ALLEN OVERSEAS

Question Paper No.

X X X X X

CLASS VIII

Duration: 2 Hrs.
Maximum Marks: 360

Answer Sheet No.

Tallentex Roll No.

TALLENTEX OVERSEAS 2026

SAMPLE PAPER

Please read the instructions carefully. You are allotted 5 minutes specifically for this purpose.

Items NOT ALLOWED in the EXAM HALL: Blank paper, clipboard, log table, slide rule, calculator, camera, mobile phone, or any electronic or electrical gadget. If you are carrying any of these, please leave them at the designated area specified by the invigilator, at your own responsibility.

GENERAL INSTRUCTIONS :

1. This booklet is your Question Paper. DO NOT break seal of Booklet until the invigilator instructs to do so.
2. Fill your TALLENTEX Roll No. & Answer Sheet No. in the space provided on the cover page.
3. Carefully fill your present **CLASS** in space provided on Optical Response Sheet (ORS).
4. Please make sure that paper you received is of your class only.
5. The Answer Sheet is provided to you separately which is a machine readable Optical Response Sheet (ORS). You have to mark your answers in the ORS by darkening bubble, as per your answer choice, by using black or blue ball point pen.
6. This Question Paper contains MCQs with choices for **General Section** (Subject: Mental Ability (IQ): 20, Physics: 9, Chemistry: 9, Maths: 11, Biology: 11).
   For Achiever Section (Subject: Physics: 4, Chemistry: 4, Maths: 6, Biology: 6).
7. Answer once marked by pen cannot be cancelled.
8. Marking Scheme:
   a. If darkened bubble is **RIGHT** answer : +4 Marks (General questions), +6 Marks (Achiever questions)
   b. If darkened bubble is **WRONG** answer: -1 Marks (General questions), -2 Marks (Achiever questions)
9. If you are found involved in cheating or disturbing others, then your ORS will be cancelled.
10. Do not put any stain on ORS and hand it over back properly to the invigilator.
11. You can take along the question paper after the test is over.

IMPORTANT INSTRUCTIONS FOR MARKING THE ANSWER :

1. The Answer Sheet is of special type, called ORS, which will be scanned on Optical Scanner.
2. ORS must be filled/marked neatly with blue/black ball point pen only. Use of pencil is strictly NOT permitted.
3. Partially filled, light filled, crossed & ticked circles will NOT be evaluated. Only completely filled circles with no other mark will be accepted for evaluation. Correct method of marking circle is shown below.
   Correct Method ● Wrong Method ○ ⊘ ⊗ ◐ ◉ ◉
4. 4.Students should NOT mark any answer unless they are sure of it as there is negative marking.
   (+4 for each correct answer and-1 for each incorrect answer).
   For the Achiever Section: (+6 for each correct answer and -2 for each incorrect answer).
5. Do not do any rough work or write anything extra other than asked information on the ORS otherwise the ORS will not be evaluated.
6. Changing of answer after marking once is NOT allowed. Think before marking.
7. Students of Grade 11 are required to attempt questions of either PCM or PCB as per the stream selected in registration form.

VERY IMPORTANT

1. Fill your TALLENTEX Overseas form no., country name and present class carefully otherwise the ORS will not be evaluated and you will be treated as ABSENT in the test.
2. Compulsorily fill in the mobile numbers as mentioned in yourTALLENTEX Overseas registration form.
3. Do not fold, crumple, rub or stain the ORS, otherwise it may get rejected by the scanning machine.
4. Any instance of cheating will not be tolerated and the involved student's ORS will not be evaluated.
5. The student hereby declares that they have thoroughly reviewed all instructions and provided information to the best of their knowledge and understanding.
6. The student information is collected to facilitate the result dissemination process. Rest assured, the data provided is maintained with utmost security and confidentiality.

"Every question you face is a step closer to your dreams. Take a deep breath, trust yourself, and give it your all."

HAVE CONTROL ⟶ HAVE PATIENCE ⟶ HAVE CONFIDENCE ⇒ 100% SUCCESS

BEWARE OF NEGATIVE MARKING

IQ

1. Raj is the son of Diya. Diya and Chavi are sisters. Bharti is the mother of Chavi. If Pawan is the son of Bharti, How is Raj related to Pawan?

(1) Nephew (2) Brother (3) Father (4) Son

2. Pointing to the photograph of a girl Maya, Aman said, " Her daughter's father's wife's mother is my wife's daughter's mother's mother - in - law". How is Aman related to Maya?

