NCC
NEET COACHING CLASSES

SECTION-A : PHYSICS

This section contains **11 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

1. A coil is wrapped around an iron nail and connected to a cell as shown in the given figure. The coil behaves like a magnet only if
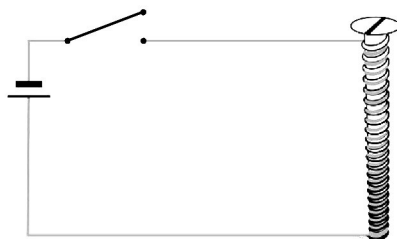

    (1) switch is close   (2) switch is open

    (3) cell is replaced by a plastic wire   (4) cell is replaced by a bulb

2. Wind flows from

    (1) high pressure to low pressure   (2) low pressure to high pressure

    (3) low pressure to low pressure   (4) high pressure to high pressure

3. Which of the following would reflect the most light?

    (1) An object with a crumpled surface.   (2) A smooth, shiny object with flat surface.

    (3) A rough object with curved surface.   (4) A dark, shiny object with curved surface.

4. The bimetallic strip as shown in figure is made by joining a less expanding material such as steel with a more expanding material such as brass. Then match the following columns
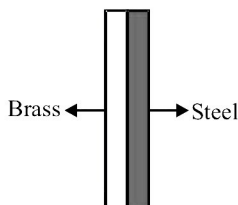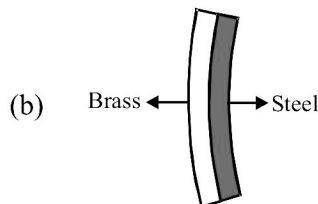

    Column - I   **Column - II**

    (i)   A hot bi-metallic strip   (a)
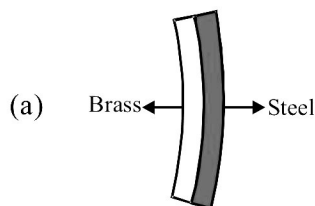
    (ii) A cold bi-metallic strip   (b)
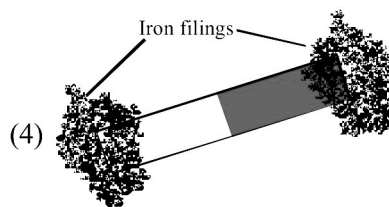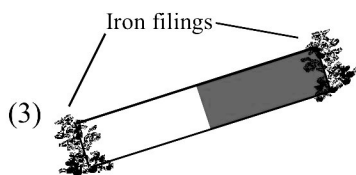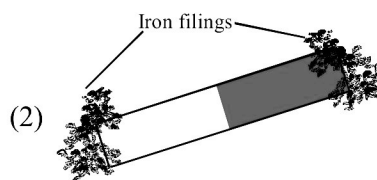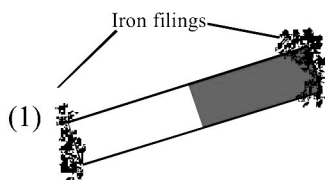
    (1) (i) - (a); (ii) - (a)   (2) (i) - (a); (ii) - (b)

    (3) (i) - (b); (ii) - (a)   (4) (i) - (b); (ii) - (b)

5. What happens when light hits a reflective material?

(1) It passes completely through the material.

(2) It bounces off the material, changing direction.

(3) It is absorbed by the material.

(4) It forms a rainbow.

6. Which of the following figure shows the strongest magnet?

7. We can increase the strength of an Electromagnet by:-

(1) Increasing the magnitude of current through it.

(2) Increasing the number of turns of coil around it.

(3) Both (1) and (2)

(4) None of the above

8. The circuit diagram below shows D-cells connected to four light bulbs and four different materials labelled 1, 2, 3, and 4.
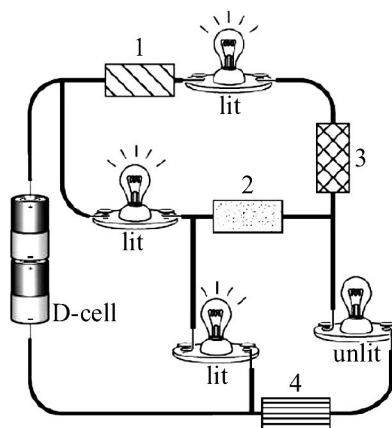
Which one of the materials is not a conductor of electric current?

