



K24U 2976

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 2024  
(2019 to 2022 Admissions)

V Semester Integrated M.Sc. Degree (Regular/Supplementary/  
Improvement) Examination, October 2024  
(2020 Admission Onwards)

Generic Elective Course

5D02 MAT : QUANTITATIVE ARITHMETIC AND REASONING

Time : 2 Hours

Max. Marks : 20

PART – A

Answer any 4 out of 5 questions. Each question carries 1 mark. (4×1=4)

1. When a person sells two similar items, one at a gain of say  $x\%$ , and the other at a loss of  $x\%$ . Then find the loss percentage.
2. If  $a : b = 5 : 9$  and  $b : c = 4 : 7$ , then find  $a : b : c$ .
3. If a quarter kg of potato costs 60 paise, how many paise will 200 gm cost ?
4.  $x$  can do  $\frac{1}{4}$  of a work in 10 days,  $y$  can do 40% of the work in 40 days and  $z$  can do  $\frac{1}{3}$  of the work in 13 days. Who will complete the work first ?
5. If the speed of a boat in still water is  $u$  km/hr and the speed of the stream is  $v$  km/hr, then find the speed of upstream.

PART – B

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

(6×2=12)

6. Find the average of first 40 natural numbers.
7. The ratio between the present ages of P and Q is 5 : 7 respectively. If the difference between Q's present age and P's age after 6 yrs is 2, what is the total of P's and Q's present age ?
8. If a radio is purchased for Rs. 490 and sold for Rs. 485.50, find the loss percent.

P.T.O.



9. A mixture contains alcohol and water in the ratio 4 : 3. If 5 litres of water is added to the mixture, the ratio becomes 4 : 5. Find the quantity of alcohol in the given mixture.
10. If 36 men can do a piece of work in 25 hrs, in how many hrs will 15 men do it ?
11. A can do a certain job in 12 days. B is 60% more efficient than A. How many days does B alone take to do the same job ?
12. Peter can cover a certain distance in 1 hr 24 min by covering two third of the distance in 4 kmph and the rest at 5 kmph. Find the total distance.
13. A train is moving at a speed of 132 km/hr. If the length of the train is 110 m, how long will it take to cross a railway platform 165 m long ?
14. On what dates of July 2004 did Monday fall ?
15. How many times are the hands of a clock at right angle in a day ?

## PART – C

Answer **any 1** question out of 2 questions. **Each** question carries **4** marks. **(1×4=4)**

16. A bag contains 50 p, 25 p and 10 p coins in the ratio 5 : 9 : 4 amounting to Rs. 206. Find the number of coins of each type.
  17. A and B are two stations 390 km apart. A train starts from A at 10 am and travel towards B at 65 kmph. Another train starts from B at 11 am and travels towards A at 35 kmph. At what time do they meet ?
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