

INSTRUCTIONS					
Time duration: 1:00 hours. (Time of OMR filling is included in time duration).					
Maximum Marks: 120					
This Paper contains 30 questions divided in two sections					
Section–A Mental Aptitude 6 questions 24 marks					
Section-B	Scholastic Aptitude	24 questions	96 marks		
Each Question has a sir	ngle correct answer. There is I	NEGATIVE MARKI	NG for wrong answers.		
Marking Scheme:					
+4 marks for correct answer; –1 mark for incorrect answer					

SECTION-A (MAT) MENTAL APTITUDE

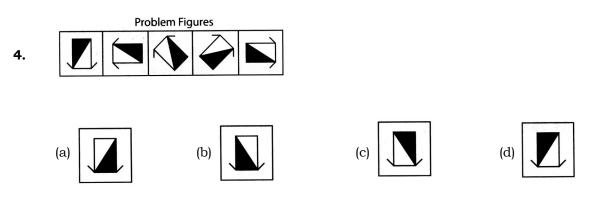
Direction : Q. 1 In ea	ch of the following	; questions a	series has	been g	given. In	each s	series
there is a '?' whi	ich signifies either	the missing	or the nex	t term.	Find the	e value	of '?'
in each of these.							

1.	101, 9999, 1000001	, 999999999, ?		
	(a) 99999999999	(b) 10000000001	(c) 1000000001	(d) 999999999
2.	Democracy : People	:::		
	(a) Theocracy : God		(b) Oligarchy : Rich	
	(c) Patriarchy : Men		(d) Plutocracy : Liter	ates
2	A policemon left his	police post and proceed	ed South 1 km on he	paring a loud sour

3. A policeman left his police post and proceeded South. 4 km. on hearing a loud sound from a point A. On reaching the place, he heard another sound and proceeded 4 km. to his left to the point B. From B he proceeded left to reach another place C 4 km. away. In which direction, he has to go to reach his police post ?

(a) North (b) South (c) East (d) West

Direction Q. 4 : In the following question, there is a series of five figures. In order to continue the series, choose a figure from the options that could be the next term of the series.



- **Direction Q. 5:** In each of the following questions, you are given a combination of alphabets and/or numbers followed by four alternatives (a), (b), (c) and (d). Choose the alternative which most closely resembles the water image of the given combination.
- **5.** FAMILY

(a) $AMIJY$ (p) $FAMIJY$ (c) $FAWIJY$ (q) $FAWIJY$	FAMILY
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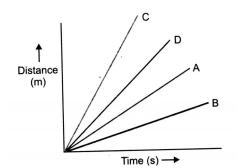
- **6.** Pointing to a photograph Kavita said, "He is the son of the only son of my grandfather." How is the man in the photograph related to Kavita ?
 - (a) Uncle (b) Brother
 - (c) Son (d) Data inadequate

SECTION-B (SAT) SCHOLASTIC APTITUDE TEST

7. A taxi driver noted the reading on the odometer fitted in the vehicle as 1052 km when he started the journey. After 30 minutes drive, he noted that the odometer reading was 1088 km. Find the average speed of the taxi.

(a) 30 ms ⁻¹	(b) 20 ms ⁻¹	(c) 40ms ⁻¹	(d) 25 m/s
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8. Four cars A, B, C and D are moving on a level road. Their distance versus time graphs are shown in figure. Choose the correct statement.



(a) car A is faster than car D (b) car B is the slowest

(c) car D is faster then car C

(d) car C is the slowest.

9. A Rocket- powered sleds are used to test the human response to acceleration. If a rocket - powered sled is accelerated to a speed of 444 m/s in 1.8 sec., then what is the acceleration.

(a) 247	(b) 222	(c) 250	(d) 800
(~) - · ·	(~) ===	(0) = 00	(0) 000

10. A man sitting in a boat in a pond drinks 1/2 a litre water. What will be the effect on the level of water in the pond.

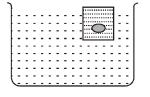
(a) increases

(b) decreases

(c) remains same

(d) cannot be determined

11. An ice cube is floating in water, with a coin of Rs 2 inside the cube. When cube melts what will be the effect on the level of water.



