



NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION

CLASS - 3

Question Paper Code : UN497

KEY














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

SOLUTIONS

MATHEMATICS

01. (B) 1500 ml
02. (B) $\frac{1}{11}, \frac{1}{10}, \frac{1}{9}, \frac{1}{8}$ are in ascending order.
03. (C) Parcel B = 1000 g – 270 g = 730 g
Total weight = 1000 g + 730 g = 1730 g
04. (C) 1st January 2023 (Sunday)
The other Sundays in January 2023
= 8, 15, 22 and 29
05. (B) 120 + 12 = 132
06. (C) 123456 ÷ 8 = 15432
P = 1, Q = 5, R = 4, S = 3 and T = 2

07. (D) Danush has 186 more marbles than Sachin
08. (D) 72 + 28 = 100
72 – 63 = 9
Hence the number is 72
09. (C) M M N M N N M M N M N M M N = $\frac{6}{14}$
10. (A) Given, Mass of basket and rice bag = 6 kg
= 6000 g
Since, 1 kg = 1000 g
Mass of basket = 1725 g
The mass of the rice bag = (6000 – 1725) g
= 4275 g = 4 kg 275 g

11. (C) $2086 \text{ ml} + 675 \text{ ml} = 2761 \text{ ml}$
 $2086 \text{ ml} + 2761 \text{ ml} = 4847 \text{ ml}$
 $6800 \text{ ml} - 4847 \text{ ml} = 1953 \text{ ml}$
 $1 \text{ l } 953 \text{ ml}$
12. (A)  +  +  +  $\times 3$
 $\times 5 =$  +  + 
 $\times 5 =$  $\times 3$
 Since more  are needed,  is smaller than .
13. (C) $3 \text{ hrs} = 180 \text{ mins}$
 $180 + 18 = 198 \text{ mins}$
14. (B) $AC + DE + GJ = (2 + 1 + 3) \text{ cm}$
 $= 6 \text{ cm} = BH$
15. (C) $BC \parallel AF$
16. (D) They give a remainder of 2 when divided by 3.
17. (A) $2100 - 1410 = 690$ (69 tens)
18. (A)
$$\begin{array}{r} 9 \overline{) 145} \begin{array}{l} 16 \\ 9 \\ \hline 55 \\ 54 \\ \hline 1 \end{array} \end{array}$$
19. (C) No. of children who took fruits and juices
 $= 10 + 14 = 24$
 No. of children who took burgers and chips $= 6 + 5 = 11$
 \therefore Difference $= 24 - 11 = 13$
20. (B) $6 \times ₹ 20 = ₹ 120$
 $₹ 120 - ₹ 38.40 = ₹ 81.60$
21. (C) Option (A) : $5 + 5 + 5 + 5 + 5 = 25$ (✓)
 Option (B) : $2 \times 4 = 2 + 2 + 2 + 2$
 $8 = 8$ (✓)
 Option (C) : $3 + 3 + 3 + 3 + 3 + 3 + 3 = 73$
 $21 = 73$ (✗)
 Option (D) : $4 + 4 + 4 = 2 + 2 + 2 + 2 + 2 + 2$
 $12 = 12$ (✓)

22. (D)

H	T	U
7	2	5

(i) $5 - 2 = 3$

(ii) $2 + 5 = 7$

\therefore The two given conditions are satisfied to the number 725.

23. (B) In 4 days, the plant will grow 2 cm each day, so the total growth after 4 days is $2 \text{ cm/day} \times 4 \text{ days} = 8 \text{ cm}$.

Adding the initial height of 5 cm, the total height after 4 days is $5 \text{ cm} + 8 \text{ cm} = 13 \text{ cm}$.

24. (D) In the given figure, there are 3 cones and 5 cylinders. Their product is $3 \times 5 = 15$.

25. (D) To find out how many ten-rupee notes Sakshi gets for exchanging 18 five-rupee coins, we need to divide the number of 5 rupee coins by 2 (since 1 ten-rupee note is equal to 2 five-rupee coins). Therefore, 18 divided by 2 equals 9 ten-rupee notes. The answer is option (D).

GENERAL SCIENCE

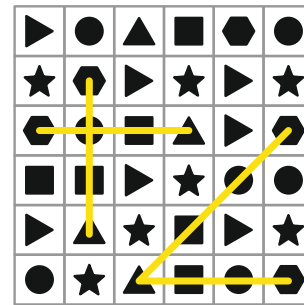
26. (D) Shoot is the part of the plant that grows above the ground. Q (stem), R (leaf) and S (bud) are different parts of the shoot. P (root) is the part of the plant that grows below the ground.
27. (C) Tap root – bean. Fibrous root in wheat.
28. (D) Birds lay their eggs in the nest. It keeps safe from bad weather and from enemies.
29. (B) We eat the leaf of spinach, mint and coriander, stem of sugarcane, potato and garlic, root of radish and flower of broccoli and, cauliflower.
30. (B) We should always eat fresh and covered food. We should avoid eating junk food or eat it occasionally.
31. (D) Figure X is of a snowman. It is found in cold places. People in such places wear warm clothes like sweater, woollen cap, etc.
32. (A) The road signs given in options B, C and D indicate hospital ahead, school ahead and no parking respectively.

33. (D) The activity shown in the given figure is running. Therefore the girl must be using both skeletal and muscular systems as muscles are attached to bones. They contract and relax to bring movement.
34. (C) Earth rotates on its axis. One half of the Earth faces the Sun, this half has day time whereas the other half of the Earth is away from Sun, this half of the Earth has night time.
35. (A) In two weeks time, Full Moon will change into New Moon.
36. (C) Stone is a solid. Solids have fixed shape. Liquids take the shape of the vessel in which they are kept. Juice, oil and milk are liquids.
37. (B) Opposite side of the light source
38. (D) The major gases present in air are oxygen, carbon dioxide and nitrogen. Other gases like hydrogen and helium are present in trace amounts.
39. (C) The boy in the given picture is sweating under the Sun. Hence, the season must be summer.
40. (B) Graphite is used as lead in the pencil.
41. (A) Horse is a herbivore.
42. (D) Birds are shaped like aeroplane.
43. (B) Germs cause cavities in tooth.
44. (C) Fibres are not nutrients.
45. (C) We need force to full things.
46. (A) In the process melting solid state changes to liquid state.
47. (A) Claysoil is dark due to high percentage of minerals.
48. (B) Claws of flesh eating birds are called tailor.
49. (C) Lungs help us to take in oxygen and giving out of carbondioxide.
50. (A) Basalt is used for making roads. For road building, the rock used should be rough. Rough rock provides more friction. On a smooth rock, automobiles can slip. Therefore, this purpose is adequately served by basalt.

51 to 55 : Print Error

CRITICAL THINKING

56. (B) 4



57. (A) Dinesh : (8, 14) and (10, 12)

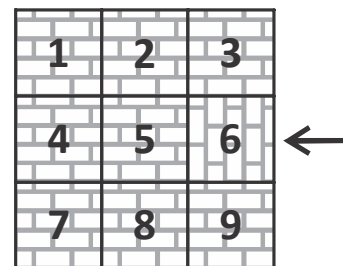
Praveen : (2, 8) and (4, 6)

Rohit : (2, 12), (4, 10) and (6, 8)

The card numbered 10 is left behind.

58. (C) In a test situation, students should try to cause as little disturbance as possible. Raising a hand is the standard way to signal the need for assistance.

59. (D)



60. (B) Horizontally from left to right - all of them travel the same distance. But vertically top to bottom and bottom to top, the distances will differ. As we can see that Car Y will travel least distance vertically and therefore car Y will reach the other side first.