

# Dos and Don'ts for General Science & Ability Paper

Day: \_\_\_\_\_

Hi there, you've done well. Know that acquiring knowledge is one thing and reproducing it in paper according to what's asked is another. There are a few things I would like to highlight.

1. A 5 marks part requires 2 sides (not more than that) of a paper. Know that there can be two or three parts of a question and their marks are divided accordingly. So, address all of them in a just manner.

2. Focus on time management. You get 35 minutes to solve one question and about 8 minutes per 5 mark part. Manage your time accordingly.

3. You need to understand that your paper is supposed to look more scientific than theoretical. So, add flowcharts and diagrams where required.

4. Your handwriting and neatness can be really impactful. Avoid cutting and overwriting.

5. Focus on your spellings and your grammar. Here, in GSA there's no deduction in marks but your expression will definitely create an impact.

6. In ability portion, give explanation for analytical ability question in words. You need to understand that a 5 mark part requires all steps written and explained.

Good luck for CSS 2025. You're gonna rock in sha Allah.



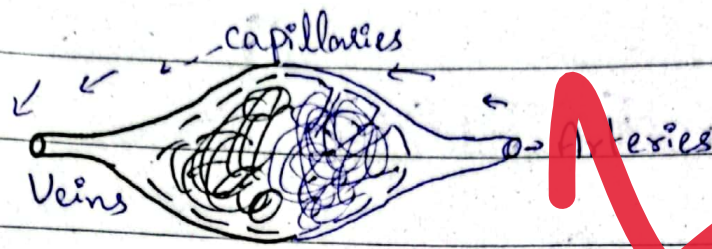


Fig: Structure of Blood Vessels

Add headings

Why do atoms form chemical bonds? Explain the structure of water.

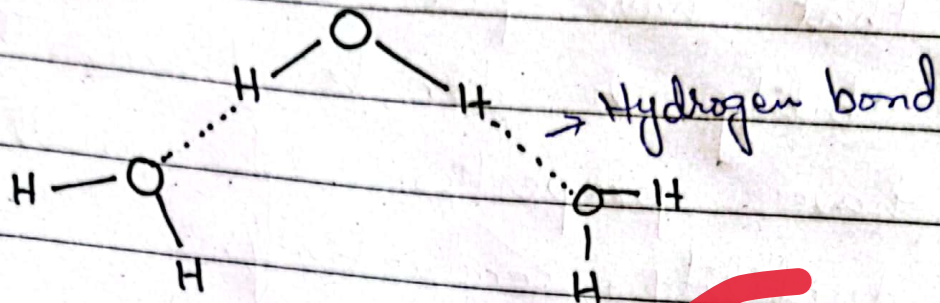
## ATOMS FORM CHEMICAL BONDS

Atoms form chemical bonds in order to make their outermost shells more stable. The type of chemical bond maximizes the stability of atoms. An ionic bond is formed when one atom loses electron to make it stable and the other atom accepts it to complete its outer shell and become stable.

Covalent bond is formed when sharing of electrons between atoms results in their highest stability.



# STRUCTURE OF WATER



One water molecule consists of two hydrogen atoms and one oxygen atom. These molecules are interconnected with each other through hydrogen bonds.

red line

**CONDUCTORS:** A material that permits the flow of electric charge through the movement of electrons. e.g. metals like iron.

**SEMICONDUCTOR:** A material that partially conducts electricity is termed as semi-conductor.

e.g. Selenium.



**METALS:** Metals are the substance that have free electrons and ability to donate them. They have properties like malleability, ductility, conductivity.

e.g. Mercury, Sodium.

**PLASTICS:** Plastics are organic compounds that are made up of long chain of carbon atoms called polymers.

e.g. Polyethylene, a plastic used to make plastic bags.

**CERAMICS:** Ceramics are inorganic substance made up of clay that can be convert into any shape and then hardened by heating at high temperature.

e.g. Brick, Glass.



