



NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION (UPDATED)

CLASS - 4
Question Paper Code : 1P204

KEY

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

SOLUTIONS

MATHEMATICS

01. (D) $(200 + 6) \times 80 = (200 \times 80) + (6 \times 80)$

02. (D) $5\frac{1}{3}$

03. (B) $1070 \text{ g} = 1 \text{ kg } 70 \text{ g}$

04. (B) Perimeter of triangle = $4 \text{ cm} + 7 \text{ cm} + 9 \text{ cm} = 20 \text{ cm}$

Perimeter of square = 20 cm

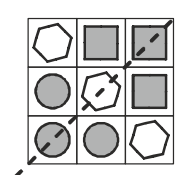
Length of each side = $\frac{20 \text{ cm}}{4}$

= 5 cm

05. (D) Mother dog + 3 puppies = 32 kg

Mother dog = 3 puppies

\therefore Mother dog = $\frac{32 \text{ kg}}{2} = 16 \text{ kg}$



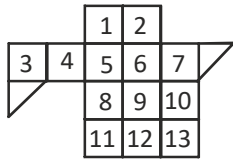
06. (B)

07. (D) $1000 \div 200 = 5$

This means there are 5 groups of 200 words

\therefore 5 groups \times 5 mistakes per group = 25 mistakes

08. (B) $(5 + 10 + 15 + 25) \text{ min} = 55 \text{ mins}$
 $7:30 \text{ am} - 55 \text{ mins} = 6:35 \text{ am}.$
09. (B) A quadrilateral that has all sides equal is called a rhombus, which looks like a slanted square.
10. (B) DCV = 605
11. (C) 1 lakh = 100 thousand
12. (Delete)
13. (D) $43 + 43 = 86$, $52 + 52 = 104$, $12 + 12 = 24$
 $33 + 33 = 66$
14. (C) No. of beads given in the abacus in hundred's place = 9
 To get the number between 500 and 550,
 No. of beads required = 5
 \therefore No. of beads to be removed = $9 - 5 = 4$
 \therefore Answer is option (C)
15. (A) $862 - 245 = 617$
 $617 + 167 = 784$
16. (D) There are 14 unit squares in option (D)



17. (A) $1 \text{ m} = 100 \text{ cm}$
 $\frac{100 \text{ cm}}{50} = 2 \text{ cm}$
18. (C) The mass of Tarun's sister = $(75 - 22) \text{ kg}$
 $= 53 \text{ kg}$
 Total mass of Tarun and his sister
- | |
|---------|
| 75 kg |
| + 53 kg |
| 128 kg |
19. (B) $32 \times 23 = 736$
20. (B) Unit 5 is at thousand's place,
- | | | | | |
|----|---|---------|-----|-----|
| TT | T | HUNDRED | TEN | ONE |
| 4 | 5 | 2 | 3 | 6 |
- \therefore Place value of 5 = $5 \times 1000 = 5000$
 \therefore Answer is option (B)
21. (C) $63945 > 63495$

22. (C)
$$6 \overline{)23} \begin{matrix} 3 \\ 18 \\ \hline 5 \end{matrix}$$

So mixed fraction can be written as

Quotient $\left(\frac{\text{Remainder}}{\text{Divisor}} \right)$

$\therefore \frac{23}{6}$ as a mixed number is $3\frac{5}{6}$

23. (B) The numeral for eleven million eleven thousand eleven is 11,011,011
24. (B) $100 \times 1000 \times 1 = 100000$
25. (B) 53899, 54598, 58455, 58459 are in ascending order.

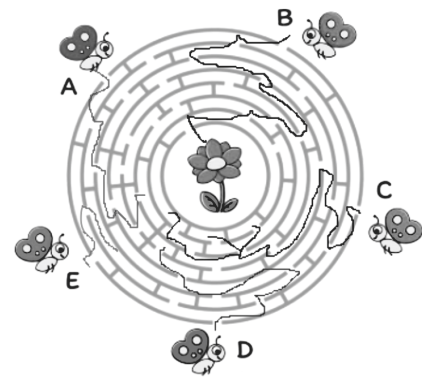
GENERAL SCIENCE

26. (A) Living thing labelled as 1 is mushroom. Mushroom is a fungi. Fungi are saprophytes.
27. (D) If all the flowers of a mango tree are removed, the tree will not produce fruits.
28. (C) Bird's egg have hard shells to protect the embryo from trauma.
29. (B) Solar energy was converted to light and heat energy.
30. (B) Some animals hibernate in the winter to adapt to environmental changes.
31. (B) Lion is a carnivore.
32. (A) Cockroach young one undergoes moulting to form into an adult.
33. (D) Sound energy is produced when a guitar string vibrates.
34. (A) If you breathe on a mirror, the mirror steams up ... When the water vapor from your breath hits the cold mirror, some of it turns into a liquid. Thousands of tiny droplets of water form on the mirror, and this is called condensation.
35. (B) Hand lens magnifies the things.
36. (D) It is condensed from the water vapour in air.
37. (B) Growth and development occur in the life span of all animals.

38. (C) The sharp spines on the cactus help it to keep animals away from the plant.
39. (B) Woollen blanket traps body heat and keeps body warm during winter.
40. (B) Earth is the third planet. It supports life as it has air and water.
41. (A) Plants in option (A) is sundew an insectivorous plant, that grow in nutrition deficient soil. Hence, it eats insects and also can make its on food.
42. (D) Bread, biscuit and chapati are made from flour of cereals. Butter, ghee and cheese are made from milk.
43. (C) 1 : Nitrogen;
2 : Oxygen;
3 : Other gases
44. (D) A tooth decay results in bad breathe, cavities and toothache. It is due to the growth of bacteria.
45. (B) An apple fall down when it gets detached from the tree due to gravitational force.
46. (B) Q stage in the butterfly lifecycle is called pupa. It undergoes changes to become an adult. The process is called metamorphosis.
47. (C) Rain, snow and sleet are precipitation.
48. (B) Insects have three body parts. Head, thorax and abdomen.
49. (A) Plants make their food in the presence of sunlight taking in water from the soil and carbon dioxide from the air.
50. (B) Option (B) is large intestine it absorbs water from undigested food.
51. (C) Balloon filled with air can be compressed easily.
52. (D) Nymph is the larval stage of cockroach.
53. (B) Water is essential to life, exists in three states, it has mass and occupies space.
54. (C) Earth's gravity is responsible for objects being pulled towards the ground.
55. (D) The correct order of the frog's life cycle is eggs, larva, tadpole and an adult frog.

CRITICAL THINKING

56. (B)



57. (B) Tomorrow

The day before yesterday was two days ago; the day after the day before yesterday was yesterday; two days after that (yesterday) is tomorrow.

58. (B) Given the equations:

1. $M + C = 80$
2. $F + C = 100$
3. $F + M = 140$

Adding all three equations:

$$(M + C) + (F + C) + (F + M) = 80 + 100 + 140$$

This simplifies to:

$$M + C + F + C + F + M = 320$$

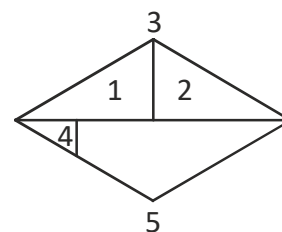
$$2M + 2F + 2C = 320$$

$$M + F + C = 160$$

Therefore, the combined weight of the family is 160 kg

$$M + F + C = 160 \text{ kg}$$

59. (B) 5 triangles



60. (C)

