



# MATRIX OLYMPAD

CSR Initiative of Matrix Education, Sikar to motivate and reward young talent.

✓ Total Questions : 60

✓ Maximum Marks : 240

✓ Duration : 2 Hrs.

## PAPER PATTERN

Part	(I) Physics	(II) Chemistry	(III) Biology	(IV) Mathematics	(V) Logical Reasoning & IQ
Number of Questions	7	6	7	30	10

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

### Instructions :

1. This Booklet is your **Question Paper**. DO NOT **break seal** of Booklet until the invigilator instructs to do so.
2. 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.
3. If you are found involved in **cheating** or disturbing others then your ORS will be cancelled.
4. Do not **damage** the ORS sheet in any manner. If ORS is damaged or not completed properly, your results will not be prepared.
5. If you have any **confusion** in filling-up ORS sheet, please **contact** your invigilator. Incomplete ORS will be not be evaluated.
6. You can take the question paper home once the ORS is submitted.





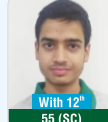





Answer Key and Video  
Solutions Kindly Scan  
QR Code and subscribe  
Matrix youtube channel

# MATRIX: Where producing outstanding results is a habit!

## JEE ADVANCED TOPPERS

 With XII Mayank Soni	AIR <b>26</b> (Gen.)	 With XII Priyanshu Meel	AIR <b>154</b> (Gen.)	 With XII Nagendra Singh	AIR <b>220</b> (Gen.)	 With XII Mohit Modi	AIR <b>296</b> (Gen.)	 With XII Aman Nehra	AIR <b>356</b> (Gen.)	 With XII Himanshu Rewar	AIR <b>358</b> (Gen.)	 With XII Aarish	AIR <b>415</b> (Gen.)	 With XII Uttam Paharia	AIR <b>421</b> (Gen.)
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## JEE MAIN TOPPERS

100 %tile  With XII Mayank Soni	AIR <b>34</b> (Gen.)	99.99 %tile  With 12 <sup>th</sup> 15 (OBC) Nagendra Singh	AIR <b>123</b> (Gen.)	99.97 %tile  With 12 <sup>th</sup> 55 (SC) Shailesh Saini	AIR <b>354</b> (Gen.)	99.98 %tile  With XII Mohit Modi	AIR <b>213</b> (Gen.)	99.97 %tile  With XII Aman Nehra	AIR <b>393</b> (Gen.)	99.97 %tile  With 12 <sup>th</sup> Satyam Sharma	AIR <b>426</b> (Gen.)	99.96 %tile  With XII Anupam Jakhar	AIR <b>478</b> (Gen.)	99.95 %tile  With XII Uttam Paharia	AIR <b>509</b> (Gen.)
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## NEET (UG) Toppers

Marks- <b>680</b>  Rekha Nitharwal	AIR <b>1665</b>	Marks- <b>670</b>  Narendra Farroda	AIR <b>2905</b>	Marks- <b>667</b>  Mahendra Yadav	AIR <b>3263</b>	Marks- <b>666</b>  Ankit Kumar Chahar	AIR <b>3378</b>	Marks- <b>665</b>  Deepika Soni	AIR <b>3545</b>	Marks- <b>665</b>  Lokesh Goyal	AIR <b>3621</b>	Marks- <b>665</b>  Mohit Haritwal	AIR <b>3661</b>
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## KVPY TOPPERS

 Manas Jajodia	AIR <b>6</b> (Gen.) Stream- SB	 Ishu	AIR <b>8</b> (Gen.) Stream- SB	 Lakshya	AIR <b>13</b> (Gen.) Stream- SB	 Akshay Choudhary	AIR <b>17</b> (Gen.) Stream- SB	 Chirag Indoria	AIR <b>37</b> (Gen.) Stream- SB
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## STSE TOPPERS

