



# UNIFIED COUNCIL

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## NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION (UPDATED)

CLASS - 4

Question Paper Code : UN446

### KEY

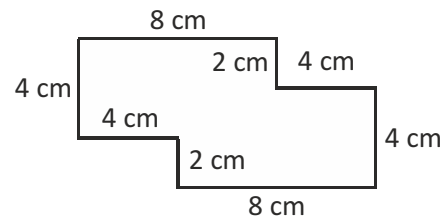
1. B	2. C	3. B	4. A	5. B	6. C	7. B	8. B	9. C	10. B
11. B	12. A	13. B	14. B	15. C	16. C	17. B	18. D	19. C	20. B
21. D	22. Del	23. A	24. C	25. B	26. C	27. A	28. B	29. C	30. D
31. D	32. D	33. C	34. A	35. B	36. B	37. B	38. C	39. D	40. B
41. D	42. C	43. D	44. D	45. D	46. C	47. A	48. B	49. D	50. B
51. A	52. B	53. B	54. B	55. B	56. D	57. C	58. A	59. D	60. C

### SOLUTIONS

#### MATHEMATICS

- (B)  $96427 - 24679 = 71748$
- (C)  $7 + w + w = 11 \text{ cm}$   
 $2w = 11 \text{ cm} - 7 \text{ cm}$   
 $w = 2 \text{ cm}$   
 $\therefore$  length of each rectangle =  $7 \text{ cm} + 2 \text{ cm}$   
 $= 9 \text{ cm}$

3. (B)

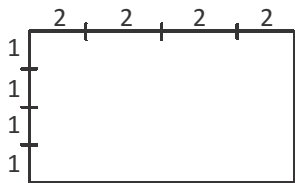


$$\begin{aligned} \text{Perimeter} &= 4 \text{ cm} \\ &+ 4 \text{ cm} + 2 \text{ cm} + 8 \text{ cm} + 4 \text{ cm} + 4 \text{ cm} \\ &+ 2 \text{ cm} + 8 \text{ cm} = 36 \text{ cm} \end{aligned}$$

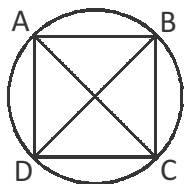
- (A)  $12.05 \text{ PM} - 45 \text{ minutes} = 11.20 \text{ AM}$
- (B)  $999 + 1000 + 1 = 2,000$
- (C)  $\text{₹ } 50 - \text{₹ } 8.75 - \text{₹ } 3.75 - \text{₹ } 12.50 = \text{₹ } 25$

## SCIENCE

7. (B)  $6 \text{ kg} \times 5 = 30 \text{ kg}$   
8. (B) length =  $2 + 2 + 2 + 2 = 8 \text{ cm}$   
Breadth =  $4 \text{ cm}$   
Perimeter =  $2(l+b) = 2 \times 12 \text{ cm} = 24 \text{ cm}$



9. (C)  $\frac{1}{7} \times 49 = 7$   
10. (B) Option 'B' is improper fraction  
11. (B) 1 is neither prime nor composite  
12. (A) Each pen cost = ₹  $\frac{12}{3} = ₹ 4$   
cost of pens = ₹  $50 - ₹ 2 = ₹ 48$   
Number of pens =  $48 \div 4 = 12$   
13. (B) we get '6' line segments



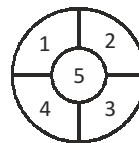
14. (B) Option 'B' completes the figure  
15. (C)  $\frac{325}{25} = 13$   
Which is greater than  $12\frac{1}{5}$   
16. (C) A point  
17. (B)  $3,01,999 - 30,999 - 1 = 270999$   
18. (D) There are nine rectangles  
19. (C)  $\frac{7}{3}$   
20. (B) **B**  
21. (D) 4 time perimeter =  $4 \times 2 (l + b)$   
 $= 4 \times 2 (135 + 78) = 1704 \text{ m}$   
22. Delete  
23. (A) 5  
24. (C) XLVIII  
25. (B) Mehul is nearer to play ground

26. (C) Rock, soil, water, grass and trees are natural resources.  
27. (A) Mushroom gets its food from dead and decaying organic matter (Heterotroph).  
28. (B) The earth gets most of its heat energy from the sun.  
29. (C) Balloon filled with air can be compressed easily.  
30. (D) A magnet is used to separate steel clips.  
31. (D) Dog is a carnivore.  
32. (D) If all the flowers of a mango tree are removed, the tree will not produce fruits.  
33. (C) Chemical energy in crackers on burning release heat, light and sound energy.  
34. (A) A batter uses a push force to hit a baseball.  
35. (B) Wool traps body heat and keeps our body warm.  
36. (B) It changes to a butterfly.  
37. (B) Croton is an autotroph and it can make their own food.  
38. (C) The tapewater in the test tube gets cooled when placed in a beaker of ice cubes.  
39. (D) A force can cause an object to change its shape, motion and direction.  
40. (B) Water is essential to life, exists in three states, it has mass and occupies space.  
41. (D) The correct order of the frog's life cycle is eggs, larva, tadpole and an adult frog.  
42. (C) Earth's gravity is responsible for objects being pulled towards the ground.  
43. (D) The given chart shows that air is a mixture of gases and their is more nitrogen i.e., 78% and oxygen 21% and carbon dioxide less than 1%.  
44. (D) Nymph is the larval stage of cockroach.  
45. (D) 'S' is the stomata that is represented as Z in diagram I.

46. (C) The given experiment shows that water has a fixed volume.
47. (A) Plants need carbon dioxide to make its food.
48. (B) Actions shown at II and IV are done against gravity.
49. (D) Eggs have young ones inside it and eggs ensure the continuity of their own kind.
50. (B) The physical state of water X is gaseous state and Y is liquid state.
51. (A) Carbon dioxide is absorbed to make food, glucose and oxygen is released during photosynthesis.
52. (B) Desert plants store water in their stems.
53. (B) Mammals give birth to their young ones.
54. (B) Water vapour is cooled it is condensed to liquid form of water.
55. (B) A pull force is used to put on a sock.

**CRITICAL THINKING**

56. (D)  $5 + 5 + 3 + 3 = 16$   
16 flowers are embroidered on the handkerchief altogether.



57. (C) There are five regions altogether. Regions 1 and 3 can be of the same colour. Regions 2 and 4 can be of the same colour.
58. (A)  $15 - 9 = 6$   
He was 7<sup>th</sup> from the end of the queue.
59. (D) No. of big triangles = 3  
No. of small triangles = 2  
Total number of triangles = 5
60. (C) If shopkeeper gives me more money in return by mistake, i will return the extra money.

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**THE END**

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