



NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION

CLASS - 3

Question Paper Code : 10119

KEY

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

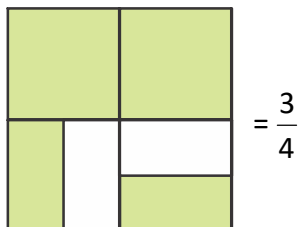
SOLUTIONS

MATHEMATICS

01. (B) $AB + CD = 36 + 36 = 72$
 $AC + BD = 24 + 24 = 48$
 Total = $72 + 48 = 120$
 Corner trees counted twice = 4
 $120 - 4 = 116$
02. (C) $7 \div 2 \rightarrow$ remainder 1
 $7 \div 3 \rightarrow$ remainder 1

03. (C) Hundreds = $2 \rightarrow 2$ ____
 Tens = $20 + 5 = 25 \rightarrow$ tens digit
 $= 7 \rightarrow 27$ ____
 Ones = 1 less than 7 $\rightarrow 6 \rightarrow 276$
04. (D) Harry has 3 more marks than Alwin.
 Sophia has the same marks as Harry.
 So the extra marks are: $3 + 3 = 6$
 Take away extra marks from total:
 $51 - 6 = 45$
 Now share equally among 3 children:
 $45 \div 3 = 15$

05. (C)



06. (C)

Biscuits ready at 10 : 10
Baking took 1 hour 25 minutes
Subtract 1 hour \rightarrow 9 : 10
Subtract 25 minutes \rightarrow 8 : 45

07. (A)

Hundreds digit $H = 4$
Tens digit $T = 2 \times 4 + 1 = 9$
Ones digit $U = 21 - (4 + 9) = 8$
Number = 498
It also works because $4 + 9 + 8 = 21$, which is divisible by 3.

08. (A)

If $\star + \star + \star = 150$

then $\star = 150 \div 3 = 50$

$\text{Spiral} - \star = 185$

$185 + 50 = \text{Spiral}$

$\text{Spiral} = 235$

09. (C)

Left side = $26 + 12 + 8 = 46$ kg
Right side = $20 + 17 = 37$ kg
Missing weight = $46 - 37 = 9$ kg

10. (D)

Ali's stamps = $3986 - 1328 = 2658$
Raju's stamps = $2658 - 867 = 1791$

11. (B)

Meena has 7 times as many beads as Teena. So together, they have 1 part (Teena) + 7 parts (Meena) = 8 parts.
Total beads = 984, so one part = $984 \div 8 = 123$ beads.
Meena has 7 parts $\rightarrow 7 \times 123 = 861$ beads.
Teena has 1 part $\rightarrow 123$ beads.
Difference = $861 - 123 = 738$ beads.

12. (D)

Border X = 16 m

Border Y = 24 m

13. (D)

$180 \text{ ml} + 320 \text{ ml} = 500 \text{ ml}$

14. (A)

4	6	8	2	4	6	8	2	4	6
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$$8 + 4 = 12$$

15. (C)

Let Priya have 56 stamps.
Arjun has twice as many as Priya
 $\rightarrow 56 \times 2 = 112$ stamps.
Ravi has 24 less than Arjun
 $\rightarrow 112 - 24 = 88$ stamps.

16. (B)

On Odd Island, only 1, 3, 5, 7, 9 are allowed.
1-digit numbers: 1, 3, 5, 7, 9 \rightarrow 5 numbers
2-digit numbers: 11, 13, 15, ..., 99 \rightarrow 25 numbers
Total 1-digit + 2-digit = $5 + 25 = 30$ numbers

So the 31st number is the first 3-digit odd number $\rightarrow 111$

17. (B)

Group the numbers and calculate. $(7 - 7) + (16 - 6) + (34 - 4) + (45 - 15) + 50 = 0 + 10 + 30 + 30 + 50 = 120$

18. (A)

$46 \text{ kg } 750 \text{ g} - 28 \text{ kg } 850 \text{ g} = 17 \text{ kg } 900 \text{ g}$

19. (B)

When we subtract 0 from a number, nothing is taken away.
So the number stays the same.

20. (A)

Number of children in 1 group $\rightarrow 252 \div 9 = 28$
Number of girls in 1 group $\rightarrow 28 - 17 = 11$

Total number of boys $\rightarrow 9 \times 17 = 153$

Total number of girls $\rightarrow 9 \times 11 = 99$

Difference between the number of boys and girls $\rightarrow 153 - 99 = 54$

21. (B)

John has 20 stickers.
Ali has $3 \times 20 = 60$ stickers.
Ali has twice as many as Ifran, so Ifran = $60 \div 2 = 30$ stickers.