 Class 12 <sup>th</sup> Aman Nehra	1 <sup>st</sup> State Rank	 Class 12 <sup>th</sup> Mayank Soni	2 <sup>nd</sup> State Rank	 Class 12 <sup>th</sup> Dinesh Kumar	2 <sup>nd</sup> State Rank	 Class 10 <sup>th</sup> Pranshu Bharia	2 <sup>nd</sup> State Rank	 Class 10 <sup>th</sup> Shrishti	2 <sup>nd</sup> State Rank	 Class 10 <sup>th</sup> Rohit Yadav	2 <sup>nd</sup> State Rank	 Class 10 <sup>th</sup> Dev Kumar	3 <sup>rd</sup> State Rank	 Class 10 <sup>th</sup> Mohd. Farhan	3 <sup>rd</sup> State Rank
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## OUR BOARD TOPPERS

99.20%  Class 10 <sup>th</sup> Pinakin Choudhary	98.80%  Class 10 <sup>th</sup> Aradhya Raina	98.20%  Class 10 <sup>th</sup> Laxmi	98.00%  Class 10 <sup>th</sup> Vishal Choudhary	97.80%  Class 10 <sup>th</sup> Preksha Singh	97.80%  Class 12 <sup>th</sup> Piyush Sagatani	97.60%  Class 12 <sup>th</sup> Khushee Binwal	97.60%  Class 12 <sup>th</sup> Reena	97.60%  Class 12 <sup>th</sup> Siddhant Lalpuria	97.40%  Class 12 <sup>th</sup> Rohit Yadav
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## NTSE TOPPERS

 Aditya Jhajhria	1 <sup>st</sup> State Rank	 Nayan Godara	1 <sup>st</sup> State Rank	 Aman Nehra	1 <sup>st</sup> State Rank	 Aaditya Pratap	2 <sup>nd</sup> State Rank	 Mayank Soni	2 <sup>nd</sup> State Rank	 Aditya Bijarniya	4 <sup>th</sup> State Rank	 Pragati	5 <sup>th</sup> State Rank
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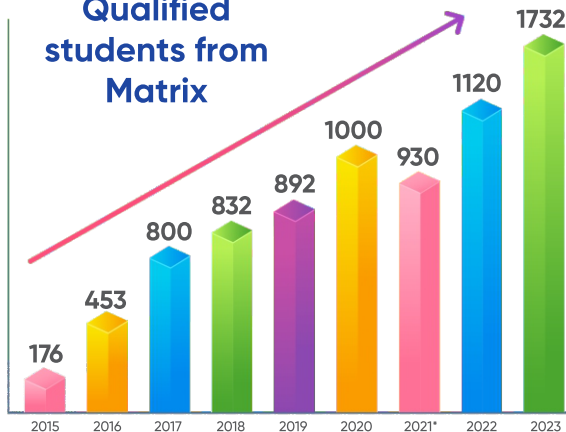
Authenticity of result, promise of Matrix!

\*cumulative result so far

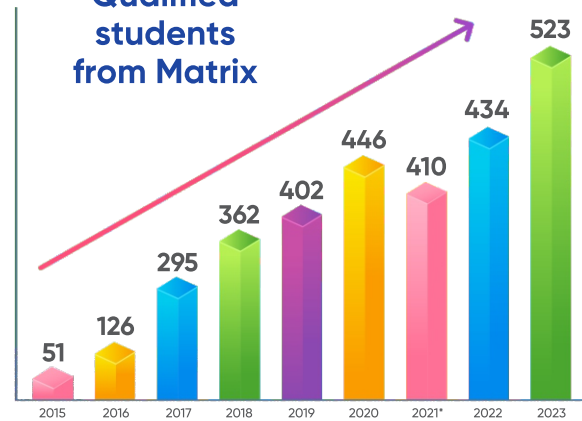
यह परिणाम मैट्रिक्स के केवल Yearlong classroom Program Students का ही है

# Remarkable result growth in both JEE Main & Advanced on a consistent basis

JEE Main  
Qualified  
students from  
Matrix



JEE Advanced  
Qualified  
students  
from Matrix



Note : All results are from Matrix year long classroom program at Sikar only.

\*due to covid

"Authenticity of result, promise of Matrix"

## HIGHLIGHTS at MATRIX

Total students  
qualified in  
JEE Main

**6700+**

students have been  
qualified in JEE main  
from matrix till date.