(1) Paternal Uncle (2) Brother (3) Father (4) Maternal Uncle

3. 'A % B' means 'A is the mother of B', 'A $ B' means 'A is the father of B', 'A # B' means 'A is the brother of B', 'A & B' means 'A is the sister of B' If J $ H # R % N & T # U % P, then which of the following statements is NOT correct ?

(1) J is the maternal grandfather of N (2) R is the maternal grandmother of P

(3) R is the mother of U (4) N is the sister of P

4. If the word 'TABLECLOTH' is coded as 'DKAZSIUPMD', how can 'HOTELS' be coded?

(1) RIXATP (2) SNGTMF (3) RXTNGI (4) RAXITS

5. If in a certain code language, 'TEA' is written as '318' and 'CHART' is written as '24853', then how 'CHEATER' be written in that code language?

(1) 8313426 (2) 2418315 (3) 4518312 (4) 5213418

6. In a certain code language. 'power is not money' is written as 'ka la ho ga' 'demand and supply power' is written as 'mo ta pa ka' 'money makes only part' is written as 'zi la ne ki' 'demand makes supply power' is written as 'zi mo ka ta' What is the code for 'money' in the given code language?

(1) ga (2) mo (3) la (4) ta

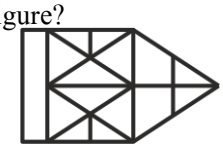
7. If AS= 39 and BAT = 64, then how will you code BREAD?

(1) 30 (2) 77 (3) 205 (4) 62

8. In a code language, INFORMATIVE is written as TQHPKKGXKVC. How will SUPERFICIAL be written as in that language?

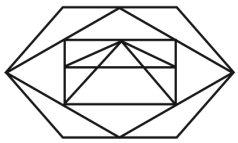
(1) USEPRFICAIL (2) TGDRPEMDLFJ (3) LAICIGREPUS (4) TGRWUDNCKEK

9. How many triangles are present in the given figure?



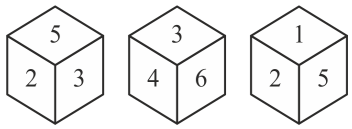
(1) 30 (2) 26 (3) 28 (4) None of these

10. How many pentagons are there in the given figure?



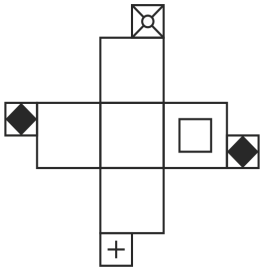
(1) 7 (2) 6 (3) 8 (4) None of these

11. Three different positions of the same dice are shown below: Which number is on the face opposite the face showing 3?

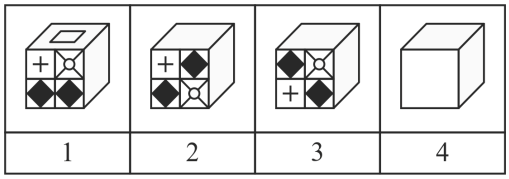


(1) 1 (2) 5 (3) 2 (4) 6

12. A paper sheet is made into the following pattern (A) Find the cube that will best represent after folding the paper.



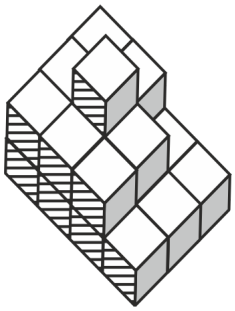
(A)



(1) 1, 2 and 3 only (2) 1, 3 and 4 only

(3) 2, 3 and 4 only (4) 2 and 3 only

13. Count the number of cubes in following figure.



(1) 18 (2) 19 (3) 21 (4) 16

14. Suresh starts from Point A and walks 20 m towards North then takes a left turn and walks 30 m and then takes a right turn and walks 10 m. He finally takes a left turn and walks 30 m and stops at Point B. After Suresh reaches the final Point B, Praveen starts from Point A. He walks 5 m towards the East, takes a left turn and walks 30 m to reach point C. How far and towards in which direction would Suresh have to walk in order to meet Praveen at Point C?

(1) 90 m towards West (2) 55 m towards North

(3) 65 m towards East (4) 90 m towards South

15. Read the following information carefully and answer the questions given below it:

(i) P α Q means Q is to the right of P at a distance of one metre.

