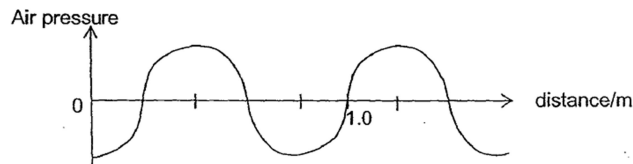


SECTION - A : PHYSICS

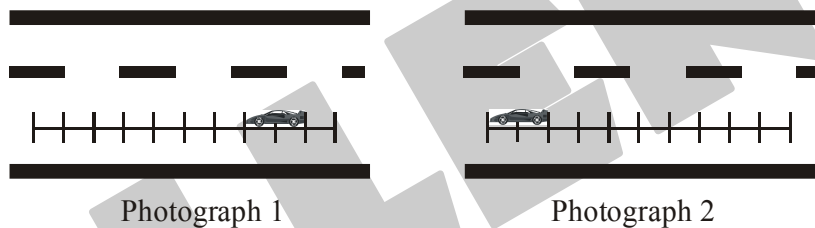
This section contains **15 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

1. The diagram shows the variation of air pressure from an alarm siren at particular instant. The speed of sound in the air is 340 m/s.



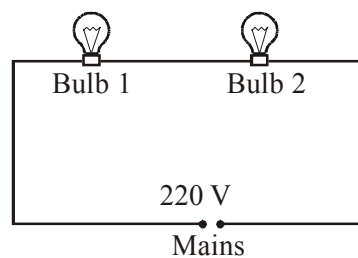
What is the period of alarm siren?

- (1) 0.98 ms (2) 1.2 ms (3) 2.35 ms (4) 2.9 ms
2. Speed cameras are used to detect motorists who break the speed limit. A number of lines 2 m apart are painted on the road. As a speeding car crosses the painted lines, the camera takes two photographs, 0.5 second(s) apart.



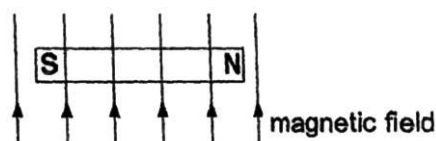
The speed of the car in the photographs is

- (1) 10 m/s (2) 14 m/s (3) 70 m/s (4) 28 m/s
3. An electric bulb rated 220 V, 60 W is working at full efficiency. Another identical bulb is connected across the mains as shown



What is the total power ?

- (1) 20 W (2) 40 W (3) 30 W (4) 60 W
4. The diagram shows a bar magnet placed in a uniform magnetic field. When the magnet is allowed to move freely, it will

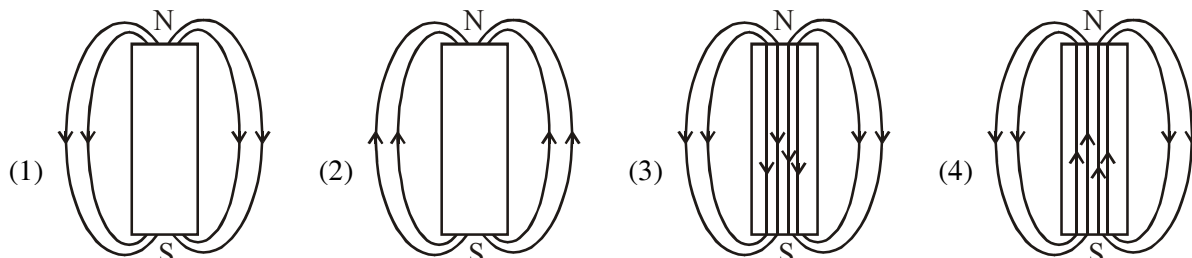


- (1) remain stationary (2) turn 90° clockwise
(3) turn 90° anti - clockwise (4) turn 180° clockwise

5. A heater boils 1 kg of water in time t_1 and another heater boils the same water in time t_2 . If both the heaters are connected in parallel, the combination will boil the water in time

(1) $\frac{t_1 t_2}{t_1 - t_2}$ (2) $\frac{t_1 t_2}{t_1 + t_2}$ (3) $\frac{t_1^2 + t_2^2}{t_1 + t_2}$ (4) $\frac{t_1^2 - t_2^2}{(t_1 - t_2)}$

6. The magnetic field lines due to a bar magnet are correctly shown in figure.

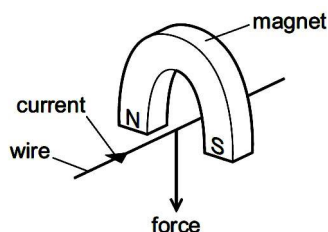


7. The wire of a heating element has a resistance R . The wire breaks and is replaced by a different wire. Data for the original wire and the replacement wire is as shown in the table.

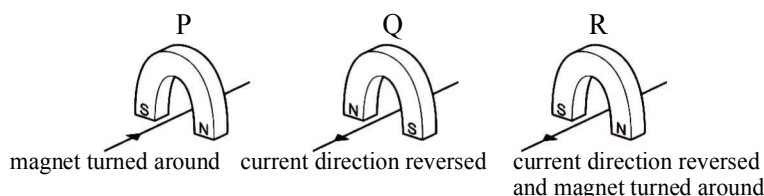
	length	diameter	resistivity of metal
original wire	l	d	ρ
replacement wire	l	$2d$	2ρ

What is the resistance of the replacement wire?

