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BACHELOR OF BUSINESS ADMINISTRATION (B.B.A.)
EXAMINATION: MAY- 2024
SEMESTER - III

Sub.: Business Mathematics (BBA22-311)

Date : 25/05/2024

Total Marks : 60

Time: 2.00 pm to 4.30pm

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

Q. 1. Choose the most appropriate option. (05)

1. 20 % of 20,000 =
 - a) 4000
 - b) 40
 - c) 4000
 - d) 400

2. is a sum of money set aside with the intention of accruing a specific amount over a predetermined period of time through regular, equal installments.
 - a) sinking fund
 - b) fund
 - c) valuable fund
 - d) capital fund

3. The duplicate ratio of 3:2 is.....
 - a) 6:4
 - b) 5 : 2
 - c) 9 ; 4
 - d) 6 ; 1

4. Tata 's annual expenses, including cost of goods sold, come to Rs. 5,00000.However, the annual revenue is Rs. 20,00000. Then the sales percentage.....
 - a) 25%
 - b) 28%
 - c) 5%
 - d) 15%

5. In a mixture of 63 litres, the ratio of milk and water is 5:2. How much water must be added to this mixture to make the ratio 3:2?
 - a) 12 litres
 - b) 20 litres
 - c) 10 litres
 - d) 18 litres

Q. 2. State True / False (05)

1. The time of the beginning of the first payment period to the end of the last payment period is called as term of annuity
 - a) True
 - b) False

2. Commission is always paid on Selling price
 - a) True
 - b) False

3. Ratios of Liquidity. Liquidity ratios determine a company's capacity to use its fast or current assets to settle its short-term debts
 - a) True
 - b) False

4. Componendo and dividendo – If $a : b = c : d$, then $a + b : a - b = c + d : c - d$
 - a) True
 - b) False

5. At same time Profit and Loss may be in Business .
 - a) True
 - b) False

Q. 3. Write Short notes on (Any Three) (15)

- Abhay spends 60% of his monthly salary .Find his monthly income if he saved Rs. 20,928 in a month.
1. Find the principal when sum of money doubles itself in 6 years. Also estimate rate of Simple Interest.
 2. An agent made Rs. 7000 by charging a 10% commission on sales. Discover the sales value.
 3. Sayali loses 4% when she sells a cell phone for Rs. 15500. Find the amount she paid for it using the profit and loss calculation.
 4. The monthly price of electricity has gone up by 25%.How much should a family reduce down on its electricity use in order to maintain the same level of electricity costs?

Q. 4. Answer in detail (Any Two) (20)

1. A dining table of cost Rs. 5000 is purchased on installment basis under five equal annual installments including compound interest at 10 % p.a. Calculate the amount of installment.
2. A makeup item used to cost Rs. 1000, but now it costs Rs. 1500. Calculate the price increase as a percentage.
3. 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?
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. 5. Case study (15)

On January 25, 2007, Mr.Mohan borrowed Rs. 12,000 from Mr. Rohan at 9% interest. The principle and interest are due on August 10, 2007. Determine the interest and total sum that Mr. Mohan has paid.

Question

- 1) Estimate proper S.I.
- 2) Count the total number of Days.
- 3) Estimate the Amount.