

TILAK MAHARASHTRA VIDYAPEETH, PUNE
BACHELOR OF BUSINESS ADMINISTRATION (B.B.A.)

EXAMINATION: DECEMBER- 2024

SEMESTER - III

Sub.: Business Mathematics (BBA22-311)

Date : 18/12/2024

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. The percent decline if Akash's profit dropped from 28,000 to 26,880 is%
 - a) 4%
 - b) 40%
 - c) 5%
 - d) 6%
2. $6 : 15 :: 2 : X$
 - a) 5
 - b) 50
 - c) 0.5
 - d) 45
3. Discount = Marked Price –
 - a) Selling Price
 - b) price
 - c) Cost Price
 - d) Discounted price
4. Ms. Anagha purchased Rs. 14,00,000 for a property, which she then sold for Rs. 14,72,000 instead. Then will have
 - a) Profit = 72000
 - b) Loss = Rs. 72000
 - c) Profit = 7200
 - d) Loss = 2700
5. Mr. Shankar borrows Rs. 500 for 2 years at 10% interest. Then S.I. = ...
 - a) Rs. 100
 - b) Rs. 500
 - c) Rs. 150
 - d) Rs. 600

Q. 2. State True / False (05)

1. When cost price is more than selling price then there is profit.
 - a) True
 - b) False
2. Simple Interest is always less than Compound Interest .
 - a) True
 - b) False
3. The sum of all periodic payments of an annuity is called its present value.
 - a) True
 - b) False
4. The interest which is calculated on the amount in the previous year is called compound interest.
 - a) True
 - b) False
5. A salesman gets 4% commission in his sales means for Rs. 4 on Rs 100
 - a) True
 - b) False

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

1. A salesman gets 4% commission in his sales. If in month of July he received Rs. 980 as commission. Find his sales in month of July.
2. When a camera sold by Pratik at Rs. 1674 there is 7% loss then calculate C.P.
3. Consider a company that has three branches, A, B and C, operating in small, medium-

sized and large towns. Suppose the branches have the following performances during a month: Estimate which department is running well.

	A (Rs.)	B (Rs.)	C (Rs.)
Sales	12500	46500	63200
Expenses	9550	38750	48850
Profit	2950	7750	14350

4. An agent sold products for Rs. 30,000 and sent Rs. 27125 to the owner as payment after subtracting his commission. Find out how much the agent charges in commission.
5. Calculate S.I. for Rs. 12500 for 3.5 years with 12.5% .

Q. 4. Answer in detail (Any Two)

(20)

1. Mr.Avinash wants to invest some amount for 4 years in a bank. Bank X offers 8% interest if compounded half yearly while bank Y offers 6% interest if compounded monthly. Which bank should Mr.Avinash select for better benefits?
2. Pratik's company wishes to set aside a certain sum at the end of each year to create a sinking funds . The sum amount should to be 10 lakhs in 10 years at 12 % p.a. ,find the sum amount to be set aside each year by the company?
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. How many days would it take 20 men to finish the same work that 35 men could finish in 8 days?

Q. 5. Case study

(15)

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

Question

- 1) Estimate new cost price of bottle .
- 2) Decide the usage.
- 3) Decide profit or loss in the Business.