**2500+**

students have qualified  
JEE Advanced  
till date – Highest  
in Sikar

**2000+**

final admissions  
in various top IITs  
over last 5 years –  
Highest in Sikar

**3500+**

selection in NIT/IIITs  
and other or other  
Prestigious Universities  
Highest in Sikar

**2023** RESULT

Top score in  
JEE Main 2023  
Mayank Soni

Rank- **34**

Top scorer  
JEE Advanced 2023  
Mayank Soni

AIR- **26** (Gen)

**200** Doctors  
in very  
1st year of  
Matrix NEET  
Division

All India Rank **6**  
in KVPY 2021:  
**MANAS JAJODIA**

55+ total selections  
in KVPY over last  
4 years **45+**

More than  
**40,000**  
students have been  
beneficiary of  
Matrix system  
till date

Matrix has the largest  
pre-foundation career  
program in Sikar with  
highest number of  
enrolment and top  
results in all sort of  
competitive  
examinations.

Matrix System has  
produced one of  
the highest  
**NDA**  
selections in Sikar  
at a very early stage.

**70** selections  
in NDA 2023  
April attempt!

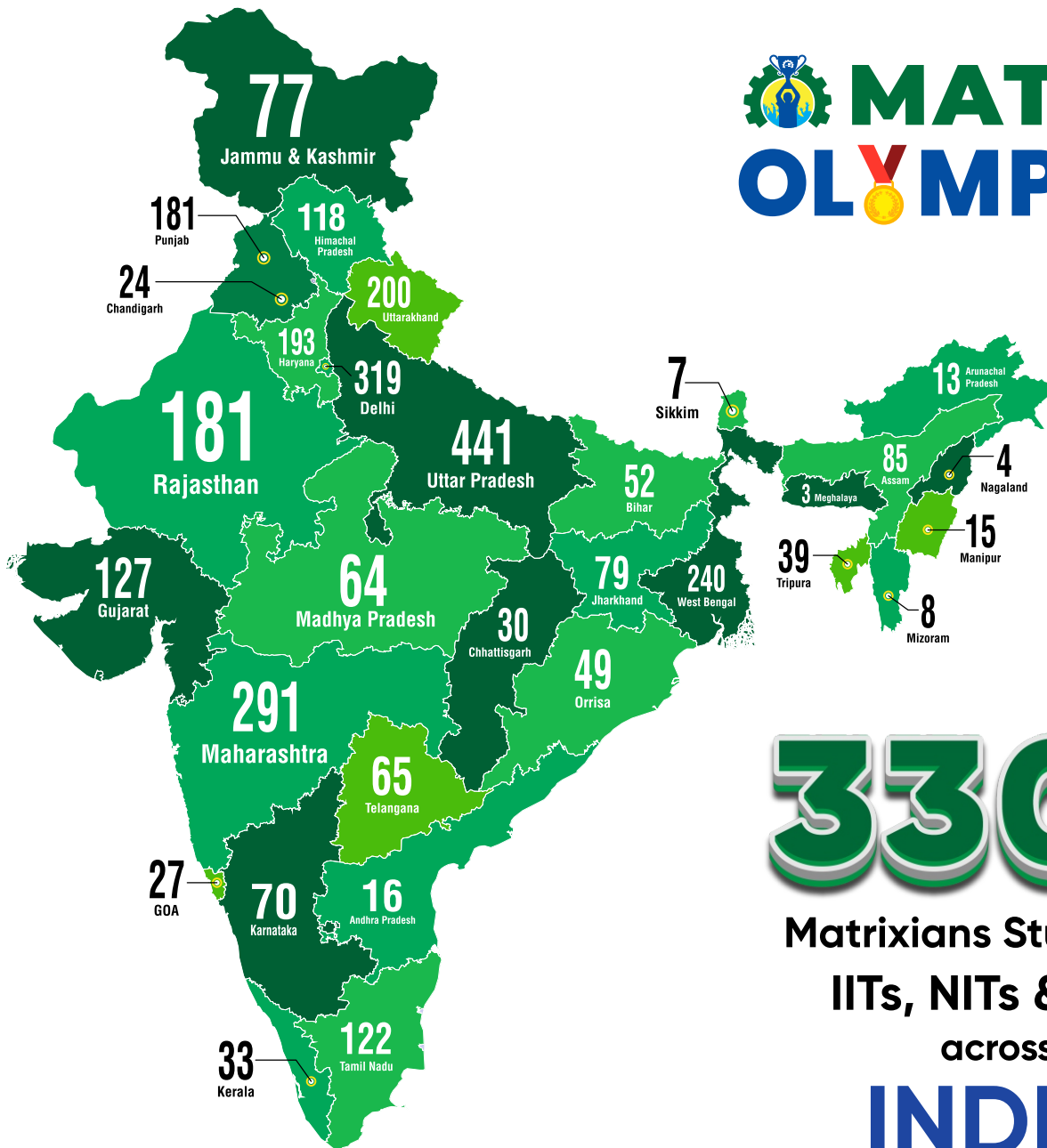
The Most  
**INNOVATIVE**  
**INSTITUTE** for  
**NEET, JEE &**  
**Pre-foundation**  
Covering & Serving

