



WISDOM WORLD SCHOOL, KURUKSHETRA

Wisdom Aptitude Test (WAT)

for

Admission to Grade 8 (Aadhar Batch)

PATTERN OF WAT

Multiple choice questions with single correct option type.
Each question carry 2 marks and there is no negative marking.

Syllabus for WAT (Grade 8)

Science	Nutrition in Plants, Nutrition in Animals, Acids, Bases and Salts, Respiration in Organisms, Transportation of Substances, Reproduction in Plants, Time and Motion, Electric Current and its Effect, Light
Mathematics	Integers, Algebraic Expressions, Simple Linear Equations, Comparing Quantities, Lines and Angles, Properties of Triangles, LCM and HCF.
Reasoning	Verbal : Number and Letter Series, Alphabet Test, Coding-Decoding, Direction Sense Test. Non-Verbal : VENN Diagram, Counting of Figure, Water & Mirror Images.

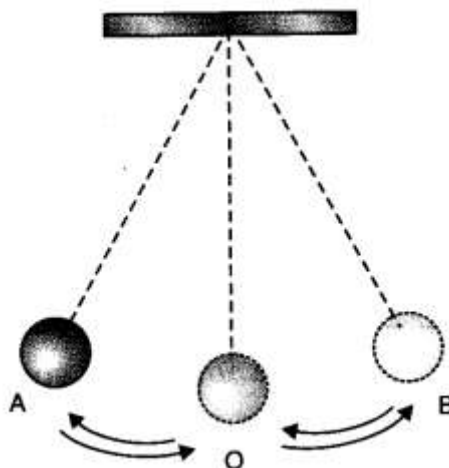
Marking Scheme

Subjects	No. of Questions	Total Marks
Science	20	40
Mathematics	25	50
Reasoning	15	30
Total	60	120
Time Allowed : 2 hours		

Sample Questions for WAT (Grade 8)

SCIENCE

1. The complete site of digestion of food is:
(a) Stomach (b) Small intestine (c) Large intestine (d) Esophagus
2. Which of the following statements is/are true about complete parasitic plants?
(i) They completely depend on the host plant for their survival.
(ii) They have chlorophyll and can prepare their own food.
(iii) They have special root like structure called haustoria.
(iv) They draw nutrition from tissues of host plant.
(a) Both (i) and (ii) (b) (i), (iii) & (iv) (c) Both (i) & (iii) (d) Both (i) & (iv)
3. What is the pH range of tomato?
(a) 5.5-7.5 (b) 5.5-8.5 (c) 4.5-5.5 (d) 6.0-7.5
4. Identify the type of respiration from below given equation:
 $C_6H_{12}O_6 \rightarrow 2C_3H_6O_3 + \text{Energy}$
(a) Aerobic respiration (b) Fermentation
(c) Anaerobic respiration (d) Respiration during lack of O_2
5. What is another name of platelets?
(a) Erythrocytes (b) Leucocytes (c) Thrombocytes (d) Lymphocyte
6. Kanak and Sagar were given one mirror each by their teacher. Kanak found his image to be erect and of the same size whereas Sagar found her image erect and smaller in size. This means that the mirrors of Kanak and Sagar are, respectively
(a) plane mirror and concave mirror (b) concave mirror and convex mirror
(c) plane mirror and convex mirror (d) convex mirror and plane mirror
7. If an object is placed at a distance of 0.5 m in front of a plane mirror, the distance between the object and the image formed by the mirror will be
(a) 2 m (b) 1 m (c) 0.5 m (d) 0.25 m
8. Observe the figure given below:



The time period of a simple pendulum is the time taken by it to travel from

(a) A to B and back to A

(b) O to A, A to B and B to A. Observe the figure given below:

The time period of a simple pendulum is the time taken by it to travel from

(a) A to B and back to A

(b) O to A, A to B and B to A

(c) B to A, A to B and B to O

(d) A to B

9. The absorption of nutrients and exchange of respiratory gases between blood and tissues takes place in:

(a) veins

(b) arteries

(c) heart

(d) capillaries

10. Which mark is necessary on electric appliances?

(a) AGMARK

(b) ISI

(c) FICCI

(d) KSK

MATHEMATICS

11. An elevator descends into a mine shaft at the rate of 6m/min. What will be its position after one hour? If it begins to descend from 20m above the ground.

