



SCIENCE APTITUDE TEST

CLASS - 6

SOLUTIONS

TEST CODE - 28S

WhatsApp Channel



Result will be Declared on 14th Oct. 2025

Video Solutions will be available on

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M : 9081062221, 9033063029.

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10th CBSE Board Results 2025

SCI -100 | SS -100



99.00%

Kushagrah



98.80%

Devansh



98.50%

Harshil



98.40%

Jay D.



98.66%

Rudra

MATH -100



97.60%

Aryan



97.60%

Khwahish



97.40%

Naman



97.40%

Rusha



97.40%

Siddhant

MATH -100



96.60%

Diza



96.50%

Kaushar



96.00%

Harleen



96.00%

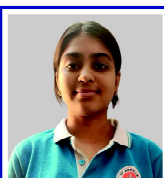
Rakhi



95.75%

Swara

ENG -100



95.60%

Jayani



95.60%

Parita



95.50%

Shaurya



95.20%

Krishiv



95.05%

Shruja

And Many More....



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10th GSEB Board Result 2025



SCI
100



99.81% ile

Naysa P.

SS
100



99.60% ile

Pahal B.

MATH
100

SCI
100



99.35% ile

Khushi P.

SS
100



99.22% ile

Chirag R.

SCI
100



99.14% ile

Rutvi S.

MATH
100



99.00% ile

Darsh G.



98.62% ile

Dhanesh B.



98.31% ile

Darshil P.

MATH
100



98.20% ile

Vihaan T.



98.20% ile

Drashti S.



98.20% ile

Aanya K.



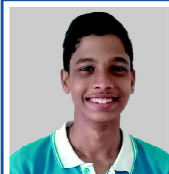
98.20% ile

Kshitij N.



97.99% ile

Varada M.



97.88% ile

Saksham U.

MATH
100



97.76% ile

Nivedya J.

SCI
100



97.64% ile

Dhyey P.



97.50% ile

Maharsh B.



97.40% ile

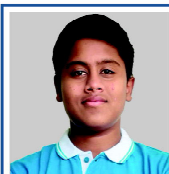
Shubh P.

MATH
100



97.27% ile

Pankti P.



97.14% ile

Devansh A.



97.02% ile

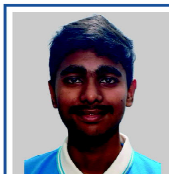
Vihaan P.

SCI
100



96.76% ile

Kathit S.



96.68% ile

Nisarg S.



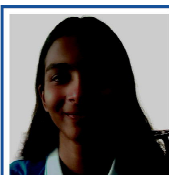
96.63% ile

Dhwani P.



96.50% ile

Evan C.



96.36% ile

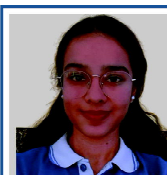
Disha S.



96.36% ile

Samarth T.

MATH
100



96.22% ile

Devanshi P.



95.93% ile

Mahaveer V.



95.93% ile

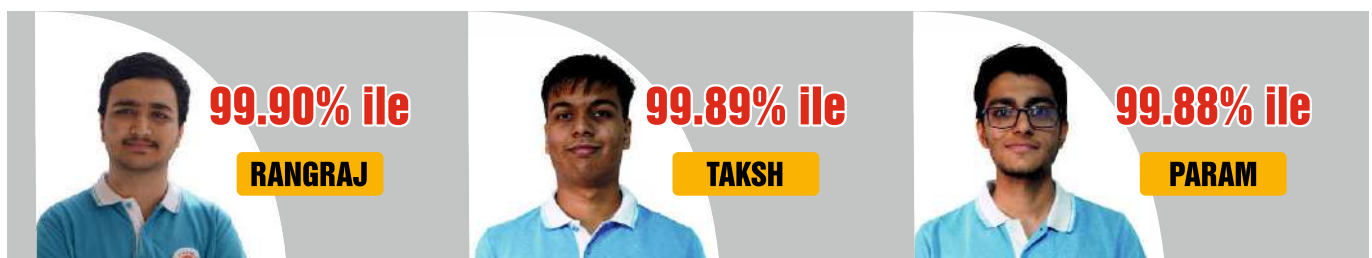
Abhinav P.

And Many More....

