NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION (UPDATED)

CLASS - 3
Question Paper Code : UN465

KEY

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

SOLUTIONS

MATHEMATICS

1: (D) $3214 - 2191 = 1023$

The value of digit 1 in 1023 is thousand.

2: (B) 8 eights – 1 eight = 7 eights = 8×7

3: (C) Option (C) has numbers in decreasing order

$746 > 647 > 467$

4: (B) From options, If one number is 8 the other must be $8 + 3 = 11$

$8 + 11 = 19$

Hence, larger number is 11

5: (D) $4840 - (1988 + 331)$

$= 4840 - 2319$

$= 2521$

6: (B) Weight of 1 rice bag = $7 \times 3 = 21$ kg

Weight of 2 rice bags = 21×2

$= 42$ kg

7: (D) Number = $(8 \times 5) + 7$

$= 47$

Product = $47 \times 5 = 235$

8: (B) 45 hundreds – 340 tens

450 tens – 340 tens = 110 tens

9: (D) Number of beads required for 1 necklace = 9

Number of beads required for 20 necklaces = 20 × 9 = 180

Remaining beads that Niha requires = 180 − 50 = 130

10: (B) 3700 ÷ 100 = 37 Rupees

11: (D) From the options we can easily make out that only option (D) satisfies the condition.

In options (A), (B) and (C) smaller no. exactly divides the other.

12: (A) Change received = 1 + 1 + (2 × 2) = ₹ 6

∴ Cost of 2 pens = 10 − 6 = ₹ 4

Hence, cost of 1 pen = 4 ÷ 2

= ₹ 2

13: (C)

Boys: | | 213 |
Girls: | 614 |
Teachers: | |
} 1582

No. of Teachers =

$$\frac{[1582 - (614 + 213 + 614)]}{3}$$

= 47

14: (C) 3 km 57 m = 3000 m + 57 m

= 3057 m

15: (D) $\frac{9}{12} = \frac{18}{24}; \frac{1}{2} = \frac{12}{24}; \frac{5}{8} = \frac{15}{24}; \frac{2}{3} = \frac{16}{24}$

$\Rightarrow \frac{1}{2}, \frac{5}{8}, \frac{2}{3}, \frac{9}{12}$

16: (B) Capacity of smaller container = 1580 − 595

= 985 ml

Capacity of two containers = 1580 + 985

= 2565

= 2 l 565 ml

17: (B) Total parts = 24

Shaded parts = 12

Fraction of shaded part = $\frac{12}{24} = \frac{1}{2}$

18: (D) ⌘ = 60 ÷ 5 = 12

⌘ + ⌘ = 12 + 12 = 24

☯ + ☯ + ☯ + ☯ + ☯ + ☯ = 24

☯ = 24 ÷ 6 = 4

19: (C) 😃 = 60 ÷ 3 = 20

😎 = 20 × 8 = 160

20: (D) m (1 2 / 4 3)

21: (A) There are 9 small squares in the figure,

so for $\frac{2}{3}$ of the figure to be shaded

$\frac{2 \times 3}{3 \times 3} = \frac{6}{9}$

6 − 2 = 4

4 more small squares must be shaded

22: (D) 3721 → Three thousand seven hundred twenty one

23: (D) → 4 curved lines
4 straight lines

→ 4 curved lines
4 straight lines

24: (A) 11 : 40 pm to 12 mid night → 20 min

12 : 00 am to 7 : 00 am → 7 hrs

Hence duration is 7 h 20 min

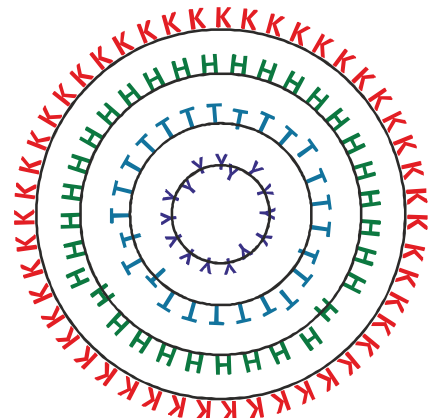25: (D) 5 m = 5 × 100 cm = 500 cm

Hence, 5 m and 500 cm are equal lengths

SCIENCE

26. (D) Things labelled as U & V are birds. Birds are the living things with feathers on their body.

27. (A) Cow is the domestic animal.

28. (D) "X" is a tree trunk are woody stem. The function of "X" is to transport food and water.

29. (D) Birds, bats and butterflies have wings to fly.

30. (A) The sense of hearing helps prairie dogs to communicate.

31. (B) Kidneys are parts of excretory system.

32. (B) To keep the eggs warm, birds sit on their eggs until they hatch.

33. (D) Many animals blend in with their environment and cannot be easily seen by predators. This is an example of Camouflaging.

34. (A) Grasshopper is a herbivore.

35. (A) The fur of some animals becomes thicker in the winter and is shed in the spring is to respond to changes in the environment.

36. (A) Rocks are natural non-living things.

37. (B) Silk : Silkworm : : Wool sheep

38. (A) Meter is the unit of measurement that describes an object's length.

39. (B) Heat changes solids to liquids and liquid to gases.

40. (C) Earth takes one year to revolve around the sun. In the given figure the earth takes 6 months to travel from A to B.

41. (D) Air temperature and wind speed are related to weather.

42. (C) Roots absorbs water and nutrients from the soil.

43. (A) Rotation of the earth causes day and night.

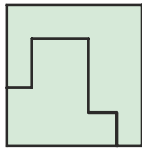44. (C) Carnivores eat meat and flesh of other animals.

45. (C) To survive plants need leaves to make food, stem to transport food and water, roots to absorb water and mineral salts, flower is the reproductive part of the plant which is not essential for the plant to survive.

46. (D) Cow, goat and buffalo are milk giving animals.

47. (D) Exercising every day is an example of a good healthy habit.

48. (D) Children in option (D) crossing the road at zebra crossing are obeying safety rules.

49. (A) 'X' is seed.

50. (C) All living things grow and reproduce.

51. (B) A bear grows thicker fur as a season changes. This adaptations helps the bear to keep warmer.

52. (A) Animal shown in option (A) is pigeon. It moves with the help of its wings as that of butterfly.

53. (C) A tent is made of waterproof cloth, wooden poles and rope.

54. (C) Water vapours are given off when we blow air.

55. (C) Birds use their beaks to obtain food. The differences in the birds' beaks are due to different food habits.

CRITICAL THINKING

56: (A)

57: (B) The answer to the first question is B (13 blocks). You should count for the hidden block under the block X.

58: (D)   Boarding is the process of getting on a Train, as Mounting is the process of getting on a Horse.

59: (D)

60: (C)   6 ways

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    I           D       K           R   N
  R   N       R   N           D   I   K
D       K       I

    R               N               D   I   K
  D   I   K     D   I   K       R   N
    N           R
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The word "DRINK" can be formed in 6 ways

THE END