(ii) P β Q means Q is to the North of P at a distance of one metre.

(iii) P λ Q means Q is to the left of P at a distance of one metre.

(iv) P η Q means Q is to the South of P at a distance of one metre.

If G α L η R α M then M is in which direction with respect to L?

(1) North-east (2) North-west (3) South-east (4) South-west

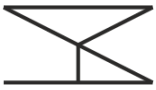
16. Sonia walked 90 m towards the north from her house, and then took a right turn and walked 60 m to reach the market. Then, she took a left turn and walked a few meters from the market to reach the post office, from where she took a left turn again and walked 160 m to reach the school. If the air distance between Sonia's house and the school is 260 m, what is the air distance between the market and the post office?

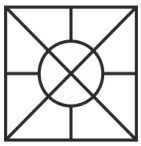
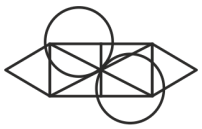
(1) 180 m (2) 120 m (3) 150 m (4) 100 m

17. Rita walks from her home 30 m towards the north and then turns right and walks 20m. Then she turns left and walks 15m.After that she turns right and walks 40m. From there, she turns right and walks 65m. Then she again turns left and walks 40 m. She finally turns left and walks 20m. How far is she from her home now and in which direction with reference to her home?

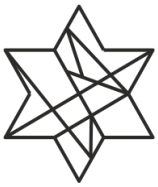
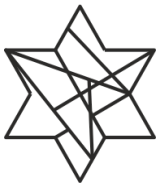
(1) 20m, west (2) 40m, south (3) 100m, East (4) 20m, East

18. Select the option in which the given figure is embedded.



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

19. Select the option in which the given figure is embedded.

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

20. Study the given pattern carefully and select the number that can replace the question mark(?) in it.

10	4	14	16
15	3	5	6
14	7	6	14
18	?	8	15

(1) 6 (2) 9 (3) 7 (4) 8

21. Shreya has two metal wires, one with a high melting point and another with a low melting point. Now she is confused which one is more effective for making a fuse. Help her to choose effective wire.

(1) Wire which has a low melting point.
(2) Wire which has a high melting point.
(3) Both wires are equally effective.
(4) None of the above.

22. Ayesha recorded the daily minimum temperatures as shown in the table.

Daily Minimum Temperature	
Day	**Temperature In Degrees Fahrenheit**
Monday	−15°
Tuesday	−8°
Wednesday	−25°
Thursday	−2°

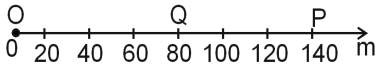
Which of the following lists the temperatures in order from the Lowest to the Highest?

(1) −2°, −8°, −15°, −25°
(2) −25°, −15°, −8°, −2°
(3) −2°, −8°, −25°, −15°
(4) −8°, −15°, −25°, −2°

23. When prongs of a tuning fork are striked using a rubber pad, the compressions and rarefactions in the sound wave correspond to

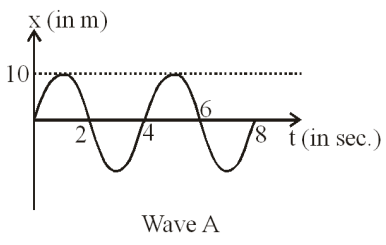
(1) high pressure and low pressure regions.
(2) low pressure and high pressure regions.
(3) both are high density regions.
(4) both are low density regions.

24. A car is moving along a straight line from point O. It moves from O to P in 15 s and returns from P to Q in 10 s. The average speed of the car is