**5**  
Major State of  
the Country

Every student  
matters! Every  
student has  
potential!

Highest quality  
of management  
and student care  
for each student





# 3302

Matrixians Studied at  
IITs, NITs & IIITs  
across  
**INDIA**





# PART I : PHYSICS

This section contains **07 Multiple Choice Questions (Q : 01 to Q : 07)**. Each question has four choices **(A), (B), (C) and (D)** out of which **ONLY ONE** is correct.

1. Which of the following is a transparent object ?

- (A) Thin layer of water
- (B) Colored glass
- (C) Book
- (D) Butter paper

2. Lunar eclipse occurs on \_\_\_\_\_.

- (A) New Moon day
- (B) Full Moon day
- (C) Full Sun day
- (D) Everyday

3. Which of the following is not a natural source of light ?

- (A) Lightning
- (B) Electric bulb
- (C) Volcanic eruptions
- (D) Glow worms

4. Which of the following statement/s is/are **True(T)** or **False(F)** ?

- (i) A shadow has no mass and it isn't an object.
- (ii) When a shadow is formed by a point size light source, the umbra region of shadow is greater than its penumbra region.
- (iii) For reflection of light rays, angle of incidence is always equal to the angle of reflection.

**Code :**

**(i) (ii) (iii)**

- (A) T F T
- (B) T T T
- (C) F F T
- (D) F T F

5. Radha, a student of 6<sup>th</sup> standard, goes to her school at 8:00 am and comes back at 3:00 pm. The distance of Radha's school from home is 13.25 km. What will be the total distance in Radha's one round of home to school and school to home ?



**School**



**Home**

- (A) 27000 m
- (B) 2750 km
- (C) 13250 cm
- (D) 26.5 km

*Space for rough work*

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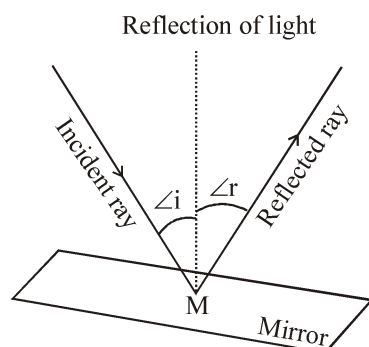
6. Match **Column – I** with **Column – II** and select the correct answer using the codes given below.

Column – I	Column – II
P. One millennium	1. 10 quintals
Q. One metric ton	2. 10 years
R. One decade	3. 10 centuries

**Code :**

- |     | <b>P</b> | <b>Q</b> | <b>R</b> |
|-----|----------|----------|----------|
| (A) | 2        | 3        | 1        |
| (B) | 3        | 1        | 2        |
| (C) | 3        | 2        | 1        |
| (D) | 2        | 1        | 3        |

7. The phenomenon of bouncing back of light in same medium after striking the reflecting surface is called as reflection of light. Laws of reflection of light holds for all type of reflecting surfaces.



Which of the following is not correct about the image formed by reflection of light from plane mirrors ?

- (A) Image formed is real
- (B) Image formed is virtual
- (C) Image is laterally inverted
- (D) Image is of same size as object

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*Space for rough work*

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## PART II : CHEMISTRY

This section contains **06 Multiple Choice Questions (Q : 08 to Q : 13)**. Each question has four choices (A), (B), (C) and (D) out of which **ONLY ONE** is correct.