PART - I : MENTAL ABILITY

1.
Sol. (d) 29
Series of prime numbers
2.
Sol. (c) 7
There are 6 sons, and 1 daughter (6 sons share the same sister).
3.
Sol. (d) Circle
The other shapes have straight sides, while a circle does not.
4.
Sol. (c) Jim
Since John is taller than Jack and Jack is taller than Jim, Jim is the shortest.
5.
Sol. (a) TVX
Each group skips one letter and then two letters alternately.
6.
Sol. (a)
7.
Sol. (d) 4
8.
Sol. (c)
9.
Sol. (b)
10.
Sol. (d) 4
11.
Sol. (a) Explanation: GA->AG, RD->DR, EN->NE.

27 Students secured above **99% ile** in **JEE Main 2025**

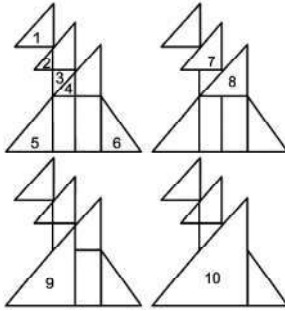


and many more....

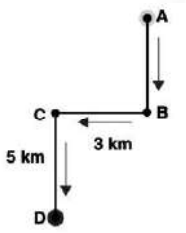
12.

Sol. (a) 10

The triangle are:



13.

Sol. (b)Initial position \rightarrow A, Final Position \rightarrow D

The path traced by Deepak Mohan

The right and left movements are with respect to Mr. Deepak Mohan. After walking 5 km towards the South, he takes a right turn and now will be facing West. After walking 3 more km he turns left and walks 5 more km. Now he is facing South.

14.

Sol. (d) If the Minute hand is at 12 which is North-West, then at 6.00 p.m. the hour hand will be pointing at the number 6. Since the numbers 12 and 6 are exactly the opposite. The opposite of North-West should be South-East. Hence, option D is the correct answer.

15.

Sol. (d) In one step, the existing element enlarges and a new element appears inside this element. In the next step, the outer element is lost.

PART - II : MATHEMATICS

1.

Sol. (b) We have to use digit equal number of times, Since we have to make smallest 4- digit number. Therefore answer will be 7799

2.

Sol. (c)

Since $98 \times 5 = 490$

$98 \times 15 = 98 \times 5 \times 3 = 490 \times 3$

$98 \times 25 = 98 \times 5 \times 5 = 490 \times 5$

Therefore $98 \times 35 = 98 \times 5 \times 7 = 490 \times 7$

3.

Sol. (b) We can draw only one line from two points.

4.

Sol. (b)

$99 + 1 = 100$

$999 + 1 = 1000$etc

therefore, greatest 2-digit number +1 = smallest 3-digit number.

5.

Sol. (a) Common end point of an angle is called vertex.

6.

Sol. (a) Side of square park = 300m

Perimeter = $4 \times \text{side} = 4 \times 300 = 1200\text{m}$

Cost of fencing 1200 metre at the rate of Rs 20 per metre = $20 \times 1200 = \text{Rs } 24000$

7.

Sol. (a) The numbers 1, 2, 3,, which we use for counting are known as natural numbers.



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Alkapuri, Vadodara - 390007. (Guj.) India.

9081062221

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8.

Sol. (b) Additive identity.

Whole number when added to zero give back the same whole number. Hence zero is called an identity for addition of whole numbers.

9.

Sol. (c) Greatest 5 digit number is 99999. Smallest digit number is 10000,
Hence total number of 5 digit number is $(99999 - 10000) + 1 = 89999 + 1 = 90000$

10.

Sol. (b)

On first day-man.purchased 26 buttons. On second day 14 buttons.

Cost of each buttons is Rs. 12. Therefore, total cost

$$= 12 \times (26 + 14) = 12 \times 40 = \text{Rs. } 480.$$

11.

Sol. (b) We know that a line has indefinite length and a line segment has definite length.

12.

Sol. (a) Perimeter = AB + BC + CD + DE + EF + FG + GA

$$\text{Perimeter} = 4 \text{ cm} + 0.5 \text{ cm} + 2.5 \text{ cm} + 2.5 \text{ cm} + 0.5 \text{ cm} + 4 \text{ cm} + 1 \text{ cm} = 15 \text{ cm}$$

13.