- (1) $\frac{R}{4}$ (2) $\frac{R}{2}$ (3) R (4) $2R$
8. A child is stuck on a frictionless horizontal surface and cannot exert any horizontal force by pushing against the surface. How can he get off?
 (1) By running (2) By rolling (3) By jumping (4) By spitting or coughing
9. A wire is placed between the poles of a horseshoe magnet. There is a current in the wire in the direction shown, and this causes a force to act on the wire.



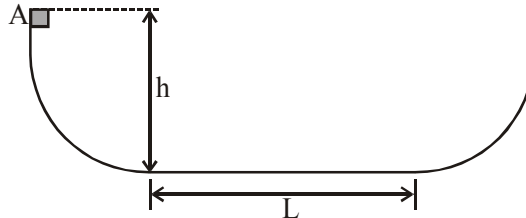
Three other arrangements, P, Q and R, of the wire and magnet are set up as shown.



Which arrangement or arrangements will cause a force in the same direction as the original arrangement?

- (1) P, Q and R (2) P and Q only (3) R only (4) P only

10. A small object of mass = 234 g slides along a track with elevated ends and a central flat part, as shown in below figure. The flat part has length $L = 2.16$ m. The curved portions of the track are frictionless; but in traversing the flat part, object loses 688 mJ of mechanical energy, due to friction. The object is released at point A, which is at height $h = 1.05$ m above the flat part of the track. Where does the object finally come to rest ?



- (1) Particle will move back and forth across the flat portion 3.5 times while attempting one last right to left journey.
 (2) Particle will move back and forth across the flat portion 4 times while attempting one last left to right journey.
 (3) Particle will move back and forth across the flat portion 3.5 times while attempting one last left to right journey.
 (4) It will never stop.
11. The table below shows the mass and the weight of a certain object on Earth.

Mass (kg)	Weight (N)
6.0	60

What are the approximate mass and approximate weight of the same object on the Moon?

(1)

Mass (kg)	Weight (N)
1.0	10

(2)

Mass (kg)	Weight (N)
6.0	10

(3)

Mass (kg)	Weight (N)
6.0	360

(4)

Mass (kg)	Weight (N)
36.0	360

12. An isolated system consists of two bodies on which no external forces act. The two bodies collide with each other and stick together on impact.

	Total kinetic energy before and after collision	Total momentum before and after collision
A	different	different
B	different	the same
C	the same	different
D	the same	the same

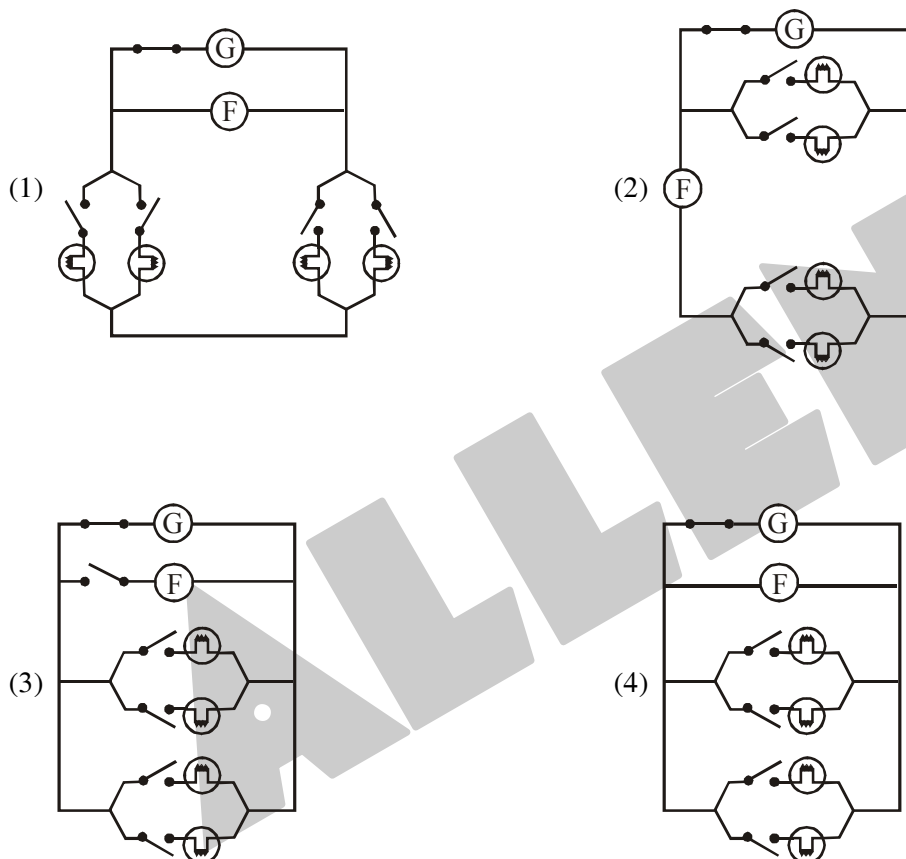
Which row correctly compares the total kinetic energy and the total momentum of the bodies before and after the collision?

