WISDOM WORLD SCHOOL, KURUKSHETRA



Wisdom Aptitude Test (WAT)

for

Admission to Grade VIII (Aadhar Batch) Date : 19 February 2023

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 VIII)

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, Powers and Exponents, Algebraic Expressions, Simple Linear Equations, Comparing Quantities, Lines and Angles, Properties of Triangles, Congruence of Triangles
Reasoning	Verbal : Number and Alphabet Series, Alphabet Test, Coding-Decoding, Direction Sense Test, Blood Relations, Non-Verbal : VENN Diagram, Counting of Figure, Water & Mirror Images

Marking Scheme

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

Sample Questions for WAT (Grade VIII) SCIENCE

		SCH		
1.	The complete site of c	ligestion of food is:		
	(a) Stomach	(b) Small intestine	(c) Large intestine	(d) Esophagus
2.	(i) They completely(ii) They have chlorop(iii) They have special	ng statements is/are true depend on the host plan phyll and can prepare th l root like structure calle on from tissues of host p (b) (i), (iii) & (iv)	neir own food. ed haustoria.	plants? (d) Both (i) & (iv)
2			(-) = (-) ()	(1) = 1 = (1) = (1)
3.	What is the pH range (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 re $C_6H_{12}O_{6\rightarrow} 2C_3H_6O_{3+1}$ (a) Aerobic respiratio (c) Anaerobic respirat	n	ven equation: (b) Fermentation (d) Respiration during	lack of O2
5.	What is another name	of platelets?		
	(a) Erythrocytes	(b) Leucocytes	(c) Thrombocytes	(d) Lymphocyte
6.	and of the same size	whereas Sagar found he and Sagar are, respectiv oncave mirror	er image erect and smalle ely (b) concave mirror and	
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 wi	ll be	
8.	(a) 2 m Observe the figure giv	(b) 1 m ven below:	(c) 0.5 m	(d) 0.25 m

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



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.		f a triangle is 110° ar interior opposite angle i		posite angles is 30°. The
	(a) 30°	(b) 40°	(c) 80°	(d) 60°
19.	Two figures are cong	ruent if they have the		
	(a) same shape		(b) same size	
	(c) different shapes		(d) same shape and same	me size
20.	In the given figure, P	Q = RS and PQ ∥ RS. Δ	POQ and \SOR are congru	ient by
	(a) RHS	(b) AAS	(c) SSS	(d) SAS
21	C V	(REAS	R O S ONING)	
21.		hoose the correct altern	ative which resembles the	water-image of the given
	word/number/figure.			



22.	How many such pair(s	s) of letters are there	in the word 'POCK	ETBOOK' which h	ave as many
	letters between them as	s in the alphabetical s	eries?		
	(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. Pointing to a man on the stage, Rita said "He is the brother of daughter of the wife of my husband". How is the man of stage related to Rita?

(a) Son(b) Husband(c) Cousin(d) Nephew25. 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. Which two of the following numbers comes in the next in the following sequence.
61, 57, 50, 61, 43, 36, 61,
(a) 29, 61
(b) 29, 20
(c) 29, 22
(d) 31, 61

30. Here we have a figure named X. The task is to find X in the other four images. Find out the correct answer.



WISDOM WORLD SCHOOL, KURUKSHETRA



Wisdom Aptitude Test (WAT)

for

Admission to Grade IX (Aadhar Batch) Date : 19 February 2023

PATTERN OF WAT

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

Science	Microorganisms, 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 Alphabet Series, Alphabet Test, Coding-Decoding, Analogy, Blood Relation, Number Ranking, Calender Non-Verbal : Cubes and Dices, Counting figures, Paper Folding & Cutting, Water & Mirror Images

Syllabus for WAT (Grade IX)

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 IX)

