

BC--102
B.Com 1st year
Examination – June 2019
Business Mathes
Time: Three Hours

Maximum Marks :40

Note: i) Attempt all questions.(Ques.no.1 is Compulsory)

Section–A

- Q.1 Choose the correct answer (1x5) = 5
1. What percentage of a day is 3 hours?
(a) 12.5% (b) 22.5% (c) 12% (d) 12.25%
 2. Arithmetic mean of 9, 8, 27, 36, 45 will be
(a) 18 (b) 36 (c) 25 (d) 45
 3. If $2x + 20 = 0$ then the value x will be
(a) -20 (b) -10 (c) 20 (d)
 4. (Cost price - selling) price is equal to
(a) discount (b) marked price (c) profit (d) loss
 5. The simple interest of Rs.500 borrowed for 4 years @ 10% per annum is
(a) Rs.720 (b) Rs.200 (c) Rs.44 (d) Rs.440

Section – B

Short answer type question (attempt any five) 5 x 2 =10

Q.2 What do you understand by invoice? Give the name of the types of Invoice?

Or

(2)

In a mixture of 70 litres the ratio of milk and water is 4:1. If 14 litres of water is added to mixture, then what will be new ratio?

Q.3 Is an agent entitled to commission? Write in brief?

or

solve by comparison method

$$x - y = 4$$

$$2x - 3y = 2$$

Q.4 write a note on various types of matrices?

or

Find the value of (A+B) if:

$$\begin{bmatrix} 1 & 3 \\ 7 & 9 \end{bmatrix} + \begin{bmatrix} 8 & 9 \\ 5 & 5 \end{bmatrix}$$

Q.5 Find the value of $\frac{88.93}{2.344}$.

or

Calculate the compound interest on Rs 1500 at 4% for 3 years.

Q.6 Write a note on role and importance of Mean in business?

or

Find the arithmetic mean for following data?

Roll No	1	2	3	4	5	6	7	8	9	10
Marks	23	45	65	44	39	25	24	26	28	77

Section – C

Long answer type question (attempt any five) 5 x 5 =25

Q.7 A bag contains one rupee, fifty paise and twenty five paise coins in the ratio of 2:3:4. If their total value is 210. Find how many coins are there in the bag?

Or

(3)

How many pens an agent needs to sell at Rs 7.55 to earn a commission worth Rs 75.50 at the rate of 5%?

Q.8 Find the two numbers whose sum is 128 and difference is 32?

Or

Explain the method of solving simultaneous equation with example?

Q.9 Solve the following by elimination method:

$$3x - 4y + 22 = 0$$

$$4x - 3y + 13 = 0$$

Or

What is matrix? Explain its role in statistics?

Q.10 A certain sum at simple interest becomes Rs 1200 in 2 years and Rs 1400 in 4 years? Find the principal and interest per annum?

Or

What do you understand by compound interest? Distinguish between simple and compound interest

Q.11 If a commodity is sold at Rs 120, the profit is 15%. If the commodity is sold at Rs 75, find the percentage of profit or loss?

Or

Calculate arithmetic mean inclusive and exclusive class intervals?

Class	:	1-6	7-12	13-18	19-24
Frequency	:	16	14	10	20