



K23U 2557

Reg. No. :

Name :

V Semester B.A./B.A. Afsal-UI-Ulama/B.Sc./B.Com./B.T.T.M./B.B.A./B.B.A.-
T.T.M./B.B.A.-A.H./B.C.A./B.S.W./B.M.M.C. Degree (CBCSS – OBE –
Regular/Supplementary/Improvement) Examination, November 2023
(2019 – 2021 Admissions)
GENERIC ELECTIVE COURSE
5D02MAT : Quantitative Arithmetic and Reasoning

Time : 2 Hours

Max. Marks : 20

SECTION – A

Answer **any 4** questions out of 5 questions. **Each** question carries **1** mark.

1. Divide 648 in the ratio 2 : 3 : 4.
2. Find the average of all numbers between 1 and 50 that are multiples of three.
3. A, B and C can do a piece of work in 24, 6 and 12 days respectively. Working together, in how many days will they complete the work ?
4. A car moves at a speed of 108 kmh. What is its speed in metres per second ?
5. A vendor bought bananas at 6 for Rs. 10 and sold them at 4 for Rs. 6. Find his loss or gain percentage. **(1×4=4)**

SECTION – B

Answer **any 6** questions out of 10 questions. **Each** question carries **2** marks.

6. The average age of a class of 39 students is 15 years. If the age of the teacher is included, then the average age increases by 3 months. Find the age of the teacher.
7. A man can row upstream at 7 km per hour and downstream at 10 km per hour. Find man's rate in still water and the rate of current.
8. A train 150 m long is running with a speed of 68 km per hour. In what time will it pass a man who is running at 8 km per hour in the same direction in which the train is running ?

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9. A and B can do a work in 8 days, B and C can do the same work in 12 days and they three together can do it in 6 days. How many days will it take to finish the work if A and C are employed ?
10. Excluding stoppages the speed of a bus is 54 km per hour and including stoppages it is 45 km per hour. For how many minutes does the bus stop per hour ?
11. If 15 men working 9 hours a day can reap field in 16 days, in how many days will 18 men reap the field, working 8 hours a day ?
12. A shopkeeper sold a TV set for Rs. 17,940 with a discount of 8% and earned a profit of 19.6%. What would have been the percentage of profit earned if no discount was offered ?
13. The cost price of an article is 64% of the market price. Calculate the gain percent after allowing a discount of 12%.
14. Find the angle between the hour hand and the minute hand of a clock when the time is 3.25.
15. What was the day of the week on January 26, 1950 ? **(2×6=12)**

SECTION – C

Answer **any one** question from this Section. **Each** question carries **4** marks.

16. The average temperature of the town in first four days of a month was 58 degrees. The average for the second, third, fourth and fifth days was 60 degrees. If the temperature of the first and the fifth days were in the ratio 7 : 8, then what was the temperature on the fifth day ?
17. If $5x^2 + 6y^2 - 13xy = 0$, then find $x : y$. **(4×1=4)**