(a) 360m above the ground

(b) 340m under the ground

(c) 380m under the ground

(d) none of these.

12. If $2x+10=3x$, then find x .

(a) 5

(b) -5

(c) 10

(d) -10

13. Which is the suitable equation for the given solution $x = -3$

(a) $15x = -5$

(b) $\frac{4x}{5} = -4$

(c) $17x = -51$

(d) none of these

14. Find the value of y : $\frac{y}{5} + \frac{y}{15} = y - 11$

(a) 15

(b) -15

(c) -25

(d) 25

15. 30% of $(x - 50) = 150$, then find x :

(a) 250

(b) 550

(c) 750

(d) 450

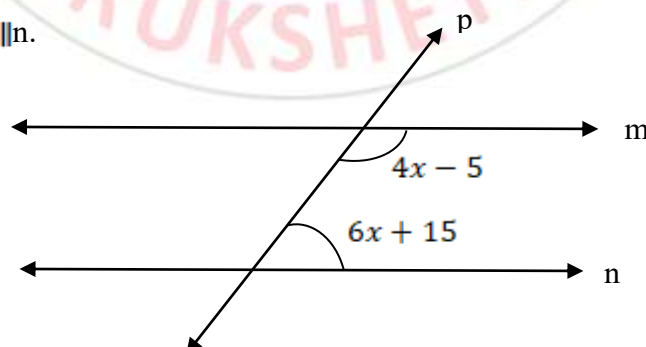
16. Find the value of x if $m \parallel n$.

(a) 19

(b) 18

(c) 17

(d) 12



17. A 17 m long ladder exactly reaches a window 15 m high from the ground when placed against a wall. Find the distance between the foot of the ladder and the wall.

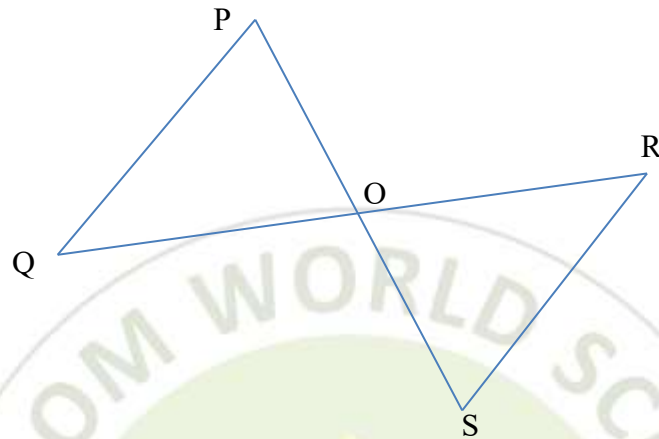
(a) 25m

(b) 8m

(c) 7m

(d) 16m

18. The exterior angle of a triangle is 110° and one of the interior opposite angles is 30° . The measure of the other interior opposite angle is _____.
- (a) 30° (b) 40° (c) 80° (d) 60°
19. The sum of two sides of a triangle is _____ than the third side.
- (a) equal (b) greater
(c) greater than equal to (d) smaller
20. In the given figure, if $\angle QPO = 30^\circ$, and $\angle SOR = 70^\circ$ then $\angle OQP = ?$
- (a) 50° (b) 70° (c) 80° (d) 90°



(REASONING)

21. You are required to choose the correct alternative which resembles the water-image of the given word/number/figure.



(1)



(2)



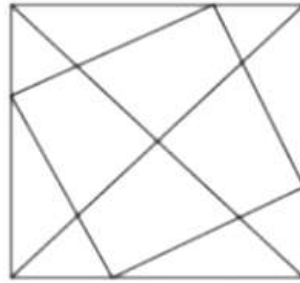
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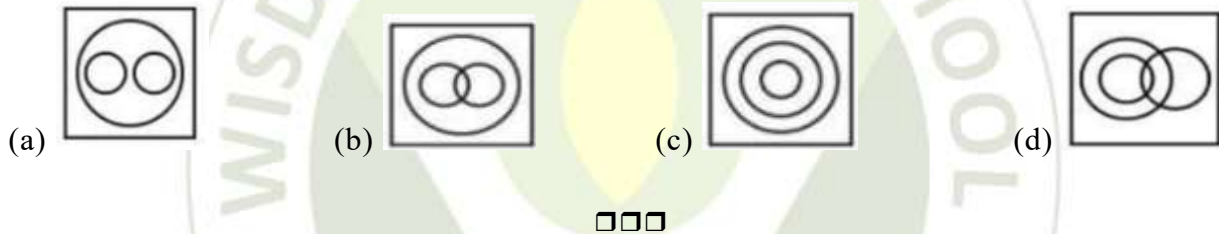
(4)