- (1) A (2) B (3) C (4) D

13. Four lights and a fan connected on the same circuit must each be able to operate independently. An electrician used the symbols shown below to draw a diagram of the circuit.



Which of the following circuit diagrams did the electrician draw?



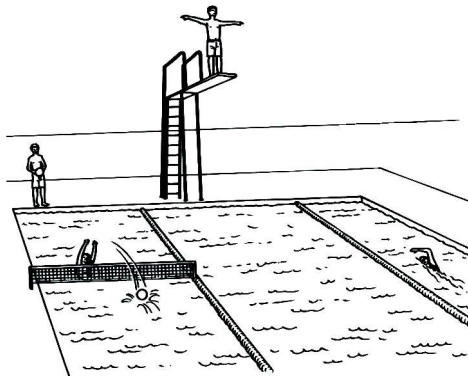
14. Data for various electrical appliances is given in the table below.

Appliance	Power (W)	Potential difference (V)	Current (A)
Car headlamp	48	12	4
TV	240	240	
Hairdryer		240	2
Iron	960	240	
Kettle		240	10

The power for the hairdryer and current for the iron are, respectively :

- (1) 480W ; 0,25 A (2) 240W ; 4A
 (3) 480W ; 4A (4) 960W ; 2A

15. Four students were asked to classify the activities of the people in the picture below as examples of either potential or kinetic energy.



Which student correctly classified the activities?

Student 1		Student 2	
Activity Observed	Classification of Activity	Activity Observed	Classification of Activity
(1) Girl swimming laps	Potential energy	(2) Girl swimming laps	Potential energy
Boy on diving board	Kinetic energy	Boy on diving board	Potential energy
Girl hitting volleyball	Potential energy	Girl hitting volleyball	Kinetic energy
Boy holding volleyball	Kinetic energy	Boy holding volleyball	Kinetic energy

Student 3		Student 4	
Activity Observed	Classification of Activity	Activity Observed	Classification of Activity
(3) Girl swimming laps	Kinetic energy	(4) Girl swimming laps	Kinetic energy
Boy on diving board	Kinetic energy	Boy on diving board	Potential energy
Girl hitting volleyball	Potential energy	Girl hitting volleyball	Kinetic energy
Boy holding volleyball	Potential energy	Boy holding volleyball	Potential energy

SECTION-B : CHEMISTRY

This section contains **15 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

16. Which of the following is the formula of the compound nickel bisulphate?
 (1) NiHSO_4 (2) Ni_2HSO_4 (3) Ni_2SO_4 (4) $\text{Ni}(\text{HSO}_4)_2$
17. 10 g sample of a mixture of CaCl_2 and NaCl is treated to precipitate all the calcium as CaCO_3 . This CaCO_3 is heated to convert all the Ca to CaO and the final mass of CaO is 1.68 g. The percent by mass of CaCl_2 in the original mixture is
 (1) 33.3 % (2) 16.2 % (3) 30 % (4) 11.0 %
18. The table below lists three characteristics of an atom of an element.

Characteristics of an Element

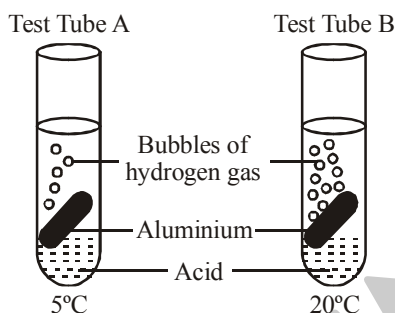
Number of Protons	Number of Neutrons	Number of Valence Electrons
37	48	1

An atom of which element is described by the data in the table?

- (1) Radon (Rn) (2) Cadmium (Cd) (3) Rubidium (Rb) (4) Astatine (At)

CLASS-X

19. How many gram ions of SO_4^{-2} are present in 1 gram molecule of $\text{K}_2\text{SO}_4 \cdot \text{Al}_2(\text{SO}_4)_3 \cdot 24\text{H}_2\text{O}$?
 (1) 2 (2) 3 (3) 1 (4) 4
20. An ore of potassium is
 (1) Bauxite (2) Dolomite
 (3) Carnallite (4) Cryolite
21. Equal-sized pieces of aluminium were placed in test tubes containing equal volumes of acid at different temperatures. From the statements below identify the actions that a student could take to increase the reaction rate in the test tubes.



- i. adding more of the acid to the test tube
 ii. using more concentrated acid
 iii. grinding up the pieces of aluminium before adding the acid
 iv. adding water to the test tube
 v. sealing the test tube with a stopper
- (1) i, ii, v (2) ii, iii (3) i, ii, iii v (4) i, iv, v
22. The pH number of a liquid tells its level of acidity or alkalinity. Some chemicals have different colours when put into liquids with different levels of acidity. These chemicals are called indicators. The following table shows the colour changes that occur with four different acid-base indicators.