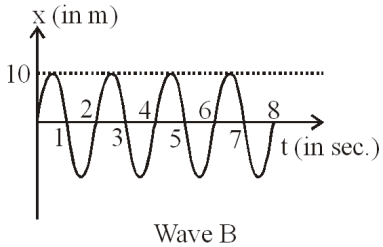


(1) 8 m/s
(2) 10 m/s
(3) 15 m/s
(4) 12 m/s

25. Sound waves generated by two sources A and B are shown by the graphs.



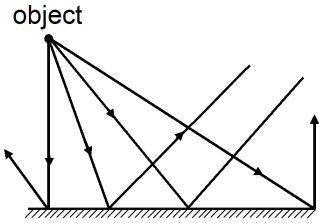
Wave A



Wave B

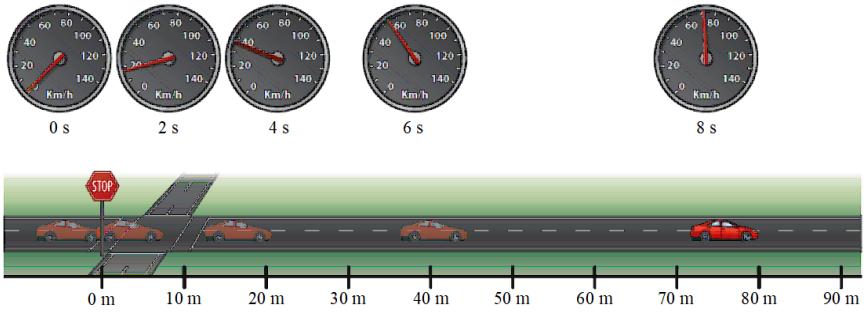
(1) Pitch of A is higher than pitch of B.
(2) Pitch of B is higher than pitch of A.
(3) Pitch of A and B is same.
(4) Information is insufficient to comment on pitch.

26. How many light rays have reflected in wrong way through the given plane mirror?



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

27. The car's speed changes as it leaves the stop sign.



The above figure shows that the body

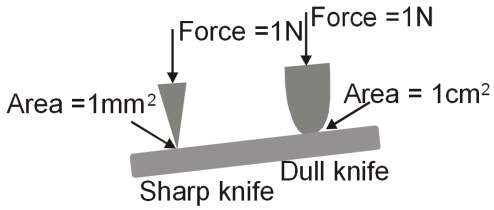
(1) covers equal distance in equal interval of time.

(2) covers equal displacement in equal interval of time.

(3) exhibits non-uniform motion.

(4) exhibits uniform motion.

28. In diagram shown below, two knives are used to apply pressure on a surface. Then



(1) sharp knife exerts large pressure (2) dull knife exerts large pressure

(3) both exert same pressure (4) none of these

29. Ramu is observing his image in a plane mirror. The distance between the mirror and his image is 5 m. If he moves 1m towards the mirror then the distance between Ramu and his image will be

(1) 3 m (2) 5 m (3) 6 m (4) 8 m

30. Which of the following is incorrect statement?

(1) Transpiration helps in maintaining the moisture in atmosphere.

(2) The process of seeping of water into the ground is called infiltration.

(3) The ground water that is stored between layers of hard rock below the water table is known as aquifer.

(4) The process of recharging ground water by collecting rainwater is known as drip irrigation.

31. Ramu has a copper coin, but he wants a silver coin. As a chemist, which solution out of the options given below will you give Ramu to help him get the coating of silver on coin?

(1) $Cu(NO_3)_2$ (2) $ZnCO_3$ (3) Ag (4) $AgNO_3$

32. Which of the following statements is correct about the given change?
(a) Mixing of glucose in water
(b) Curdling of milk
(c) Rusting of iron
(d) Drawing copper into a wire

(1) (b), (c) & (d) are chemical change.
(2) (b) and (d) are physical change.
(3) (b) and (c) are chemical change.
(4) (a), (b) & (d) are physical change.

33. The most appropriate use of Rain water harvesting is

(1) washing clothes
(2) watering the garden
(3) drinking water
(4) rise of ground water level

34. Match the columns and choose the correct option.

Column–I		Column–II	
a.	Expansion or contraction of metals on heating or cooling	(p)	Physical change only
b.	Action of heat on calcium carbonate	(q)	Chemical change only
c.	A stone place under sunlight	(r)	Combination of physical and chemical change
d.	Burning of candle	(s)	Neither a physical nor a chemical change

(1) (a) - (p), (b) - (q), (c) - (r), (d) - (s)
(2) (a) - (q), (b) - (s), (c) - (p), (d) - (r)
(3) (a) - (p), (b) - (q), (c) - (s), (d) - (r)
(4) (a) - (p), (b) - (s), (c) - (q), (d) - (r)

35. Which non-metal is sometimes used as a disinfectant for water due to its strong oxidising properties?

(1) Hydrogen (2) Oxygen (3) Fluorine (4) Chlorine

36. Some changes are classified as given below.

S.No.	Change	Reversible Change	Chemical change
I	Respiration	✗	✓
II	Baking of cake	✓	✗
III	Cutting of tree	✓	✓
IV	Mixing paint colours	✗	✗
V	Curdling of milk	✗	✓
VI	Sawing of wood	✓	✗

Which of the above changes are incorrectly classified?

