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NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION (UPDATED)

CLASS - 3
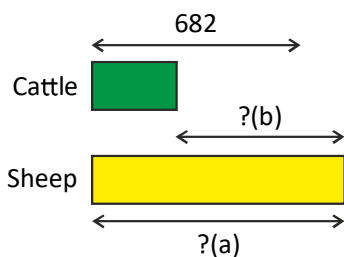**Question Paper Code : UN489**

KEY

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

SOLUTIONS

MATHEMATICS

01. (D)

682
Cattle
?(b)
Sheep
?(a)

No. of Cattle = 682

No. of Sheep = 682 × 3 = 2046

N. of more Sheep than Cattle

= 2046 − 682 = 1364

There are 1364 more sheep in the cattle.

02. (B)

$$6\sqrt{2874} = 479$$

03. (C) 180 + 19 = 199

04. (A) 70 ÷ 2 = 35 is less than 36

05. (C) 2 m 9 cm + 1 m 15 cm + 3 m 5 cm

= 6 m 29 cm

06. (B)   P-iii, Q-iv, R-i, S-ii

07. (A)   Cost of 1 Pen = ₹1.30

Cost of 6 Pens = ₹1.30 × 6 = ₹7.80

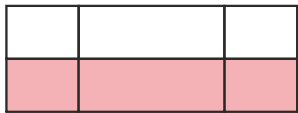Amount paid = ₹10

Change he got = ₹10 − ₹7.80 = ₹2.20.

08. (C)   🔺 + ⭐ + 🟧 = 64

🔺 + ⭐ = 28

28 + 🟧 = 64

🟧 = 64 − 28 = 36

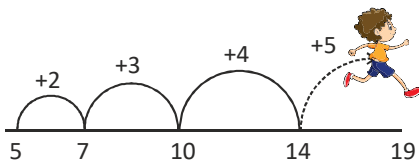09. (C) $\dfrac{4}{8} = \dfrac{1}{2}$
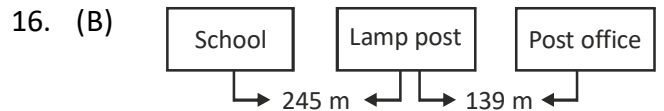
10. (D)

11. (A)   2 h 30 min + 3 h 40 min

= 5 h 70 min

= 6 h 10 min.

12. (A)   6 tens and 3 ones

63 = sixty three

13. (A)   In option (A) the hour hand should be in the middle of 7 and 8, so that the will be exactly 7:30.

14. (A)

15. (A)   No. of stationary items = 888

Items bought by Akhil = 25 Pens + 18 erases + 35 high lighters = 78

Items left in the book shop

= 888 − 78 = 810

16. (B)

Distance from school to post office = 245 m + 139 m = 384 m

17. (A)   Mass of a Pineapple = 260 g

Mass of a Watermelon = 260 g + 195 g = 455 g

Total mass = 455 g + 260 g = 715 g

18. (D)   Monthly salary of Nitya = ₹1300

Amount she gives to her mother = ₹550

Amount she spends

= ₹357 = ₹550 + 357 = ₹907

Amount she saves

= ₹1300 − ₹907 = ₹393

19. (C)
$$
\begin{array}{r}
2\ 1\ \boxed{6} \\
+\quad 8\ \boxed{6} \\
\hline
3\ 0\ 2
\end{array}
$$

20. (D)   57 × 8 = 114 × 4

456 = 456

21. (C)   (A)   3 l 50 ml < 3500 ml

3050 ml < 3500 ml (✔)

(B)   7 l 5 ml + 495 ml > 7050 ml

7005 ml + 495 ml > 7050 ml

7500 > 7050 ml (✔)

(C)   1 l 90 ml − 180 ml > 1010 ml

1090 ml − 180 ml > 1010 ml

910 ml > 1010 ml (✘)

(D)   6 l 70 ml − 3 l 984 ml < 2190 ml

6070 ml − 3984 ml < 2190 ml

2086 ml < 2190 ml (✔)

22.	(A)	Capacity of bottle with water = 330 ml

22. (A) Capacity of bottle with water = 330 ml

Amount of water drunk by Sana = 165 ml

Amount of water refills in the bottle

= 300 ml

Capacity of bottle with water now

= 300 + 165 = 465 ml

23. (D) Total number of cubes in the solid in the given figure

= 2 × 3 + 1 × 2 + 2 × 1 = 6 + 2 + 2 = 10

24. (C) 252 ÷ 7 = 36 means

36 × 7 = 252

25. (D) 347 × 6 = 2082

The number is 347 × 6 + 5

347 × 6 = 2082

2082 + 5 = 2087

GENERAL SCIENCE

26. (B) When water vapour present in air come in contact with the outer surface of the glass of cold water, they condense to form water drops on it.