PHYSICS

1.	When the amplitude is s (a) Feeble	small, the sound produce (b) Loud	d is: (c) Low Pitched	(d) None of these
2.	Calculate the pressure of by 2m.	exerted by an object hav	ing weight 2020 N	I on an area of dimension 5m
	(a) 200 Pa	(b) 1010 Pa	(c) 202 Pa	(d) 404 Pa
3.	of the following state	s a container filled with ements is correct about		
	water?			۶ A
		essure at B > Pressure at G essure at B = Pressure at G		* в
		essure at $B > Pressure at G$		
		$a \in B < Pressure at C$		* c
4.	In a periscope how are	the reflecting mirrors arra	anged?	
т.	(a) Perpendicular to eac		(b) Parallel to eac	ch other
		egree (d) At an angle of 6		O
5.	Myopia is corrected by:			0
0.	(a) Convex mirror		(b) Concave lens	
	(c) Concave mirror		(d) Convex lens	
		CHEMIS	TRY	
6.		wing four metals would	be displaced from	the solution of its salt by the
	other three metals?			
	(a) Zn	(b) Ag	(c) Cu	(d) Mg
7.	In electrolysis of water,	which gas is liberated at	t anode?	
	(a) Chlorine	(b) Oxygen	(c) Hydrogen	(d) Nitrogen
8.	Choose the metals in the	e increasing order of their	r reactivity.	
	(a) Ag, Cu, Ca, K	(b) Cu, Ag, K, Ca	(c) K, Cu, Ag, C	a (d) Ca, K, Ag, Cu
9.	Who proposed the laws	of electrolysis?		
	(a) Michael Faraday	(b) J.J. Thomson	(c) Proust	(d) Lavoisier
10.	Which non-metal is used	l for disinfection of wate	er?	
	(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 abo	ove	
12.	Which of the following	glands produces more tha	n one	e hormone?		
	(a) Pancreas	(b) Liver	(c)	Pituitary	(d)	Thyroid
13.	Chromosome carry	which transfers charact	ers fi	rom parents to of	fspri	ng
	(a) Ribosome	(b) Genes	(c)	Plastid	(d)	Mitochondri
14.	Micro-organisms were f	irst observed by				
	(a) Robert Hooke		(b)	Anton Van Lee	uwer	hoek
	(c) Charles Darwin	100	(d)	Camillo Golgi		
15.	The smallest cell in the l	numan body is		0		
	(a) Bacteria	(b) PPLO	(c)	RBC	(d)	Platelets
			TI		$\langle \rangle$	
		MATHEMA		.5		
16.	If $3^{(x-y)} = 27$ and $3^{(x+y)} =$			— A 9		
	(a) 0	(b) 2	(c)	4	(d)	6
17.	If $1800 = 2^a \times 3^b \times 5^c$, the	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	. 202	0. What percent	disco	ount is offered during
	the sale?					
	(a) $\frac{49}{3}\%$	(b) $\frac{50}{3}\%$	(c)	25%	(d)	$\frac{34}{3}\%$
	3	3	1 S	3		3
19.	The solution of $\frac{x-5}{2} - \frac{x}{2}$	$\frac{1}{5} = \frac{1}{2}$ is				
	(a) $x = 7$	(b) $x = 9$	(c)	x = 8	(d)	x = 5
20.	The value of $\frac{2^{2020} + 2^{201}}{2^{2019} - 2^{201}}$	$\frac{1}{7}$ is:				
	(a) 2	(b) $\frac{10}{3}$	(c)	$2^{2020} + 1$	(d)	10
21.	Find the product of $(x^2 - $	$(x^2 - x + 1)$ and $(x^2 - x + 1)$:				
			(c)	$x^{4} + x^{2} - 1$	(d)	$x^4 - x^2 - 1$