(1) I, III and IV (2) II, III and VI (3) II, III and IV (4) II, IV and VI

37. A few elements in the order of decreasing reactivity are: K > Ca > Mg > Fe > Sn > H > Au.

Identify the incorrect statement.

(1) Hydrogen is less reactive than Potassium.

(2) Tin from tin chloride can be displaced by Iron.

(3) Magnesium displaces hydrogen from acid more easily than tin.

(4) Calcium displaces iron from its sulphate more easily than Potassium.

38. ___(a)___ was the traditional way of collecting water. Year ___(b)___ was observed as the International year of fresh water to make people aware of this dwindling natural resource. Water drawn from under the ground gets restored by seepage of ___(c)___.

(1) (a) - Wells, (b) - 2005, (c) Rain water

(2) (a) - Springs, (b) - 2003, (c) Water table

(3) (a) - Bawris, (b) - 2003, (c) Rain water

(4) (a) - Bawris, (b) - 2001, (c) Rain water

39. Frogs and Earthworms can breathe through their skin. The skin of both the organisms is-

(1) Moist and slimy

(2) Hairy and rough

(3) Dry and rough

(4) Moist and hairy

40. Read the following statements carefully & identify whether they are true (T) or false (F).

(i) Three chambered heart ensures complete separation of oxygenated and deoxygenated blood, which is useful to animals with high energy needs such as birds and amphibians.

(ii) Blood pressure at the time of maximum contraction of ventricles is systolic blood pressure.

(iii) Stethoscope is used to measure the blood pressure.

(iv) Blood from right atrium enters into right ventricle through bicuspid value.

(v) Heart is covered by a double walled sac, the pericardium.

	(i)	(ii)	(iii)	(iv)	(v)
(1)	F	F	T	T	F
(2)	F	T	T	T	F
(3)	F	T	F	F	T
(4)	F	T	T	F	T

41. Which of the following sets include the Bacterial diseases?

(1) Tuberculosis, Polio, Malaria

(2) Typhoid, Tuberculosis, Cholera

(3) Polio, Typhoid, Measles

(4) Malaria, Typhoid, Cholera

42. Select the correct option from the codes given below to fill in the blanks.

(A) Inhaled air contains _(i)_ of O_2 while exhaled air contains _(ii)_ of O_2.

(B) Whales and dolphins have _(iii)_ as their respiratory organs.

(C) In the absence of oxygen, our skeletal muscles will form _(iv)_ & _(v)_ as an end product of respiration.

	(i)	(ii)	(iii)	(iv)	(v)
(1)	21%	16.40%	gills	lactic acid	energy
(2)	16.40%	21%	gills	lactic acid	energy
(3)	21%	16.40%	lungs	lactic acid	energy
(4)	0.04%	4.40%	lung	ethanol	energy

43. Select the correct option that correctly defines the given characteristics of a cellular component.

I- Responsible for the transfer of hereditary characters from parents to offsprings.

II- Controls the activities of the cell.

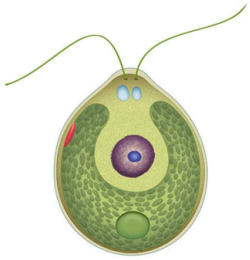
(1) Golgi body

(2) Nucleus

(3) Lysosomes

(4) Endoplasmic reticulum

44. Observe the given image. Identify the organism & select the correct statements about it.



(i) It is unicellular prokaryotic organism with well defined nucleus.

(ii) It has chloroplast with the help of which it can synthesize food.

(iii) When sunlight is not available, it shifts to heterotrophic nutrition.

(iv) It can locomote with the help of tail like structure called cilia.

(1) *Chlorella;* only statement (ii) is correct.

(2) *Euglena*; statements (ii) & (iii) are correct.

(3) *Chlamydomonas*; only statement (ii) is correct.

(4) *Chlamydomonas*; statements (ii), (iii) & (iv) are correct.

45. Rohan was putting seeds in the soil. His father suggested him some precautions regarding the same. From the given options, select the correct statement(s) that Rohan should follow while sowing seeds.

(1) Distance between seeds should be proper.

(2) Enough water should be there while sowing seeds.

(3) Seeds should be sown at a particular depth under the soil.

(4) Rohan must follow all of the given suggestions in (1), (2) & (3).