8. Which of the following represent the correct sequence to obtain cotton fabric :

- (A) Picking→Ginning→Spinning→Weaving
- (B) Ginning→Picking→Spinning→Weaving
- (C) Spinning→Picking→Ginning→Weaving
- (D) Weaving→Spinning→Picking→Ginning

9. \_\_\_\_\_ is man-made fibre which is synthesized in laboratory by chemicals.

- (A) Jute
- (B) Silk
- (C) Nylon
- (D) Cotton

10. The hardest naturally occurring substance is :

- (A) Wood
- (B) Teeth
- (C) Stone
- (D) Diamond

11. Which of the following statement/s is/are **True(T)** or **False(F)** ?

- (i) Fibres are first converted into yarn by the process of knitting.
- (ii) The coconut fibres are used for making ropes and mats.
- (iii) The cloth made from the stem fibres of flax plant is called rayon.

**Code :**

(i) (ii) (iii)

- (A) T F F
- (B) T F T
- (C) F F T
- (D) F T F

12. Match **Column – I** with **Column – II** and select the correct answer using the codes given below.

Column – I	Column – II
P. Stone	1. Transparent
Q. Pure water	2. Opaque
R. Sand paper	3. Rough materials

**Code :**

P Q R

- (A) 1 2 3
- (B) 3 2 1
- (C) 2 3 1
- (D) 2 1 3

Space for rough work

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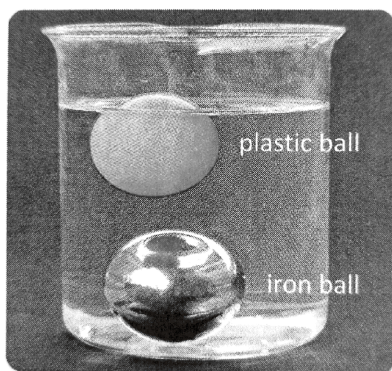
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13. When a wooden object or a plastic ball is placed in water, it floats. Wood and plastic are lighter (less dense) than water. So, they float on water. A pumice stone also floats on water.

A piece of rock, a metal nail, an iron ball and a pin sink in water. This is because these objects are denser than water.

Before we discuss why an object floats or sinks, let us recall what is matter. Matter is anything that has mass and volume. Mass is the amount of matter in an object. Volume is the space occupied by the matter. Density is defined as mass per unit volume.



\_\_\_\_\_ sinks in the water, while \_\_\_\_\_ floats on the water.

- (A) Oil, stone
- (B) Oil, wax
- (C) Iron nail, oil
- (D) Pumice stone, ice

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*Space for rough work*

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### PART III : BIOLOGY

This section contains **07 Multiple Choice Questions (Q : 14 to Q : 20)**. Each question has four choices **(A), (B), (C) and (D)** out of which **ONLY ONE** is correct.

**14.** Mohan is 11 years old boy. He is suffering from a condition called ‘obesity’ because all the time, he takes a type of food.

- (A) Minerals
- (B) Protein
- (C) Fat
- (D) Vitamin

**15.** Swollen glands in neck and mental disability found in adult as well as children. These are the symptoms of deficiency of \_\_\_\_\_.

- (A) Iron
- (B) Iodine
- (C) Calcium
- (D) Magnesium

**16.** Amla is the richest source of \_\_\_\_\_.

- (A) Vitamin - A
- (B) Vitamin - B
- (C) Vitamin - C
- (D) Vitamin - D

**17.** A small white structure may have grown out of seeds is called :

- (A) Roots
- (B) Sprouts
- (C) Seeds
- (D) None of these

**18.** Which of the following statement/s is/are **True(T)** or **False(F)** ?

- (i) Vitamin-D is synthesized when body is exposed to sunlight.
- (ii) We get calcium from milk and milk products.
- (iii) Rice alone can provide all necessary nutrients to body.

