



K21U 2125

Reg. No. :

Name :



III Semester B.B.A. (TTM)/B.B.A./B.B.A. (RTM)/B.B.M. Degree (CBCSS – Sup./Imp.)
Examination, November 2021
(2015 – '18 Admission)
General Course
3A12 BBA/BBA (TTM)/BBA (RTM)/3A11BBM : NUMERICAL SKILLS

Time : 3 Hours

Max. Marks : 40

SECTION – A

Answer the 4 questions. Each question carries $\frac{1}{2}$ mark. (4× $\frac{1}{2}$ =2)

1. Arrange the following ratios in the ascending order $\frac{2}{3}, \frac{3}{5}, \frac{7}{9}$.
2. Solve $(x - 2)(x - 5) = 0$ for x.
3. Find the 4th proportion to 3, 6, 7.
4. What is rational numbers ?

SECTION – B

Answer any 4 questions. Each question carries 1 mark. (4×1=4)

5. Find the average of the quantities 15, 52, 41, 23, 65, 11, 25, 68.
6. 10 kg of a variety of rice at Rs. 30 per kg. is mixed with 6 kg. of an inferior variety at Rs. 20 per kg. Find the cost per kg. of the mixture.
7. Find the amount due for a sum of Rs. 500 after 2 years @ 8% interest (simple).
8. Write the determinant of $A = \begin{bmatrix} 3 & -6 \\ 1 & 2 \end{bmatrix}$.
9. Write down all the subsets of the set $A = \{f, g, h\}$.
10. An amount is divided between Tom and James in the ratio 3:4. Tom gets 1200. How much did James get ?

P.T.O.



SECTION – C

Answer **any 6** questions. **Each** question carries **3** marks. (6×3=18)

11. Calculate the total interest on Rs. 500 for 73 days. Rs. 720 for 14 weeks and on Rs. 900 for 3 months, all at 6% per annum.
12. The 3rd and the 8th term of a G.P. are 4 and 128 respectively. Find the G.P.
13. A machine costs Rs. 10,000. Calculate its scrap value and at the end of 10 years, depreciation on the reducing installment system being charged at 10% p.a.
14. Solve the quadratic formula $x^2 - 5x - 14 = 0$.
15. Find the natural numbers whose sum is 30 and whose difference is 4.
16. If $A = \{a, b, c\}$, and $B = \{2, 3\}$ and $C = \{3, 5\}$ find :
 - i) $(A \cup B \cup C)$
 - ii) $((B \cap C) \times A)$
 - iii) $A \times A$
17. The 6th term of an AP is 6 and the 16th term is 14. What is the 27th term ?
18. Solve : $y = 3(x + 1)$
 $4x = y + 1$.

SECTION – D

Answer **any two** questions. **Each** question carries **8** marks. (2×8=16)

19. In mixing tea one kg in every 100 kg is wasted. In what proportion must a dealer mix teas which cost him Rs. 50 and Rs. 40 per kg. respectively so as to gain 25% on cost, by selling the mixture at Rs. 54.30 ps.

20. Find the inverse of A where $A = \begin{bmatrix} 5 & 1 & -1 \\ 2 & -4 & 2 \\ 3 & 1 & -1 \end{bmatrix}$.

21. Out of 1200 students who appeared for B.Com examination, 650 failed in Accountancy, 600 failed in B O, and 540 failed in Costing, 350 failed in both Accountancy and B O, 450 failed in both Accountancy and Costing. 200 failed in B O and Costing, 30 failed in all subjects. How many students passed all three subjects.
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