Indicator	Colour of Indicator													
	Acidic						pH		Basic					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A	red						blue							
B	clear									pink				
C	red			orange										
D	yellow						purple							

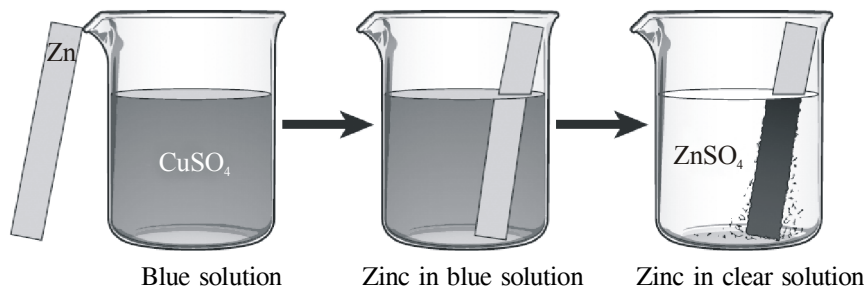
Four liquids 1, 2, 3 and 4 were tested with indicators A, B, C, and D. The results are recorded below. Which liquid has the highest pH?

Liquid	Colour of Indicator			
	Indicator A	Indicator B	Indicator C	Indicator D
1	blue	clear	orange	purple
2	blue	pink	orange	purple
3	red	clear	red	yellow
4	red	clear	orange	yellow

23. If H^+ ion concentration of a solution is increased 10 times its pH will
 (1) increases by 1 (2) remains unchanged
 (3) decreases by 1 (4) increases by 10

24. For an investigation a student poured a blue solution of CuSO_4 into a beaker. The student placed a shiny, silver-coloured strip of zinc metal in the solution and observed the changes.

Observations of an Investigation



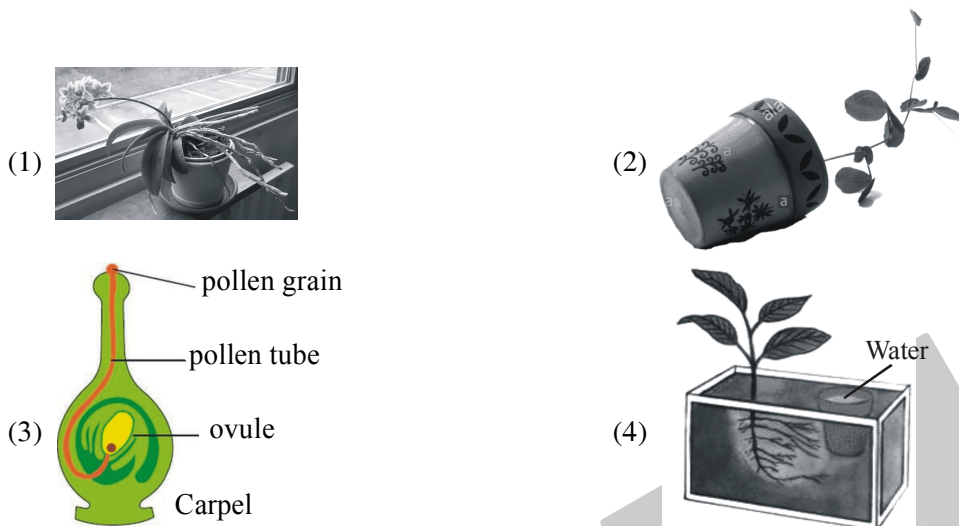
The student inferred that a chemical reaction occurred. What evidence supports this inference?

- (1) A dark solid formed on the zinc metal.
 - (2) The zinc metal remained silver-coloured and shiny.
 - (3) The CuSO_4 solution turned blue when the zinc metal was added.
 - (4) None of these
25. Removal of CO_2 and H_2O from atmospheric air by using KOH and anhydrous CaCl_2 is an example of _____ and _____ changes respectively.
- (1) chemical, chemical
 - (2) physical, physical
 - (3) chemical, physical
 - (4) physical, chemical
26. Electron energy is a negative energy because
- (1) electron carries negative charge
 - (2) energy is zero near the nucleus and decrease as the distance from the nucleus increase
 - (3) energy is zero at infinite distance from the nucleus and decreases as the electron come closer to the nucleus
 - (4) there are inter - electronic repulsion
27. In which one of the following pairs the two species are both isoelectronic and isotopic?
(Atomic numbers : Ca = 20, Ar = 18, K = 19, Mg = 12, Fe = 26, Na = 11)
- (1) $^{40}\text{Ca}^{2+}$ and ^{40}Ar
 - (2) $^{39}\text{K}^+$ and $^{40}\text{K}^+$
 - (3) $^{24}\text{Mg}^{2+}$ and ^{25}Mg
 - (4) ^{23}Na and $^{23}\text{Na}^+$
28. Which of the following is correct about electrorefining of metals?
- (1) Pure metal is made as anode.
 - (2) Impure metal is made as cathode.
 - (3) The metal ions move to anode from cathode through the solution.
 - (4) It is done by using electricity.
29. Which of the following reactions is a synthesis reaction ?
- (1) When steam is passed over red hot coke, a mixture of carbon monoxide and hydrogen is formed.
 - (2) Sodium reacts with water to form sodium hydroxide and hydrogen.
 - (3) When the milk of lime (calcium hydroxide) is added to hot sodium carbonate solution, sodium hydroxide is obtained and calcium carbonate separates out as mud.
 - (4) Stannic chloride is prepared by passing chlorine into molten tin.
30. A sodium salt of unknown anion when treated with CaCl_2 gives white precipitate only on boiling. The anion is
- (1) SO_4^{2-}
 - (2) HCO_3^-
 - (3) CO_3^{2-}
 - (4) NO_3^-