(1) 1   (2) 2   (3) 3   (4) 4

9. 15 cm is equal to

(1) 150 mm   (2) 15 mm   (3) 1.5 mm   (4) 0.15 mm

10. Match the following columns :

	Column - I		Column - II
(i)	Absolute zero temperature	(a)	212 °F
(ii)	Boiling point of water	(b)	–273 °C
(iii)	Freezing point of water	(c)	273 K
(iv)	Normal body temperature	(d)	310 K

(1) (i) - (b); (ii) - (a); (iii) - (c); (iv) - (d)

(2) (i) - (b); (ii) - (a); (iii) - (d); (iv) - (c)

(3) (i) - (b); (ii) - (c); (iii) - (a); (iv) - (d)

(4) (i) - (c); (ii) - (a); (iii) - (b); (iv) - (d)

11. When a plastic comb is rubbed on dry hair, then plastic comb acquires

(1) Positive charge

(2) Negative charge

(3) May be positive or negative

(4) Neutrality

SECTION-B : CHEMISTRY

This section contains **11 Multiple Choice Questions.** Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

12. Given are some points regarding wool

(i) While wool can absorb moisture, it repels liquids.

(ii) The scales on the outside surface of the wool fibre cause liquid to roll off the surface.

(iii) We cannot mop water with a wool jumper.

Which property of wool can be predicted by these points?

(1) Wool is fire resistant.

(2) Wool is water repellent.

(3) Wool resists dirt.

(4) Wool absorbs air.

13. Which of the following is an example of a chemical change?

(1) Deflating the balloon.

(2) Taking ice cubes and melting them by giving heat.

(3) A plant collecting sunlight and turning it into food.

(4) All of these

14. Observe the given figure carefully and select the correct option.
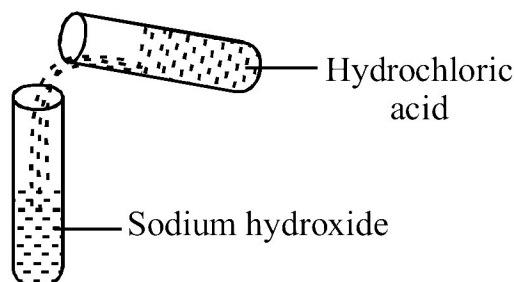
(1) It is a neutralisation reaction.

(2) It will produce common salt and water.

(3) pH of solution will be 7.

(4) All of these

15. Potable water is

(1) Ocean water

(2) River water

(3) Water fit for drinking

(4) Pond water

16. Which of the following are neutralisation reactions ?

A. $2NaOH + H_2SO_4 \longrightarrow Na_2SO_4 + 2H_2O$

B. $H_2SO_4 + 2NH_4OH \longrightarrow (NH_4)_2SO_4 + 2H_2O$

C. $Ca(OH)_2 + 2HCl \longrightarrow CaCl_2 + 2H_2O$

D. $NaOH + HNO_3 \longrightarrow NaNO_3 + H_2O$

(1) A & B   (2) A, B & D   (3) C & D   (4) All of these

17. Which of the following is a physical change?

(1) Rusting of iron   (2) Converting liquid water into steam

(3) Preparing curd from milk   (4) Burning of coal

18. The initial process in the processing of raw wool is __(x)__ , in which wool is cleaned. Raw wool contains an oily substance, called __(y)__ . This contains a complex chemical called __(z)__ .

Select the correct option for above passage.

