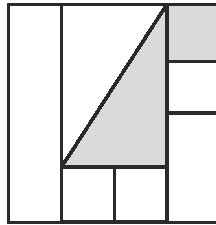# UIMO SAMPLE QUESTIONS

CLASS - 04

MATHEMATICS

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01. The figure below is a square. What fraction of the square is shaded ?

(A) $\dfrac{1}{4}$ (B) $\dfrac{1}{2}$ (C) $\dfrac{3}{4}$ (D) $\dfrac{1}{6}$

02. The area of a rectangle is 91 m². If its breadth is 7 m, find its perimeter.

(A) 30 m   (B) 50 m   (C) 40 m   (D) 45 m

03. The time 15 min past 15:30 is the same as _____ min before 16:10.

(A) 20 min   (B) 25 min   (C) 30 min   (D) 35 min

04. Charan is 18 years younger than Karan now. 12 years ago, their total age was 54 years old. If Karan is four times as old as Anil, how old is Anil now ?

(A) 12 years   (B) 11 years

(C) 13 years   (D) 10 years

05. The difference between two numbers is 6252. If the bigger number is 5 times as big as the smaller number, find the sum of the two numbers.

(A) 9278   (B) 9378   (C) 9738   (D) 9387

REASONING

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01. Which of the given options completes the second pair in the same way as the first ?
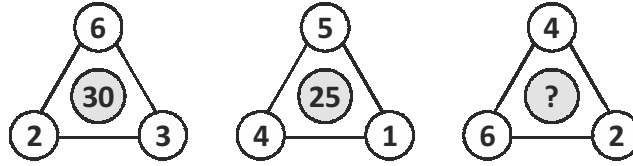

(A)   (B)   (C)   (D)

02. In an examination, Bindu scored more than Arush but less than Prem. Harsh scored more than Prem. Who scored highest marks among these four ?

(A) Bindu   (B) Harsh   (C) Prem   (D) Arush

03.   **If A = 2, B = 3, C = 4, ...**

What is the answer to the sum B + E in the above order ?

(A) I   (B) J   (C) G   (D) H

04.   **Which number replaces the question mark ?**

(A) 35   (B) 40   (C) 32   (D) 38

05.   **Find the number which is different from others.**

(A) 182   (B) 821   (C) 236   (D) 345

CRITICAL THINKING

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01.   **There are cows and farmers in a field. If Surya counts 22 heads and 66 legs, how many cows are there ? (Surya does not include himself in the count).**

(A) 11   (B) 12   (C) 14   (D) 13

02.   If 😊 😊 😊 😊 = 12

✚ ✚ ✚ ✚ ✚ 😊 😊 😊 😊 😊 = 25

◎ ◎ ◎ ◎ = 16

♡ ♡ ◎ ◎ ◎ = 16

😊 😊 ✚ ◎ ◎ ◎ ◎ ♡ ♡ ♡ ♡ =

(A) 31   (B) 28   (C) 32   (D) 40

03.   **A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P ?**

(A) P   (B) R   (C) A   (D) X

04.   **Henrietta the Hen lays eggs this week. There are more than 3 eggs. There are fewer than 6 eggs. There are not 4 eggs. How many eggs does Henrietta lay ?**

(A) 5   (B) 2   (C) 7   (D) 1

05.   **You are returning home from school. On the way, you find a sealed envelop in a street fully addressed with unused stamps on it you would:**

(A) leave it there as it was and walk away.

(B) remove the stamps and destroy the envelop.

(C) open the envelop, find out who has dropped it by mistake, and send it to him if possible.

(D) post it at the nearest letter box.

KEY & SOLUTION

MATHEMATICS

01. **(A)**   Divde the figure into 16 small squares.
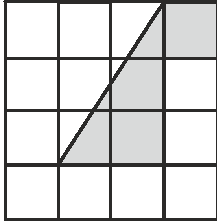
Since the area of the triangle is half that of the area of 6 small squares, it has the same area as 3 small squares.

Number of small squares shaded = 3 + 1 = 4

Total number of small squares = 16

Fraction of the square shaded = $\dfrac{4}{16} = \dfrac{1}{4}$
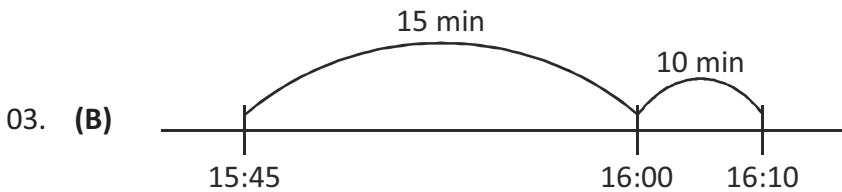
02. **(C)**   Area of rectangle = 91 m²

$l \times b = 91$ m²

$l \times 7 = 91$ m²

$l = \dfrac{91}{7} = 13$

$l = 13$, b = 7

Perimeter of a rectangle = 13 + 7 + 13 + 7 = 40 m

03. **(B)**

15 min + 10 min = 25 min

15:45 is the same as 25 min before 16:10

04. **(A)**   12 years ago
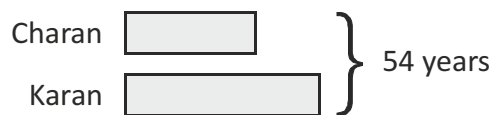
54 + 18 = 72

2 units – 72

1 unit – 72 ÷ 2 = 36

Karan is 36 years old 12 years ago

36 + 12 = 48

Karan is 48 years old now

48 ÷ 4 = 12

Anil is 12 years old now

05. **(B)** Bigger number = ⬜⬜⬜⬜⬜
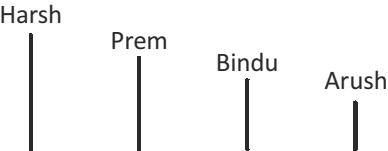
Small number = ⬜

4 units – 6252

1 unit – 6252 ÷ 4 = 1563

6 units – 6 × 1563 = 9378

The sum of the two numbers is 9378

REASONING

01. **(B)**

02. **(B)**

Harsh scored higest marks

03. **(D)** B = 3; E = 6

B + E = 3 + 6 = 9

'H' is the answer

04. **(C)** 6 × (2 + 3) = 30

5 × (4 + 1) = 25

4 × (6 + 2) = 32

'C' is correct answer

05. **(D)** 1 + 8 + 2 = 11

8 + 2 + 1 = 11

2 + 3 + 6 = 11

3 + 4 + 5 = 12

∴ 345 is different from others

CRITICAL THINKING

01. **(A)** Let cows be x and farmers be y.

Then $4x + 2y = 66$ .... (1)

$x + y = 22$ .... (2)

Multiple (2) with 2
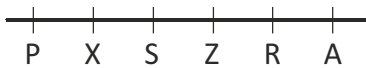
$$\begin{array}{r} 2x + 2y = 66 \\ \underline{4x + 2y = 66} \\ -2x = +22 \\ x = 11 \end{array}$$

02. **(C)** $3 + 3 + 2 + 4 + 4 + 4 + 4 + 2 + 2 + 2 + 2 = 32$

03. **(D)**

P   X   S   Z   R   A

04. **(A)** More than 3 and less than 6 means:

The answer may be 4 or 5. From the given options we have only 5 but not 4

So, Henrietta lay 5 eggs.

05. **(D)** On the way, if i find a sealed envelop with fully addressed with unused stamps on it, i would post it at the nearest letter box.