



**NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION (UPDATED)**

**CLASS - 4**  
**Question Paper Code : UN470**

**KEY**

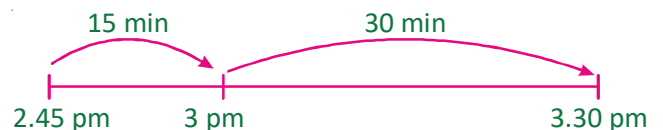
1. A	2. A	3. B	4. C	5. B	6. D	7. C	8. C	9. B	10. D
11. A	12. C	13. A	14. C	15. B	16. C	17. A	18. A	19. D	20. C
21. A	22. B	23. C	24. D	25. C	26. A	27. B	28. C	29. A	30. B
31. B	32. D	33. B	34. A	35. B	36. C	37. D	38. B	39. A	40. A
41. B	42. A	43. A	44. B	45. A	46. B	47. D	48. B	49. B	50. C
51. A	52.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

**SOLUTIONS**

**MATHEMATICS**

01. (A)  $7 - 3 = 4$  (intervals)  
 $16 \text{ m} \div 4 = 4 \text{ m}$  (1 interval)  
 $17 - 1 = 16$  (intervals)  
 $16 \times 4 \text{ m} = 64 \text{ m}$
02. (A)  $\frac{2}{3} + \frac{2}{9} = \frac{6}{9} + \frac{2}{9} = \frac{8}{9}$  (used)  
 $1 - \frac{8}{9} = \frac{1}{9}$

03. (B) 14:45 → 2:45 pm



$15 \text{ min} + 30 \text{ min} = 45 \text{ min}$

04. (C)  $14 \times 4 \text{ cm} = 56 \text{ cm}$   
 (The four 2 cm sides can be considered as two 4 cm sides)
05. (B) Choose any number, say 6.  
 $6 + 12 = 18$ ;  $18 \times 3 = 54$ ;  $54 - 36 = 18$ ;  
 $18 \div 6 = 3$ ;  $3 \times 2 = 6$

06. (D)  $50100 \div 100 = 501$

07. (C)  $78 \approx 80$

$932 \approx 900$

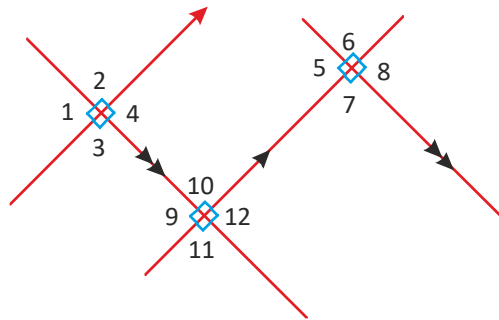
$78 \times 932 \approx 80 \times 900$

08. (C) "D" is not a symmetrical letter.

**DAD** is not symmetrical

09. (B)  $32 \div 8 = 4$

$32 \div 6 = 5 \text{ R } 2$  (32 is not divisible by 6)



10. (D)

11. (A)  $3\frac{3}{4} - \boxed{?} = 2\frac{5}{6}$

$\frac{15}{4} - \boxed{?} = \frac{17}{6}$

$\boxed{?} = \frac{15}{4} - \frac{17}{6}$

$= \frac{45 - 34}{12} = \frac{11}{12}$

12. (C)  $\text{₹ } 800 \div \text{₹ } 200 = 4$

$4 \times 4 = 16$

$16 + 2 = 18$

13. (A)  $\text{CDXLIV} = \text{CD} + \text{XL} + \text{IV}$

$= 400 + 40 + 4 = 444$

$\text{CXV} = 100 + 10 + 5$

$444 + 115 = 559$

$= 500 + 50 + 9$

$= \text{D} + \text{L} + \text{IX} = \text{DLIX}$

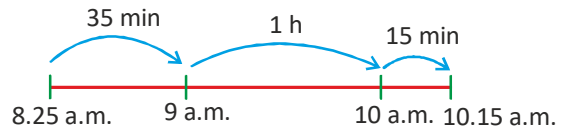
$\therefore \text{CDXLIV} + \text{CXV} = \text{DLIX}$

14. (C)  $28965 + 1000 = \overset{\curvearrowright}{29965}$   
 $\approx 30000$

15. (B)  $1 \text{ min} \rightarrow 120 \div 6 = 20$

$30 \text{ min} \rightarrow 20 \times 30 = 600$

16. (C)



17. (A) Sixth multiple of 8 = 48

Third multiple of 9 = 27

$= 48 + 27 - 10 = 75 - 10 = 65$

18. (A)  $\frac{3}{4} = \frac{9}{12}$

$\frac{2}{3} = \frac{8}{12}$

$\frac{4}{3} = \frac{16}{12}$

By comparing the numerators, the fractions arranged in order beginning

with the smallest  $\frac{5}{12}, \frac{2}{3}, \frac{3}{4}, \frac{4}{3}$ .

