#### **SAMPLE PAPER**

CLASS: 6



Duration: 2 Hrs. Total Questions: 60

Paper Pattern							
Section	(A) Physics	(B) Chemistry	(C) Biology	(D) Mathematics	(E) Logical Reasoning & IQ		
Number of Questions	7	6	7	30	10		

Marking Scheme: +4 For Correct Answer (There is no negative for wrong answer)

#### **Syllabus**

Section A - • Motion and Measurement of Distances • Light, Shadows and Reflections

Section B - • Fibre to Fabric • Sorting materials into Groups

Section C - • Food: Where does it come from? • Components of food

Section D - • Knowing our Numbers • Whole Numbers • Playing with Numbers • Basic Geometrical Ideas • Integers

Section E - • Series: Number, Alphabet and Letter repeating series • Direction sense • Mirror & Water Image • Ranking and Ordering

• Mathematical Operation • Paper Folding and Cutting

#### Instructions:

- This Booklet is your Question Paper. DO NOT break seal of Booklet until the invigilator instructs to do so.
- The Answer Sheet is provided to you separately which is a machine readable Optical Response Sheet (ORS). You have to mark your answer in the ORS by darkening bubble, as per your answer choice, by using **Black/Blue** ball point pen only.
- If you are found involved in cheating or disturbing others then your ORS will be cancelled.
- Do not put any stain on ORS and hand it over back properly to the invigilator.
- You can take along the question paper after test over.



### MATRIX

**JEE Division | NEET Division** 

Piprali Road, Sikar, (Raj.)332001 | 01572-241911,01572-243911

### MATRIX HIGH SCHOOL

**Pre-Foundation & Schooling Division** 

Piprali Road, Sikar, (Raj.) 332001 | Bikaner Bypass Road, Near Gokulpura Village, Sikar (Raj.) 332021 | 01572-299956

www.mof.matrixedu.in

f @matrixsikar 🛮 📵 @matrix\_sikar 🔽 @MatrixSikar 🔼 /c/matrixacademy



# PART I: PHYSICS

This section contains 07 Multiple Choice Questions. Each question has four choices (A), (B), (C) and (D) out of which ONLY ONE is correct.

1.	A stone is thrown down from school b	ouilding which t	ype of motion doe	es the stone have?
	(A) Non - uniform motion	(B)	Rectilinear motion	1
	(C) Translatory motion	(D)	All of the above	
2.	Which of the following is the example	of random moti	ion?	
	(A) Motion of a housefly	(B)	Motion of a footb	all player
	(C) Motion of a cricket fielder	(D)	All of the above	
3.	While measuring the length of wooder	n box the measur	ring tape reads leng	gth at one end to be 55mm and at other
	end it measures 1.5dm than what is th	e length of the b	oox?	
	(A) 9.5 cm	(B)	5.5 cm	
	(C) 20.5 cm	(D)	15 cm	
4.	Which of the following is smallest unit	?		
	(A) Millimeter	(B)	Angstorm	
	(C) Nanometer	(D)	Macrometer	
	Following information is related to	o questions 5, 6	6 and 7 :	
	From the columns below what physic	al phenomenon	will the object cor	mbinations create?
	First object	Second obj	ject	Third object
	Luminous object	Pericope mirr	ror 1	Periscope mirror 2
	Luminous object	Plane mirror		Irregular reflecting surface
	Non-luminous non-reflecting object	Plane mirror	1	Plane mirror 2
5.	What will the first combination create	?		
	(A) Laterally inverted image	(B)	Laterally similar in	nage
	(C) Blurred image	(D)	None of the abov	e
6.	What will the second combination cre	eate?		
	(A) Laterally inverted image	(B)	Laterally similar in	nage
	(C) Blurred image	(D)	None of the abov	e
7.	What will the third combination create	e?		
	(A) Laterally inverted image	(B)	Laterally similar in	mage
	(C) Blurred image	(D)	None of the abov	e



Which of the following statements is incorrect?