22. How many such pair(s) of letters are there in the word 'POCKETBOOK' which have as many letters between them as in the alphabetical series?
- (a) One (b) Two (c) Three (d) Four
23. Arrange the following words according to the dictionary.
- | | | | |
|-------------|--------------|-------------|-------------|
| 1. Critical | 2. Criterion | 3. Crisis | 4. Crisp |
| (a) 3,4,2,1 | (b) 1,3,4,2 | (c) 3,4,1,2 | (d) 4,3,1,2 |
24. Which of the following number comes in the next in the following sequence.
31,37,41,43,47.....
- (a) 51 (b) 53 (c) 55 (d) 57
25. What is the next letter in the series CNL, BLI, AJF, ZHC, _____ ?
- (a) XDY (b) YFZ (c) YFA (d) XFY
26. Complete the series : *m _ nm _ n _ an _ a _ ma _*
- (a) aamnan (b) ammanm (c) aammnn (d) amammn

27. Vijayan started walking towards South. After walking 15 m, he turned to the left and walked 15 m. He again turned to his left and walked 15 m. How far is he from his original position and in which direction?
- (a) 15 m, North (b) 30m, East (c) 15 m, West (d) None of these
28. In a certain code language, 639 means 'wood is hard', 657 means 'fur is soft', 135 means 'hard or soft'. Find the code for 'or'.
- (a) 4 (b) 1 (c) 6 (d) 3
29. How many triangles are there in the given figure?



- (a) 20 (b) 23 (c) 24 (d) 26
30. Identify the diagram that best represents the relationship among the given classes.
Manager, Husband, Human Being





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Wisdom Aptitude Test (WAT)

for

Admission to Grade 9 (Aadhar Batch)

PATTERN OF WAT

Multiple choice questions with single correct option type.
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Syllabus for WAT (Grade 9)

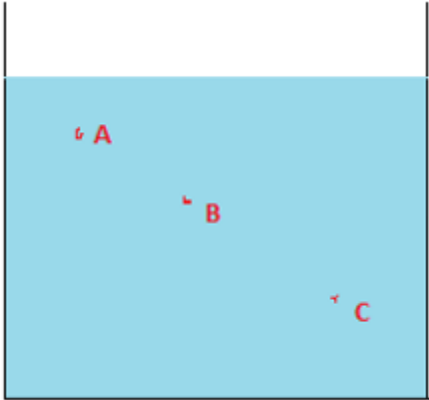
Science	Microorganisms, Reaching the Age of Adolescence, Force and Pressure, Sound, Light, Combustion and Flame, Chemical effects of Electric Current.
Mathematics	Rational Numbers, Exponents, Squares and Square Roots, Cubes and Cube Roots, Algebraic Expressions, Factorisation, Linear Equations in one Variable, Comparing Quantities, Quadrilaterals & its Basics, Mensuration.
Reasoning	Verbal : Number and Letter Series, Alphabet Test, Coding-Decoding, Mathematical Operators, Blood Relation Non-Verbal : Cubes and Dices, Counting figures, Paper Folding & Cutting.