SECTION-C : BIOLOGY

This section contains **15 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

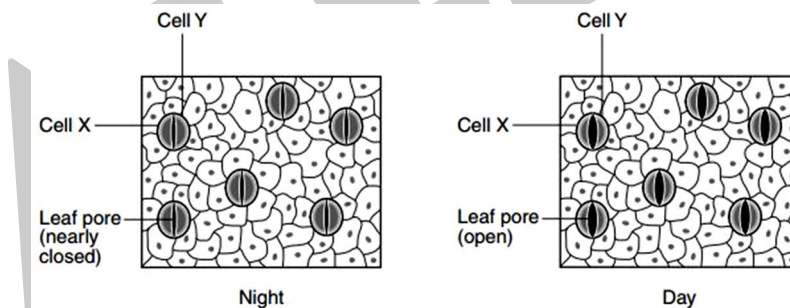
31. Which of the following diagrams shows hydrotropism ?



32. Which bacterial disease affects the nervous system and causes muscle contraction of the jaw and neck?

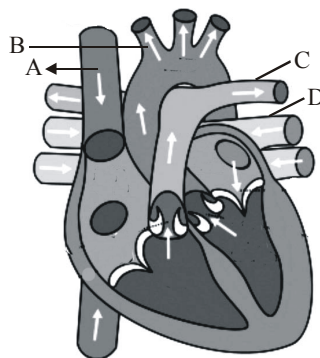
- (1) Diphtheria (2) Plague (3) Tetanus (4) Rabies

33. Which of the following is correct explanation about cell X and Y in the given images?



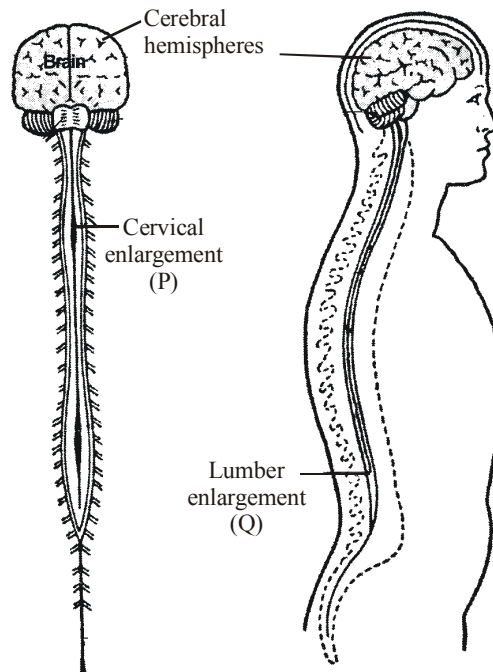
- (1) Detect changes in the biotic factors present in the environment.
 (2) Maintain homeostasis by controlling water loss.
 (3) Store excess heat during the day and remove the heat at night.
 (4) Absorb light energy necessary for cellular respiration.

34. Two arteries and two veins are labelled in the diagram given below. Which of the following are arteries?

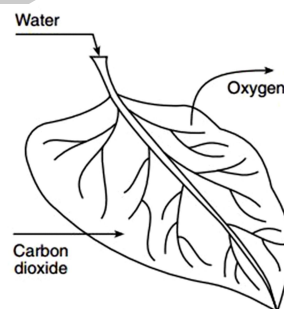


- (1) A and B (2) B and C (3) B and D (4) C and D

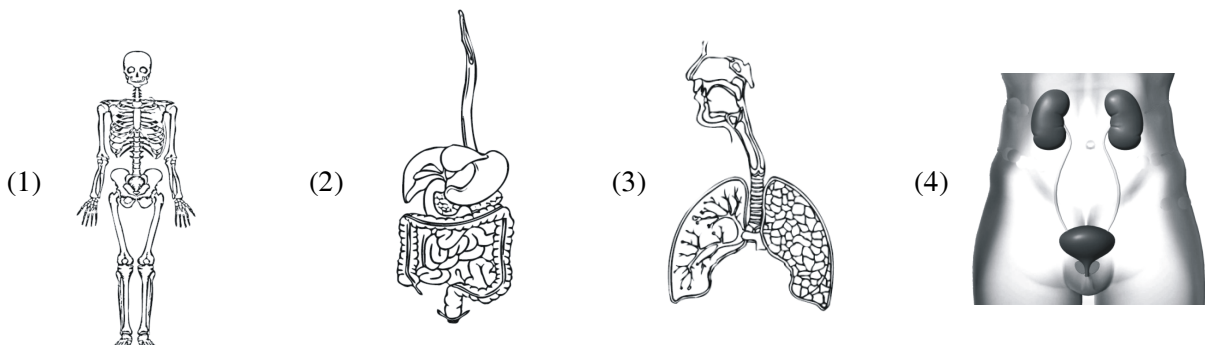
35. Look at the diagram given below and identify the position from where nerves to the upper limb originate.



- (1) P (2) Q (3) Both P and Q (4) None of these
36. A girl was walking slowly to the school. One day suddenly she began breath rapidly. What do you think may have caused her breathing rate to increase?
- (1) too much minerals in her blood. (2) too much salt in her blood.
(3) too much nitrogen in her blood. (4) too much carbon dioxide in her blood.
37. The arrows in the diagram below represent the movement of materials. This movement of materials indicated by the arrows is most directly involved in the processes of



- (1) Respiration (2) Photosynthesis (3) Digestion (4) Circulation
38. Which of the following is human excretory system ?