8.

## PART II: CHEMISTRY

This section contains 06 Multiple Choice Questions. Each question has four choices (A), (B), (C) and (D) out of which ONLY ONE is correct.

	(A)	Some m	aterials a	appear sl	niny, whi	ile others	appe	ear dull			
	(B)	Some m	aterials a	are rough	n, while	others are	e smo	oth			
	(C)	C) Certain materials are hard, while others are soft									
	(D)	Some st	ones are	transpa	rent, wh	ile some	glass	es are opaque			
	The	clothes a	ds called :								
	(A)	A) Yarn						Thread			
	(C)	Fibre					(D)	Fabric			
0.	Choose the odd one out of the given options below:										
	(A)	Gold					(B)	Silver			
	(C)	Diamono	d				(D)	Plastic			
1.	Fron	From the given options, choose the one that do						t belong to the group.			
	(A)	Milk					(B)	Honey			
	(C)	Oil					(D)	Ink			
2.	Match the following items given in Column A with that in Column B:										
		Column	ı–I				Col	umn – II			
	<b>P.</b>	Cotton is collected from cotton plants by					1.	Ginning			
	Q.	Separati	on of co	tton fror	n seeds		2.	Handpicking			
	R.	Loose ro	ope of co	otton fib	es		3.	Cotton clothes			
	S.	Animal fibres					4.	Sliver			
	Т.	Γ. Suitable for wearing in kitchen					5.	Silk and wool			
	Cod	le:									
		P	Q	R	S	T					
	(A)	4	1	2	5	3					
	(B)	3	5	4	1	1					
	(C)	2	1	4	5	3					
	(D)	4	5	3	2	1					
	(2)										
3.		ch one is		device?							
3.		ch one is Takli		device?			(B)	Loom			



# PART III: BIOLOGY

This section contains 07 Multiple Choice Questions. Each question has four choices (A), (B), (C) and (D) out of which ONLY ONE is correct.

Vitrogen
d Oxygei
lf



and 21:

(A) 100800

21.

## PART IV : MATHEMATICS

This section contains 30 Multiple Choice Questions. Each question has four choices (A), (B), (C) and (D) out of which ONLY ONE is correct.

Determine the number nearest to 100000 but greater than 100000 which is exactly divisible by each of 8, 15

(B) 100900

	(C) 100700	(D) 100600						
22.	I am the sixth multiple of the HCF of	20, 5 and 10. What number am I?						
	(A) 30	(B) 240						
	(C) 20	(D) 100						
23.	How many prime numbers are there b	petween 1 and 100?						
	(A) 20	(B) 26						
	(C) 25	(D) 24						
24.	LCM of two numbers is 180. Then wh	nich of the following is not the HCF of the numbers?						
	(A) 45	(B) 60						
	(C) 75	(D) 90						
25.	If x and y are two primes, then their LCM is:							
	(A) xy	(B) $x + y$						
	(C) $\frac{x}{y}$	(D) 1						
26.	There were five pieces of cloth of lengths 15m, 21m, 36m, 42m, 48m. But all of them could be measured in							
	whole units of a measuring rod. What	could be the largest length of the rod?						
	(A) 3	(B) 48						
	(C) 5040	(D) None of these						
27.	The smallest 4—digit number formed by using the digits 5, 0, 3, 1 only once contains. Then correct option is :							
	(A) 0 in unit's place	(B) 5 in ten's place						
	(C) 0 in hundred's place	(D) 1 in unit's place						
28.	Keeping the place of 6 in the number 6 is:	350947 same, the greatest number obtained by rearranging other digits						
	(A) 6975430	(B) 6043579						
	(C) 6034579	(D) 6034759						
		(4)						



- 29. The largest 4–digit number, using any one digit twice from digits 5, 9, 2 and 6 is:
  - (A) 9652

