

Dos and Don'ts for General Science & Ability Paper

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. :)

$$= \frac{45}{18}$$

18

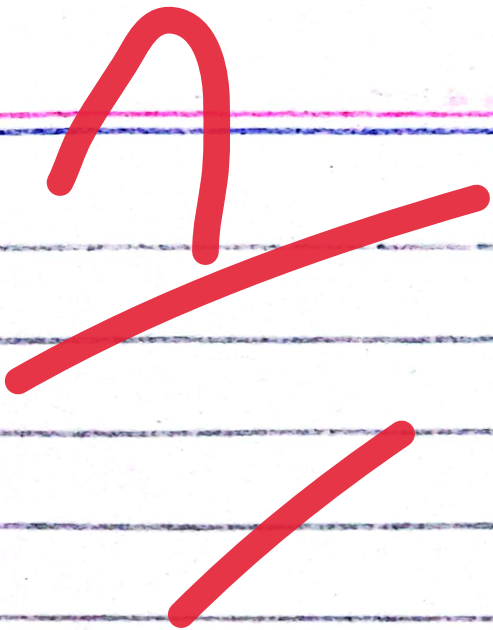
$$= \frac{15}{6}$$

6

$$= \frac{5}{2}$$

2

$$= 2.5\%$$



b.

Units	days	machines
600	9	20
x	12	18

$$\frac{600}{x} = \frac{9}{12} \times \frac{18}{20}$$

where x is the number of units made in 12 days with 18 machines.

units is directly proportional to days while with machines is inversely proportional.

$$\frac{600}{x} = \frac{3}{4} \times \frac{9}{10}$$

$$\frac{2 \times 600 \times 4 \times 10}{3 \times 9} = x$$

$$\frac{8000}{9} = x$$

$$x \approx 889$$

889 units will be made.

888.8

8000

72

80

72

80

72

80

c.

$$\text{Speed} = \frac{\text{distance}}{\text{time}}$$

$$S = \frac{d}{t}$$

for car the speed will be

$$S = \frac{450 \text{ m}}{1 \text{ min}}$$

$$S = 450 \text{ m/min}$$

for train:

$$S = \frac{69 \text{ km}}{45 \text{ min}}$$

$$S = \frac{69000 \text{ m}}{45 \text{ min}}$$

$$S = \frac{69000}{45} \text{ m/min}$$

The ratio of their speed will be:

$$= \frac{69000}{45} \div 450$$

$$= \frac{69000}{45} \times \frac{1}{450}$$

$$= \frac{6900}{45 \times 45} \times \frac{1}{92}$$

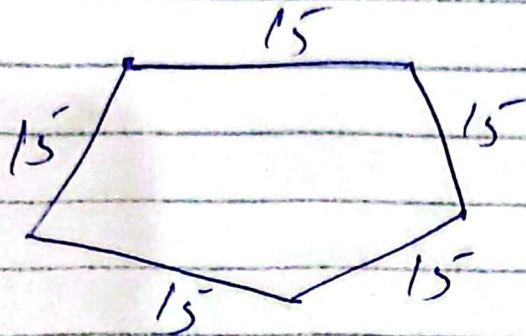
$$= \frac{2300}{675} \times \frac{1}{92}$$

$$= \frac{23}{27} \times \frac{1}{92}$$

$$\begin{array}{r} 45 \\ \times 15 \\ \hline 225 \\ 45 \\ \hline 675 \end{array}$$

d.

Pentagon has 5 sides



Perimeter is the ~~sum of~~
sides.

Perimeter of the given figure
will be:

$$= 15 \times 5$$

$$= ~~175~~ \text{ cm}$$

$$= 75 \text{ cm}$$

Q. 7.

b.

Circumference of circle is:

$$C = 2\pi r$$

$$C = 2\pi(4)$$

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

$$C = 6.28 \times 4$$

$$C = 25.12 \text{ cm}$$

C.

The given data is:

20, 22, 21, 21, 23

Arrange the data in ascending order:

20, 21, 21, 22, 23.

