Reg No:..... K24FY1249
Name :.....

First Semester FYUGP Mathematics Examination
NOVEMBER 2024 (2024 Admission onwards)
KU1MDCMAT101 (MATHEMATICS IN REAL LIFE)
(DATE OF EXAM: 29-11-2024)

Time : 90 min Maximum Marks : 50

Part A (Answer any 6 questions. Each carries 2 marks)

1. $7589 - ? = 3434$. 2

2. Compute the average of first two odd primes. 2

3. Define selling price and cost price. 2

4. If 15 toys cost Rs 234, compute the cost of 35 toys. 2

5. When do you say that two quantities are directly proportional? 2

6. If A can do a piece of work in 10 days, then calculate A's two day's work. 2

7. If A can do a piece of work in 3 days, calculate A's one day's work. 2

8. Suppose a woman covers a certain distance at 3 km/h and an equal distance at 4 km/h. Compute the average speed during the whole journey. 2

Part B (Answer any 4 questions. Each carries 6 marks)

9. Find the H.C.F of 35 and 80. 6

10. The average of four consecutive even numbers is 27. Find the largest of these numbers. 6

11. (a) A man buys an article for Rs. 250 and sells it for Rs. 290. Calculate his gain percent

    (b) If a radio is purchased for Rs. 490 and sold for Rs. 465.50. Calculate the loss percent.

    6

12. The price of 357 mangoes is Rs. 1517.25. calculate the price of 1000 mangoes. 6

13. A is twice as good a workman as B and together they finish a piece of work in 18 days. In how many days will A alone finish the work? 6

14. A train is moving at a speed of 132km/h. If the length of train is 110 m, calculate the time taken by the train to cross a railway platform 165 m long. 6

Part C (Answer any 1 question(s). Each carries 14 marks)

15. (a) How many natural numbers are there between 17 and 80 which are divisible by 6?

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(b) SImplify $\dfrac{789 \times 789 \times 789 + 211 \times 211 \times 211}{789 \times 789 - 789 \times 211 + 211 \times 211}$.

(c) Two numbers are in the ratio 15 : 11. If their H.C.F is 30, find the numbers.

14

16. (a) The average of 5 consecutive odd numbers is 61. Calculate the difference between the highest and lowest numbers.

(b) If 120 is 20% of a number, then find the 120% of that number.

14

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