TILAK MAHARASHTRA VIDYAPEETH, PUNE BACHELOR OF COMMERCE (B.COM) EXAMINATION: MAY- 2024 FIRST SEMESTER

Subject: Business Mathematics (BCOM23-103)

Date:	11/05/2024	Total marks:	60 Time: 2.00 pn	n to 4.30 pm	
	Instructions:	1) All questions are compulsory.	2) Figures to the right indicate full marks.		
Q.1.	Fill in the bla	nks (Any 5)		(05)	
(A) 1.	12 % 0f Rs. 10000 is the amount to be paid to a person.				
	Then the exact amount to $pay = \dots$				
	a) 12		b)1.2		
	c) 21		d) 0.12		
2.	30 marks out o	of 40 then % of marks =			
	a) 75%		b) 65%		
	c) 50%		d) 78%		
3.	Chocolate dropped from pricing Rs. 127 to Rs. 103. Then % decrease=				
	a) 18.9%		b) 1.89%		
	c) 189		d) 81.9%		
4.	When multiply ratio 4:5 by 3 the new ratio =				
	a)) (12/15)		b) (15/12)		
	c) (4/5)		d) (5/4)		
5.	S.I. = 5468.75 & P = Rs. 12500 for 3.5 years with 12.5% then Amount =				
	a) 17968.75		b) 1796875		
	c) 179687.5		d) 1796.875		
6.	$C.P. = 450000$, $S.P. = 436000$ then $Loss = \dots$				
	a) 14000		b) 10400		
	c) 10040		d) 10004		
7.	If Article costing Rs. 1100 is sold AT 25 % loss then S.P. =				
	a) 852		b) 825		
	c) 528		d) 582		

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

- 1. A broker acts as a mediator for the buyer and the seller and receives a payment with a commission.
- 2. Perpetual Annuity or a Perpetuity: A perpetual annuity is an annuity that is intended to continue indefinitely .

3. S.I. =
$$\frac{P \times r \times n}{100}$$

- 4. A commission salesperson may accept payment in cash or on credit.
- 5. Variable Cost: This could change based on a number of variables, including the quantity of units.
- 6. Commission Broker is Good New Profession as per Earnings.

Q.2. Fill the table -

(A)

	C.P.	S.P.	Profit	Loss
1	Rs.500	Rs.600		
2	Rs. 5000	Rs4500		
3	Rs.100		Rs. 20	
4	Rs.800			Rs.150
5		Rs.700000	Rs.3500	
6		Rs.65000		Rs.2500
7	Rs. 10000	Rs. 15600		

OR

- (B) Consider that one company, A, generated a profit of Rs. 13 crores from sales of Rs. 40 crores in a year, and another, B, made a profit of Rs. 16 crores from sales of Rs. 60 crores. Now we can use a firm's performance as one criterion for profit comparison. we infer that the second firm's performance is superior?
- Q.3. The ratio of the two friends monthly salary is 3:5. The new ratio would be 13:21 if each person's (10)
- (A) monthly salary increased by 200 rupees. Determine their starting salary.

(B) Solve (Any 2)

- 1. When a camera sold by Pratik at Rs. 1674 there is 7% loss then calculate C.P.
- 2. On the sale of bicycles, an agent received commission of Rs. 1596 at a rate of 12%. Each bicycle sold for the sum of Rs. 950. Determine how many bicycles the agent has sold.

(05)

(20)

- 3. A commission agent earns 12% commission on sales up to Rs. 30000 and 15% commission on sales above Rs. 30000. His monthly sales are 67,000; calculate his commission.
- 4. Find the compound Interest of10 years of Rs. 10000 when rate of interest is 8% annually
- Q.4. The Furniture dealer want to earn 25% profit after giving 15% discount on chair buying at Rs, 340 (15)
- (A) each. Calculate the Marked price of a chair.

OR

(B) Calculate the value of an ordinary annuity with a Rs. 3000 periodic payment, compounded semiannually 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.