(a) increases

(b) decreases(d) coin will float

(c) remains same

Robe	o-Champs Olympiad	Ę	5	Class-IX
12.	By applying a force	of one Newton, one c	an hold a body of mas	s Take g = 9.8 m/s^2
	(a) 102 grams	(b) 102 kg	(c) 102 mg	(d) None of these
13.	coloured bromine v spreads into the up	vapour, then after some oper gas jar making be	me time, the brown c	ver a gas jar full of brown- olour of bromine vapour r brown in colour. Which s incorrect ?
	(a) bromine vapour	is made of tiny parti	cles which are moving	g
	(b) air is made up o	of tiny particles which	n are moving	
	(c) the particles of 1	promine are moving t	out those of air are no	ot moving
	(d) even though bro	omine vapour is heav	ier than air, it can m	ove up against gravity
14.	Two chemical subst both X and Y	ances X and Y combi	ne together to form a j	product P which contains
		X + Y	$ \to P$	
			upler substances by cl K, Y and P are correct	nemical reactions. Which ?
	(i) P is a compound			
	(ii) X and Y are com	pounds		
	(iii) X and Y are ele	ements		
	(iv) P has a fixed co	mposition		
	(a) (i), (ii) and (iii)	(b) (i), (ii) and (iv)	(c) (ii), (iii) and (iv) (d) (i), (iii) and (iv)
15.	Which of the follow	ing molecule has larg	gest number of atoms	?
	(a) 8 g of CH_4		(b) 4.4 g of CO_2	
	(c) 34.2 g of $C_{12}H_{22}$	D ₁₁	(d) 2 g of H_2	
16 .	The number of mol	ecules in 16.0 g of ox	ygen is	
	(a) 6.02 × 10 ²³	(b) 6.02 × 10 ⁻²³	(c) 3.01×10^{-23}	(d) 3.01×10^{23}
17.	How many moles of atoms ?	magnesium phospha	te, $Mg_3 (PO_4)_2$ will con	tains 0.25 mole of oxygen
	(a) 0.02	(b) 3.125 × 10 ⁻²	(c) 1.25×10^{-2}	(d) 2.5×10^{-2}
18.	Which of the follow	ing in not true for a c	ompound ?	
	(a) It is heterogene	ous in nature.		
	(b) A compound con	ntains different eleme	ents in a fixed ratio.	
	(c) Properties of a co	mpound are entirely d	lifferent from those of t	the elements present in it
	(d) Constituents of	a compound cannot b	be separeated by simp	le physical methods.
19.	ABCD is a trepezit respectively. Then		the midpoints of th	e diagonals AC and BD
	(a) $\frac{1}{2}$ (AB + DC)	(b) $\frac{1}{2}$ (AB – CB)	(c) $\frac{1}{2}$ (AB + AD)	(d) $\frac{1}{2}$ (AB – DC)

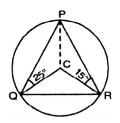
Robo-Champs Olympiad

(c) Vacuoles

27.

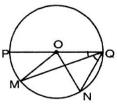
20. In the given figure, if C is the centre of the circle and $\angle PQC = 25^{\circ}$ and $\angle PRC = 15^{\circ}$, then $\angle QCR$ is equal to

6



	(a) 40°	(b) 60°	(c) 80°	(d) 120°
21.	A cylinder circumscri	bes a sphere. The ratio	o of their volumes is	
	(a) 1 : 2	(b) 2 : 3	(c) 3 : 4	(d) 5 : 6

22. In the given figure, \angle MON = 80°, \angle MQO=20°, then the measure of \angle MOP is



	(a) 40°	(b) 45°	(c) 50°	(d) 55°
23.	A sphere of radius 40 radius 4cm. The heig	cm has the same volum ght of the cone is	ne as that of a cone w	with a circular base of
	(a) 12 cm	(b) 16 cm	(c) 20 cm	(d) 24 cm
24.		am. If L, M are the mid n the area of triangle O	•	respectively, and O is
	(a) $\frac{1}{3}$ rd of the paralle	logram PQRS	(b) $\frac{1}{4}$ th of the para	llelogram PQRS
	(c) $\frac{1}{2}$ of the parallelog	gram PQRS	(d) $\frac{1}{6}$ th of the paral	llelogram PQRS
25.	The undefined nuclea	ar region of prokaryotes	s is also known as:	
	(a) nucleus	(b) nucleolus	(c) nucleic acid	(d) nucleoid
26.	Which cell organelle cell?	plays a crucial role in	detoxifying many po	pisons and drugs in a
	(a) Golgi apparatus		(b) Lysosomes	

Cartilage is not found in: (a) nose (b) ear (c) trachea (d) stomach

(d) Smooth endoplasmic reticulum

Rob	o-Champs Olympiad	1 7		Class-IX
28.	-	an accident in which t ng may be the possible		l were dislocated. Which
	(a) Tendon break			
	(b) Break of skelet	al muscle		
	(c) Ligament breal	x		
	(d) Areolar tissue	break		
29.	Plasmolysis in plar	nt cells occurs due to		
	(a) exosmosis	(b) endosmosis	(c) absorption	(d) pinocytosis
30.	The growth in plan	nts is		
	(a) Caused by each	n and every cell of the b	ody	
	(b) Uniform			
	(c) Caused by non-	-dividing regions		
	(d) Limited to cert	ain regions		

Dream on !! ଡ଼୶୶ଡ଼ୄଢ଼୶୶ୡଡ଼

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ANSWER KEY

SECTION-A (MAT) MENTAL APTITUDE

1. (c)	2. (a)	3. (d)	4. (d)	5. (d)
6. (b)				

SECTION-B (SAT) SCHOLASTIC APTITUDE TEST

7. (b)	8. (b)	9. (a)	10. (c)	11. (b)
12. (a)	13. (c)	14. (d)	15. (c)	16. (d)
17. (b)	18. (a)	19. (d)	20. (c)	21. (b)
22. (a)	23. (b)	24. (b)	25. (d)	26. (d)
27. (d)	28. (c)	29. (a)	30. (d)	