(1) x - carding, y - yolk   (2) x - carding , z - lanolin

(3) x - scouring, z - egg   (4) x - scouring, z - lanolin

19. A gas that is colourless, odourless and extinguishes fire is

(1) Hydrogen   (2) Carbon dioxide   (3) Helium   (4) Oxygen

20. Identify an undesirable change from the following.

(1) Ripening of fruits   (2) Occurrence of flood   (3) Growth of a plant   (4) Baking of chapati

21. All are animal fibres except

(1) Wool   (2) Jute   (3) Silk   (4) Both (1) and (3)

22. Seema took orange juice in one glass and soap solution in another glass. Then she took strips of blue litmus and red litmus and dipped those into both glasses one by one. What changes will she observe?

(1) Red litmus paper turns blue in orange juice.

(2) Red litmus paper turns blue in soap solution.

(3) Blue litmus paper remains same in orange juice.

(4) Blue litmus paper turns red in soap solution.

SECTION-C : BIOLOGY

This section contains **11 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

23. The given figure represents a section of a flower.
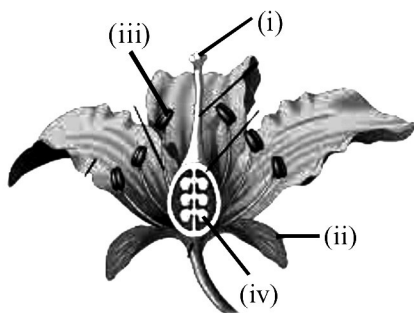
Which part bears female gamete?

(1) (i)   (2) (ii)   (3) (iii)   (4) (iv)

24. Meena put some fruit remains in soil in corner of her garden. According to Ram it is bad to mix garbage in garden soil but Meena knows that what she has done is good, because

(1) Fruit remains are biodegradable   (2) Fruit remains are non-biodegradable

(3) It will form humus after sometime   (4) Both (1) and (3)

25. Which of the following is a list of entirely abiotic factors?

(1) Soil, pH, temperature, bacteria

(2) Viral infections, predators competing for resources

(3) Sunlight levels that penetrate the canopy, soil, pH, number of species

(4) Temperature, soil, oxygen content of soil

26. Which of the following dicot features are present in mango plant?

(i) Reticulate venation   (ii) Parallel venation   (iii) Tap root   (iv) Fibrous root

(1) (i) and (iii)   (2) (i) and (iv)   (3) (ii) and (iii)   (4) (ii) and (iv)

27. A part of human digestive system is shown below.

'P' secretes enzyme which helps in digestion of starch.

'Q' produces a juice which helps in fat digestion.

Identify the correct labelled diagram.
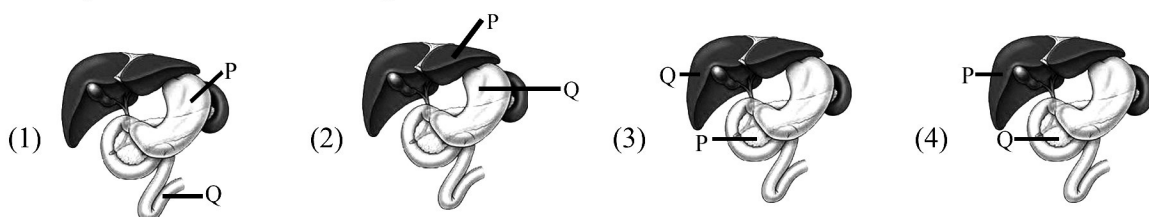
28.

Animal	Characteristics
X	Migrates towards warmer region
Polar bear	Y
Penguin	Z

Which of the following information completes the above table ?

(1) X-Siberian crane, Y-Black colour, Z-Strong, large beak

(2) X-Lion-tailed macaque, Y-White fur, Z-Heavy body

(3) X-Toucan bird, Y-Heavy body, Z-White fur

(4) X-Siberian crane, Y-White fur, Z-Thick layer of fat below skin

29. Woody, perennial, single main stem called trunk which gives out number of branches on upper part. These plants are _____.