(B) 9562

(C) 9659

- (D) 9965
- **30.** Which of the following options is written in the ascending order?
  - (A) XCVII > XCCIV > DCCLXVII > MDCLXII
  - (B) MDCLXII < DCCLXVIII < XCCIV < XCVII
  - (C) MDCLXII > DCCLXVIII > XCCIV > XCVII
  - (D) XCVII < XCCIV < DCCLXVIII < MDCLXII
- 31. Height of a person is 1 meter 65 centimeter. His height in millimeters is:
  - (A) 165 millimeters

(B) 165000 millimeters

(C) 1650 millimeters

- (D) 16500 millimeters
- **32.** How many millions make 10 crore?
  - (A) 10 million

(B) 1000 million

(C) 1 million

- (D) 100 million
- **33.** Which of the following statement is not true?
  - (A) Both addition and multiplication are associative for whole numbers
  - (B) Zero is the identity for multiplication of whole numbers
  - (C) Addition and multiplication both are commutative for whole numbers
  - (D) Multiplication is distributive over addition for whole numbers
- **34.** Match the column:

	Column – I	Col	umn – II
P.	Distributive property shows	1.	$98 \times (25 \times 40) = (98 \times 25) \times 40$
Q.	Associative property shows	2.	$48 \times 100 + 48 \times 2 = 48 \times (100 + 2)$
R.	Commutative property shows	3.	1
S.	Multiplicative identity for whole number is	4.	25 + 63 = 63 + 25

#### Code:

	P	Q	R	S
(A)	1	3	4	2
(B)	2	4	1	3
(C)	2	1	4	3
(D)	3	1	4	2



36.

37.

38.

### **35.** Match the following columns:

	Column	ı–I		Col	umn – II		
P.	The diff	erence c	ftwo co	onsecutive	1.	Always even	
	whole numbers						
Q.	The pro	duct of 1	wo non	-zero consecutive	2.	0	
	whole n	umbers					
R.	-			ivided by another	3.	6	
<b>C</b>	non-zero						
S.	2 added whole m		mes to t	he smallest	4.	1	
Coc		umoei					
Coc	P	Q	R	S			
(A)	4	1	3	2			
(B)	1	3	4	2			
(C)	4	1	2	3			
(D)	3	2	1	4			
The	successo	r of 1 m	illion is	:			
	The successor of 1 million is:  (A) 2000000 (B) 1000001						
(C)	100001				(D)	10001	
Whi	ch of the	followir	ı⊈ stater	nent is not true :			
			_	as a predecessor			
(B)	All natu	ral numl	ers are	whole numbers			
(C)	Division	by zero	is not c	lefined			
(D)	Zero div	ided by	a whole	e number always a	who	le number	
Determine the sum of the four numbers as given below:							
(a)							
(b)	Predecessor of 49						
(c)	Predecessor of the predecessor of 56						
(d)	Success	or of th	e succes	ssor of 67			
Cho	ose the c	orrect a	nswer :				
(A)	205				(B)	204	
(C)	203				(D)	206	



**39.** What is the angle measure between the hands of the clock in the given figure?







(D) 60°



- **40.** A man is standing facing North. In which direction will he face if he makes:
  - (a)  $1\frac{1}{2}$  revolution clockwise?
  - (b)  $\frac{3}{4}$  revolution anti-clockwise?

(A) (a) - East, (b) - East

(B) (a) – South, (b) – West

(C) (a) – South, (b) – East

(D) (a) - West, (b) - West

41. Where will the hour hand of a clock stop if it starts at 5 and makes  $\frac{1}{4}$  of a revolution, clockwise?

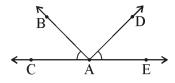
(A) 7

(B) 8

(C) 9

**(D)** 10

**42.** The number of common points in the two angles marked in fig. is:



(A) 1

(B) 3

(C) 4

(D) 2

- **43.** Geometrical figure which has no dimension is:
  - (A) Point

(B) Line segment

(C) Plane

(D) Line

**44.** Match the following columns:

Column – I	Col	lumn – II
Number of diagonals in a pentagon	1.	4
A Polygon of six sides	2.	Scalene
A triangle with all its sides of unequal	3.	5
Number of sides in a quadrilateral	4.	Hexagon
	Number of diagonals in a pentagon  A Polygon of six sides	Number of diagonals in a pentagon  1. A Polygon of six sides 2. A triangle with all its sides of unequal 3.



