



K17U 1828

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.M./
B.T.T.M./B.C.A./B.S.W./B.A. Afsal-Ul-Ulama Degree (CBCSS – Reg./Sup./Imp.)

Examination, November 2017

(2014 Admission Onwards)

Open Course

5D03MAT : QUANTITATIVE ARITHMETIC AND REASONING

Time : 2 Hours

Max. Marks : 20

SECTION – A

Answer **all** the questions. **Each** question carries **one** mark.

1. If a radio is purchased for Rs. 490 and sold for Rs. 465.50, find the loss percent.

2. What is the average of first 5 multiples of 3 ?

3. If $\frac{x}{5} = \frac{y}{8}$, then find $(x + 5) : (y + 8)$.

4. Find the value of ${}^{10}C_3$.

(1×4=4)

SECTION – B

Answer **any 6** questions. **Each** question carries **two** marks.

5. If the wages of 6 men for 15 days be Rs. 2,100, then find the wages of 9 men for 12 days.

6. 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.

7. Rajeev's age after 15 years will be 5 times his age 5 years back. What is the present age of Rajeev ?

P.T.O.



8. There are two sections A and B of a class, consisting of 36 and 44 students respectively. If the average weight of section A is 40 kg and that of section B is 35 kg, find the average weight of the whole class.
9. Peter can cover a certain distance in 1 hr. 24 min. by covering two-third of the distance at 4 kmph and the rest at 5 kmph. Find the total distance.
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. A man can row upstream at 7 kmph and downstream at 10 kmph. Find man's rate in still water and the rate of current.
12. Find the angle between the hour hand and the minute hand of a clock when the time is 3.25.
13. In how many ways can the letters of the word 'APPLE' be arranged ? (6×2=12)

SECTION – C

Answer **any 1** question. **Each** question carries **four** marks.

14. At what percentage above the Cost Price must an article be marked so as to gain 33% after allowing a customer a discount of 5% ?
15. A man standing on the bank of a river observes that the angle subtended by a tree on the opposite bank is 60° . When he retires 36 m from the bank, he finds the angle to be 30° . Find the breadth of the river. (1×4=4)