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BACHELOR OF COMMERCE (B.COM)
EXAMINATION: DECEMBER- 2024
FIRST SEMESTER

Subject: Business Mathematics (BCOM23-103/BCOM24-103)

Date: 05/12/2024

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. An agent made Rs. 7000 by charging a 10% commission on sales then sales value.....
 - a) 7000
 - b) 700
 - c) 70000
 - d) 70
2. S.I. for Rs. 12500 for 3.5 years with 12.5% is
 - a) 5468.75
 - b) 54.6875
 - c) 546.875
 - d) 54687.5
3. The sum of all periodic payments along with the interest is called
 - a) Accumulated amount
 - b) Annuity
 - c) True value
 - d) periodic payments
4. is the fresh approach to digital investing that engages clients online.
 - a) Virtual brokers
 - b) Brokers at a discount
 - c) Brokers
 - d) Complete brokers
5. Selling Price = Cost + ...
 - a) Markup
 - b) Discount
 - c) Cost price
 - d) Commission
6. Annual P&L Statement is record in company .
 - a) Profit and Loss
 - b) Profit and Legacy
 - c) Price and Loss
 - d) Permanent cost and Low cost
7. Simple or complex partnerships are both in business .
 - a) possible
 - b) impossible
 - c) Not possible
 - d) May be possible

(B) State whether the following statement are true or false (any 5) (05)

1. A broker is a representative who connects the buyer and seller .
2. Spending and the bank balance are inversely related.

3. Selling Price = Cost + Markup
4. Monthly Installments Equated is called as EMI.
5. Net Asset Value is N.A.V.
6. Reciprocal Ratio If $x:y$ is a ratio, then $y:x$

Q.2. (A) In three mopeds selling through agent for Rs. 20000, Rs. 16800 & last one Rs. 15000 respectively. The 15% & 12% commission on 1st & 2nd. If that agent received average 14% in selling three mopeds, calculate the commission on third moped selling. **(20)**

OR

(B) Pratik is aware that, in 18 years, his child's education will cost Rs. 40,000. How much would you need to deposit right now to meet his objective if the quarterly compound interest rate on your account is 4%?

Q.3. (A) Calculate the profit or loss on the 800 bottle sell when shopkeeper sold 600 bottles at 20% profit and the remaining with 25% loss. **(10)**

(B) Solve (Any 2) **(05)**

1. The total of two numbers in the ratio 7:8 is 195. Find the numbers.
2. How many days would it take 20 men to finish the same work that 35 men could finish in 8 days?
3. Mr. Ghatpande dedicated Rs. 20000 in bank with 15% interest to give the economical help to students as scholarship every year. Calculate the amount to be given to needy students yearly.
4. The Furniture dealer wants to earn 25% profit after giving 15% discount on chair buying at Rs. 340 each. Calculate the Marked price of a chair.

Q.4. (A) Mr. Dani takes a loan of Rs. 15,00,000 from a bank for a period of 20 years at 7.5% with reducing balance. Every month the E.M.I. consists of principal component and interest component. Calculate the EMI of first three months with reducing balance. **(15)**

OR

(B) What is commission? Duties of a Commission Broker in new era.
