



**NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION (UPDATED)**

**CLASS - 4**  
**Question Paper Code : 10119**

**KEY**

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

**SOLUTIONS**

**MATHEMATICS**

01. (B)  $\frac{3}{5} + \frac{3}{10} = \frac{6+3}{10} = \frac{9}{10}$
02. (A) Product: 7632 → digits used: 7, 6, 3, 2  
Remaining digits for factors: 1, 4, 5, 8, 9  
Factors : 159 × 48 = 7632 (uses all digits 1 – 9 exactly once)  
3-digit number 159 → middle digit Y = 5
03. (C) B rounds to 830 → smallest B = 825  
C rounds to 1200 → smallest C = 1150  
Smallest B + C = 825 + 1150 = 1975

04. (A) Hundred times of a centimetre is a metre. And if we do thousand times of a metre, we get a kilometre. Hence, metre is the answer.
05. (A) Square side =  $28 \div 4 = 7$  cm  
One rectangle perimeter = 16 → sides 7 × 1  
Other rectangle = 7 × 6 → perimeter =  $2(7 + 6) = 26$  cm

06. (D) Given: 1, 2, each term = sum of all previous terms.  
 1<sup>st</sup> term = 1  
 2<sup>nd</sup> term = 2  
 3<sup>rd</sup> term = 1 + 2 = 3  
 4<sup>th</sup> term = 1 + 2 + 3 = 6  
 5<sup>th</sup> term = 1 + 2 + 3 + 6 = 12  
 6<sup>th</sup> term = 1 + 2 + 3 + 6 + 12 = 24  
 7<sup>th</sup> term = 1 + 2 + 3 + 6 + 12 + 24 = 48  
 50 is not in the sequence
07. (D) He walks 10 m → this is of the journey (remaining by bus)  
 Total distance = 10 × 4 = 40 m
08. (B) Weight of empty beaker = 50 g  
 weight of water in the beaker = 250 g  
 weight of water = 250 g – 50 g = 200 g
09. (D) 13 : 30 to 18 : 05 is 4 h 35 min  
 Duration of time he worked = 1 h 50 min + 2 h 5 min = 3 h 55 min  
 4 h 35 min – 3 h 55 min = 40 min  
 His break was 40 min long
10. (D) 40444 + 44044 + 44404 + 44440  
 = 1 7 3 3 3 2  
 TL L TTh Th H T
11. (D) 2 + 4 + 6 + 8 + 10 + 12 + 14 + 16 + 18 + 20 + 22 + 24 + 26 + 28 + 30 + 32 + 34 + 36 + 38 + 40  
 = 20 × 21 = 420
12. (A) Total squares = 18  
 shaded squares = 6  
 fraction of the shaded rectangle  

$$= \frac{6}{18} = \frac{1}{3}$$
13. (C) This means that (□ + ○) + (○ + △) + (△ + □) = 30 + 28 + 22  
 and so (□ + ○ + △) + (□ + ○ + △) = 80  
 Therefore, □ + ○ + △ = 80 ÷ 2 = 40
14. (A) Boys = 25, Girls = 19 → difference = 6  
 Every week : Boys + 2, Girls + 3 → difference gets smaller by 1 each week  
 So, to close the difference of 6, it will take 6 weeks
15. (D) Total weight = 36 kg  
 Apples + Bananas = 36 kg, Bananas = 3 × Apples → Apples = 9 kg  
 Boxes adding to 9 kg → 7 kg + 2 kg → Boxes 1 and 4
16. (D) 2022 + 3 = 2020 + 5  
 2025 = 2025
17. (B) 1 shirt →  $2\frac{1}{3}m = \frac{7}{3}m$   
 ? → 35 m  
 $35 \div \frac{7}{3} = 35 \times \frac{3}{7} = 15$  shirts
18. (C) Bharat counts by 4's: 8, 12, 16, ..., 100 → 24 numbers  
 Charan counts by 5's : 10, 15, 20, ..., 100 → 19 numbers  
 Common numbers: 20, 40, 60, 80, 100 → 5 numbers  
 Total different numbers  
 = 24 + 19 – 5 = 38
19. (C) Manu = even → 48 or 52  
 Janu = multiple of 5 → 45  
 Chetan → ≠ heaviest → ≠ 53  
 Amit → ≠ lightest → ≠ 45 → Amit = 53
20. (C) Shaded + unshaded  
 = whole → always 1