39. The following table shows selected characters used in analyzing the Phylogenetic relationship of four plant taxa: (YES means present that character)

Taxon	Characters			
	Xylem / Phloem	Wood	Seed	Flowers
A ₁	YES	NO	NO	NO
A ₂	YES	YES	YES	YES
A ₃	YES	YES	YES	NO
A ₄	NO	NO	NO	NO

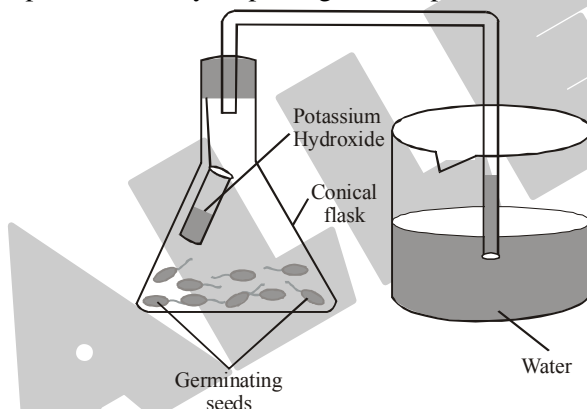
So, Taxa A₁, A₂, A₃ and A₄ are respectively

- (1) Ferns, Oaks, Pines, Hornworts
- (2) Oaks, Pines, Hornworts, Ferns
- (3) Ferns, Pines, Oaks, Hornworts
- (4) Hornworts, Pines, Oaks, Ferns

40. Which of these best describes carbon as it travels through the carbon cycle ?

- (1) Carbon is totally removed from the cycle when an animal dies.
- (2) Carbon exists as a gas throughout the cycle.
- (3) The total mass of carbon remains constant throughout the cycle.
- (4) The carbon atoms are only found in living organisms in the cycle.

41. Study the experimental setup given below in which water level rises in the test tube then which of the following option correctly depicting this experiment ?

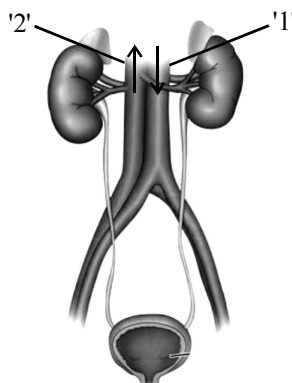


- (1) Aerobic respiration by germinating seed.
- (2) Anaerobic respiration by germinating seed.
- (3) Potassium hydroxide is necessary for respiration.
- (4) None of these

42. Which of the following is a set of viral diseases ?

- (1) AIDS, influenza, T.B.
- (2) AIDS, influenza, common cold
- (3) Influenza, Typhoid, T.B.
- (4) Influenza, cholera, typhoid

43. The diagram below shows the main organs of nitrogenous waste excretion and their blood supply. Arrows in the diagram below show blood flow direction then labelled structure '1' represents



- (1) Renal vein
- (2) Vena cava
- (3) Dorsal aorta
- (4) Hepatic vein

44. The table below lists ways that four organisms obtain energy.

Organism	Method
1. Oak tree	Make food by photosynthesis.
2. Mushroom	Absorbs nutrients from dead plants and animals.
3. Cotton tail rabbit	Eats grasses.
4. Mountain lion	Eat deer, fox etc.

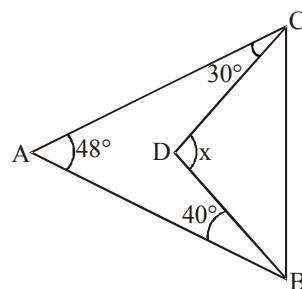
Which organism obtain energy without depending on other organism?

- (1) Oak tree (2) Mushroom (3) Cotton tail rabbit (4) Mountain lion
45. Which of the following phylums contains malpighian tubule as a excretory system?
(1) Cnidaria (2) Arthropoda (3) Porifera (4) Both (2) and (3)

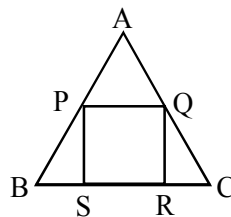
SECTION-D : MATHEMATICS

This section contains **15 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

46. How many positive integers less than 100 have reciprocals with terminating decimal representations?
(1) 13 (2) 14 (3) 21 (4) 25
47. Ram, Shyam, Tarun and Varun together had a total amount of Rs 240 with them. Ram had half of the total amount with the others. Shyam had one-third of the total amount with the others. Tarun had one-fourth of the total amount with the others. Find the amount with Varun (in Rs).
(1) 64 (2) 70 (3) 52 (4) 58
48. The condition that $x^3 - ax^2 + bx - c = 0$ may have two of the roots equal to each other but of opposite signs is
(1) $ab = c$ (2) $\frac{2}{3}a = bc$ (3) $a^2b = c$ (4) None of these
49. The total number of propositions in the book 'Elements' are
(1) 460 (2) 465 (3) 13 (4) 55
50. Find the value of x in the figure given below.