(1) Herbs   (2) Shrubs   (3) Trees   (4) Creepers

30. Choose the incorrect statement from the given options.
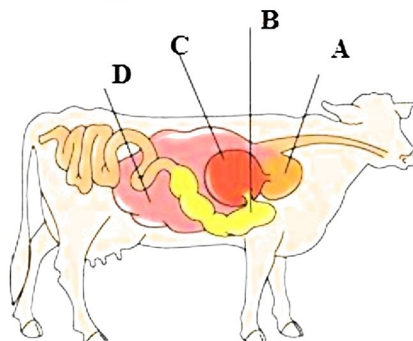
(1) Part labeled 'C' is not true stomach.

(2) Part labeled 'A' is the region where complete digestion occur.

(3) Part labeled 'D' is the region where cud is formed.

(4) Part labeled 'B' is Abomasum

31. Which of the following can not be used for composting?

(1) Plastic bag   (2) Rotten banana

(3) Vegetable peels   (4) Fruit peels

32. Ribs are attached to which bone in front ?

(1) Backbone   (2) Femur   (3) Sternum   (4) Humerus

33. Which adaptation helps the camel to survive in hot and dry desert?

(1) It has a layer of fat under its skin

(2) It sleeps during the day and is active at night

(3) It stores fat in its hump which can be used in emergency.

(4) It stores water in its long neck

SECTION-D : MATHEMATICS

This section contains **25 Multiple Choice Questions.** Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

34. The following pictograph shows the number of mangoes purchased for a home during first four months of an year. Read the table and answer the question given below :

Months	Number of Mangoes 🥭 = 5 Mangoes
JANUARY	🥭 🥭 🥭
FEBRUARY	🥭 🥭 🥭 🥭 🥭
MARCH	🥭 🥭 🥭
APRIL	🥭 🥭 🥭

Find the number of mangoes purchased for a home during January to March is

(1) 60   (2) 25   (3) 30   (4) 80

35. Seven times a number added to five times the same number gives the result 192. The number is ....

(1) 12   (2) 96   (3) 32   (4) 16

36. Find the distance covered by an insect in crawling along the edges of top of the rectangular table as shown in the figure.
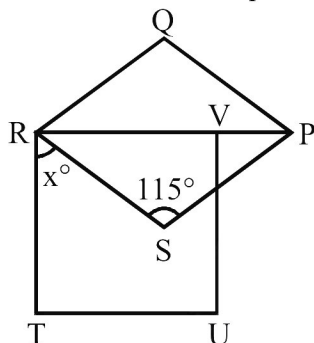
80 cm

60 cm   60 cm
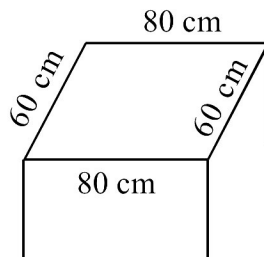
80 cm

(1) 220 cm   (2) 200 cm   (3) 280 cm   (4) 240 cm

37. In a magic square each row, column and diagonal have the same sum, then the values of A and B are respectively _____.

3	−4	1
−2	A	2
−1	B	−3

(1) 4, 1 (2) 4, 0 (3) 1, 1 (4) 0, 4

38. $4(x-3)-2(x+3)=6(x+5)-8$, then the value of x is

(1) 10 (2) −12 (3) −10 (4) 44

39. In the given figure, PQRS is a rhombus and RVUT is a square. Then find x°.

(1) $122\frac{1}{2}^\circ$ (2) $32\frac{1}{2}^\circ$ (3) $57\frac{1}{2}^\circ$ (4) $65\frac{1}{2}^\circ$

40. Absolute value of $2 \times 3 - 4 \times 5$ is

(1) 10 (2) −14 (3) 14 (4) −11

41. The value of $1+\cfrac{1}{2+\cfrac{1}{3+\cfrac{1}{4}}}$ is

(1) $\dfrac{4}{29}$ (2) $\dfrac{5}{39}$ (3) $\dfrac{43}{4}$ (4) $\dfrac{43}{30}$

42. The perimeter of the right angled isosceles triangle is $\left(8+4\sqrt{2}\right)$ cm , then area of triangle is

(1) 8 cm^2 (2) 16 cm^2 (3) $2\sqrt{2}$ cm^2 (4) $32\sqrt{2}$ cm^2

43. The sale of electric bulbs on different days of a month is shown below and answer the following question.

Months	Number of Electric Bulbs ⬛ = 5 bulbs
January	🔆🔆🔆🔆🔆
February	🔆🔆🔆🔆🔆🔆
March	🔆🔆🔆🔆
April	🔆🔆🔆🔆🔆

Find the total number of electric bulbs sold in all the months.

