



UNIFIED COUNCIL

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NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION (UPDATED)

CLASS - 4

Question Paper Code : UN449

KEY

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

SOLUTIONS

MATHEMATICS

- (A) $(54,200 + 20,180) - (30,980 + 14,270)$
 $= 74380 - 45,250 = 29,130$
- (B) $9,99,99,999 + 10,00,00,000 = 19,99,99,999$
- (C) Ten times
- (C) $3\frac{1}{2} \times 29 \text{ days} = \frac{7}{2} \times 29 = 101\frac{1}{2} \text{ litres}$
- (A) $\frac{5}{6} \times 15 = \frac{15}{18} \times 15$
- (D) Cost of 2 pencils and 3 arasers = ₹ 17
 $- ₹ 5 = ₹ 12.$

- (D) $3.8 + 4.2 + 6.3 + 4.6 + 7.2 + 4.3 + 8.2$
 $+ 1.7 + 3.5 + 1.4 + 4.5 + 3.6 + 4.2 + 3.8$
 $+ 4.4 + 2.6 = 68.3 \text{ cm}$
- (A) $2\left(b + \frac{6}{5}b\right) = 132 \text{ m}$
 $\frac{11b}{5} = 66 \text{ m}$
 $b = 30 \text{ m}$
 $l = 36 \text{ m}$
 $\text{Area} = l \times b = 36 \times 30 \text{ m}^2 = 1080 \text{ m}^2$
- (B) $\text{Area} = \frac{1}{4} \text{ cm} \times \frac{1}{4} \text{ cm} = 0.25 \times 0.25 \text{ cm}^2$
 $= 0.0625 \text{ cm}^2$

10. (C) XLIV, XLVI, LXIV, LXVI
11. (C) $\frac{666}{18} = 37$
12. (D) $50 \text{ m} + 30 \text{ m} + 30 \text{ m} + 50 \text{ m} = 160 \text{ m}$
13. (D) $5 : 30 \text{ pm} + 2 \text{ hours } 30 \text{ minutes} = 8 : 00 \text{ pm}$
14. (B) $8,05,03,624 - (3,53,72,460 + 3,00,04,738) = 1,51,26,426$
15. (A) $(x+22+x+22) \text{ cm}$
 $= (20+20+10+10+10+10) \text{ cm}$
 $2x = 80 - 44 = 36$
 $x = 18$
16. (A) $226 \times 21 \times 37 = 1,75,602$
17. (D) $35 - \frac{100}{20} + 2 \times 5 = 35 - 5 + 100 = 40$
18. (A) $16 \times \frac{7}{22} = \frac{56}{11}$
19. (C) $\frac{7}{4} + \frac{19^{-2}}{8} = \frac{14+19^{-2}}{8} = \frac{33}{8} - 2 = \frac{17}{8} = 2\frac{1}{8}$
20. (A) $2019 - 1998 = 21$
 $53 - 21 = 32$
21. (B) Area of shaded region
 $= 8 \times 4 - \frac{1}{2} \times 8 \times 4$
 $= (32 - 16) \text{ cm}^2$
 $= 16 \text{ cm}^2$
22. (C) $792 \times 650 = (800 - 8) 650$
 $= 800 \times 650 - 8 \times 650$
 $= 800 \times 650 - 5200$
23. (C) $3\frac{6}{7}$
24. (C) Trapezium
25. (A) 12 lies between 6 & 15 and 12 is a factor of 36 & 12 is multiple of 4.

GENERAL SCIENCE

26. (C) Sand is insoluble in water. It sinks to the bottom of the container.
27. (B) Mouth → Foodpipe → stomach → small intestine.
28. (A) Tadpole is the larval stage of frog. It undergoes changes to form into an adult frog.
29. (A) The sun gives out heat and light.
30. (A) Fossils are the remains of plants and animals long ago.
31. (C) Lion is a carnivore
32. (A) The position of the earth at image 1 is tilted towards the sun. So it is summer in northern hemisphere, at position 1.
33. (A) The process of making food by the plant using sunlight, carbon dioxide from air and water.
34. (D) The more the temperature difference between the water and the room temperature, the higher the rate of evaporation.
35. (D) The rate of evaporation is more from the container which has more exposed surface area and less depth.
36. (A) Nylon is a man made material.
37. (A) The given diagram represents the cause of sea breeze. During the day the land is heated up more than the water in the sea. The air above the land is warmer it rises up. Cool air from the sea blows take place.
38. (C) Revolution of the earth around the sun takes one year to complete.
39. (C) Microscope is used to observe microbes or small parts of a cell
40. (B) Ice is water in the solid state. A solid has a fixed shape and a fixed volume. A solid cannot be compressed
 Water vapour is water in the gaseous state. A gas has no fixed shape and no fixed volume. A gas can be compressed
 Ice is visible (can be seen) but water vapour is invisible (cannot be seen)
41. (A) The freezing point of pure water is 0°C.
 At the freezing point, 0°C, water changes from the liquid state to the solid state.
42. (A) Air has mass and it can be compressed.
43. (A) Incisors are used to cut the food.

44. (A) A dog is a mammal. Mammals have lungs to breathe in oxygen from the air. Plants have tiny pores called stomata on their leaves or stems to allow air to move in and out of them. A fish has gills (in a gill chamber) to take in oxygen that has dissolved in the water.
45. (D) Large intestine helps in defecation
46. (D) The given diagram represents interdependence between plants and animals the arrow labelled X represents oxygen.
47. (D) Translocation is the transport of manufactured food substances such as sugars through the phloem tissue from the leaf to all other parts of the plant.
48. (C) Vein, stomata, lamina, blade are all parts of leaf.
49. (D) Bacteria is the cause for tooth decay
50. (C) During photosynthesis light energy → chemical energy
51. (D) A lizard drops its tail when it is trying to escape.
52. (C) The coconut falls on the ground is due to the gravitational force.
53. (C) A life cycle tells us about the different stages of living things life.
54. (D) Bread is made from cereals of grass plants.
55. (C) During photosynthesis oxygen is liberated and carbon dioxide is used to make food.

CRITICAL THINKING

56. (B)

1	2	3
A	B	D
A	D	B
B	A	D
B	D	A
D	A	B
D	B	A

57. (C) Neck, Ears, Nails, Hair

58. Delet

59. (C) $30 + 29 + 31 + 30 + 31 + 30 + 31 + 15 = 227 / 7 = \text{remainder} = 3.$

So Independence day is Thursday.

60. (B) 1 watermelon = 2 strawberries
 3 watermelons = 6 strawberries
 6 strawberries = 10 apples
 10 apples = 30 bananas
 3 watermelons = 30 bananas
 1 watermelon = 10 bananas

THE END
