K21U 4745

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/B.B.A. (AH) Degree CBCSS (OBE) – Regular Examination, November 2021
(2019 Admission Only) Open Course
5D02 MAT : QUANTITATIVE ARITHMETIC AND REASONING

Time : 2 Hours

Max. Marks : 20

SECTION – A

Answer **any 4** questions. **Each** question carries **1** mark. **(4×1=4)**

1. Find the average of first 40 natural numbers.
2. Divide Rs. 672 in the ratio 5:3.
3. A man bus an article for Rs. 27.50 and sells it for Rs. 28.60. Find his gain percent.
4. A man can row upstream at 7 kmph and down stream at 10 kmph. Find man's rate in still water.
5. How many minute does aditya take to cover a distance of 400m if he runs at speed of 20km/hr ?

SECTION – B

Answer **any 6** questions. **Each** question carries **2** marks. **(6×2=12)**

6. The ages of two persons differ by 16 years. If 6 years ago, the elder one be 3 times as old as the younger one, find their present ages.
7. If $x : y = 3 : 4$, find $(4x + 5y) : (5x - 2y)$.
8. If 15 toys cost 234, what do 35 toys cost ?
9. Nine persons went to a hotel for taking their meals. Eight of them spent Rs. 12 each on their meals and the ninth spent Rs. 8 more than the average expenditure of all the nine. What was the total money spent by them ?

P.T.O.

10. Varun's age after 15 years will be five times his age 5 years back. What is the present age of Varun ?

11. A and B together can complete a piece of work in 4 days. If A alone can complete the same work in 12 days, in how many days can B alone complete that work ?

12. A man travelled from the village to the post-office at the rate of 25 kmph and walked back at the rate of 4 kmph. If the whole journey took 5 hours 48 minutes, find the distance of the post office from the village.

13. A cyclist covers a distance of 750 m in 2 min 30 sec. What is the speed in km/hr of the cyclist ?

14. 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.

15. At what time between 2 and 3 o'clock will the hands of a clock be together ?

SECTION – C

Answer **any one** question. **Each** question carries **4** marks. **(4×1=4)**

16. An article is sold at certain price. By selling it at 2/3 of that price one loses 10 percentage. Find the gain percent at original price.

17. What was the day of the week on 15th August, 1947 ?

K22U 2572

Reg. No. : .....

Name : .....

V Semester B.A./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.A. Afsal-Ul-Ulama/B.S.W. Degree (CBCSS – OBE – Regular/ Supplementary/Improvement) Examination, November 2022

(2019 Admission Onwards)

Open Course

5D02 MAT : QUANTITATIVE ARITHMETIC AND REASONING

Time : 2 Hours Max. Marks : 20

PART – A

Answer **any 4** questions. They carry **1** mark **each**.

1. Find the average of all prime numbers between 30 and 50.
2. The selling price of 30 items is equal to the purchase price of 25 items. What is the profit or loss percent ?
3. If 17 : x = 17.5 : 22.5, then find the value of x.
4. A can complete a piece of work of ₹300 in 6 day; but by engaging an assistant, the work is completed in 4 days. Find the share to be received by the assistant.
5. The speed of the boat then travelling downstream is 32 km/hr where as when travelling upstream it is 28 km/hr, what is the speed of the boat in still water and the speed of the stream ?

PART – B

Answer **any 6** questions from among the questions **6** to **15**. These questions carry **2** marks **each**.

6. Of the three numbers, second is twice the first and is also thrice the third. If the average of three numbers is 44, what is the largest number ?
7. The product of the ages of Ankit and Nikita is 240. If twice the age of Nikita is more than Ankit's age by 4 years, then find Nikita's age ?

P.T.O.

8. An article is sold at a certain price. By selling it at $\frac{2}{3}$ of that price one losses 10%. Find the gain percent at original price.

9. Find two numbers such that their mean proportional is 6 and third proportional is 20.25.

10. If 20 men can build a wall 56 meters long in 6 days, what length of a similar wall can be built by 35 men in 3 days ?

11. 3 men and 4 women can earn ₹3780 in 7 days. 11 men and 13 women can earn in ₹15040 in 8 days. In what time will 7 men and 9 women earn ₹12400 ?

12. A car starts running with the initial speed of 40 kmph with its speed increasing every hour by 5 kmph. How many hours will it take to cover a distance of 385 km ?

13. A boatman rows to a place 45km distant and back in 20 hours. He finds that he can row 12 km with the stream in the same time as 4 km against the stream. Find the speed of the stream.

14. What was the day of the week on 4th june, 2002 ?

15. Find the angle between the hour hand and the minute hand of a clock when the time is 3.25.

PART – C

Answer **any 1** question from among the questions **16** to **17**. These questions carry **4** marks **each**.

16. There are 4 consecutive odd numbers (x_1, x_2, x_3 and x_4) and three consecutive even numbers (y_1, y_2 and y_3). The average of the odd numbers is 6 less than the average of the even numbers. If the sum of three even numbers is 16 less than the sum of the four odd numbers, what is the average of (x_1, x_2, x_3 and x_4) ?

17. Train A passes a lamp post in 9 seconds and 700 meter long platform in 30 seconds. How much time will the same train take to cross the platform which is 800 meters long ?

K23U 2557

Reg. No. : .....

Name : .....

V Semester B.A./B.A. Afsal-Ul-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 ?

P.T.O.

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)**
