B.Com. Part–II (Semester—III) Examination

BUSINESS MATHEMATICS

Time : Three Hours]   [Maximum Marks : 80

Note :— (1) There are **three** Sections (A, B & C).

   (2) Section-A : **20** marks, Section-B : **20** marks, Section-C : **40** marks.

   (3) All questions are compulsory.

   (4) Section-B and Section-C comprises of short and long questions respectively, one each from respective unit having internal choice from the same unit.

   (5) Show necessary working notes wherever necessary.

SECTION—A

Note :— (1) Answer the **ALL** questions.

   (2) Choose the correct answer and rewrite it.

1. 4 C.M. of 11, 13, 19 _____.

   (a) 11   (b) 13

   (c) 143   (d) 2717

2. G.C.D. of 44, 54, 87 _____.

   (a) 1   (b) 2

   (c) 3   (d) 4

3. If x – 4 = 6 the value of x will be _____.

   (a) 1.5   (b) 2.0

   (c) 10   (d) 24

4. Sum of two numbers is 8 and difference is 4. The numbers are _____.

   (a) 4, 4   (b) 5, 3

   (c) 7, 1   (d) 6, 2

5. 5% on 4.45 is _____.

   (a) 222.5   (b) 22.25

   (c) 2.225   (d) .2225

6. 40% of a number added to 42 gives the number, the number is _____.

   (a) 56   (b) 70

   (c) 84   (d) 98

7. Cost price is Rs. 1,920 is sold for Rs. 1,680. The rate of discount is _____.

   (a) 12.50%   (b) 1.25%

   (c) .125%   (d) .0125%

8. A 5.5% commission on the turnover is Rs. 2,750, the turnover is _____.

   (a) Rs. 151.25   (b) Rs. 500

   (c) Rs. 5,000   (d) Rs. 50,000

9. The average of daily wages of 5 workers is Rs. 40 and other 3 workers is Rs. 48. The average wages is _____.

    (a) Rs. 41   (b) Rs. 42

    (c) Rs. 43   (d) Rs. 44

10. The average of 15, 10, 14, 13 _____.

    (a) 11   (b) 12

    (c) 13   (d) None of these

11. Correct formula is _____.

    (a) S.P. = C.P. + Loss   (b) S.P. + Loss %

    (c) C.P. = S.P. – Profit   (d) C.P. = S.P. + Profit%

12. The cost price and selling price of a pen is Rs. 100 and Rs. 110 respectively, the profit % is _____.

    (a) 8%   (b) 10%

    (c) 12%   (d) None of these

13. Simple Interest formula is _____.

    (a) S.I. $= \dfrac{P + N + R}{100}$ (b) S.I. $= \dfrac{P - N - R}{100}$

    (c) S.I. $= \dfrac{P + N - R}{100}$ (d) S.I. $= \dfrac{P \times N \times R}{100}$

14. The simple interest of Rs. 5,000 @ 10% for one year is _____.

    (a) Rs. 50   (b) Rs. 500

    (c) Rs. 550   (d) Rs. 450

15. Compound Interest formula is _____.

    (a) C.I. $= P\left[1 + \dfrac{R}{100}\right]^{N} - P$ (b) C.I. $= P\left[1 + \dfrac{R}{100}\right]^{N} + P$

    (c) C.I. $= P\left[1 - \dfrac{R}{100}\right]^{N} - P$ (d) C.I. $= P\left[1 - \dfrac{R}{100}\right]^{N} + P$

16. Compound interest of Rs. 400 at 6% p.a. for two years is _____.

    (a) Rs. 48   (b) Rs. 49.44

    (c) Rs. 53.44   (d) Rs. 449.44

17. In a class of 42 students, 6 students are girls, the ratio of boys and girls in class is _____.

    (a) 7 : 1   (b) 7 : 6

    (c) 6 : 7   (d) 6 : 1

18. The ratio between prices of two cows costing Rs. 1,500 and Rs. 1,000 is _____.

    (a) 3 : 2   (b) 2 : 3

    (c) 5 : 2   (d) 5 : 3

19. If 4 : 5 :: x : 20, x is _____.

    (a) None   (b) 1

    (c) 16   (d) 25

20. A man earns Rs. 72 a day, for how many days must he work to earn Rs. 1,512 _____.

    (a) 16 days   (b) 21 days

    (c) 26 days   (d) 31 days   20×1=20

SECTION—B

1. Find out the L.C.M. of 69, 78, 87.   4

OR

The sum of two numbers 250. Their difference is 50. Find the numbers.   4

2. Find the values of 64 percent of 150.   4

OR

Bombay dyeing allows 7.5% discount on the cloth purchased. Sarthak purchases cloth worth Rs. 10,320. How much money will he pay ?   4

3. Raj average of 13 numbers in 13. If the average of first 7 numbers be 7. Find the average of last six numbers.   4

OR

A purchased a cow for Rs. 12,000 and sold it for Rs. 10,900. Find out Profit or Loss.   4

4. If Shreyash deposit Rs. 1,00,000 in a saving account for 2 years at the rate of 10% p.a. How much interest will he get at the end of the 2 years ?   4

OR

Find out compound interest on Rs. 4,000 at 10% p.c.p.a for 3 years.   4

5. Divided Rs. 8,320 in the ratio 8 : 5.   4

OR

If the cost of 32 chairs is Rs. 14,400. How many chairs can be bought for Rs. 30,600 ?   4

SECTION—C

1. Find out L.C.M. and H.C.F. of 144, 216, 288.   8

OR

The sum of the two numbers is 276. Greater number is greater than thrice the smaller number by 12. Find the numbers.   8

2. A milk man has two kinds of mixture of milk and water. The first mixture contains 15% of water and the second 10% water. One dealer mixes 90 litres of the first mixture with 210 litres of second. Find the percentage of water in the mixture.   8

OR

A publisher sells 80 books of Business Mathematics for Rs. 6,144. If the list price of the books be Rs. 96. Calculate the rate of trade discount.   8

3. The average age of 40 students of a class is 16 years 5 students of average age 14.8 years left and 3 students of 24, 17.5 and 19.5 years respectively were admitted. Find the average age of students of the class.   8

OR

A purchase an article for Rs. 1,050 and sold it for Rs. 1,197. B also purchased similar article for Rs. 960 and sold it for Rs. 1,104. Find who had a better profit percentage.   8

4. The amount with simple interest of Rs. 4,000 at a certain rate of interest is Rs. 5,000 in 5 years. Find out the rate of interest per annum.   8

OR

Find out compound interest on Rs. 90,000 at the rate of 3.75% per annum for 3 years.   8

5. Divide Rs. 7,000 among A, B and C. So that A and B share is 2 : 3 and B and C share is 4 : 5.   8

OR

12 men and 20 women working 10 hours a day. Can finish a piece of work in 35 days. In how many days 12 men and 20 women can do the same work by working 7 hours a day.   8