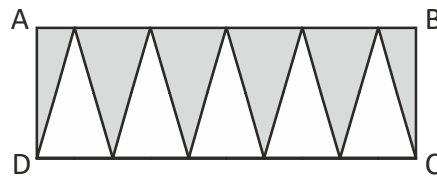


# UIMO SAMPLE QUESTIONS

## CLASS - 05

### MATHEMATICS

01. The total cost of a bag and a T-shirt is ₹ 200, Dinesh buys 4 bags and 2 T-shirts for ₹ 650. How much does a T-shirt and 2 bags cost ?  
 (A) ₹ 325 (B) ₹ 350 (C) ₹ 305 (D) ₹ 352
02. On a farm, the number of chickens to the number of cows was in the ratio 5 : 3. The ratio became 3 : 2 after 300 chickens were sold, How many more chickens than cows were there at first ?  
 (A) 1200 (B) 1300 (C) 1400 (D) 1500
03. In a Mathematics test, Sunil scored 0.6 of what Manish scored and Manish max scored 0.7 of what Dinesh scored. If Manish scored 70 marks, how many more marks did Dinesh score than Sunil  
 (A) 58 (B) 48 (C) 68 (D) 78
04. 240 girls and 560 boys took part in a national art competition. What percentage of the participants were girls ?  
 (A) 35% (B) 30% (C) 32% (D) 28%
05. The perimeter of a rectangle ABCD is 280 cm. The base of two triangles equals the length of AD. What is the area of the shaded parts of rectangle ABCD ?



- (A)  $200 \text{ cm}^2$  (B)  $2200 \text{ cm}^2$  (C)  $2002 \text{ cm}^2$  (D)  $2000 \text{ cm}^2$

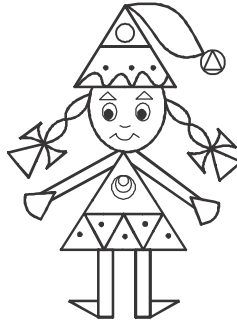
REASONING

01. If the letters of each of the following words are reversed, how many meaningful words are formed ?

RATS, DIET, MADAM, MALAYALAM, REST

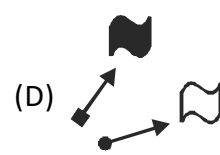
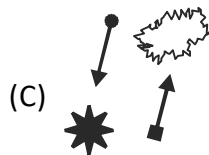
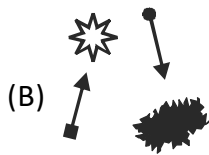
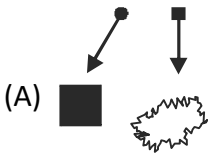
- (A) 1 (B) 2 (C) 3 (D) 4

02. How many triangles are there in the given figure ?

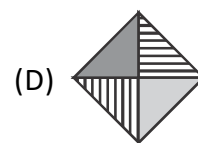
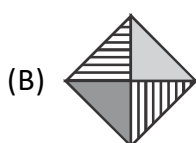
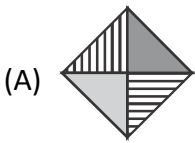


- (A) 15 (B) 14 (C) 12 (D) 16

03. Find the odd one out.



04. What is the mirror image of the given figure ?



05. In which figure is the shape hidden ?

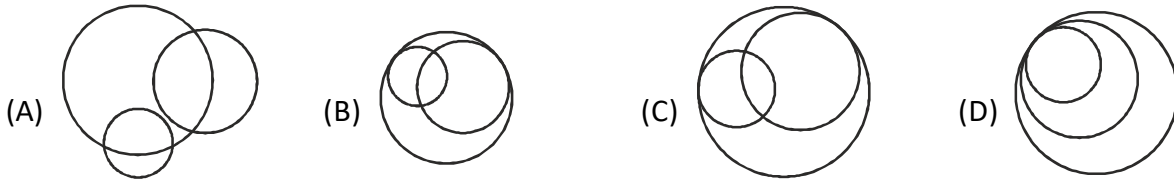


CRITICAL THINKING

**46** Tarun has 5 keys and 5 locks, but 1 key can only open 1 lock. What is the maximum number of trials Tarun has to make to match all the keys and the locks.