**Code :**

(i) (ii) (iii)

- (A) T F F
- (B) T T F
- (C) F F T
- (D) F T F

**19.** Match **Column – I** with **Column – II** and select the correct answer using the codes given below.

Column – I	Column – II
<b>P.</b> Scavengers	<b>1.</b> Chimpanzee
<b>Q.</b> Frugivores	<b>2.</b> Bacteria
<b>R.</b> Decomposers	<b>3.</b> Vulture

**Code :**

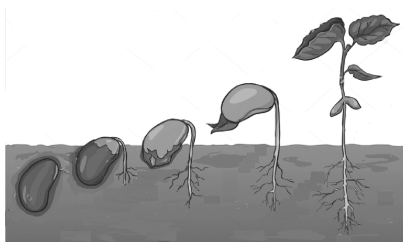
- |     |          |          |          |
|-----|----------|----------|----------|
|     | <b>P</b> | <b>Q</b> | <b>R</b> |
| (A) | 1        | 2        | 3        |
| (B) | 3        | 2        | 1        |
| (C) | 2        | 1        | 3        |
| (D) | 3        | 1        | 2        |

Space for rough work

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20. Germination begins when the seed absorbs water, swells and bursts through the seed coat. All seeds need water, oxygen and optimal temperature to germinate. A common example of seed germination is the sprouting of a seedling from a seed.



After the root has grown downwards a small shoot grows upward, towards light. This shoot is known as \_\_\_\_

- (A) Radicle
- (B) Plumule
- (C) Flower
- (D) Cotyledon

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*Space for rough work*

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# PART IV : MATHEMATICS

This section contains 30 Multiple Choice Questions (Q : 21 to Q : 50). Each question has four choices (A), (B), (C) and (D) out of which **ONLY ONE** is correct.

21. Shekhar is a famous cricket player. He has so far scored 6980 runs in test matches. He wishes to complete 10,000 runs. How many more runs does he need ?

- (A) 3020
- (B) 2030
- (C) 3200
- (D) 3000

22. Choose the correct option :

- (A)  $9754 > 8320 > 571 > 847$
- (B)  $38802 > 36501 > 25751 > 9801$
- (C)  $38802 > 36501 > 9801 > 25751$
- (D)  $847 > 571 > 8320 > 9574$

23. Convert 1 billion into lakhs.

- (A) 100 lakhs
- (B) 10 lakhs
- (C) 1000 lakhs
- (D) 10000 lakhs

24. Which of the following numbers in Roman numerals is incorrect ?

- (A) LXII
- (B) XCI
- (C) LC
- (D) XLIV

25. Find the difference between the place value and face value of the digit 2 in 3124698.

- (A) 19999
- (B) 20000
- (C) 19998
- (D) 18998

26. What is the two consecutive whole numbers just preceeding 8510001 ?

- (A) 8510000, 8509999
- (B) 8510000, 8509998
- (C) 85010001, 85010002
- (D) 8510099, 85100100

27. Saleem deposited Rs 25,000 in his saving bank account. Later he withdrew Rs 5,425 from it. How much money was left in his account ?

- (A) 19757
- (B) 19575
- (C) 19577
- (D) 19755

28. Find the product of the greatest number of five digit and the smallest number of four digit.

- (A) 9999000
- (B) 9999900
- (C) 99999000
- (D) 999990

Space for rough work

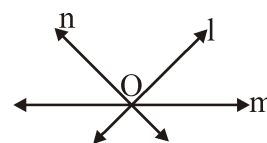
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29. If  $a$  and  $b$  are integers, then  $a \div b$ .
- (A) May or may not be an integer  
(B) Always an integer  
(C) Never be an integer  
(D) None of these
30. When zero is multiplied by any negative integer, their product will be :
- (A) A positive integer  
(B) A negative integer  
(C) Zero  
(D) None of these
31. A certain freezing process requires that room temperature be lowered from  $43^{\circ}\text{C}$  at the rate of  $8^{\circ}\text{C}$  every hour. What will be the room temperature 6 hours after the process begins ?
- (A)  $-50^{\circ}\text{C}$   
(B)  $-52^{\circ}\text{C}$   
(C)  $-05^{\circ}\text{C}$   
(D) None of these
32. Find a pair of negative integers whose difference gives positive 6.
- (A)  $(-3, -9)$   
(B)  $(9, 6)$   
(C)  $(9, 3)$   
(D)  $(12, -6)$