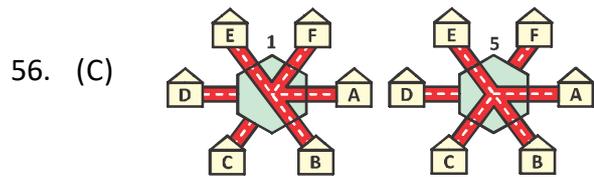
21. (C) E has 3 pairs of parallel lines.
22. (B) A number multiplied by 1 is itself, which is not bigger than the number.
23. (D) The segment from 5 to 6 is divided into 8 equal parts  $\Rightarrow$  each part =  $\frac{1}{8}$
- A is 3 part after 5  $\Rightarrow A = 5 + \frac{3}{8} = 5\frac{3}{8}$
- B is 2 parts after 6
- $\Rightarrow B = 6 + \frac{2}{8} = 6 + \frac{1}{4} = 6\frac{1}{4}$
24. (A) Starting with Kushi, calculate the number of stamps the other have
- Kushi : 170 stamps
- Juhi :  $170 + 37 = 207$  stamps
- Let Rishi's share of stamps be 1 unit
- Then, 3 units  $\rightarrow 207 - 18$
- = 189 stamps
- 1 unit  $\rightarrow 189 \div 3$
- = 63 stamps
- Rishi has 63 stamps
25. (D) order:  $B < C < A (=E) < D$
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26. (B) Mangroves grow in Marshy areas.
27. (D) All items in option (D) are levers, which is the same type of simple machines.
28. (A) The amphibian shown in the picture is a frog. The young one of a frog is tadpole that breathes through gills.
29. (A) Three, Four
30. (A) The eggs of frogs are called spawn.
31. (D) Cross the road at zebra crossing, always walk on the footpath, play in the play ground. It is safe to play with toys in a good condition.
32. (A) The imaginary line that divides the earth into two halves is called equator.
33. (B) Monkey, lizard and squirrels are tree dwelling or arboreal animals.
34. (A) A-3, B-4, C-2, D-1
35. (C) Dry leaves and vegetable waste matter can be allowed to get decomposed in a pit to form compost.
36. (A) Covering your mouth stops germs from spreading in the air and keeps others safe from germs.
37. (C) Fruits and vegetables are rich in vitamins and minerals that boost immunity and protect against diseases.
38. (C) In Sugarcane plant, the stem is modified to store food. The root is modified to store food in radish. The seeds of pea plant are modified to store food and cauliflower is the edible modified flower of the plant.
39. (D) Castor oil, Tulsi and Dhatura gives us medicines.
40. (A) Tilling is the process of loosening of the soil.
41. (C) Sheep, cow and rabbit are herbivores while bear is an omnivore.
42. (A) Kerosene is insoluble in water.
43. (D) Quartz is used for making optical lenses. Quartz is a delicate mineral and is used for making glass, lenses and other electrical equipment.
44. (A) When describing the colour, size, shape, or smell of an object, we are describing the properties of matter.
45. (A) Mammals suckle their young ones.
46. (B) The first help given to the victim of an accident.
47. (B) Heterotrophs depends on other organisms for their food.
48. (B) The chameleon exhibits camouflage.
49. (C) The moon, the earth, the sun.
50. (D) Energy obtained from sun, wind and water are renewable.

51. (B) A constellation is a recognized pattern or shape formed by a group of stars in the night sky, often named after mythological figures, animals, or objects.
52. (A) Protein-rich foods like pulses, milk, and eggs help repair tissues and support growth.
53. (C) Cactus is a desert plant. The leaves are modified into thorns and stem is green, thick and fleshy. It makes food and stores water for the plant.
54. (D) Mustard plants have multiple edible parts such as leaves, seeds, stems, roots and flowers.

Hence, the correct answer is (D)

55. (C) Winter crops are called Rabi crops.

**CRITICAL THINKING**



57. (B) Dog goes 7 steps up, cat 3 steps down → 1 cycle.

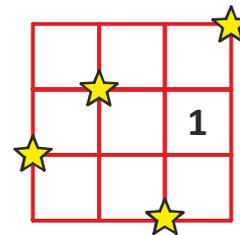
Dog at step 56 → number of cycles  
 $= 56 \div 7 = 8$

Cat moves  $3 \times 8 = 24$  steps down from 100 →  $100 - 24 = 76$

58. (C)



59. (D)



60. (A) Day after tomorrow is Wednesday, and day before yesterday was Saturday (a weekend), so today is Monday.