22. (D) Mother gave of beads to Navya

She gave half of that so Suhas

$$\rightarrow \frac{1}{2} \times \frac{1}{4} = \frac{1}{8} \text{ to Suhas}$$

$$\text{Total given} = \frac{1}{4} + \frac{1}{8} = \frac{2}{8} + \frac{1}{8} = \frac{3}{8}$$

$$\text{Fraction left with mother} = 1 - \frac{3}{8} = \frac{5}{8}$$

23. (A) Triangles = 6

Squares = 5

$$6 - 5 = 1$$

24. (B) We want 70 balloons using 5, 10, 25 packs and minimum packages.

Use largest packs first:

2 packs of 25 = 50 balloons

Remaining = $70 - 50 = 20$ balloons \rightarrow 2 packs of 10

Total packages = $2 + 2 = 4$ packages

25. (A) Jug has $\frac{1}{4}$ of the tank.

Tank holds 12 litres \rightarrow Jug = $\frac{1}{4} \times 12 = 3$ litres

GENERAL SCIENCE

26. (C) When we do not get food for a long time, our body uses stored fats to give energy.

27. (D) The correct arrangement is top soil, sub soil and bed rock.

28. (A) A tailor uses measuring tape to measure the clothes.

29. (C) We get jute fibre from the jute plants. The fibres which are obtained from plants and animals are called natural fibres.

30. (C) We are able to see the Moon because it reflects light from the Sun.

31. (B) The water cycle helps in recycling of water from the earth to the sky.

32. (D) Food is necessary for growth and development of body. It protects us from diseases and gives energy.

Nutritious food provides mental growth in addition to health. Helps in formation of body.

33. (A) The pictures showcase a variety of clay pots, highlighting their different shapes, sizes, and decorative patterns.

34. (B) If we start from 12:00 pm and up till 4:00 pm it is 4 hours. $12 (+4)$ hours.

35. (B) Silk is obtained from the cocoon of the silkworm.

36. (C) Venus is in the same size as Earth and it is the brightest of all planets.

37. (C) Bear is an omnivore.

38. (B) Liquid. Steam can be defined as gas and milk can be defined as liquid.

39. (B) These pollinators are attracted to gardens with abundant flowers, indicating a thriving ecosystem with available nectar and habitats.

40. (B) Raw fruits contain roughage which is the dietary fibre that adds bulk to the food and helps to remove waste material out of our body.

41. (B) Sandy soil does not retain water and is usually found in deserts and beaches.

42. (B) Limestone is an example of sedimentary rock.

43. (B) i) Kidneys excretes urine.
ii) Lungs excretes carbon dioxide.
iii) Skin excretes sweats.

44. (D) One day has twenty four hours.

45. (A) A boy leaning out of the window of a moving car.

46. (C) A water bottle you refill creates no new trash every time you use it.

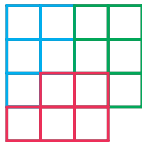
47. (D) Skin helps us feel touch, heat and pain.

48. (C) Nervous system receives message from sense organs and send to brain.

49. (B) Kidneys are located in the abdomen.
50. (C) By applying pressure bandage we can stop the bleeding.
51. (D) Bungalow is a permanent house.
52. (C) Crane is a bird that is wade in water, fly to warmer places in winter, and stand in the water to spear fish with their beaks.
53. (B) For example, an old newspaper is recycled to become a new notebook.
54. (B) Different foods provide carbohydrates for energy, proteins for repair, and vitamins for metabolic functions, creating balanced vitality.
55. (B) Skin enables us to know the hotness of an object (chapati)

CRITICAL THINKING

56. (B)
- | | | | | | |
|-------------|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| First step | 1 | 2 | 5 | 3 | 4 |
| Second step | 1 | 3 | 2 | 5 | 4 |
| Third step | 2 | 1 | 3 | 5 | 4 |



57. (A)
58. (D) 3, 6, 9 images are similar.

59. (D) From the first scale
 $4 \text{ apples} = 1 \text{ pineapple} \Rightarrow 1 \text{ pineapple} = 4 \text{ apples}$

From the second scale

$$3 \text{ apples} = 1 \text{ pear} \Rightarrow 1 \text{ pear} = 3 \text{ apples}$$

From the third scale

$$2 \text{ apples} = 1 \text{ watermelon} \Rightarrow 1 \text{ watermelon} = 2 \text{ apples}$$

Option A : Watermelon = 2 Apples, 2 Pineapples = $2 \times 4 = 8$ Apples (not equal)

Option B : 2 Pears = $2 \times 3 = 6$ Apples, 1 Pineapple = 4 Apples (not equal)

Option C : Pineapple = 4 Apples, Watermelon + Pear = $2 + 3 = 5$ Apples (not equal)

Option D : 1 Pear = 3 Apples, Watermelon + Apple = $2 + 1 = 3$ Apples (equal)

60. (A) Monkey A and Mankey B arrive at the same time