33. A line segment passing through the centre of the circle and whose end points lie on the circle is called :
- (A) Diameter  
(B) Radius  
(C) Sector  
(D) None of these

34. In the given figure lines  $l, m$  and  $n$  are called :



- (A) Collinear lines  
(B) Parallel lines  
(C) Concurrent lines  
(D) Transversal lines
35. The basic elements of a quadrilateral are :
- (A) 4 vertices  
(B) 4 sides  
(C) 4 angles  
(D) All of these
36. Which of the following statements is incorrect ?
- (A) Line  $\overleftrightarrow{AB}$  is same as line  $\overleftrightarrow{BA}$  .  
(B) Line segment  $\overline{AB}$  is same as line segment  $\overline{BA}$  .  
(C) Ray  $\overrightarrow{AB}$  is the same as ray  $\overrightarrow{BA}$  .  
(D)  $AB$  perpendicular to  $CD$  is same as  $CD$  perpendicular to  $AB$ .

*Space for rough work*

\*\*\*\*\* D06291023 \*\*\*\*\*

D06291023

37. Which of the following numbers are co-prime :

- (A) 18 and 34
- (B) 30 and 415
- (C) 17 and 68
- (D) 15 and 37

38. The H.C.F. and L.C.M of two numbers are 2 and 1456 respectively. If one of the number is 112. Determine the other number.

- (A) 26
- (B) 62
- (C) 28
- (D) 65

39. A school has three sections of class 6th. They need to have enough books in the class library so that they can be distributed equally in the three sections. What is the minimum number of books required if the number of students in section A, B and C are 30, 32 and 36 respectively ?

- (A) 30
- (B) 36
- (C) 288
- (D) 1440

40. In a morning walk three persons step off together. Their steps measuring 80 cm, 85 cm and 90 cm respectively. What is the minimum distance each should walk so that they can cover the distance in complete steps ?

- (A) 12240 cm
- (B) 122m 40 cm
- (C) Both (A) and (B)
- (D) None of these

41. Match **Column – I** with **Column – II** and select the correct answer using the codes given below.

Column – I	Column – II
P. $x \div 0$	1. Distributive property
Q. $(-a) \times b = b \times (-a)$	2. Not defined
R. $x \times (y + z) = x \times y + x \times z$	3. Commutative property

Code :

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

Space for rough work

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D06291023



42. Match **Column – I (Numbers)** with **Column – II (Expanded forms)** and select the correct answer using the codes given below.

Column – I	Column – II
P. 47300	1. $2 \times 10000 + 9 \times 1000 + 8 \times 100 + 5$
Q. 29805	2. $4 \times 10000 + 7 \times 1000 + 3 \times 100$
R. 65740	3. $6 \times 10000 + 5 \times 1000 + 7 \times 100 + 4 \times 10$

Code :

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

43. Match **Column – I** with **Column – II** and select the correct answer using the codes given below.

Column – I	Column – II
P. $297 \times 17 + 297 \times 3$	1. 5427900
Q. $54279 \times 92 + 8 \times 54279$	2. 8126500
R. $81265 \times 169 - 81265 \times 69$	3. 005940

Code :

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

44. Which of the following statement/s is/are **True(T)** or **False(F)** ?

- (i)  $18 - |-12|$  is equal to 6.  
(ii) The smallest negative integer is not defined.  
(iii) Zero is greater than every non-negative integers.

Code :

(i)	(ii)	(iii)
(A) T	F	T
(B) F	F	T
(C) F	T	F
(D) T	T	F

45. Which of the following statement/s is/are **True(T)** or **False(F)** ?

- (i) Four points are collinear if any three of them lie on the same line.  
(ii) The minimum number of point of intersection of three lines is one.  
(iii) Two different lines can be drawn passing through two given points.

Space for rough work

\*\*\*\*\* D06291023 \*\*\*\*\*

D06291023

Code :

(i) (ii) (iii)

(A) T F T

(B) F F F

(C) F T F

(D) T T F

46. Which of the following statement/s is/are **True(T)** or **False(F)** ?

(i) All numbers divisible by 18 are also divisible by 9.

(ii) A number is divisible by 35 if it is divisible by both 7 and 5.