22.	Fifteen years from now age is:	Ravi's age will be four ti	mes the age 15 years	ago from now. His present
	(a) 40 years	(b) 10 years	(c) 25 years	(d) 75 years
23.	The length of the longes (a) 16 m	t pole that can be put in a (b) 15 m	(c) 10 m	10m × 10 m × 5 m is: (d) 12 m
24.	The diagonals of a rhom	bus are 24 cm and 10 cm	. What is the perimet	er of the rhombus?
	(a) 13 cm	(b) 52 cm	(c) 25 cm	(d) 72 cm
25.	formed. Find the volume	e of the cylinder.		its width and a cylinder is
	(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		s the ratio of their radii?
	(a) 4:1	(b) 1:4	(c) $\sqrt{2}:1$	(d) $1:\sqrt{2}$
27.	-	of edges of the cube of ed		
	(a) 30 cm	(b) 36 cm	(c) 48 cm	(d) None of these
28.		triangle having base x cn		
	(a) $\frac{x}{2}\sqrt{y^2 + \frac{x^2}{4}}$ cm ²	(b) $\frac{x}{2}\sqrt{\frac{4y^2-x^2}{4}}$ cm ²	(c) $\frac{x^2 - y^2}{4}$ cm ²	(d) None of these
• •		2 1 1 1 1 1		C.1 D1 1
29.	Area of a Rhombus is 20	020 m ² and its altitude is	101 m, then the perin	neter of the Rhombus is
29.	(a) 100 m	$(b) 200 \text{ m}^2$ and its altitude is	(c) 120 m	(d) 80 m
29. 30.		(b) 200 m		
	(a) 100 m	(b) 200 m		
	(a) 100 m Number of vertices of a	(b) 200 mtetrahedron is(b) 6	(c) 120 m (c) 8	(d) 80 m
	(a) 100 m Number of vertices of a	(b) 200 m tetrahedron is	(c) 120 m (c) 8	(d) 80 m
	(a) 100 mNumber of vertices of a(a) 4	(b) 200 mtetrahedron is(b) 6	 (c) 120 m (c) 8 ING 	(d) 80 m
30.	(a) 100 mNumber of vertices of a(a) 4	 (b) 200 m tetrahedron is (b) 6 REASON 	 (c) 120 m (c) 8 ING 	(d) 80 m
30.	 (a) 100 m Number of vertices of a (a) 4 Find the next term in the (a) 34 	 (b) 200 m tetrahedron is (b) 6 REASON e given series: 2, 3, 10, 15 (b) 35 	 (c) 120 m (c) 8 ING 5, 26, (c) 36 	(d) 80 m (d) 12
30. 31.	 (a) 100 m Number of vertices of a (a) 4 Find the next term in the (a) 34 If Q means add to, J me out the value of: 	 (b) 200 m tetrahedron is (b) 6 REASON e given series: 2, 3, 10, 15 (b) 35 	 (c) 120 m (c) 8 ING 5, 26, (c) 36 	(d) 80 m (d) 12 (d) 37
30. 31.	 (a) 100 m Number of vertices of a (a) 4 Find the next term in the (a) 34 If Q means add to, J me out the value of: 30 K 2 Q 3 J 6 T 5 	 (b) 200 m tetrahedron is (b) 6 REASON e given series: 2, 3, 10, 15 (b) 35 ans multiply by, T means 	 (c) 120 m (c) 8 ING 5, 26, (c) 36 subtract from and K 	 (d) 80 m (d) 12 (d) 37 means divide by then find
30.31.32.	 (a) 100 m Number of vertices of a (a) 4 Find the next term in the (a) 34 If Q means add to, J me out the value of: 30 K 2 Q 3 J 6 T 5 (a) 18 	 (b) 200 m tetrahedron is (b) 6 REASON e given series: 2, 3, 10, 15 (b) 35 ans multiply by, T means (b) 28 	 (c) 120 m (c) 8 ING 5, 26, (c) 36 subtract from and K (c) 31 	(d) 80 m (d) 12 (d) 37
30. 31.	 (a) 100 m Number of vertices of a (a) 4 Find the next term in the (a) 34 If Q means add to, J me out the value of: 30 K 2 Q 3 J 6 T 5 (a) 18 What will come in the b 	 (b) 200 m tetrahedron is (b) 6 REASON e given series: 2, 3, 10, 15 (b) 35 ans multiply by, T means (b) 28 lanks of the given series: 	 (c) 120 m (c) 8 ING 5, 26, (c) 36 subtract from and K (c) 31 ababa _ ab 	 (d) 80 m (d) 12 (d) 37 means divide by then find (d) 103
30.31.32.33.	 (a) 100 m Number of vertices of a (a) 4 Find the next term in the (a) 34 If Q means add to, J me out the value of: 30 K 2 Q 3 J 6 T 5 (a) 18 What will come in the b (a) abbba 	 (b) 200 m tetrahedron is (b) 6 REASON e given series: 2, 3, 10, 15 (b) 35 ans multiply by, T means (b) 28 lanks of the given series: (b) abbab 	 (c) 120 m (c) 8 ING 5, 26, (c) 36 (c) 31 ababa _ ab (c) baabb 	 (d) 80 m (d) 12 (d) 37 (d) 37 (d) 103 (d) bbaba
30.31.32.	 (a) 100 m Number of vertices of a (a) 4 Find the next term in the (a) 34 If Q means add to, J me out the value of: 30 K 2 Q 3 J 6 T 5 (a) 18 What will come in the b (a) abbba In a certain code langua 	 (b) 200 m tetrahedron is (b) 6 REASON e given series: 2, 3, 10, 15 (b) 35 ans multiply by, T means (b) 28 lanks of the given series: (b) abbab 	 (c) 120 m (c) 8 ING 5, 26, (c) 36 (c) 31 ababa _ ab (c) baabb 	 (d) 80 m (d) 12 (d) 37 means divide by then find (d) 103
30.31.32.33.	 (a) 100 m Number of vertices of a (a) 4 Find the next term in the (a) 34 If Q means add to, J me out the value of: 30 K 2 Q 3 J 6 T 5 (a) 18 What will come in the b (a) abbba 	 (b) 200 m tetrahedron is (b) 6 REASON e given series: 2, 3, 10, 15 (b) 35 ans multiply by, T means (b) 28 lanks of the given series: (b) abbab 	 (c) 120 m (c) 8 ING 5, 26, (c) 36 (c) 31 ababa _ ab (c) baabb 	 (d) 80 m (d) 12 (d) 37 (d) 37 (d) 103 (d) bbaba