#### Code:

P Q R S

- (A) 3 4 2 1
- (B) 3 4 1 2
- (C) 1 2 3 4
- (D) 4 3 2 1
- **45.** The additive inverse of the sum of the integers –9853 and –3187 is
  - (A) 6666

**(B)** 4031

**(C)** 10340

- (D) 13040
- **46.** Find the difference between the smallest and the largest number of the following:
  - -68, 32, -32, 0, -3
  - (A) 68

**(B)** 100

(C) 36

- (D) 65
- 47. Subtract the largest 4-digit even positive integer from the largest 5-digit odd negative integer?
  - (A) 19999

(B) 19998

(C) -19998

- (D) -19999
- **48.** When we multiply a positive integer and a negative integer, then the resultant sign will be:
  - (A) Always negative

(B) Always positive

(C) Sign of bigger integer

- (D) Sign of smaller integer
- **49.** How many positive integers are there between -9 and -2?
  - (A) 6

**(B)** 0

(C) 8

- (D) 7
- **50.** Two integer whose sum is zero are called of each other:
  - (A) Additive identity

(B) Additive inverse

(C) Multiplicative inverse

(D) Multiplicative identity



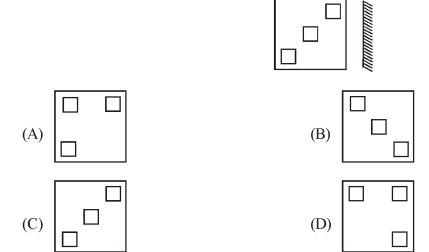
## PART V : LOGICAL REASONING & IQ

This section contains 10 Multiple Choice Questions. Each question has four choices (A), (B), (C) and (D) out of which ONLY ONE is correct.

51.	Find the missing number:					
	4, 8, 16, 32, ? , 128					
	(A) 60	(B) 64				
	(C) 50	(D) 42				
52.	Find the missing term:					
	C, F, I, L, ?					
	(A) M	(B) O				
	(C) N	(D) I				
53.	Krish walks 10 km towards North. From th	ere he walks 6 km East. Then he turns right and walks 3 km				
	In which direction he is facing now?					
	(A) South	(B) West				
	(C) North	(D) East				
54.	Raju walks 15 km towards East. From there he turns left and walks 10 km. Then he turns left and walks					
	15 km. Now, how far is he from starting poin	t?				
	(A) 15 km	(B) 10 km				
	(C) 25 km	(D) 5 km				
55.	In a row of 30 boys, Ram is 11th from left. W	hat is the position of Ram from the Right?				
	(A) 20th	(B) 21th				
	(C) 19th	(D) 22th				
56.	Find the correct group of signs to solve the eq	uation:				
	18_2_3 = 6					
	(A) +, ×	(B) ÷, –				
	(C) ×, ÷	(D) -, +				
57.	If ' $\times$ means $\div$ ', ' $-$ means $\times$ ', ' $\div$ means $+$ '	and '+ means -' then : $36 \times 6 - 4 \div 8 + 10 = ?$				
	(A) 32	(B) 20				
	(C) 22	(D) 25				



### **58.** Find the mirror image



**59.** Find the water image

MONDAY

(A) MOUDAY

(B) YADNOM

(C) MONDAY

- (D) WONDAA
- **60.** Choose a figure which most closely resemble the unfolded from of figure (z).