Marking Scheme

Subjects	No. of Questions	Total Marks
Physics	10	20
Chemistry	10	20
Biology	10	20
Mathematics	30	60
Reasoning	20	40
Total	80	160
Time Allowed : 2 hours 30 minutes		

Sample Questions for WAT (Grade 9)

PHYSICS

- When the amplitude is small, the sound produced is:
(a) Feeble (b) Loud (c) Low Pitched (d) None of these
 - Calculate the pressure exerted by an object having weight 2020 N on an area of dimension 5m by 2m.
(a) 200 Pa (b) 1010 Pa (c) 202 Pa (d) 404 Pa
 - The below figure shows a container filled with water. Which of the following statements is correct about pressure of water?
(a) Pressure at A > Pressure at B > Pressure at C
(b) Pressure at A = Pressure at B = Pressure at C
(c) Pressure at A < Pressure at B > Pressure at C
(d) Pressure at A < Pressure at B < Pressure at C
- 
- In a periscope how are the reflecting mirrors arranged?
(a) Perpendicular to each other (b) Parallel to each other
(c) At an angle of 90 degree (d) At an angle of 60 degree
 - Myopia is corrected by:
(a) Convex mirror (b) Concave lens
(c) Concave mirror (d) Convex lens

CHEMISTRY

- Which one of the following four metals would be displaced from the solution of its salt by the other three metals?
(a) Zn (b) Ag (c) Cu (d) Mg
- In electrolysis of water, which gas is liberated at anode?
(a) Chlorine (b) Oxygen (c) Hydrogen (d) Nitrogen
- Choose the metals in the increasing order of their reactivity.
(a) Ag, Cu, Ca, K (b) Cu, Ag, K, Ca (c) K, Cu, Ag, Ca (d) Ca, K, Ag, Cu
- Who proposed the laws of electrolysis?
(a) Michael Faraday (b) J.J. Thomson (c) Proust (d) Lavoisier
- Which non-metal is used for disinfection of water?
(a) Bromine (b) Fluorine (c) Chlorine (d) Iodine

BIOLOGY

11. All viruses consist of:
(a) Protein coat (b) Nucleic Acid
(c) Both (a) and (b) are correct (d) None of the above
12. Which of the following glands produces more than one hormone?
(a) Pancreas (b) Liver (c) Pituitary (d) Thyroid
13. Chromosome carry _____ which transfers characters from parents to offspring
(a) Ribosome (b) Genes (c) Plastid (d) Mitochondri
14. Micro-organisms were first observed by
(a) Robert Hooke (b) Anton Van Leeuwenhoek
(c) Charles Darwin (d) Camillo Golgi
15. The smallest cell in the human body is
(a) Bacteria (b) PPLO (c) RBC (d) Platelets

MATHEMATICS

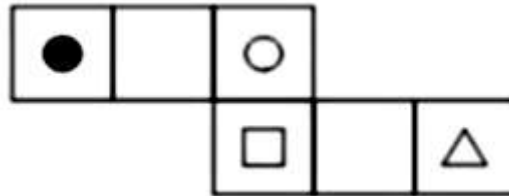
16. If $3^{(x-y)} = 27$ and $3^{(x+y)} = 243$, then x is equal to _____.
(a) 0 (b) 2 (c) 4 (d) 6
17. If $1800 = 2^a \times 3^b \times 5^c$, then the value of $a + b + c$ is _____.
(a) 9 (b) 7 (c) 8 (d) 10
18. A watch worth Rs. 2424 is offered for sale at Rs. 2020. What percent discount is offered during the sale?
(a) $\frac{49}{3}\%$ (b) $\frac{50}{3}\%$ (c) $\frac{25}{3}\%$ (d) $\frac{34}{3}\%$
19. The solution of $\frac{x-5}{2} - \frac{x-3}{5} = \frac{1}{2}$ is _____.
(a) $x = 7$ (b) $x = 9$ (c) $x = 8$ (d) $x = 5$
20. The value of $\frac{2^{2020} + 2^{2018}}{2^{2019} - 2^{2017}}$ is:
(a) 2 (b) $\frac{10}{3}$ (c) $2^{2020} + 1$ (d) 10
21. Find the product of $(x^2 + x + 1)$ and $(x^2 - x + 1)$:
(a) $x^4 - x^2 + 1$ (b) $x^4 + x^2 + 1$ (c) $x^4 + x^2 - 1$ (d) $x^4 - x^2 - 1$