- 35. Among five children T, Q, H, J and F each having a different height. T is taller than only J and H is shorter than only F. Who among them is the third in order of height?
 - (a) F (b) Q (c) H (d) J
- 36. Find the water image of the given image out of the given alternatives.



37. Find the mirror image of the given image out of the given alternatives.



39.

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.



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

WISDOM WORLD SCHOOL, KURUKSHETRA



Wisdom Aptitude Test (WAT)

for

Admission to Grade X (Aadhar Batch) Date : 19 February 2023

PATTERN OF WAT

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

Science	Work and Energy, Atoms and Molecules, Structure of the Atom, Tissues, Improvement in Food Resources		
Mathematics	Number Systems, Polynomials, Coordinate Geometry, Linear Equations in Two Variables, Lines and Angles, Quadrilaterals, Circles, Surface Areas and Volumes		
Reasoning	Verbal - Number Series, Alphabet Test, Coding-Decoding, Blood Relation, Number Ranking, Calendar, Reasoning Puzzle Non-Verbal - Counting figures, Missing and Inserting Character, Cubes and Dices		

Syllabus for WAT (Grade X)

Marking Scheme

Subjects	No. of Questions	Total Marks				
Science	30 S H V	60				
Mathematics	30	60				
Reasoning	20	40				
Total	80	160				
Time Allowed : 2 hours 30 minutes						

Sample Questions for WAT (Grade X) PHYSICS

- 1. The inertia of a moving object depends on:
 - (a) mass of the object (b) momentum of the object
 - (c) speed of the object (d) shape of the object
- 2. Aman wearing a bullet-proof vest stands on roller skates. The total mass is 80 kg. A bullet of mass 20 g is fired at 400 m/s. It is stopped by the vest and falls to the ground. What is then the velocity of the man?
 - (a) 1m/s (b) 0.1 m/s (c) 0.01m/s (d) 0 m/s
- 3. Newton's third law of motion explains the two forces namely 'action' and 'reaction' coming into action when the two bodies are in contact with each other. These two forces:



- (a) Always act on the same body
- (b) Always act on the different bodies in opposite directions
- (c) Have same magnitude and direction
- (d) Acts on either body at normal to each other
- 4. Velocity versus time graph of a ball of mass 50 g rolling on a concrete floor is shown in the figure below. What will be the frictional force of the floor on the ball?