(1) 80 (2) 100 (3) 20 (4) 200

44. What is the value of the expression $\left[\dfrac{14}{3}\left(2\dfrac{3}{7}-3\dfrac{1}{6}+1\dfrac{2}{3}\right)\right]$?

(1) $1\dfrac{1}{2}$ (2) $2\dfrac{1}{3}$ (3) $3\dfrac{1}{3}$ (4) $4\dfrac{1}{3}$

45. On dividing Rs. 7200 among A, B and C in the ratio $\dfrac{1}{3}:\dfrac{1}{6}:\dfrac{1}{4}$ then B's share is

(1) Rs. 1600   (2) Rs. 2400   (3) Rs. 3200   (4) Rs. 1200

46. Which is smaller among $\dfrac{6}{-7}$ and $\dfrac{-5}{9}$?

(1) $\dfrac{-5}{9}$ (2) $\dfrac{6}{-7}$ (3) both are equal   (4) None of these

47. Express $\left(-2\right)^{-3}\div m^{-3}$ in the form of $\left(\dfrac{a}{b}\right)^{3}$.

(1) $\dfrac{-m}{2^3}$ (2) $\left[\dfrac{m}{-2}\right]^3$ (3) $\dfrac{\left(m\right)^3}{2^3}$ (4) $-\left[\dfrac{2}{m}\right]\left[\dfrac{-2}{m}\right]$

48. 7 steps to the left of 4 on number line gives

(1) 3   (2) 11   (3) –11   (4) –3

49. The speed of a train is $75\dfrac{1}{3}$ km / hr. What is the distance travelled by train in $1\dfrac{3}{5}$ hrs?

(1) $12\dfrac{8}{15}$ km   (2) $1200\dfrac{8}{15}$ km   (3) $120\dfrac{8}{15}$ km   (4) $47\dfrac{1}{2}$ km

50. The difference of one fifth of a number and 4 is 3. Which of the following can be the number?
(1) 7   (2) 35   (3) 21   (4) 14

51. A pair of lines which do not intersect at any point are called _____ lines.
(1) Perpendicular   (2) Parallel   (3) Concurrent   (4) Intersecting

52. Which number to be added to 2, 3, 5 and 7 to be in proportion?
(1) 5   (2) 1   (3) 2   (4) 3

53. In the given figure, ΔABC is congruent to ΔPQR. Then, find the value of (m+2n+3p).
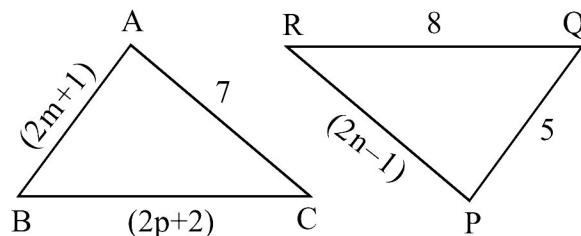
(1) 8   (2) 10   (3) 17   (4) 19

54. The standard form of 65950 is _____.
(1) 6.59×10^6 (2) 6.595×10^5 (3) 6.595×10^4 (4) 6.59×10^5

55. If $x + \dfrac{1}{x} = 11$, then the value of $x - \dfrac{1}{x}$ is = _____ .

   (1) $\sqrt{117}$ (2) $\sqrt{110}$ (3) $\sqrt{119}$ (4) 10

56. In the given figure, if AD = BC and AD||BC, then
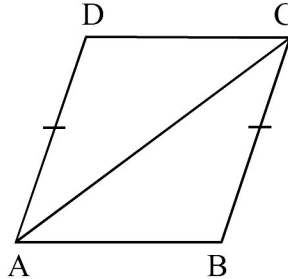
   (1) AB = AD   (2) AB = DC   (3) BC = CD   (4) AD = CD

