

K20U 1682

Reg. No. :

Name :

V Semester B.A./B.Sc./B.Com./B.B.A./B.B.A.T.T.M./B.B.A.R.T.M./B.B.A./ B.T.T.M./B.C.A./B.S.W./B.A. Afsal UI Ulama/B.B.A. (AH) Degree (CBCSS – Reg./Sup./Imp.) Examination, November 2020 (2014 Admn. Onwards) Open Course 5D 03 MAT : QUANTITATIVE ARITHMETIC AND REASONING

AND SU

LIBRARY

Time : 2 Hours

Max. Marks: 20

SECTION - A

All the first 4 questions are compulsory. They carry 1 mark each :

- 1. Find the average of first five multiples of 3.
- If 36 men can do a piece of work in 25 hours in how many hours will 15 men do it ?
- 3. A cyclist covers a distance of 750 m in 2 min 30 sec. What is the speed in km/hr of the cyclist ?
- 4. Find the value of 10C₂.

SECTION - B

Answer any 6 questions from among the 5 to 13. These questions carry 2 marks each :

5. If x : y = 3 : 4, find 4x + 5y : 5x - 2y.

- A book was sold for Rs. 27.50 with a profit of 10%. If it were sold for Rs. 25.75, then what would have been the percentage of profit or loss ?
- Worker A takes 8 hours to do a job. Worker B takes 10 hours to do the same job. How long should it take both A and B, working together but independently, to do the same job ?

P.T.O.

 $(4 \times 1 = 4)$

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- 8. The average of four consecutive even numbers is 27. Find the largest of these numbers.
- An aeroplane flies along the four sides of a square at the speeds of 200, 400, 600 and 800. Find the average speed of the plane around the field.
- 10. A train 100 m long is running at the speed of 30 km/hr. Find the time taken by it to pass a man standing near the railway line.
- 11. In how many ways can a cricket eleven be chosen out of a batch of 15 players ?
- 12. Find the angle of elevation of the sun, when the length of the shadow of a tree is $\sqrt{3}$ times the height of the tree.
- A clock is set right at 5 a.m. The clock loses 16 minutes in 24 hours. What will be the true time when the clock indicates 10 p.m. on 4th day ? (6×2=12)

SECTION - C

Answer any 1 question from the following questions. These questions carry 4 marks each :

- 14. The average of A, B, C is 45 kg. If the average weight of A and B be 40 kg and that of B and C be 43, find the weight of B.
- 15. What was the day of the week on 16th July 1776 ?

 $(1 \times 4 = 4)$