The mean will be:

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

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

$$\approx 21.4$$

The median is the middle most term. The median of given data is:

21

Mode is the most frequently occurred term. The mode of the given data is:

21

The range of a data is the difference between the highest and lowest value. The range of the data will be:

$$23 - 20$$

$$= 3$$

d.

$$\begin{aligned} \text{Tahir} & : \text{Umar} : \text{Usman} \\ 15000 & : 30,000 : 45000 \\ 15000 \times 12 & : 30,000 \times 7 : 45000 \times 4 \\ 1 \times 12 & : 2 \times 7 : 3 \times 4 \\ 12 & : 14 : 12 \\ 6 & : 7 : 6 \end{aligned}$$

The sum of ratio
 $= 6 + 7 + 6 = 19$

Total Profit = Rs 406,000/-

Tahir's share

$$= \frac{6}{19} \times 406,000$$

$$= 6 \times 21368$$

$$= 128208$$

Rs 128208/-

Usman's share

$$= \text{Rs } 128208/-$$

Umar's share

$$= 406000$$

$$- 128208$$

$$- 128208$$

$$= 406000$$

$$- 256416$$

		19
		<u>3</u>
		57
$\therefore 19 \times 20$		
$= 380$		
5419	$406 - 380$	
$19 \frac{5}{19}$		26
$6 \frac{19}{19}$		<u>21368</u>
$114 \frac{19}{19}$		
	19	406000
		<u>38</u>
719		26
$\times 8$		<u>19</u>
<u>152</u>		70
		<u>57</u>
		130
		<u>114</u>
		100

= 149589

Rs 149589/-

Q.

I. Q

I. Q is the measure of intelligence of a person. It refers to cognitive powers of a person.

Factors affecting I. Q

- i - short-term memory
- ii - memorizing power
- iii - Problem solving skill
- iv - Pressure and stress handling

Sec - I

Q. No. 5

Q. Artificial Intelligence :

Artificial intelligence (AI) is the use of technology to generate codes, compile images and video and create many other new contents.

AI works on the free online data and its training. As the

free online data is limited.
AI can't create something new. AI analyze any kind of data available on internet which may be correct or wrong. AI generated contents lack authenticity.

AI can't outsmart humans due to its limited data, lack of innovation and lack of authenticity.

b. Benefits of balance diet

A balance diet means taking suitable amount of fruit, vegetable, meats and cereals in order to fulfill the body's demand.

Add a pie chart

A balance diet has the following benefits:

- i - No need of medicines
- ii - Physical fitness is maintained
- iii - Safeguard from diseases
- iv - Healthy life
- v - Reduces the risk of Hypertension, blood pressure and cholesterol.

Q No. 2

c. Atoms form chemical bonds to stable themselves according to octet and duplet rule.

