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K19U 2552

Reg. No. : .....

Name : .....

III Semester B.B.A./B.B.A. (TTM) / B.B.A. (RTM)/ B.B.M. Degree  
(CBCSS-Reg./Suppl./Imp.) Examination, November - 2019  
(2014 Admn. Onwards)

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.  $(4 \times \frac{1}{2} = 2)$ 

1. Divide 40 into two parts such that  $\frac{1}{4}$ th of one part is  $\frac{3}{8}$ th of the other.
2. How much time will it take for an amount of Rs. 450 to yield Rs. 81 as interest at 4.5% per annum of simple interest?
3. Find the fourth proportion of 10, 20, 30
4. Which is the two digit smallest prime number?

**SECTION-B**Answer any 4 questions. Each question carries 1 mark.  $(4 \times 1 = 4)$ 

5. Find the solution X to the equation  $X+18=67$ .
6. Solve  $(x+1)(x-3)=0$ .
7. Find the simple interest on Rs. 20,000 at the rate of 6.5% for 10 years 8. Find the simple interest on Rs. 10,000 at the rate of 5% for 5 years. Also find the total amount after this time.
8. Find the average of the first 7 multiples of 7.
9. If the cost of 10 m silk cloth is Rs.1,300, find the cost of 3m cloth.
10. Find the solution n to the equation  $n+11=84$

P.T.O.



## SECTION-C

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

11. Solve for  $x$ :  $x^2 - 3x - 10 = 0$  using the quadratic formula.
12. A sum of Rs. 5000 is deposited by Mr. X in a finance company under quarterly interest scheme. Find the total interest earned by him in 5 years at 12% per annum.
13. In a consumer survey, 85% of those surveyed liked at least one of three products: 1, 2, and 3. 50% of those asked liked product 1, 30% liked product 2, and 20% liked product 3. If 5% of the people in the survey liked all three of the products, what percentage of the survey participants liked more than one of the three products?
14. There are 70 students in Sociology or History or Geography. Exactly 40 are in Sociology, 30 in Geography, 35 in History and 15 in all three courses. How many students are enrolled in exactly two of the courses? Sociology, Geography and History.
15. Calculate the compound interest on a sum of Rs. 25,000 after 3 years at the rate of 12% per annum.
16. A sum of money is to be distributed among P, Q, R with ratio 5:4:1. If R gets Rs. 3500, what is the share of P and Q?
17. What do you mean by depreciation?
18. Find the final grades and their averages for practical test, theory tests, assignments, and presentation for 3 pupils by using Multiplying Matrices method with the help of below given information. Weightage for practical tests are 50% of the grade, theory tests 20, assignments 10%, and presentation 20%.

Student	Practical Tests	Theory Tests	Assignments	Presentation
ABC	92	100	89	80
XYZ	72	85	80	75
STU	88	78	85	92



**SECTION - D**

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

19. Find the sum of the first 10 terms of the following geometric progression:  
6, 36, 900, 4500,-----
20. Find the inverse of the matrix  
[ -1 3 -3 ]  
[ 0 -6 5 ]  
[ -5 -3 1 ]
21. In a survey of 500 students of a college, it was found that 49% liked watching football, 53% liked watching hockey and 62% liked watching basketball. Also, 27% liked watching football and hockey both, 29% liked watching basketball and hockey both and 28% liked watching football and basket ball both. 5% liked watching none of these games.
- a) How many students like watching all the three games?
  - b) Find the ratio of number of students who like watching only football to those who like watching only hockey.
  - c) Find the number of students who like watching only one of the three given games.
  - d) Find the number of students who like watching at least two of the given games.
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