

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

PART-A

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

 $(4 \times 1 = 4)$

Max. Marks: 20

- 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.

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- 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)

- 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 ?