



NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION (UPDATED)

CLASS - 3
Question Paper Code : UN487

KEY

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

SOLUTIONS

MATHEMATICS

01. (B) No. of ducks = 1492
No. of chickens =
 $1492 + 3292 = 4784$
 $4784 + 1492 = 6276$

02. (A) $\frac{2}{9} + \frac{3}{9} + \frac{4}{9} = \frac{9}{9} = 1$

03. (C) $2 \text{ h } 15 \text{ min} + 1 \text{ h } 45 \text{ min}$
 $= 3 \text{ h } 60 \text{ min}$
 $= 4 \text{ h } 0 \text{ min}$

04. (A) $12 \text{ hundreds } 11 \text{ tens} = 1200 + 110 = 1310$
 $= 1310 - 200 = 1110$

05. (C) Two digit odd numbers are = 45
i.e., 11, 13, 15, 17, 19, 21, 23, 25, 27, 29
31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51,
53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73,
75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95,
97, and 99.

06. (A) (A) $15 > 5$ (T)
(B) $27 < 14$ (F)
(C) $6 > 9$ (F)
(D) $8 = 5$ (F)

07. (B) Length of arrow C = 3 m 98 cm
 Length of arrow B = Length of arrow C + 5 cm
 = 3 m 98 cm + 5 cm
 = 4 m 3 cm
 Length of arrow A = 4 m 3 cm + 4 cm
 = 4 m 7 cm

08. (A) 7077

09: (D) The number of cubes in the solid given in the figure is $4 \times 3 = 12$.

10. (C) $253 - 143 = 110$

$$363 - 253 = 110$$

$$583 - ? = 110$$

$$583 - 110 = 473$$

11. (C) Given amount = 200

Number of ₹5 need to make

$$₹200 = ₹200 \div 5 = 40$$

12. (C) No. of people in the museum = 740

No. of children = 248

$$\text{No. of adults} = 740 - 248 = 492$$

No. of adults than children

$$= 492 - 248 = 244$$

13. (C) No. of doors preparing by monica = 36

No. of doors she packs in a day = 8

No. of doors she packs in 4 days

$$= 8 \times 4 = 32$$

$$\text{Left} = 36 - 32 = 4$$

14. (A) 5:45 am + 30 min

$$= 575 \text{ min}$$

$$= 6:15 \text{ min}$$

15. (C) No. of slices of a pizza = 5

No. of portions she ate = 2

$$\text{Fraction of pizza she ate} = \frac{2}{5}$$

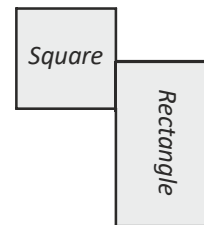
16. (C) Quantity of juice Ankur needs = 48 l

1 carton contains = 6 l of juice

= $48 \text{ l} \div 6 \text{ l} = 8$ cartons of juice he has to buy.

$$17. (B) \begin{array}{r} 7 \quad \boxed{5} \quad 7 \\ - \boxed{4} \quad 7 \quad 3 \\ \hline 2 \quad 8 \quad 4 \end{array}$$

18. (A)



19. (C) Mass of 3 bananas

$$= 900 \text{ g} - 150 \text{ g} = 750 \text{ g}$$

Mass of an orange

$$= 850 \text{ g} - 750 \text{ g} = 100 \text{ g}$$

20. (B) Difference = $2254 - 1958 = 296$

$$\begin{array}{r} 7) 296 (42 \\ -28 \\ \hline 16 \\ -14 \\ \hline 2 \end{array}$$

$$Q = 42, R = 2$$

21 (C) Length of the remaining lace

$$= 465 - 149 = 316 \text{ cm}$$

$$50 + 50 + 50 + 50 + 50 + 50 = 300$$

$$(300 + 50 = 350 \text{ cm})$$

The maximum number of pieces of length 50 cm he could cut from the remaining lace was 6.

22. (D) Total capacity of 8 similar jugs = 56 l

∴ The capacity of a jug

$$= 56 \text{ l} \div 8 = 7 \text{ l}$$

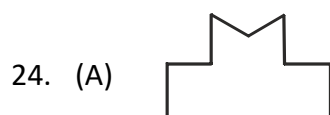
The quantity of water in 3 such jugs = $7 \text{ l} \times 3 = 21 \text{ l}$

23. (C) (A) $\frac{1}{10} + \frac{9}{10} = \frac{10}{10} = 1$

(B) $\frac{3}{8} + \frac{5}{8} = \frac{8}{8} = 1$

(C) $\frac{5}{12} + \frac{5}{12} = \frac{10}{12}$

(D) $\frac{6}{9} + \frac{3}{9} = \frac{9}{9} = 1$



25. (C) $+ = 16$

$= 1, (2), 3, (4), 5, 6, 7 : = 15, (14),$

$13, (12), 11, 10, 9$

$4 \times 12 = 48$

$12 \div 4 = 3$

GENERAL SCIENCE

26. (C) Soil particles have space between them, which is filled with air. It allows plant roots and soil animals to breathe.

