## NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION - UN412

## Solutions for Class: 2

## Mathematics

1. (D) $10 \div 2=5$
2. (B) $4+3=7$
or
$7-4=3$
3. (B) ₹ $5+₹ 1+50 p$
$\Rightarrow$ ₹ 6.50
4. (B) Cost of 2 pens $=65-45$
= ₹ 20
Cost of 1 pen $=₹ 20 \div 2$
= ₹ 10
5. (A) Pen is 4 units.
$7-4=3$
Hence eraser is $\mathbf{3}$ units long.
6. (B) 9 hundreds 8 tens 3 ones $=983$

99 tens $=990$
Option (A): 900 (smaller than 983) ( $\boldsymbol{X}$ )
Option (B): 984
Option (C): 983 (equal to 983)
Option (D): 938 (smaller than 983) (X)
7. (A)

8. (A) Amount of money Mrs. Mathur paid for the 6 pails
$\longrightarrow 6 \times$ ₹ 3
= ₹ 18
₹ 18 + ₹ 2 = ₹ 20
Mrs. Mathur gave the cashier ₹ 20.
9. (B)

| $\frac{1}{3}$ | $\frac{1}{3}$ | $\frac{1}{3}$ |
| :--- | :---: | :---: |

Shaded fraction is $\frac{2}{3}$.
10. (D) Option (A): 450

Option (B): 45
Option (C): $400+50=450$
Option (D): $400+50+5=455$
11. (A) Each marking stands for $5 l$.

Amount of water in the tank
$\longrightarrow 3 \times 5=15 l$
Amount of more water needed to fill up the tank to $20 l \longrightarrow 20-15=5 l$
12. (B) 6 groups of $2=2+2+2+2+2+2$
13. (D) One whole is 1.
or all regions of a shape shaded.
14. (C) Number of books Mona has $\longrightarrow 2 \square$

Twice as many books as Mona has


Aarush has twice as many books as Mona. or

Harsha has twice as many books as Mona.
15. (C)

16. (B) Number of straight lines in Figure $P \longrightarrow 12$ Number of straight lines in Figure $Q \longrightarrow 9$ $12-9=3$

There are 3 more straight lines in Figure $P$ than Figure Q .
17. (D)


Cost of 5 stalks of flowers $\longrightarrow 5 \times$ ₹ 7
= ₹ 35
$₹ 48-₹ 35=₹ 13$
She had ₹ 13 left.
18. (C)

$3 \times 5=15$
19. (D)



Hence, $\sqrt{ }$ is $\frac{1}{5}$ of the whole.
20. (B)

| Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |  |

Calendar $21^{\text {st }}$ falls on Thursday.
21. (C) Number of legs $=18$

Number of legs that each lady bug has = 6
Number of lady bugs $=\frac{18}{6}=3$
Hence there are 3 lady bugs.
22. (D) Mass of Object $Z \longrightarrow 7$ kg
$3 \mathrm{~kg}+$ Mass of Object $\mathrm{P} \longrightarrow 7 \mathrm{~kg}$
Mass of Object $P \longrightarrow 7-3=4 \mathrm{~kg}$
23. (D) Two hundred fifteen $=215$

$$
\text { Fifty seven = } 57
$$

$+\quad+$
i.e., Two hundred seventy two.
24. (D) 1 hour has 60 minutes.
25. (D)
$42-15=27$
$27<38$
General Science
26. (C) A frog is an insectivorous animal. It eats insects like grasshopper.
27. (A) On a full moon day the moon appears as a whole circle.
28. (A) A shadow is formed when light being blocked by an object.
29. (B) Flowers of apple trees change into apples.
30. (C) Eyes helps us to see things and the color of the sky.
31. (B) The given figure show rotation or rotatory motion of the earth on its axis.
32. (C) Air travels through windpipe before it reaches the lungs.
33. (A) When the sun is directly overhead at noon. The shadows are the shortest at that time of the day.
34. (B) The Sun gives off light and heat.
35. (C) The given picture shows that air has mass.
36. (A) A bear is an omnivore. Omnivores eat many different things including plants and animal.
37. (C) Ice cubes are the examples of solid form of water.
38. (A) We get paper, spices and fibres from plants.
39. (B) A tree and grass have roots to absorb water from the soil.
40. (A) Plants need sunlight, air and water to make its food and to grow.
41. (A) A seed becomes sprout and seedling. It develops leaves, root system and shoot system. After the formation of root and shoot system it grows into an young plant.
42. (A) A weather vane or wind vane shows the wind direction.
43. (C) Potato is a stem tuber. It can reproduce from stem tuber.
44. (D) Roots take in water from the soil.
45. (D) Animals need to move about so that they can get away from danger and look for food, water and shelter.
46. (B) A tooth have a crown, a root and is covered with a protective cover called enamel.
47. (C) A tortoise is an amphibian. It can live both on land and in water.
48. (A) The given cross section of the vegetable is of bhendi or ladiesfinger.
49. (D) Our tongue does not have any bones. It moves when we talk. We can control the movement of tongue.
50. (A) Water gets evaporated and disappear on a sunny day.