46. Given below are some steps involved in the process of exhalation. Arrange them in proper order.

(i) Air rushes outside the lungs.

(ii) Volume of thoracic cavity decreases.

(iii) Relaxation in diaphragm and external intercostal muscles.

(iv) Ribs move downward & inward and diaphragm becomes dome shaped.

(v) Air pressure inside the lungs increases.

(1) (v) ⟶ (iii) ⟶ (iv) ⟶ (ii) ⟶ (i)

(2) (iii) ⟶ (ii) ⟶ (v) ⟶ (iv) ⟶ (i)

(3) (iii) ⟶ (iv) ⟶ (ii) ⟶ (v) ⟶ (i)

(4) (iii) ⟶ (iv) ⟶ (ii) ⟶ (i) ⟶ (v)

47. Stuti observed the cells of *Tradescantia* leaf under the microscope. She noticed several small green coloured structures in the cytoplasm. What are these green coloured structures known as?

(1) Vacuole

(2) Nucleus

(3) Mitochondria

(4) Chloroplast

48. Some of the microorganisms are useful to us while some are harmful. From the given list, sort out useful and harmful actions of microorganisms.

(i) Malaria

(ii) Curd preparation

(iii) Cleaning the environment

(iv) Yellow vein mosaic of *Okra*

(v) Production of vaccines

(vi) Food spoiling

(1) Useful : (i), (iii), (v) ; Harmful : (ii), (iv), (vi)

(2) Useful : (ii), (iii), (v) ; Harmful : (i), (iv), (vi)

(3) Useful : (ii), (iii), (iv) ; Harmful : (i), (v), (vi)

(4) Useful : (i), (iv), (vi) ; Harmful : (ii), (iii), (v)

49. Statement-1 : Bacteria, blue green algae are the examples of prokaryotic organisms

Statement-2 : Prokaryotes have a well defined nucleus with a nuclear membrane.

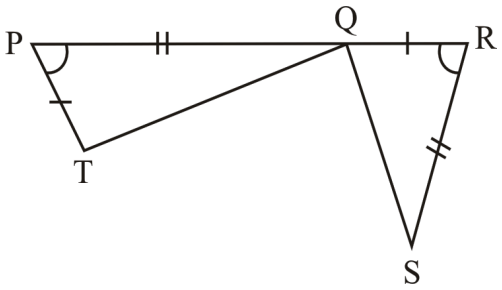
(1) Both statements 1 and 2 are correct & statement 2 is the correct explanation of statement 1.

(2) Both statements 1 and 2 are correct but statement 2 is not the correct explanation of statement 1.

(3) Statement 1 is correct & statement 2 is incorrect.

(4) Both statement 1 and 2 are incorrect.

50. Complete the congruence statement, $\Delta QRS \cong$ _____.



(1) ΔTQP (2) ΔTPQ

(3) ΔQTP (4) ΔQPT

51. Convert 3.1262626..... in fraction.

(1) $\frac{31}{90}$ (2) $\frac{619}{198}$

(3) $\frac{3126}{99}$ (4) $\frac{3126}{1000}$

52. Simplify : $b-\left[b-(a+b)-\left\{b-\left(b-\overline{a-b}\right)\right\}+2a\right]$

(1) 0 (2) $b-a$

(3) 2b (4) 2a

53. If two numbers are in the ratio 3 : 7 and their LCM is 126, then find the smaller number.

(1) 18 (2) 42

(3) 21 (4) 9

54. A cube with a side 1 m long has been cut into cubes of a side 1 dm each. All small cubes have been put one on top of the other, to form a vertical structure. What is the height of this structure?

(1) 100 m (2) 1 km

(3) 10 km (4) 1000 km

55. If AB || DC, AB = 7 cm, BC = 6 cm, AD is 5 cm more than one third of double of BC, $\angle B = \left[\frac{\left(2^{n+1}\times 7\times 6-2^{n}\times 2\times 7\right)}{\left(2^{n}\times 4^{6}-4095\times 2^{n}\right)}\right]$ degree, then which figure of ABCD can be constructed?

