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EXAMINATION: DECEMBER 2023
FIRST SEMESTER

Subject: Business Mathematics (BCOM23-103)

Date: 07/12/2023

Total marks: 60

Time: 10.00 am to 12.30 pm

Instructions: 1) All questions are compulsory. 2) Figures to the right indicate full marks.

Q.1. (A) Fill in the blanks (Any 5) (05)

1. Calculate gross profit =given Total sales = 450000 and Cost of goods sold= 87000
 - a) 363,000
 - b) 306300
 - c) 336000
 - d) 603300
2. 5% of 60 =
 - a) 3
 - b) 6
 - c) 4
 - d) 7
3. If Sales = Rs. 3200,000 & Profit = Rs 8,00,000 then % profit =
 - a) 0.25
 - b) 25
 - c) 2.5
 - d) 5.2
4. Rs. 12 each newspaper, a man purchases them in bulk and selling price Rs. 15 then % profit =
 - a) 25%
 - b) 2.5%
 - c) 52%
 - d) 0.25%
5. An agent received a 4.5 % commission for selling products valued at Rs. 3,000 then the agent's commission =
 - a) 135
 - b) 153
 - c) 513
 - d) 315
6. S.I. for Rs. 12500 for 3.5 years with 12.5% =
 - a) 5468.75
 - b) 54687.5
 - c) 546875
 - d) 546.875
7. Abhay spends 60% saved Rs. 20,928 in a month then his salary =

a) 52320

b) 23205

c) 20352

d) 32025

(B) State whether the following statements are true or false (any 5)

(05)

1. EMI means Monthly Installments Equated.- true
2. $C.P. < S.P.$ then there is loss in business.
3. Selling Price = Cost + Markup
4. Revenue – Expenses = Profit
5. Making a profit is a business's main goal.
6. Mathematics is the soul of business

Q.2. (A) Calculate the value of an ordinary annuity with a Rs. 3000 periodic payment, compounded semi-annually at 9% p.a. for four years. Calculate the value of an ordinary annuity with a Rs. 3000 periodic payment, compounded semi-annually at 9% p.a. for four years.

(20)

OR

(B) Mr. Pansare received a total of Rs. 4950 in simple interest for his five-year loans of Rs. 5000 to Mr. Panish and Rs. 4000 to Mr. Punit. Find each one's (i) interest rate and (ii) simple interest.

Q.3. (A) The price of one bottle is Rs. 160 increased by 12%. As a result used decreased by 10%. Find the increased or decreased in original income.

(10)

(B) Solve the followings - (Any 2)

(05)

1. The monthly salary of a person increased from Rs. 18,000 to Rs. 18,560. Find the rise in percentage.
2. A, B & C are in business. A sold a car to B with 15% profit. B sold that car to C with 5% profit for Rs. 158,000. Find the price at which A has purchased the car.
3. Divide a profit of Rs. 25,828 in a ratio of 4:7 between the two partners.

4. Mr. Harish purchased Rs. 4,50,000 for a wardrobe, which he later sold for Rs. 4,36,000 instead. Find his gain or loss in percentage.

Q.4. (A) Fill the table -

(15)

Partner	Investment	For no of months	Product (Rs.)	Capital for one month (Rs.)	Profit share (Rs.)
Anil	50,000	3	1,50,000	4,10,000
	40,000	9	3,60,000		
Dinesh	40,000	12	4,80,000	4,80,000
Rajesh	30,000	3	90,000	5,40,000
	50,000	9	4,50,000		

OR

- (B)** The Furniture dealer want to earn 25% profit after giving 15% discount on chair buying at Rs, 340 each. Calculate the Marked price of a chair.