## SECTION - II

Q. NO. 8

relation

If BROTHER = QDGSNQA

Then SISTER = QDSIR

It's decoding is start from right to left and each alphabet is decoded as one step backward.

relation

1, 2, 6, 21, \_\_\_\_\_

$$1 \times 1 + 1 = 2$$

$$2 \times 2 + 2 = 6$$

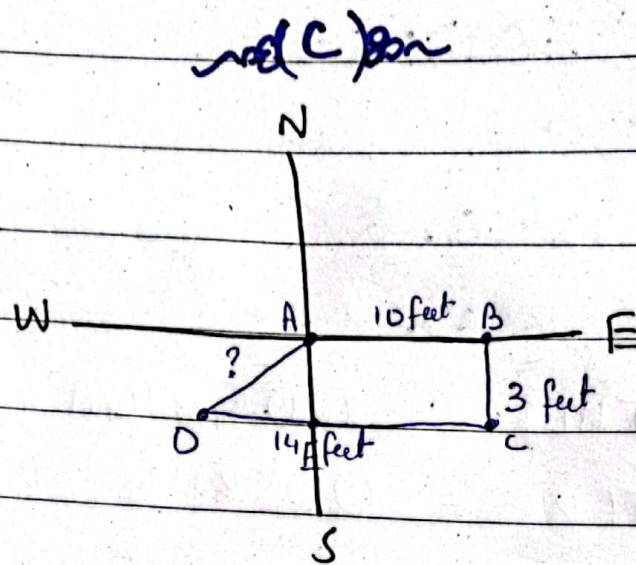
$$3 \times 6 + 3 = 21$$

$$4 \times 21 + 4 = 88$$

So, 1, 2, 6, 21, 88

The answer will be 88 as each digit is multiplied and added by increasing natural number.





By using Pythagoras theorem,

$$(\text{Hypotenuse})^2 = (\text{Base})^2 + (\text{Perpendicular})^2$$

$$(DB)^2 = (DE)^2 + (BC)^2$$

$$(DA)^2 = (4)^2 + (3)^2$$

$$(DA)^2 = 16 + 9$$

$$(DA)^2 = 25$$

By taking " $\sqrt{\quad}$ " on both sides.

$$\sqrt{(DA)^2} = \sqrt{25}$$

$$DA = 5$$

$\therefore$  Distance is 5 feet from point A.



Q. No. 6

Average temperature =  $33^{\circ}\text{C}$

Temperature =  $T_1 = 30^{\circ}\text{C}$

Temperature =  $T_2 = 35^{\circ}\text{C}$

Temperature =  $T_3 = ?$

By applying formula:

$$\text{Average} = \frac{T_1 + T_2 + T_3}{3}$$

$$33^{\circ}\text{C} = \frac{30 + 35 + T_3}{3}$$

$$3 \times 33 = 65 + T_3$$

$$99 = 65 + T_3$$

$$99 - 65 = T_3$$

$$\Rightarrow \boxed{T_3 = 34^{\circ}\text{C}}$$

Q. No. 7

Q. No. 7

I. Q.

IQ stands for Intelligence Quotient and in short it is a measure of person's reading ability. An IQ is supposed to



to tell how well someone can use information and logic to answer questions or make predictions.

## FACTORS AFFECTING I.Q

- ① Nutrition
- ② Environment factors
- ③ Genetics
- ④ Enviro Age factor

rad(b)an

$$\text{Radius} = r = 4 \text{ cm}$$

③  
.14  
× 8  
12

$$\text{Circumference of circle} = C = 2\pi r$$

$$C = 2 \times 3.14 \times 4$$

$$= 25.12 \text{ cm}$$

rad(C)an

Age of 5 students in ascending order = 20, 21, 21, 22, 23

$$\text{Mean} = \frac{20 + 21 + 21 + 22 + 23}{5}$$

11.6  
07  
01  
7  
-5  
2

$$= \frac{107}{5} = 21.4$$

$$\text{Median} = \frac{23 - 20}{2} = \frac{3}{2}$$



Day: \_\_\_\_\_

Date: \_\_\_\_\_

$$\boxed{\text{Mode} = 21}$$

$$\text{Range} = 23 - 20 = \boxed{3}$$

~~and~~

$$\text{Profit} = \text{Rs } 406,000$$

Share of each = ?

Ratio of Investment:

Tahir                      Umar                      Usman

$$15,000 \quad ; \quad 30,000 \quad : \quad 45,000$$

$$3 \quad : \quad 6 \quad : \quad 9$$

$$1 \quad : \quad 2 \quad : \quad 3$$

$$\text{Share of Tahir} = \text{Rs } \del{200,000} 67,666$$

$$\text{Share of Umar} = \text{Rs } \del{100,000} 135,333$$

$$\text{Share of Usman} = \text{Rs } \del{200,000} 203,000$$

0