- 5. The gravitational force between two objects is F. If masses of both the objects are halved without altering the distance between them, then the gravitational force would become
 - (a) f/4 (b) f/2 (c) f (d) 2f

CHEMISTRY

6.	How many particles are represented by 0.25 mole of an element?								
	(a) 1.05×10^{24}	(b) 7.023×10	(c)	1.505×10^{23}	(d)	6.022×10^{23}			
7.	. How many electrons and protons are present in Mg ⁺² ?								
	(a) 10, 12	(b) 12,12	(c)	12,10	(d)	10,10			
8.	What is the atomicity of A	hat is the atomicity of Ar?							
	(a) 1	(b) 2	(c)	3	(d)	4			
9.	The formula of phosphate of a metal M is MPO ₄ , then what will the formula of the chloride of metal M?								
	(a) MCl_2	(b) MC <i>l</i> ₄	(c)	M_2Cl_3	(d)	MCl ₃			
10.	What is the molar mass of $CuSO_4.5H_2O$? (Atomic mass of $Cu = 63.5$)								
	(a) 159.5g	(b) 249.5u	(c)	249.5 g	(d)	159.5 u			
		NON	47						
BIOLOGY									
11.	Which of the following sta	ich of the following statement is not correct for a chronic disease?							
	(a) It is a long lasting disease		(b)	It lasts for a short period					
	(c) It may damage an or	gan of the body	(d) Weight loss may occur						
12.	Toxins will accumulate int	ins will accumulate into the body if this organ stops working:							
	(a) Kidneys	(b) Heart	(c)	Intestine	(d)	Oesophagus			
13.	Which cell organelle synthesizes enzymes of lysosomes?								
	(a) RER	(b) SER	(c)	Golgi bodies	(d)	Ribosomes			
14.	The process in which cell engulfs food and other materials from its external environment is known as								
	(a) Diffusion	(b) Endocytosis	(c)	Osmosis	(d)	Plasmolysis			
15.	What percentage of blood	What percentage of blood is constituted by plasma?							
	(a) 70%	(b) 80%	(c)	55%	(d)	30%			
ΜΑΤΗΓΜΑΤΙΛΟ									
MATHEMATICS									

16. What will the remainder if $p(x) = x^{45}$ is divided by $g(x) = x^2 - 1$?

(a) 2x (b) 0 (c) -x (d) x

17. The value of $\frac{(a+b)^2}{(b-c)(c-a)} + \frac{(b+c)^2}{(a-b)(c-a)} + \frac{(c+a)^2}{(a-b)(b-c)}$ will be (a) -1 (b) 1 (c) 0 (d) 2

18. How many pair of x	How many pair of x and y satisfy the equation $2x + 4y = 8$ and $6x + 12y = 24$?								
(a) 0	(b) Infinite	(c) 1	(d) None of these						
19. If (a + b, a − b) is th b is	. If $(a + b, a - b)$ is the solution of the equations $3x + 2y = 15$ and $4x + 5y = 13$, then the value of b is								
(a) 8	(b) -4	(c)-2	(d) 5						
1	20. If we add 1 to the numerator and subtract 1 from the denominator a fraction becomes 1. It also becomes $\frac{1}{2}$ if we add 1 to the denominator. Then the sum of numerator and denominator of fraction is								
(a) 7	(b) 2	(c)8	(d) 11						
21. If the mean of 10 observations is 25 and the mean of another 10 observations is 35, then the									
mean of 20 observations is									
(a) 10	(b) 20	(c)30	(d) 50						
22. The sum of mode an	22. The sum of mode and mean of certain observations is 120 and the median of the observation is								
63. The value of me	an is								
(a) 55	(b) 60	(c) 65	(d) 69						
23. If the mode of the observations 5, 4, 4, 3, 5, <i>x</i> , 3, 4, 3, 5, 4, 3 and 5 is 3, then the median of the observation will be									
(a) 3	(b) 5	(c) 4	(d) 3.5						
24. The bisectors of two adjacent angles in a parallelogram meet at a point P inside the parallelogram. The angle made by these bisectors at point P is									
(a) 180°	(b) 90°	(c)45°	(d) None of these						
25. PQRS is a cyclic Quadrilateral in which PS=PQ, RS=RQ, and \angle PSQ=2 \angle QSR, then \angle QSR=									
(a) 20°	(b) 40°	(c) 30°	(d) 50°						
26. Which of the following is equal to $10 + \sqrt{24} + \sqrt{60} + \sqrt{40}$.									
(a) $\left(\sqrt{2}+\sqrt{3}+\sqrt{5}\right)^2$	(b) $\left(\sqrt{2}+3+\sqrt{5}\right)^2$	(c) $\left(2+\sqrt{3}+\sqrt{5}\right)^2$	$(d)\left(\sqrt{2}+\sqrt{3}+5\right)^2$						
27. if $x = \frac{11}{4 - \sqrt{5}}$ then $x^2 - 8x + 11 = ?$									
(a) 0	(b) $\sqrt{5}$	(c) 11	(d) None of these						
	(b) $\sqrt{22} - \sqrt{17}$								

