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BACHELOR OF BUSINESS ADMINISTRATION (B.B.A.) (071)
B.Sc IN BUSINESS ADMINISTRATION(B.Sc.BA) (755)

EXAMINATION: DECEMBER - 2025

SEMESTER - III

Sub.: Business Mathematics (BBA22-311/BBA23-312/BBA24-312/BSBA24-24-312)

Date : 24/12/2025

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. If a number increases from 250 to 300, the percentage increase is _____
a) 16% b) 20%
c) 25% d) 30%
2. Ratio of 3 hours to 30 minutes is _____
a) 1 : 3 b) 3 : 1
c) 6 : 1 d) 1 : 6
3. Simple interest on ₹10,000 at 8% p.a. for 3 years = _____
a) Rs. 2,400 b) Rs. 2,800
c) Rs. 3,000 d) Rs. 3,200
4. Amount at compound interest on ₹5,000 at 10% p.a. for 2 years is _____
a) Rs. 5,500 b) Rs. 6,000
c) Rs. 6,050 d) Rs. 6,100
5. If a commission agent gets ₹1,200 at 4% rate, total sales = _____
a) Rs. 24,000 b) Rs. 30,000
c) Rs. 32,000 d) Rs. 48,000

Q. 2. State True / False (05)

- Commission is always paid by the buyer.
a) True b) False
- Annuity is a series of equal payments made at equal time intervals.
a) True b) False
- Simple Interest is calculated on principal only.
a) True b) False
- In proportion, product of extremes equals product of means.
a) True b) False
- Percentage is a ratio taken per hundred.
a) True b) False

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

1. Ratio – Definition and Types
2. Profit and Loss – Basic Concepts
3. Commission and Brokerage
4. Compound Interest
5. Applications of Ratio & Percentage in Business

Q. 4. Answer in detail (Any Two)

(20)

1. A shopkeeper buys an article for ₹850 and sells it for Rs.1,000. Find profit and profit percentage.
2. Find the amount and compound interest on ₹3,000 at 8% p.a. for 3 years.
3. A retail clothing store purchases branded shirts at Rs. 750 each. The marked price (MP) is kept at 40% above cost price. During a festive sale, the store gives a flat discount of 20% on the marked price.
The store also hires a sales agent who earns a 5% commission on the selling price of total shirts sold. During the week, the store sells 200 shirts during the offer period. Find Selling Price after discount & Profit or Loss per shirt.
4. A commission agent charges 5% commission on total sales of ₹80,000. Find the commission and net proceeds.

Q. 5. Case study

(15)

A company appoints multiple agents to sell its new electronic product. Agent A sold goods worth Rs. 6,00,000 and Agent B sold goods worth Rs. 4,00,000. The company offers 6% commission and 1% bonus if sales exceed Rs. 5,00,000. Agents receive their payment after deducting brokerage of 2% from gross sales. The company also invests Rs. 5,00,000 earned from sales in a bank FD at 8% compound interest for 2 years.

Question

1. Calculate the following for both agents.
 2. Find the total expenditure of the company on commission and bonus paid to both agents.
 3. Calculate the maturity amount of the company's FD using compound interest for 2 years and interpret the results.
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