- (A) 10                      (B) 15                      (C) 5                      (D) 20

**47** Which picture has symmetry ?



**48** There are 20 questions in a mathematics quiz. For each correct answer 5 marks will be given, 2 marks will be deducted for a wrong answer. How many questions does Andy answer wrongly if he scores 72 marks for that mathematics quiz ?

- (A) 5                      (B) 4                      (C) 3                      (D) 6

**49** There are 40 blocks with numbers from 1 to 40 laid out in order. How many times does the digit 3 appear ?



- (A) 10                      (B) 11                      (C) 14                      (D) 13

**50** How many numbers are there in the English language that are spelt with the same number of letters as the number itself ?

- (A) 3                      (B) 0                      (C) 2                      (D) 1

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## KEY & SOLUTION

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### MATHEMATICS

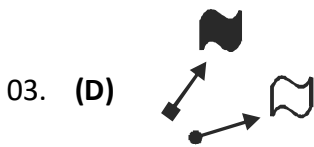
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01. **(A)** Cost of 1 bag + 1 T-shirt = ₹ 200  
 Cost of 4 bags + 2 T-shirts = ₹ 650  
 Cost of 4 bags + 4 T-shirts =  $4 \times ₹ 200 = ₹ 800$   
 2 T-shirts = ₹ 800 – ₹ 650 = 150  
 1 T-shirt = ₹ 150 ÷ 2 = ₹ 75  
 1 bag = ₹ 200 – ₹ 75 = ₹ 125  
 2 bags =  $2 \times ₹ 125 = ₹ 250$   
 ₹ 75 + ₹ 250 = ₹ 325  
 Cost of 1 T-shirt and 2 bags = ₹ 325
02. **(A)** At first      chickens : cows                  In the end      chickens : cows
- |  |        |  |       |
|--|--------|--|-------|
|  | 5 : 6  |  | 3 : 2 |
|  | 10 : 6 |  | 9 : 6 |
- 10 units – 9 units = 1 unit  
 1 unit = 300  
 10 units – 6 units = 4 units  
 4 units =  $4 \times 300 = 1200$   
 There were 1200 more chickens than cows at first.
03. **(A)** Sunil : 60 units,      Manish : 100 units  
 100 units = 70  
 1 unit =  $70 \div 100 = 0.7$   
 60 units =  $60 \times 0.7 = 42$   
 Manish : 70 parts,      Dinesh : 100 parts  
 70 parts = 70  
 1 part =  $70 \div 70 = 1$   
 100 parts =  $100 \times 1 = 100$   
 100 – 42 = 58  
 Dinesh scored 58 more marks than Sunil
04. **(B)** Total number of participants =  $240 + 560 = 800$   
 Percentage of girls =  $\frac{240}{800} \times 100\% = 30\%$

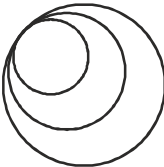
05. (D) Let the base of a triangle be 1 unit  
 Total number of units of the rectangle =  $5 + 2 + 5 + 2 = 14$   
 14 units = 280  
 1 unit =  $280 \div 14 = 20$   
 2 units =  $2 \times 20 = 40$   
 5 units =  $5 \times 20 = 100$   
 Area of rectangle ABCD =  $40 \times 100 = 4000 \text{ cm}^2$   
 $4000 \div 2 = 2000$   
 The area of the shaded parts of rectangle ABCD is  $2000 \text{ cm}^2$

REASONING

01. (C) There are 3 meaningful words are formed.  
 (Star, Madam, Malayalam)  
 02. (D) There are 16 triangles in the given figure.



CRITICAL THINKING

01. (B) Tarun has to make 15 trails to match all the keys and the locks.
02. (D) 
03. (B) Let x be a number of correct question and y be number of wrong questions  
 $x + y = 20$  ..... (1)  
 $5x - 2y = 72$  ..... (2)  
 multiply (1) with (2)  
 $7x = 112$

$$x = 16$$

$$x + y = 20$$

$$y = 4$$

wrongly answer questions are '4'

04. **(C)** Total number of 3's are 14

05. **(D)** Four – 4 letters