27. (A) For making toys, clayey soil is required which consists of fine particles with very little air space between them. It retains a lot of water and is good and is not good to grow plants in a pot. To grow Cactus sandy soil is required.

28. (D) According to the given graph, water holding capacity of soil Z is lowest, water holding capacity of soil X is moderate and water holding capacity of Y is highest. Hence, soil X, Y and Z could be loamy soil, clayey soil and sandy soil respectively.

29. (B) Sun is the main source of light on the earth.

30. (D) Water exists in all three states of matter solid (ice), liquid (water) and gas (water vapour).

31. (B) In the given flow chart X, Y and Z are Earth, natural satellite and Moon respectively.

32. (B) Atul cannot see as his eyes are blind folded by a piece of cloth. Therefore, he will not be able see the colours to differentiate between yellow and green leaf as this requires sense of sight.

33. (C) X in the given figure is kidney. Kidneys are a part of excretory system that help the body to get rid of waste.

34. (C) Slanting roof on the houses is built in a place where there is heavy rainfall.

35. (C) Cow dung adds humus to the soil and makes it more fertile.

36. (D) Thermometer is used to measure the temperature f body.

37. (B) Due to the heat of the Sun, water from the beaker will evaporate leading to decrease in its level after some time.

38. (C) Our solar system has eight planets. The correct order of planets starting from closest to the Sun to the farthest is a follows:

Mercury - Venus - Earth - Mars - Jupiter - Saturn - Uranus - Neptune.

39. (D) The organ shown in the given figure is heart. It helps in blood circulation. Respiratory system helps to throw out the impure air.

40. (D) indicates hospital.

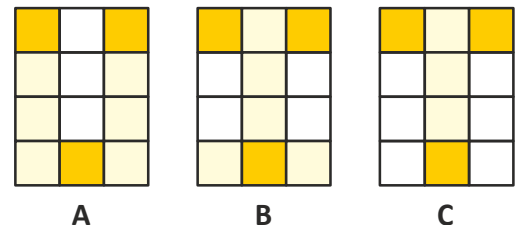 indicates Pedestrian crossing.

41. (A) Polyester, nylon, rayon, lycra, etc. are synthetic fibres. They are also known as man-made fibres.

42. (A) Ginger is an underground and ginger stem that stores food and is eaten by us.

43. (C) Ravi falls ill very frequently due to the deficiency of vitamins and minerals, so he should include more of fruits and vegetables in his diet as they are protective foods.

| 44. | (B) | We eat the root of turnip, carrot, radish, sweet potato and beetroot whereas we eat stem of potato and ginger. |

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45. (A) Part labelled P is leaf. Leaves make food for the plant.

46. (A) Tearing teeth or canines are sharp pointed teeth and strong jaws help to chew the food.

47. (C) Goat - herbivore, Wolf - Carnivore, Bear - Omnivore.

48. (A) Bean have a tap root system.

49. (C) Cow chew the cud, Rat gnaw the food and leopard tear the flesh.

50. (D) The bird shown in the picture canbe a duck as it has webbed feet.

51. (C) Weaver bird weaves its nest with the help of leaves & twigs.

52. (D) Honey is obtained from honeybee, milk obtained from animals like cow, goat and buffalo.

53. (B) Eating lots of fruits and leafy vegetables, eating meals at regular intervals and do not talk while eating are some of good food habits.

54. (C) Duck has broad and flat beaks with holes on either side. It takes in muddy water with insects, worms and water plants through its beak. The muddy water flows out through the holes leaving behind plants and insects in the beak.

55. (B) Egg is a body building food. It is rich in proteins. It helps to build our muscles strong whereas bread is rich in carbohydrates which is an energy giving food and spinah and mango are rich in vitamins and minerals, which are protective foods.

CRITICAL THINKING

56. (A)

From R, we have to take kite.

From P, we have to take trapezoid.

From Q, we have to take triangle.

From S, we have to take diamond.

From T, we have to take pentagon.

57. (C) More weight stretches more length.

58. (D) $2 + 4 = 6$

$2 \times 2 = 4$

John bought 4 fishes.

59. (C) Sprint has 15 stripes

Zonk = 15 + 3 = 18 stripes

Batman = Sprint + 5 stripes

= 15 + 5

Batman = 20

Hence, Batman won the race it has 20 stripes.

60. (B)

A   B   C

The End