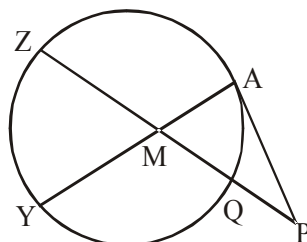


- (1) 118° (2) 20° (3) 72° (4) 223°
51. In the figure given below, ABC is an equilateral triangle and PQRS is a square of side 6 cm. By how many cm^2 is the area of the triangle more than that of the square?



- (1) $\frac{21}{\sqrt{3}}$ (2) 21 (3) $21\sqrt{3}$ (4) 63

52. In the figure, $AP = PM = MY$, $PQ = 1$, $QZ = 8$. Find AM



- (1) $\frac{18}{3}$ (2) $\frac{16}{3}$ (3) 4 (4) 9

53. In a triangle if each side of a triangle is halved, then what is the percentage change in its area.

- (1) 75% increase (2) 75% decrease
(3) 25% increase (4) 25% decrease

54. A rectangular tank has an inner length and breadth of 24 m and 20 m respectively. Water flows through an inlet pipe at 180 m per minute. The cross-sectional area of the pipe is 0.5 m^2 . The tank takes half an hour to get filled. Find the depth of the tank (in m).

- (1) 4.625 (2) 6.125 (3) 5.625 (4) 5.125

55. If a two digit number is chosen at random, find the probability that the number chosen is not a prime number.

- (1) $\frac{13}{30}$ (2) $\frac{23}{30}$ (3) $\frac{17}{30}$ (4) $\frac{29}{30}$

56. Which of the following is true?

- (1) $\tan^2 x + \sec^2 x = \sin^2 x + \cos^2 x$ (2) $\operatorname{cosec}^2 x + \cot^2 x = \tan^2 x - \sec^2 x$
(3) $\sin^2 x + \cos^2 x = \tan^2 x - \sec^2 x$ (4) $\operatorname{cosec}^2 x - \cot^2 x = \sec^2 x - \tan^2 x$

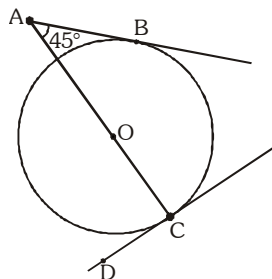
57. If $\cos^2 \theta + 2 \sin^2 \theta + 3 \cos^2 \theta + 4 \sin^2 \theta + \dots \dots \dots (200) \text{ terms} = 10025$, where θ is an acute angle, then the value of $\sin \theta - \cos \theta$ is

- (1) $\frac{1-\sqrt{3}}{2}$ (2) $\frac{1+\sqrt{3}}{2}$ (3) $\frac{\sqrt{3}-1}{2}$ (4) 0

58. The mean of 90 items was found to be 45. Later on, it was discovered that two items were misread as 26 and 19 instead of 62 and 09 respectively. The correct mean is (approximately)

- (1) 49.0 (2) 45.0 (3) 45.3 (4) 49.3

59. In the figure given below O is the centre of the circle. Line AB intersects the circle only at point B and line DC intersects the circle only at point C. If the circle has a radius of 2 cm, then AC is



- (1) 4 cm (2) $2 + \sqrt{2}$ cm (3) $4 + \sqrt{2}$ cm (4) $2 + 2\sqrt{2}$ cm

60. The sum of all the coefficients of the polynomial $(x - 2)^6 (x - 4)^2 + (x + 1)^3 (x - 2)^3 + (x + 1)^2 (x - 4)^3$ is

- (1) -45 (2) -107 (3) -152 (4) -83

SECTION-E : MENTAL ABILITY

This section contains **20 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

61. Select the correct combination of mathematical signs to replace * signs and to balance the given equation:

$$18 * 6 * 3 * 12 * 24$$

- (1) $\div, -, =, \times$ (2) $\times, \div, -, =$ (3) $+, \div, \times, =$ (4) $\times, =, \div, +$

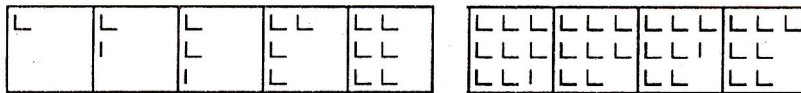
62. In a row of students, Deepak is seventh from the left and Madhu is twelfth from the right. If they interchange their positions, Deepak becomes twenty-second from the left. How many students are there in the row ?

- (1) 19 (2) 31 (3) 33 (4) Can't be found

63. A watch was set correct at 12'O clock. It loses 10 minutes per hour. What will be the angle between the two hands of the clock after 1 hour ?

- (1) 75° (2) 85° (3) 90° (4) 105°

64. Pick up from the answer figures, one which will continue the series to the problem figures.



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

65. There are two clocks A and B. The hands of the clock A moves normally as clockwise while in clock B (due to reverse connection) they move anticlockwise. Initially the two hands of both clocks are at mark showing 12. If after some time, the angle between the directions of two hour hands is 90° (for the first time), then at the same instant the angle between the directions of minute hand will be

(1) 0° (2) 60° (3) 120° (4) 180°

66. A, B, C, D, E, F and G are playing cards sitting around a circular table. D is not the neighbour of C or E. A is neighbour of B and C. G who is second to the left of D, is the neighbour of E and F. Which of the following is correct ?