57. Factors of $\left(5x^4 - 20y^4\right)$ is

   (1) 5   (2) $x^2 - 2y^2$ (3) $x^2 + 2y^2$ (4) All of these

58. The decimals 0.919, 9.19, 0.0919, 91.96 and 0.9919 can be arranged in descending order as
   (1) 91.96 > 0.9919 > 0.0919 > 9.19 > 0.919
   (2) 91.96 > 9.19 > 0.9919 > 0.919 > 0.0919
   (3) 91.96 > 0.9919 > 9.19 > 0.0919 > 0.919
   (4) 91.96 > 9.19 > 0.919 > 0.0919 > 0.9919

SECTION-E : MENTAL ABILITY

This section contains **22 Multiple Choice Questions.** Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

59. Answer the given question based on the following English alphabet:

   A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

   Which letter is 5th to the right of letter P?

   (1) V   (2) T   (3) U   (4) K

60. A man is facing North–East. He turns 90° in the clockwise direction and then 45° in the anti clockwise direction. Which direction is he facing now ?

   (1) North   (2) South–West   (3) West   (4) East

61. In a certain code, "BAGGINS" is written as "#$ααβ%@". How is AGING written in that code?

   (1) $αβ%#   (2) $αβ%α   (3) $@β%#   (4) $αβ#@

62. Regina wants to go to eat pizza in Dominos. She starts from Woodland shop which is in the East and comes to the crossing. The pathway to her Left ends in PVR cinemas, straight ahead is the MacDonald's. In which direction is the Dominos?

   (1) East   (2) North   (3) South   (4) West

63. Choose the missing term out of the given alternatives

   3C, 6F, 10J, 15O, ?

   (1) 21T   (2) 20T   (3) 21U   (4) 20S

64. If the following four words are arranged in alphabetical order, which word will come in third?

(1) Peacock   (2) Pencil   (3) Pear   (4) Past

65. If the code for HORSE is SLIHV, what is the code for DONKEY in the same code language?

(1) WLPMVB   (2) WLMPVB   (3) WLPMBV   (4) WLMPBV

66. Donald ranks 23rd from the bottom and 13th from the top in a class. How many students are there in the class?

(1) 34   (2) 35   (3) 32   (4) 36

67. In the following question, you are given a fig. (X) followed by four alternative figures such that one of the answer figures is embedded in fig. (X). Trace out the alternative figure which is embedded in fig. (X) as its part.

(X)

(1)   (2)   (3)   (4)
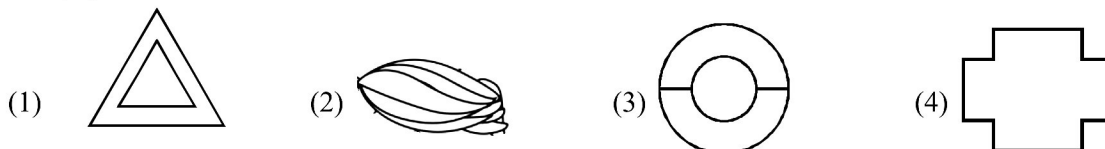
68. A person starts walking towards East direction. He then turned right, then again turn right and finally turned left. In which direction he is walking now?

(1) North   (2) South   (3) East   (4) West

69. Arrange the given words in the alphabetical order and tick the one that comes at the second place.

(1) Batting   (2) Banking   (3) Backing   (4) Banishing

70. Choose the water image of the following combination.

SARVATR75

(1)   (2)   (3)   (4)

71. Choose the mirror image of the following figure (X).
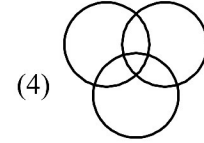

(X)
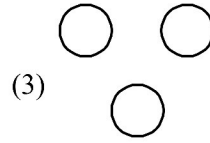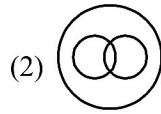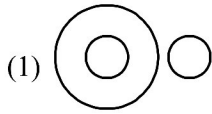
(1)   (2)   (3)   (4)

72. Complete the following series

1, 1, 3, 9, 6, 36, 10, 100, ?, ?