Sol. (a) Doubled

Let length of rectangle = ℓ

Breadth of rectangle = b

Then area of rectangle = $\ell \times b$

Now, length is doubled = 2ℓ

breadth remains same= b

So, new area = $2\ell \times b = 2(\ell \times b)$

So, area becomes 2 times.

14.

Sol. (b) The sum of linear pair is always 180°

15.

Sol. (c) Number of boys = 27

Number of girls = 19

Total = $27 + 19 = 46$

In Roman System = XLVI

16.

Sol. (b) After simplifying the given fraction in the question we get $\left(\frac{120 \div 15}{525 \div 15} \right) = \frac{8}{35}$

17.

Sol. (b) Smallest 4-digit number formed will be 3057. Predecessor is just before the existing number. Since here the number is 3057, predecessor will be $= 3057 - 1 = 3056$.

18.

Sol. (b) $8 + 8 + 8 + 8 + 4 = 36$, $36 \div 9 = 4$ so as sum of the digits is exactly divisible by 9.

19.

Sol. (d) Since p is there twice and q is there thrice.

20.

Sol. (a) 3116365

place value of = 300

place value of = 3000000

The difference = $3000000 - 300 = 2999700$

21.

Sol. (d) $\frac{5}{8} \text{ m}$

22.

Sol. (b) $12.5 = \frac{125}{10} = \frac{25}{2}$

23.

Sol. (a) Rs 23.75 - Rs 17.35 = Rs 6.40

24.

Sol. (b) Here numerators of each fraction is same. so fraction having denominator with highest value will be the smallest fraction.

25.

Sol. (c) On a number line the value of the number increases as we move to the right and decreases as we move to the left.

26.

Sol. (a) $+8 > -28$.

Positive integers are greater than negative integers.

27.

Sol. (d) $-8 - (-10) = -8 + 10 = 2$

28.

Sol. (b) Area of the square = side \times side

$$169 = s^2$$

So, side-13 m

$$\text{Perimeter of square} = 4 \times \text{side of the square} \quad 4 \times 13\text{m} = 52\text{m}$$

29.

Sol. (c) A, P, T

30.

Sol. (a)

Let the first number be y . Then, Second number = $3y$, Given their sum = 20

$$\therefore y + 3y = 20, 4y = 20, y = 5$$

$$\therefore \text{Second number} = 3y = 3 \times 5 = 15$$



35 Students secured admissions in different fields of **Biology** in 2024.



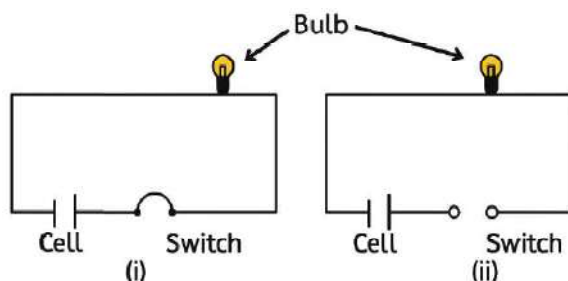
and many more....

PART - III : PHYSICS & CHEMISTRY

1.

Sol. (b) Let's analyze both diagrams (i) and (ii):

Diagram (i):



The switch is closed, forming a complete circuit.

The circuit has a cell, switch, and bulb connected properly.

Diagram (ii):

The switch is open, so the circuit is incomplete.

An open switch breaks the path for current to flow.

2.

Sol. (d) The image formed by a pinhole camera is inverted because light rays cross over through the pinhole, and it's diminished because the small aperture reduces the size of the image projected on the screen.

3.

Sol. (b) One touch method' of preparing the magnet is shown in the figure. In this method the pole produced at the end of the nail, where the friction starts is same as the pole of the magnet which is in contact with nail. Hence North Pole will be produced at A and South at B.

4.

Sol. (c) Applying the Conversions:

The speed of 30 m/s can be expressed as:

$$30 \frac{m}{s} = 30 \times \frac{\frac{1}{1000} km}{\frac{1}{3600} hours} = 30 \times \frac{1}{1000} \times 3600 \frac{km}{h} = 30 \times \frac{3600}{1000} \frac{km}{h} = 30 \times 3.6 \frac{km}{h} = 108 \frac{km}{h}$$

65 Students secured admissions to **IITs** in 2024.

and many more....

5.

Sol. (b) $\text{Pressure} = \frac{\text{force}}{\text{area}}$

Area occupied by book-2 is less than the area occupied by book-1 hence pressure exerted by book-2 > book-1.

