₹ 10,000
Sales turnover	₹ 2, 10,000

Calculate (a) Debt equity ratio (b) Net profit ratio

Q.7

- a) What does Debt equity ratio indicates?
- b) The following accounting equation is obtained from the books of a private firm –

Loan from bank	₹ 1, 20,000
Owner's equity	₹ 90,000
Gross profit	₹ 1, 70,000
Depreciation	₹ 10,000
Sales turnover	₹ 2, 40,000

Calculate (a) Debt equity ratio (b) Net profit ratio

Q.8

A small scale manufacturer of ball point pens produces 3000 pens a month. Ball point pens are sold in the market for ₹ .5.00 a piece. On every pen sold, the manufacturer earns a profit of 10%. How much profit does the manufacturer makes, when all the 3000 pens are sold and also find out the profits earned in 6 months?

Q.9

From the following data calculate the output where the entrepreneur attains Break even point.

Total Revenue (1000) Units	₹ .90, 000
Fixed Cost	₹ .25, 000

Variable Cost	₹.40,000
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Q. 10

From the following data calculate the output where the entrepreneur attains Break even point.

Total Sales (1000) units	₹ 40000
Machinery Cost	₹.48000
Raw materials	₹.15000
Daily Labour Cost	₹.1000

Q. 11

An entrepreneur of readymade shirts makes 100 shirts daily. The cost of manufacturing a shirt is Rs.350. The entrepreneur makes 10% profit on each shirt sold. Find out the selling price of a shirt and also find the profits made on 100 shirts.

Q. 12

From the following data, calculate the Economic Order quantity.

Annual Usage Rate	1600 units
Carrying cost per Unit	₹.4.00 per unit
Ordering Cost	₹.200 per order.

Q. 13. You are small scale manufacturer of Tissue papers. The monthly production of tissue paper is 25000 sheets. Each box of tissue containing 100 sheets is sold in the market for ₹ 35. Device a marketing plan for the product which should include all the elements of marketing mix.

Q. 14. The selling price of a computer printer is ₹ 4500. The seller of the computer printer makes a profit of 12%. Find out the cost price of the printer and also find out the profit of the seller when he sells 25 printers.

Q. 15. From the following data calculate the output where the entrepreneur attains Break even point.

Total Revenue (1000) Units	₹ 80, 000
Machinery Cost	₹ 25, 000
Direct costs	₹ 5, 000
Raw materials	₹ 20, 000
Labour Cost	₹ 10,000
Other Expenses	₹ 4000
Rent	₹ 3000
Interest Payment.	₹ 900

Q. 16. You are a small scale manufacturer of pencils. Your monthly production is 40000 pencils. Pencils are sold in market for ₹.1.50 each. Find out your monthly and yearly revenue. If the fixed cost is ₹ 10, 000 and the profit made is ₹.6000, calculate the percentage of sales when your firm reaches break even.

Q. 17. From the following data calculate the output where the entrepreneur attains Break even point.

Selling price per unit	₹.40
No. of units produced	2000
Machinery Cost	₹.50000
Direct costs	₹.8000
Raw materials	₹ 10000
Daily Labour Cost	₹ 10000
Overheads	₹ 5000
Rent	₹ 3000
Interest Payment.	₹ 750

Q. 18. From the following data, calculate the Economic Order quantity.

Annual Usage Rate = 800 units
 Carrying cost per Unit ` 2.00 per unit
 Ordering Cost ` 200 per order

Q. 19. A manufacturer of Table fans produces a unit of table fan for ` 2000. The percentage of profit fixed by the manufacturer is 8%. Find out the unit selling price of the Table fan.

Q. 20. From the following data calculate the output where the entrepreneur attains Break even point.

Total Revenue (1000) Units	` .75000
Machinery Cost	` .40000
Direct costs	` 8000
Raw materials	` 15000
Labour Cost	` 12000
Other Expenses	` 5000
Rent	` 2500
Interest Payment.	` 1000

Q. 21. A manufacturer of Water tank produces a unit for ` 3500. The percentage of profit fixed by the manufacturer is 10%. Find out the selling price of the Water Tank.

Q. 22. From the following data calculate the output where the entrepreneur attains Break even point.

Average Revenue	` .50
No. of units produced	1000
Machinery Cost	` .25000
Direct costs	` .4000
Raw materials	` 10000
Labour Cost	` 8000
Overheads	` 4000
Rent	` 2000
Interest Payment	` 1000

Q. 23. A stationery store sold in one day the following items at the prices indicated.

Products	Price per unit (`)	Quantity sold
Student note book	40	35
Reynolds pens	40	40
Erasers	5	5
Scale (12 plastic)	15	10
Flip chart	10	5
Sketch pens (one DOZEN)	25	3

The shopkeeper also found out, based on the number of bills issued by him, that there were 50 customers. If customer is the unit of sale, what is the —Unit Price‡ in this case? If the cost of each stationery item is 75% of its selling price, calculate the —Unit Cost‡ and the —Gross Margin‡ per unit of sale.

Q. 24. A Beauty parlor had varying number of customers during 5 weeks. This information and the total weekly billing are given in the following table. What are the Unit of sale and the Unit Price in this case? If the cost of goods sold or variable cost is 60% of the sale price, calculate the Unit Cost and the Gross Margin per Unit of Sale.

Week #	No. of customers	Total amount billed (`)	Average amount billed (`) per customer
Week 1	10	1,000	100
Week 2	17	1,445	85
Week 3	13	923	71

Weeks	No. of people taking meals	Total amount billed (₹)	Average amount billed (₹)
Week 1	120	18,000	150
Week 2	60	12,300	205
Week 3	70	10,220	146
Week 4	80	17,680	221
Week 5	90	21,600	240
Total	420	79,800	

Q. 26. A manufacturing plant that produces four different types of machine tools and their cost, price and BE Qty. The fixed costs are allocated – taking in to consideration the utilization of common resources for different products. Calculate the breakeven point.

Selling prices (in `)	Variable cost:	Allocated fixed expenses:
Silk saris: ` 3,500/sari	Silk saris: 1,050 pieces	Silk saris: ` 2, 45,000/-
Cotton saris: ` 900/sari	Cotton saris: 270 pieces	Cotton saris: ` 15, 7500/-
Suit materials: ` 1,800/suit	Suit materials: 540 pieces	Suit material: ` 63,000/-
Kids wear: ` 450/wear	Kids wear: 135 pieces	Kids wear: ` 70,875/-

Q. 28. A book shop sells 30,000 pens per year. Demand is uniform. Purchase cost is ₹ 6/- per pen. Holding cost per annum is 20% of purchase cost. Ordering cost is ₹ 500/- per order. What should be the EOQ for the shop keeper?

You have newly started a beauty parlor business, you spend ₹1,50,000/- to open the parlor of which you invested ₹70,000/- of your own money and borrowed a loan for ₹80,000/-. Interest rate per annum is 7%. Sales revenue per month is ₹80,000/-. Cost of goods sold is ₹30,000/- per month. Fixed expenses is ₹30,000/- (salary ₹20,000/-, rent and utility ₹10,000/-), depreciation ₹3,000/- and tax @ 14%.

You have newly started a restaurant business, you spend `10,00,000/- to open the restaurant. You have invested `4,00,000/- of your own money and borrowed a loan for `6,00,000/-. Interest rate per annum is 10%. Monthly sales revenue is `6,00,000/- and cost of goods sold is `3,00,000/-. Fixed expenses per month `2,00,000/- (salary `1,50,000/-, rent and utility `50,000/-), depreciation `10,000/- and tax @ 20%.

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