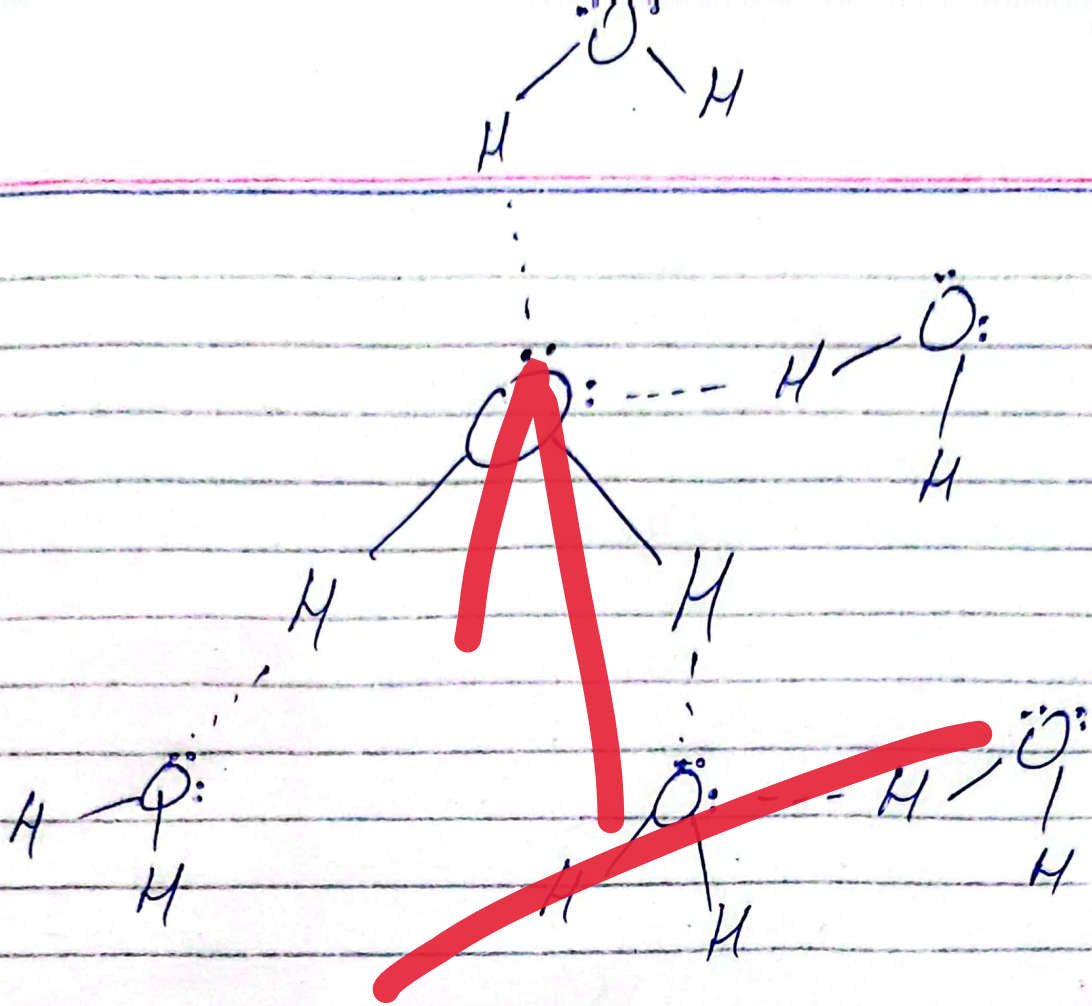
An atom can have either 8 electrons in its valence shell according to octet rule or 2 electrons in its valence shell according to duplet rule.

Example
Chlorine has 7 valence electrons in its valence shell, so it takes 1 electron from any other element, say sodium, to obey the octet rule.

Structure of water

d. Co

Water is made up of 2 Hydrogen atoms and 1 Oxygen atom. Each water atom has 2 covalent bonds - one bond with each H-atom.



The two un bonded pairs on oxygen atom makes hydrogen bonding with the adjacent hydrogen of adjacent water atom.

d.

Conductors:

Conductors are the elements or materials that can conduct electricity and heat.

Example
Iron

Semi conductors

Semi conductors are the material that can conduct heat and electricity under specific condition. It becomes a conductor upon mixture with some impurities.

Example:

Silicon.

Metals:

Metals are the elements having free electrons that makes them good conductor of electricity.

For example:
Gold.

Plastics

Plastics are non-biodegradable materials that are long chains of carbon polymers. They have high plasticity and ductility.

Example

PVC plastic.

b.

Arteries, veins and capillaries are all blood vessels.

Function of arteries:
moving blood towards the heart

Diagrams?

Function of veins?
moving blood away from heart

Function of capillaries:
Arteries and veins are further divided into smaller blood vessels called capillaries. Capillaries move blood and maintain blood flow in all the organs of a body.

a.
The following measures should be taken in COP-29 to counter global warming:

- i - Restriction on excessive emission of green house gases
- ii - Transition to renewable energy sources
- iii - Promote green energy such as nuclear energy.

iv - Ban on usage of ozone depleting substances

v - Promote afforestation and reduce deforestation