(1) Square

(2) Trapezium

(3) Rhombus

(4) Rectangle

56. A pyramid is a polyhedron whose lateral faces are

(1) Rectangles

(2) Triangles

(3) Parallelograms

(4) Rhombus

57. Ravi makes and sells wooden toy boats. For each boat, it costs him \$2.00 for the wood and \$1.00 for the materials to decorate it. He sells each boat for \$7.50. Which of these expressions could represent the amount of money that Ravi will make selling n boats after his costs to make each boat are deducted?

n=number of boats sold

(1) $7.5n - 3$

(2) $7.5n + 3$

(3) $n(7.5 - 3)$

(4) $n(7.5 + 3)$

58. The cube of a number is 8 times the cube of another number. If the sum of the cubes of numbers is 576, then what is the difference of the numbers?

(1) 16

(2) 2

(3) 3

(4) 4

59. If the prime factorization of 3600 is of the form $2^p \times 3^2 \times 5^q \times 7^{\ell}$, then find $\frac{p+q+\ell}{3}$.

(1) 6

(2) 1

(3) 3

(4) 2

60. Simplify: $\frac{24}{43} + \frac{1}{2+\frac{1}{3+\frac{1}{1+\frac{1}{4}}}}$

(1) $\frac{38}{43}$

(2) 1

(3) 2

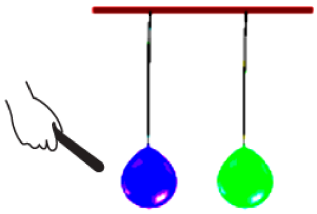
(4) $\frac{43}{19}$

61. Match Column-I with Column-II and select the correct option from codes given below.

Column–I		Column–II	
(a)	Insulator	(i)	Prevents rusting
(b)	Conductor	(ii)	Wood
(c)	Electroplating	(iii)	Graphite

(1) (a)-(i), (b)-(ii), (c)-(iii)
(2) (a)-(iii), (b)-(i), (c)-(ii)
(3) (a)-(i), (b)-(iii), (c)-(ii)
(4) (a)-(ii), (b)-(iii), (c)-(i)

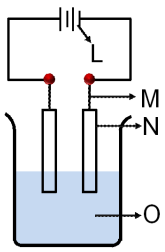
62. Two balloons A and B are rubbed with glass rod and kept near to each other, then



(1) they move away from each other.
(2) they attract each other.
(3) nothing happens.
(4) the balloons will attract each other for some time then repel.

63. On a Fahrenheit scale
(1) boiling point of water is 212°F
(2) the temperature will be equal to that on the Celsius scale at –40°C
(3) the difference between the upper fixed point and the lower fixed point is divided into 180 equal parts.
(4) all of these

64. In the diagram shown below, electrolyte is represented by which letter.



(1) L
(2) M
(3) N
(4) O

65. Which of the following statement is incorrect ?

(1) Drip irrigation is a technique of watering plants by making use of narrow tubes which deliver water directly to the roots of the plant.

(2) Water table is upper level of an underground surface where the soil or rocks are continually saturated with water.

(3) Water shortage is a problem faced only by people living in rural areas.

(4) Rooftop rainwater harvesting is a technique to recharge ground water.

66. Which of the following is not an example of physical change ?

(1) Dissolving sugar in water
(2) Casting iron in moulds
(3) Setting of cement
(4) Crumpling a sheet of aluminium foil

67. When a copper vessel is exposed to moist air for long, it acquires a dull green coating, which is:

(1) Mixture of CuO and $Cu(OH)_2$
(2) Mixture of $Cu(OH)_2$ and Cu_2S
(3) Mixture of $CuCO_3$ and CuO
(4) Mixture of $Cu(OH)_2$ and $CuCO_3$

68. Which non-metal is used to prevent thyroid problems and is applied on wounds as an antiseptic ?

(1) Phosphorus
(2) Iodine
(3) Sulphur
(4) Chlorine

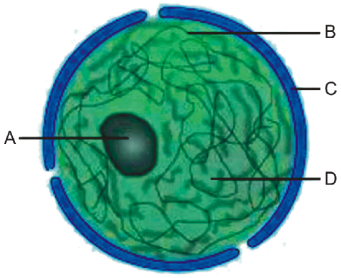
69. Given below is a food chain.

Plant ⟶ Rabbit ⟶ Fox ⟶ Lion

What would happen if the number of fox decreases in the food chain?

(1) The number of rabbit would increase.
(2) The number of lion would decrease.
(3) The number of rabbit would decrease.
(4) Both (1) & (2).