27. (B) Graphite is used as lead in pencils.

28. (C) In winter season, the days are short and nights are long.

29. (B) Shadows are always formed on the opposite side of the light source.

30. (D) Liquids take the shape of the vessel in which they are kept, Juice, oil and milk are liquids.

31. (D) The shape of the moon 15 days after full moon is new moon.

32. (B) Perfume is in a gaseous state, so it spreads (flow) in the entire room.

33. (B) Sravya will use her sense of touch to distinguish a silk fabric from a woollen sweater in dark.

34. (A) The spinning of the Earth on its axis is called rotation, it takes 24 hours. When the Earth rotates on its axis one half of the Earth faces the Sun and has day time. At the same time, the other half is away from the Sun and has night time. Thus, rotation of Earth causes day and night.

35. (C) Humus is present in loam soil. Plants grow well in loamy soil, than in any other soil. Pumice is used as body scrubber and for polishing teeth by dentists. Some rocks are made up of one mineral while some are made up of more than one minerals.

36. (B) Brain is a part of nervous system and bone is a part of skeletal system.

37. (B) Road sign symbol indicates hospital ahead.

38. (A) Fish lives in water. Its young one is called fry.

39. (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.

40. (A) Silk is a natural fibre and nylon is synthetic fibre.

41. (B) The room shown in option B is bedroom, mean for sleeping.

42. (D) Roots of some plants grow above the ground. Leaves get water from soil and carbon dioxide from the air. Most flowers grow into fruits.

43. (C) We eat stem of sugarcane, ginger, potato, garlic and onion whereas we eat root of radish, carrot, sweet potato and turnip.

44. (A) Animal described in the given box is bat.

45. (A) Hibiscus and rose have tap root system, while others have fibrous root system.

46. (D) P - 4; Q - 3; R - 2; S - 1

47. (D) Eating fresh and covered food, eating meals at regular intervals and chewing food properly before swallowing are good habits.
48. (A) Polyester, nylon, rayon, lycra, etc. are synthetic fibres. They are also known as man-made fibres.
49. (B) X is a plant eating animal (Herbivore)
50. (B) Eagle catch small animals like rats, wood pecker eat insects in wood, parrot eat fruits, sparrows eat small worm.
51. (B) Clayey soil is used to make pots and toys.
52. (C) Lungs : Windpipe :: Heart : Blood vessels
53. (A) Eagles and vultures are birds of prey that eat mice, frog, snakes, chicks, etc.
54. (D) Birds build nests to lay eggs, keeps the eggs and them safe.
55. (D) The organ shown in the given figure is heart. It helps in blood circulation.

CRITICAL THINKING

56. (B)

1	B	K	Z	E
2	P	(A) ²	F	(H) ⁴
3	S	(M) ¹	R	W
4	I	N	(T) ³	L
	A	B	C	D

57. (D)

$$\text{Nihan} = x$$

$$\text{Shanmukh} = x + 3$$

$$\text{Mahi} = 5 + x$$

$$\text{Total } x + x + 3 + 5 + x$$

$$= 3x + 8$$

$$\text{If } x = 1 \Rightarrow 3(1) + 8 = 11 \text{ option (A)}$$

$$\text{If } x = 2 \Rightarrow 3(2) + 8 = 14 \text{ option (B)}$$

$$\text{If } x = 3 \Rightarrow 3(3) + 8 = 17$$

$$\text{If } x = 4 \Rightarrow 3(4) + 8 = 20 \text{ option (C)}$$

$$\text{If } x = 5 \Rightarrow 3(5) + 8 = 23$$

Among the options option (D) 22 cannot be the total number of oranges

58. (C)

$$26 \triangle + \square + \bullet$$

$$\triangle + \bullet + \square - \triangle + \square - \bullet$$

$$= 14 + 4 + 6$$

$$2 \square = 24$$

$$\square = 12$$

$$\square - \bullet = 6$$

$$\bullet = 6$$

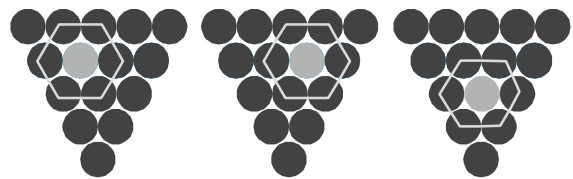
$$\triangle + \bullet = 14$$

$$\triangle + 6 = 14$$

$$\triangle = 8$$

$$\triangle + \bullet + \square = 8 + 6 + 12 = 26$$

59. (A) Three inner balls touch exactly 6 other balls



60. (C) If brother of Arun, X, has three brothers, say Arun, Y and Z. Then, Arun will also have three brothers, X, Y and Z.