(iii) A number is divisible by 6 if it is divisible by both 5 and 3.

Code :

(i) (ii) (iii)

(A) T F T

(B) T T T

(C) F F T

(D) T T F

**Paragraph for Questions 47 to 48**

Ritesh and his wife book seats H13 and H14 for a show. They order some snacks from the menu below :

Burger	Rs 170
Cold drink	Rs 180
Popcorn	Rs 190
Nachos	Rs 200
Water bottle	Rs 40

Altogether, they spend Rs 1280 including the cost of tickets.

47. What is the total cost of snacks if they ordered cold-drink and nachos?

(A) Rs 380

(B) Rs 420

(C) Rs 800

(D) Rs 1280

48. If Ritesh and his wife order every snacks one time, than the price of tickets is :

(A) Rs 580

(B) Rs 1280

(C) Rs 500

(D) Rs 780

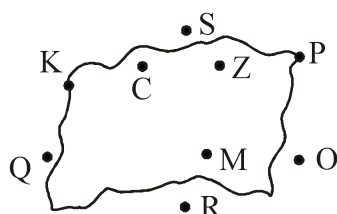
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**Paragraph for Questions 49 to 50**

The students were asked to draw a closed figure with few points inside the figure, few point outside the figure and few point on the boundary of the figure. One of the child drew a figure like this :



49. Where do points C, Z, M lie in the figure ?
- (A) Interior
  - (B) Exterior
  - (C) On the boundary
  - (D) None of these
50. Which points lie in the exterior of the figure ?
- (A) Q, R, O, S, K, P
  - (B) Q, R, O, S, Z, M
  - (C) Q, R, O, S
  - (D) All of these

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*Space for rough work*

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# PART V : LOGICAL REASONING & IQ

This section contains 10 Multiple Choice Questions (Q : 51 to Q : 60). Each question has four choices (A), (B), (C) and (D) out of which **ONLY ONE** is correct.

51. Find the missing number which will complete the given series :

4, 8, 24, 96, 480, ?

- (A) 2400
- (B) 960
- (C) 1920
- (D) 2880

52. Find the missing number which will complete the given series :

92, 90, 87, 82, 75, ?

- (A) 66
- (B) 64
- (C) 62
- (D) 68

53. Which of the following sets of letters will continue the given series ?

KTJ, MSK, ORL, QQM, ?

- (A) RPN
- (B) SPQ
- (C) TOM
- (D) SPN

54. Sunil walks 15 m towards North. Then he turns left and walks 10 m. Again he turns left and walks 15 m. Then he turns right and walks 20 m. How far is he now from the starting point ?

- (A) 20 m
- (B) 10 m
- (C) 30 m
- (D) 15 m

55. If 'East' becomes 'North-East', 'North-East' becomes 'North' and so on, then what will 'South-West' becomes ?

- (A) West
- (B) South-East
- (C) South
- (D) East

56. In a row of certain people, Pradeep is sitting 463<sup>rd</sup> place from the left end and 531<sup>st</sup> place from the right end.

Find out the total number of people in this row ?

- (A) 963
- (B) 942
- (C) 993
- (D) 994

Space for rough work

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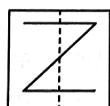
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57. If '+' denotes '×', '×' denotes '÷', '÷' denotes '−' and '−' denotes '+', then find the value of -

$$48 \times 16 + 9 \div 3 - 6$$

- (A) 30  
(B) 23  
(C) 36  
(D) 39

58. A transparent sheet (X) with a pattern and a dotted line on it is given. Find a figure from the options as to how the pattern would appear when the sheet is folded along the dotted line.



Sheet (X)

- (A)
- (B)
- (C)
- (D)

59. Select the correct water image of the given combination of letters and numbers :

**ST93YL65E**



- (A) **2103YΓ02E**  
(B) **2103YΓ02E**  
(C) **2103YΓ05E**  
(D) **3597Y361S**

60. Select the correct mirror image of the given combination of numbers, alphabets and symbols, if the mirror is placed at the line AB.

**RI478#US**



- (A) **2U#874IR**  
(B) **2U#874IR**  
(C) **2U#874IR**  
(D) **RI478#U2**

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Space for rough work

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