70. Identify the parts labelled as 'A', 'B', 'C', 'D'.



(1) A-Nucleus, B-Nuclear envelope, C-Nucleoplasm, D-Chromatin net

(2) A-Nucleolus, B-Chromatin net, C-Nuclear envelope, D-Nucleoplasm

(3) A-Nuclear envelope, B-Nucleolus, C-Nucleoplasm, D-Chromatin net

(4) A-Chromatin net, B-Nucleolus, C-Nuclear envelope, D-Nucleoplasm

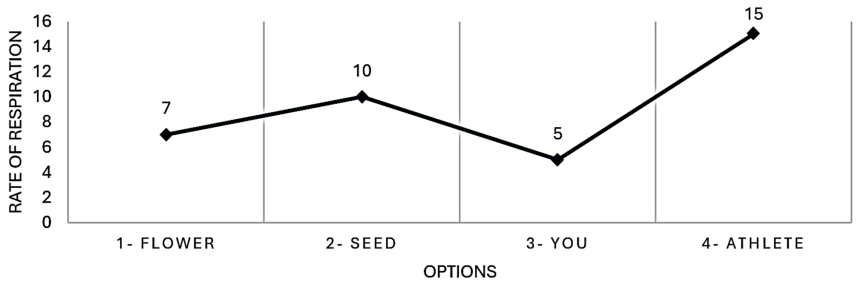
71. Higher plants have specialized tissues for the transport of different substances. The vascular tissue for the transport of water & minerals is “P” while “Q” transports food to all the parts of plants. Identify "P" & "Q" respectively :

(1) Xylem, Cork
(2) Cork, Xylem
(3) Phloem, Xylem
(4) Xylem, Phloem

72. Dead plants and animals, fallen leaves, left over food material rot after some days. This process is called decomposition. Which of the given organisms would contribute in this process ?

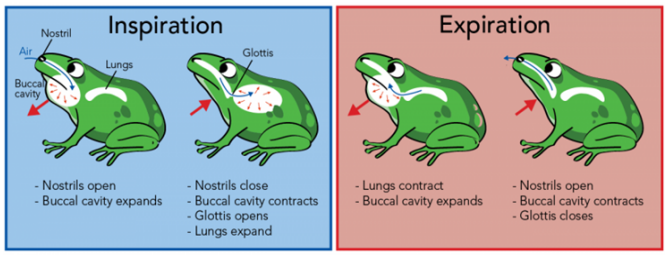
(1) Bacteria
(2) Mushroom
(3) *Chlorella*
(4) Both (1) & (2)

73. Oxygen demand increases as the rate of respiration increases. Select the option which represents least demand for oxygen in the following graph:



(1) FLOWER
(2) SEED
(3) YOU
(4) ATHLETE

74. Study the given image and select the similar organ in us responsible to regulate the passage of entry or exit for air inside the respiratory tract:

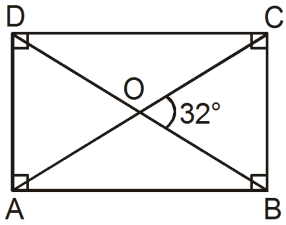


(1) Pharynx
(2) Larynx
(3) Epiglottis
(4) Bronchi

75. Find the value of $\sqrt{0.4225 \times (0.13)^{-2}}$.

(1) 25
(2) 5
(3) 0.5
(4) 50

76. In the given figure (not to scale), ABCD is rectangle whose diagonals intersect at O. Find the measure of ∠ODA.



(1) 65°
(2) 58°
(3) 74°
(4) 32°

77. For what value of 'y' does the equation $\frac{a+b-y}{c}+\frac{a+c-y}{b}+\frac{c+b-y}{a}+\frac{4y}{a+b+c}=1$ satisfy ?

(1) ab + bc + ca
(2) 0
(3) a + b + c
(4) 1

78. If $3^{2022}-3^{2021}-3^{2020}+3^{2019}=4k\times 3^{2019}$, then find the value of k.

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

79. If $x=\sqrt{\sqrt{2}^{\sqrt{2}}}$, then evaluate $\sqrt{x^{2\sqrt{2}}+2\left(\sqrt{2}^{\sqrt{2}}\right)^{0}}$.

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

80. By using the digits 2, 3, 2, 5 you can use any digits out of four numbers once. Then what is the maximum possible value of the expression.

$$\left(\frac{\square}{\square}+\frac{\square}{\square}\right)\times\left(1^0+2^0+3^0\ldots.+125^0\right)^{2325^0}$$

(1) 100
(2) 200
(3) 500
(4) 468.75

SPACE FOR ROUGH WORK