- (1) B is between A and D (2) D is between F and G
(3) F is a neighbour of B (4) C is a neighbour of D

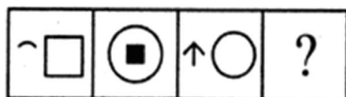
67. The outer border of width 1 cm of a cube with side 5 cm is painted yellow on each side and the remaining space enclosed by this 1 cm path is painted pink. This cube is now cut into 125 smaller cubes of each side 1 cm. The smaller cubes so obtained are now separated.

How many smaller cubes have at least one face coloured :

- (1) 27 (2) 98 (3) 48 (4) 121

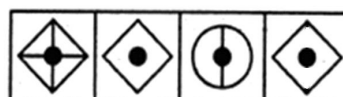
68. Select a suitable figure from the Answer Figures that would replace the question mark (?).

Problem Figures:



- (A) (B) (C) (D)

Answer Figures:



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

69. A solid cube has been painted yellow, blue and black on pairs of opposite faces. The cube is then cut into 36 smaller cubes such that 32 cubes are of the same size while 4 others are of bigger sizes. Also no faces of any of the bigger cubes is painted blue.

How many cubes do not have any of their faces painted yellow ?

- (1) 0 (2) 4 (3) 8 (4) 16

CLASS-X

70. Two statements followed by four conclusions numbered I, II, III and IV. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the conclusions logically follows from the two given statements.

Statements :

- I. Some doors are mangoes.
- II. All mangoes are bananas .

Conclusions :

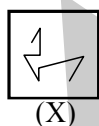
- I. All bananas are mangoes .
- II. All doors are bananas.
- III. Some doors are bananas .
- IV. Some mangoes are doors .

- (1) Only I and II follow
- (2) None follows
- (3) All follow
- (4) Only III and IV follow

71. Each of the 6 friends - A, B, C, D, E, and F wears a different brand shirt among Polo, Reebok, Adidas, Gap, Milan and Lava of six different colors among Red, Blue, Green, White, Pink and Black not necessarily in the same order. C wears a red color shirt which is neither Polo nor Lava. A wears Reebok shirt which is neither black nor pink in color. Either E or F wears white shirt. B wears Gap shirt which is not pink in color. D wears either Adidas or blue shirt. E wears blue shirt which is not Lava. Of which brand is F's shirt ?

- (1) Lava
- (2) Polo
- (3) Adidas
- (4) Milan

72. A Figure (X) is given, followed by four complex figures in such a way that Figure is embedded in one of them. Choose that one.



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

73. Some statements are given and these statements are followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from given statements, disregarding commonly known facts.

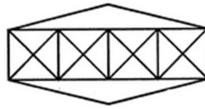
Statements:

- Some pearls are stones.
- Some stones are diamonds
- No diamond is a gem

Conclusions:

- I. Some gems are pearls.
- II. Some gems are diamonds.
- III. No gem is a diamond.
- IV. No gem is a pearl.
- (1) Only I and II follow
- (2) Only III and IV follow
- (3) Only III and either I or IV follow
- (4) Only either I or IV and either II or III follow

74. Introducing Reena, Monika said, "She is the only daughter of my father's only daughter." How is Monika related to Reena ?
 (1) Aunt (2) Niece (3) Mother (4) Sister
75. Count the number of triangles and squares in the given figure.



- (1) 36 triangles, 7 squares (2) 38 triangles, 9 squares
 (3) 40 triangles, 7 squares (4) 42 triangles, 9 squares
76. If, $A + B$ means A is the mother of B ;
 A / B means A is the brother of B ;
 $A \times B$ means A is the son of B and
 $A - B$ means A is the daughter of B .
 Which of the following means C is the niece of D ?
 (1) $D - P / C$ (2) $D \times P - C$ (3) $C - P / D$ (4) $P + D / C$
77. What day of the week was on 25th November 1959 ?
 (1) Saturday (2) Wednesday (3) Friday (4) Monday
78. One evening before sunset two friends Sumit and Mohit were talking to each other face to face. If Mohit's shadow was exactly to his right side, which direction was Sumit facing ?
 (1) North (2) South (3) West (4) Data inadequate
79. Find the missing term.

11	7	49
12	8	54
15	4	?

- (1) 60 (2) 45 (3) 0 (4) 15
80. A word is represented by only one set of number as given in any one of the alternatives. The sets of numbers given in the alternative are represented by two classes of alphabets as in the 2 matrices given below. The columns and rows of Matrix I are numbered from 0 to 4 and that of Matrix II from 5 to 9. A letter from these matrices can be represented first by its row and next by column number. For eg. 'B' can be represented by 11, 30 etc. 'U' can be represented by 58, 89 etc.

MATRIX I					
	0	1	2	3	4
0	M	L	F	H	B
1	H	B	M	L	F
2	L	F	H	B	M
3	B	M	L	F	H
4	F	H	B	M	L

MATRIX II					
	5	6	7	8	9
5	L	K	S	U	N
6	U	N	I	K	S
7	K	S	U	N	I
8	N	I	K	S	U
9	S	U	N	I	K

Identify the set for the word FISH.

- (1) 22, 81, 14, 69 (2) 33, 86, 88, 41
 (3) 33, 88, 67, 22 (4) 02, 67, 34, 88

ANSWER KEY

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