22. Fifteen years from now Ravi's age will be four times the age 15 years ago from now. His present age is:
 (a) 40 years (b) 10 years (c) 25 years (d) 75 years
23. The length of the longest pole that can be put in a room of dimensions $10\text{m} \times 10\text{m} \times 5\text{m}$ is:
 (a) 16 m (b) 15 m (c) 10 m (d) 12 m
24. The diagonals of a rhombus are 24 cm and 10 cm. What is the perimeter of the rhombus?
 (a) 13 cm (b) 52 cm (c) 25 cm (d) 72 cm
25. A rectangular paper for length 30 cm and width 44 cm is rolled along its width and a cylinder is formed. Find the volume of the cylinder.
 (a) 462000 cm^3 (b) 462 cm^3 (c) 46200 cm^3 (d) 4620 cm^3
26. Two cylinders of equal volume have their heights in ratio 2 : 1. What is the ratio of their radii?
 (a) 4 : 1 (b) 1 : 4 (c) $\sqrt{2} : 1$ (d) $1 : \sqrt{2}$
27. What is the total length of edges of the cube of edge 2.5 cm?
 (a) 30 cm (b) 36 cm (c) 48 cm (d) None of these
28. The area of an isosceles triangle having base x cm and one side y cm is:
 (a) $\frac{x}{2} \sqrt{y^2 + \frac{x^2}{4}}\text{ cm}^2$ (b) $\frac{x}{2} \sqrt{\frac{4y^2 - x^2}{4}}\text{ cm}^2$ (c) $\frac{x^2 - y^2}{4}\text{ cm}^2$ (d) None of these
29. Area of a Rhombus is 2020 m^2 and its altitude is 101 m, then the perimeter of the Rhombus is
 (a) 100 m (b) 200 m (c) 120 m (d) 80 m
30. Number of vertices of a tetrahedron is
 (a) 4 (b) 6 (c) 8 (d) 12

REASONING

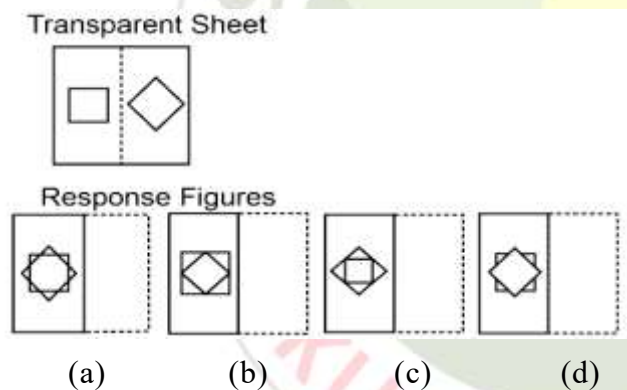
31. Find the next term in the given series: 2, 3, 10, 15, 26, ...
 (a) 34 (b) 35 (c) 36 (d) 37
32. If Q means add to, J means multiply by, T means subtract from and K means divide by then find out the value of:
 $30\text{ K } 2\text{ Q } 3\text{ J } 6\text{ T } 5$
 (a) 18 (b) 28 (c) 31 (d) 103
33. What will come in the blanks of the given series: __ aba __ ba __ ab
 (a) abbbba (b) abbbab (c) baabb (d) bbaba
34. In a certain code language CHILD is written as IMOQJ. How will BABE be written in the same language?
 (a) HFHJ (b) FGFK (c) FFGJ (d) HFGJ

35. How many such pair(s) of letters are there in the word 'REPRESENTATION' which have as many letters between them as in the alphabetical series?
- (a) One (b) Two (c) Three (d) None of these
36. Sita is the niece of Ashok. Ashok's mother is Lakshmi. Kalyani is Lakshmi's mother. Kalyani's husband is Gopal. Parvathi is the mother-in-law of Gopal. How is Sita related to Gopal?
- (a) Great grandson's daughter (b) Gopal's Sita's father
(c) Sita is Gopal's great grand-daughter (d) Grand niece
37. Which of the following cubes can be formed, when the given figure is folded to form a cube?



- (a) (b) (c) (d)

38. Find out among the four alternatives (a), (b), (c), (d), how the pattern would appear when the transparent sheet (X) is folded at the dotted line.



39. Find the number of triangles in the given figure.



- (a) 5 (b) 6 (c) 10 (d) 8
40. What will come next in the given alphabetical series: BYDW, FUHS, JQLO, NMPK,
- (a) RITG (b) RJGH (c) IRGT (d) HPIN