19. (D)  $64 = 8 \times 8$

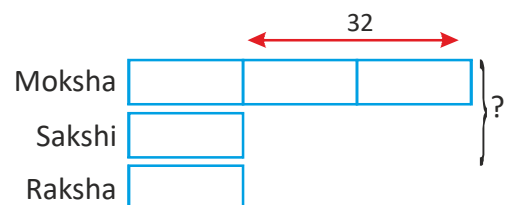
$\rightarrow 8$

$2$   $\rightarrow 48 - 8 = 40$

$\rightarrow 40 \div 2 = 20$

$\times$   $+$   $\rightarrow 20 \times 20 + 8$   
 $= 408$

20. (C)



$2 \text{ units} \rightarrow 32$

$1 \text{ unit} \rightarrow 32 \div 2 = 16$

$6 \text{ units} \rightarrow 16 \times 6 = 96$

21. (A)  $564 \div 4 = 141$   
 $141 - 65 = 76$
22. (B) Height of Rani =  $168 \div 2 = 84$  cm
23. (C)  $74728 - 74428 = 300$   
 In the given pattern difference between two numbers is 300  
 So, the missing number is  
 $74428 - 300 = 74128$
24. (D) No. of mangoes = 8629  
 No. of baskets = 7  
 $= 8629 \div 7 = 1232R5$
25. (C)

1 <sup>st</sup> number		} 3500
2 <sup>nd</sup> number	<span style="border-right: 1px solid black; width: 80%;"></span> <span>626</span>	
3 <sup>rd</sup> number	<span style="border-right: 1px solid black; width: 80%;"></span> <span>626</span> <span style="border-right: 1px solid black; width: 10%;"></span> <span>148</span>	

$3 \text{ units} + 626 + 626 + 148 \rightarrow 3500$

$$\begin{array}{r}
 1626 \\
 626 \\
 + 148 \\
 \hline
 1400
 \end{array}
 \qquad
 \begin{array}{r}
 3500 \\
 - 1400 \\
 \hline
 2100
 \end{array}$$

- 1 unit  $\rightarrow 2100 \div 3 = 700$   
 1st number  $\rightarrow 700$   
 2nd number  $\rightarrow 700 + 626 = 1326$   
 3rd number  $\rightarrow 1326 + 148 = 1474$   
 The three numbers are 700, 1326 and 1474

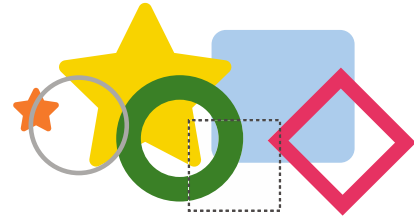
**GENERAL SCIENCE**

26. (A) The number of heart beats per minutes is used to determine the rate of breathing.
27. (B) Tetanus is due to the entry of germs through cut skin.
28. (C) P - Water, Q - Food, R - Carbon dioxide, S - Oxygen
29. (A) Shedding of outer covering or olden covering or skin is called moulting.
30. (B) Desert plant store water in their stems.
31. (B) 2, 4, 5, 3, 1
32. (D) Evaporation rate is more in vessel "D" as evaporation depends upon the exposed area.
33. (B) Woollen blanket traps body heat and keeps body warm during winter.
34. (A) Tadpole is the youngone (Larva) of frog.
35. (B) Earth is the third planet. It supports life as it has air and water.
36. (C) Precipitation is most likely to occur when the sky has thick, dark clouds.
37. (D) Tadpoles are the young ones of frog. Frogs lay their eggs in water. The eggs hatch into tadpoles.
38. (B) Hand lens magnifies the things.
39. (A) Plants need sunlight to make its food hence the plant in the window grew bigger.
40. (A) In the given options jupiter is the outer planet.
41. (B) The process labelled Q is precipitation.
42. (A) A white dog has a puppy with a white fur is an inherited trait, learning to ride a bicycle, a brokenleg of cat and a scar from a burn are not inherited from parent to child.
43. (A) Plants make their food in the presence of sunlight taking in water from the soil and carbon dioxide from the air.
44. (B) Growth and development occur in the life span of all animals.

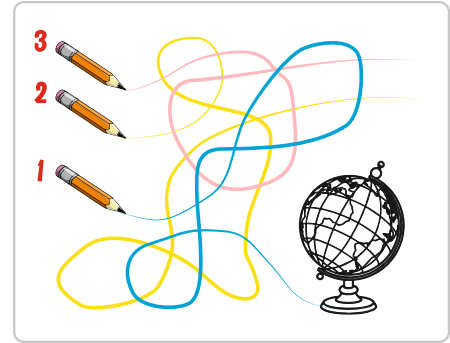
45. (A) Insect 'X' is butterfly.
46. (B) A ball falls to the ground when it is thrown up into the air is due to gravitational force of earth.
47. (D) Sound energy is produced when a guitar string vibrates.
48. (B) Some animals hibernate in the winter to adapt to environmental changes.
49. (B) Smaller particles dissolve faster (or similar). The fine salt has the smallest size of crystals, so they will dissolve faster. The coarse salt is in big blocks that do not dissolve very well. The fine salt is already partly broken down.
50. (C) Rotation of earth on its axis causes day and night.
51. (A) Fat layers under the skin helps penguin to keep warm.
52. (D) The gullet is present in between the mouth and stomach.
53. (D) Leaves are green due to the presence of a green pigment called chlorophyll. The main function of chlorophyll is to trap the sunlight and help in photosynthesis.
54. (C) Sun → Plant → Herbivore shows the correct food chain.
55. (B) Pitcher plant is an insectivorous plants.

### CRITICAL THINKING

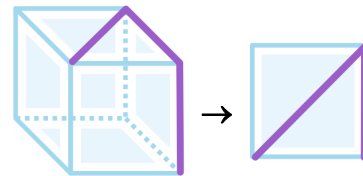
56. (D) You watering it every day.



57. (C)



58. (A)



59. (B)



60. (B)

=====*The End*=====