6.

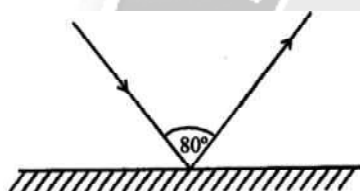
Sol. (c) The Pole Star appears to be stationary in the night sky because it lies very close to the Earth's axis of rotation, specifically above the North Pole. As the Earth rotates, the other stars appear to move in circular paths around the Pole Star, which remains nearly stationary due to its alignment with the Earth's rotational axis.

7.

Sol. (a) Shadows are formed because light travels in straight lines (rectilinear propagation). When an object blocks light, the area behind the object, where light cannot reach, forms a shadow. This is possible only because light propagates in straight lines and cannot bend around the object to illuminate the area behind it.

8.

Sol. (a)



The angle between the incident ray and reflected ray is 80° , and since the angle of incidence equals the angle of reflection, each angle would be half of 80° , which is 40° . Therefore, the angle of incidence is 40° .

9.

Sol. (b) The strength of the magnetic field increases when the current flowing through the coil is increased, as the magnetic field strength is directly proportional to the current.

10.

Sol. (b) Distance refers to the total length of the path traveled by an object from one point to another, which can include any turns, curves, or deviations from a straight line. Therefore, distance is accurately described as the "length of the path covered by an object between two points."

11.

Sol. (a) Na

Sodium's symbol comes from its Latin name Natrium, hence Na, not S or N.

12.

Sol. (d) all of the above

Salt solution, copper sulphate solution, and potassium permanganate solution are all homogeneous mixtures (uniform composition).

13.

Sol. (a) heating

Heating increases kinetic energy so, particles move faster.

14.

Sol. (d) nylon

Nylon is a synthetic fibre, stronger than cotton, rayon, or wool.

15.

Sol. (d) cotton

Cotton has a dull surface, unlike shiny synthetic fibres (nylon, polyester) or wool (soft, sometimes shiny).

16.

Sol. (b) they are hard and magnetic

Needle and knife are hard objects made of iron/steel, hence magnetic.

17.

Sol. (b) mercury

Mercury is lustrous (shiny metal), has a fixed volume but no fixed shape (liquid metal).

18.

Sol. (a) alum

Alum is commonly used in water purification for loading (settling suspended particles).

19.

Sol. (d) centrifugation

Washing machine dryer spins clothes at high speed ? centrifugation separates water from clothes.

20.

Sol. (a) burning of wax candle

Candle wax melts (physical change) and burns (chemical change) at the same time.

Total Selections In IIT ASHRAM Till Date**1103**

in JEE Advanced

5386

in JEE Main

557

in NEET

PART - IV : BIOLOGY

1.

Sol. (a) Vitamins & minerals

Vitamins and minerals are protective nutrients. They help strengthen the immune system and protect the body against various diseases.

2.

Sol. (c) Glucose

Glucose is a simple sugar that is absorbed directly into the bloodstream, providing instant energy.

3.

Sol. (b) Protein deficiency

Protein deficiency in children can lead to Kwashiorkor, which causes stunted growth, swollen belly, and weakness.

4.

Sol. (d) Stomata

Stomata are tiny pores on the leaf surface that regulate transpiration and gas exchange, thus controlling water loss.

5.

Sol. (b) Ball and socket joint

The ball and socket joint (like the shoulder and hip) allows movement in all directions.

6.

Sol. (b) Helps in Respiration

The skeletal system provides shape, support, protection, and helps in movement. Respiration is a biochemical process.

7.

Sol. (c) A is true, but R is false

A is true – ball and socket joints allow full movement.

R is false – the bones in these joints are fixed; they are not mobile.

8.

Sol. (c) Earthworms

Vermicomposting is the process of using earthworms to decompose organic waste into nutrient-rich compost, known as vermicompost.

9.

Sol. (a) Glass Bottle

Y represents items made from Never alive.

10.

Sol. (c) Sanchit and Ranchit

Animals (like Sanchit says) take in oxygen and give off carbon dioxide during respiration.

Plants also respire (especially at night), taking in oxygen and releasing carbon dioxide (Ranchit is correct).

Ananya and Saumya are confusing photosynthesis with respiration.