

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 & Section-C comprise of short and long questions respectively, one each from respective unit halving internal choice from the same unit.

(5) Show necessary working notes wherever necessary.

SECTION—A

N.B. :—(1) Answer **ALL** the questions.

(2) Choose the correct answer and rewrite it.

1. L.C.M. of 36, 72 _____ .
(a) 70 (b) 72
(c) 84 (d) 71
2. H.C.F. of 24, 84 _____ .
(a) 14 (b) 12
(c) 18 (d) 13
3. If $3x + 4 = 2x + 6$ the value of x will be _____ .
(a) 4 (b) 3
(c) 2 (d) 13
4. Sum of two numbers is 20 and difference is 6. The Numbers are _____ .
(a) 13, 7 (b) 12, 7
(c) 11, 5 (d) 13, 5
5. If the cost of a pen worth Rs. 50 is increased by Rs. 25. The rate of increase is _____ .
(a) 25% (b) 30%
(c) 75% (d) 50%

6. $\frac{3}{4}$ The convert the percentage is _____.
- (a) 75% (b) 80%
- (c) 65% (d) None of these
7. Cost price is Rs. 2,000 is sold for Rs. 1,500. The rate of discount is _____.
- (a) 35% (b) 15%
- (c) 22% (d) 25%
8. 12% commission on the sale of goods worth Rs. 20,000 is _____.
- (a) Rs. 2,200 (b) Rs. 2,300
- (c) Rs. 2,400 (d) Rs. 2,500
9. Daily wages of seven workers are Rs. 250, Rs. 350, Rs. 370, Rs. 400, Rs. 450, Rs. 460, and Rs. 480. Average wages is Rs. _____.
- (a) 394.28 (b) 390.24
- (c) 392.28 (d) 393.22
10. The Average of 25, 35, 45, 10 is _____.
- (a) 27.85 (b) 28.75
- (c) 29.75 (d) 30.28
11. Profit formula is _____.
- (a) S.P. — C.P. (b) C.P. — S.P.
- (c) S.P. — Profit (d) Above (a) and (b)
12. Cost Price is Rs. 150 and Selling Price is Rs. 200. The profit % is _____.
- (a) 34.35% (b) 35.45%
- (c) 36.34% (d) 33.33%
13. Loss percentage formula is _____.
- (a) $\frac{\text{Profit}}{\text{S.P.}} \times 100$ (b) $\frac{\text{C.P.}}{\text{S.P.}} \times 100$
- (c) $\frac{\text{Loss}}{\text{C.P.}} \times 100$ (d) Above (a) and (b)

14. The Simple Interest of Rs. 10,000 @ 12% for one year is Rs. ____.
- (a) 1,200 (b) 1,400
(c) 1,600 (d) 1,800
15. Calculate S.I. = 100, P = 500 N = 2 years R = ?
- (a) 20% (b) 25%
(c) 15% (d) 10%
16. The Compound Interest formula is ____.
- (a) $C.I. = P \left[1 - \frac{N}{100} \right]^R + P$ (b) $C.I. = P \left[1 + \frac{R}{100} \right]^N$
(c) $C.I. = P \left[1 + \frac{R}{100} \right]^N - P$ (d) None of these
17. Compound Interest of Rs. 4,000 @ 10% P.A. for three years is Rs. ____.
- (a) 1330 (b) 1324
(c) 1340 (d) 1312
18. In a class of 52 students, 12 students are girls; the Ratio of boys and girls in class is ____.
- (a) 10 : 3 (b) 10 : 4
(c) 3 : 11 (d) 10 : 5
19. The ratio equivalent to 5 : 3 is ____.
- (a) 9 : 27 (b) 25 : 15
(c) 25 : 12 (d) 9 : 25
20. Fourth proportional of 12, 24 and 48 is ____.
- (a) 98 (b) 99
(c) 96 (d) 97

20×1=20

SECTION—B

1. Find out the L.C.M. of 80, 100, 112.

4

OR

The sum of ages of father and his daughter is 130 and difference between their ages is 30. Find the age of father and age of daughter.

4

2. There are 76% girls in a certain college. If the total number of children in the college is 1250. What is the number of girls in college? 4

OR

Market price of Tab is Rs. 12,000. It is sold for Rs. 9,000 after allowing certain discount. Find out rate of discount. 4

3. Find out the average of 20, 40, 70, 90. 4

OR

A purchase 150 Notebooks for Rs. 250 and sells them at Rs. 2.50 each. Find out the Profit & Loss. 4

4. If Santosh deposits Rs. 1,50,000 in a saving account for 3 years at the rate of 12% P.A. Calculate the Interest Amount. 4

OR

Find out compound Interest of Rs. 4,000 at interest rate of 3% p.a. for 2 years. 4

5. Divide Rs. 12,500 in the ratio 4 : 6. 4

OR

Find out the compound of ratio of

3 : 6, 7 : 12, and 20 : 25. 4

SECTION—C

1. Find out H.C.F. & L.C.M. of 140, 180, 90. 8

OR

Calculate the X value,

$$6 + 4(x - 2) = 8x - 12.$$

2. A student of B.Com final scored marks as follows :

B.Com.-I, 75% of 700 marks. B.Com.-II 65% of 700 marks. Find out the percentage of marks he should score out of 600 marks in B.Com. Final, if he wants to score 66% marks in percentage taking B.Com.-III together. 8

OR

If discount of 15% on list price of Rs. 35,500 is given by trader find out the selling price. 8

3. I purchased a home for Rs. 7,00,000. If commission was charged at 4%, calculate the Amount of commission and how much I have to pay for this Home. 8

OR

A car is purchased for Rs. 80,000 but it has been found defective and hence it is sold for Rs. 60,000. Find out Profit & Loss percentage. 8

4. At what rate should Rs. 1,000 be invested so as to get Rs. 250 as Interest in $5\frac{1}{2}$ years. 8

OR

The amount with compound interest of a certain principal at 3% p.a. for two years is Rs. 28,550. Find out the Principal Amount. 8

5. A, B and C are cricket players. Their ratio is $A : B = 7 : 4$, and $B : C = 4 : 3$, their total runs were 420. Find out the runs of each player. 8

OR

The sum of present ages of 3 persons is 234 years. Ten years ago their ages were in the ratio 8 : 12 : 14.

Find their present Ages. 8