(1) 14, 196   (2) 15, 225   (3) 15, 255   (4) 225, 15

73. Which one of the four interchanges in signs and numbers would make the given equation correct?

$6 \times 4 + 2 = 16$

(1) + and ×, 2 and 4   (2) + and ×, 2 and 6   (3) + and ×, 4 and 6   (4) None of these

74. Choose the venn-diagram which best illustrates the three given classes : Yak, Zebra, Deer.

(1)   (2)   (3)   (4)

75. Find the mirror image of 'MOWGLI'.

(1) **WOMGLI**   (2) **ILGWOM**   (3) **MOWGLI**   (4) **MOWGLI**

76. If 'X' stands for add, 'Y' stands for subtract and 'Z' stands for multiply, then what is the value of given equation.
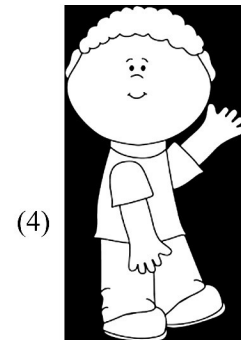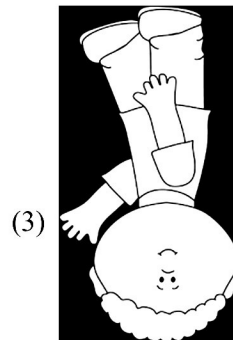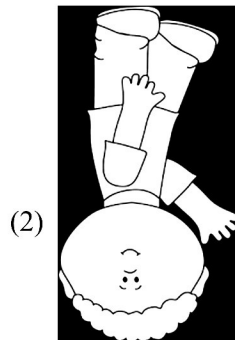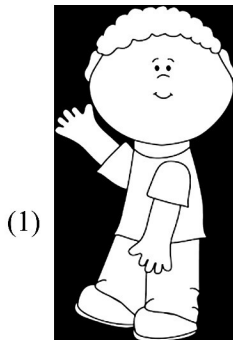
(7 Z 3) Y 6 X 5 = ?

(1) 5   (2) 10   (3) 15   (4) 20

77. Find the water image of the given figure.

(1)   (2)   (3)   (4)

78. Choose the number letter group which is different from the others.

(1) XD6   (2) NG2   (3) RF3   (4) VL2

79. In a row of girls Aditi is 10th from right and 18th from left. How many girls are there in the row?
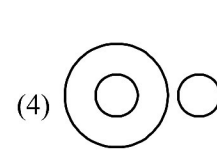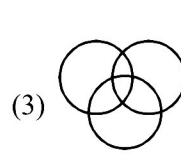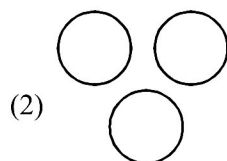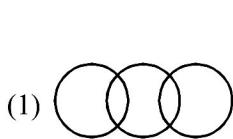
(1) 27   (2) 25   (3) 28   (4) 29

80. Which one of the following correctly represents the relation among Mango, fruit and vegetables?

(1)   (2)   (3)   (4)

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	1	1	2	3	2	4	3	4	1	1	2	2	3	4	3
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	4	2	4	2	2	2	2	4	4	4	1	3	4	3	2
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	1	3	3	1	4	3	4	3	3	3	4	1	2	4	1
Que.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	2	2	4	3	2	2	2	4	3	1	2	4	2	3	4
Que.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Ans.	2	2	3	3	2	2	2	2	4	4	3	2	3	3	2
Que.	76	77	78	79	80										
Ans.	4	2	4	1	4										