29. If $x^n + 1$ is divisible by x+1, then 'n' must be

34.

- (a) any natural number (b) even natural number
- (c) odd natural number (d) None of these
- 30. Which of the following is factor of $P(x) = 2x^3 5x^2 + x + 2$?
 - (a) x + 1 (b) 2x + 1 (c) x + 2 (d) 2x 1

REASONING

- 31. Maya who is the sister-in-law of Ashok, is the daughter in law of Kritika. Neeraj is the father of Amit who is the only brother of Ashok. How Kritika is related to Ashok.
 - (a) Mother (b) Aunt (c) Wife (d) sister

32. If the words INTIMATION, INFORMATION, INTEREST, INTERROGATION and INSTIGATION are arranged according to the dictionary which will be the fourth letter (from the right) of the last word?

- (a) O (b) A (c) R (d) T
- 33. Numbers of letters skipped in between adjacent letters in the series decrease by two. Which of the following series observes this rule.
 - (a) EPVAF(b) GPWBE(c) UCJOP(d) XFMQUWhat will come at the place of question mark: 3, 10, 29, 66, 127, ?(a) 164(b) 187(c) 216(d) 218
- 35. In a row of 21 girls, when Monika was shifted by four places towards the right, she became 12th from the left end. What was her earlier position from the right end of the row.
 (a) 9th
 (b) 10th
 (c) 11th
 (d) 14th
- 36. In a certain code language "si po re" means "book is thick", "ti na re" means "bag is heavy", "ka si" means "interesting book" and "de ti" means "that bag". What should stand for "that is interesting" in that code language?
 - (a) ka re na (b) de si re (c) de re ka (d) tip o ka
- 37. In a particular way of coding, the word CENTRAL is coded as ABCDEFG and PLANETARIUM as HGFCBDFEIJK, with the same coding, how can we express the word LANTERN?
 - (a) GFCDFEG (b) GFCDEFG (c) GFCDBEC (d) GFCDBEB
- 38. Find out the WRONG TERM in the given series : G4T, J10R, M20P, P43N, S90L
 (a) G4T
 (b) J10R
 (c) M20P
 (d) S90L

- 39. If "P×Q" means "P is the daughter of Q"; "P+Q" means "P is the father of Q"; "P/Q" means "P is the mother of Q" and "P-Q" means "P is the brother of Q" then in the expression A / B + C E x F, how is A related to F ?
 - (a) Mother-in-law (b) Aunt (c) Daughter in law (d) Mother
- 40. Which of the following meanings of the arithmetical signs will make the value "zero" for the expression given below?

 $200 \times 100 + 300 \times 200 - 10 \div 2 + 40$

- (a) + means -, means x, x means \div , \div means +
- (b) + means -, means \div , x means +, \div means x
- (c) + means x, means x, x means \div , \div means +
- (d) + means \div , means +, x means -, \div means x

