

Dos and Don'ts for General Science & Ability Paper

And 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 at least 2 and at max 3 sides 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.

Question #6

(a):

Mean / Average

Sum of observation

Total no. of observation

Mean / Average

$= \frac{9 + 13 + 10 + 8 + 12 + 15}{6}$

Mean

$= \frac{77}{6}$

(b) Soln.

Sugar solution

Coloured water = 1.3

After adding

Coloured water solution

became

$= 4.5$

Sugar solution

Coloured water = 4.5

Sugar solution

$= 1 \text{ litre}$

Coloured water

$= 5 \text{ litre}$

(c) Radius of football = 12cm
Volume of football = ?

$$\text{Volume of football} = \frac{4}{3} \pi r^3$$
$$\pi = \frac{22}{7} = 3.14 \dots$$

$$= \frac{4}{3} (3.14) (12)^3$$

$$= \left(\frac{4}{3}\right) (3.14) (12)^3$$

$$\text{Volume} = 804.57 \text{ cm}^3$$

So, the volume of the football is 804.57 cm^3 .

(d) -10, -8, 6, 40, 102, ?

-10, -8, 6, 40, 102, 200

So the missing number is 200 which can be obtained or given numeric series obtained in 1st numeric series

1st number = 7 steps

" number = 11 steps

3rd number = 15 steps

four number = 19 steps

-10 to -8

Question #18

- (a) Charge = £20 + 4n
n = no. of window in house
n = 7 windows

$$\text{Charge} = £20 + 4(7)$$

$$\text{Charge} = £20 + 28$$

So, the briem charge would be
£20 + 28.

- (b) Jumble words;

$$(c) (A \cup B)' = A' \cap B'$$

$$A = \{10, 11, 12, 13, 15\}, B = \{10, 12, 14\}$$

$$U = \{10, 11, 12, 13, 14, 15, 16, 18\}$$

$$L.H.S = (A \cup B)'$$

$$A \cup B = \{10, 11, 12, 13, 15\} \cup \{10, 12, 14\}$$

$$(A \cup B) = \{10, 11, 12, 13, 14, 15\}$$

$$U - (A \cup B) = \{10, 11, 12, 13, 14, 15, 16, 18\} - \{10, 11, 12, 13, 14, 15\}$$

$$(A \cup B)' = \{16, 18\}$$

$$R.H.S = A' \cap B'$$

$$U - A = A' = \{10, 11, 12, 13, 14, 15, 16, 18\} - \{10, 11, 12, 13, 15\}$$

$$A' = \{14, 16, 18\}$$

$$U - B = B' = \{10, 11, 12, 13, 14, 15, 16, 18\} - \{10, 12, 14\}$$

$$B' = \{11, 13, 15, 16, 18\}$$

$$A' \cap B' = \{14, 16, 18\} \cap \{11, 13, 15, 16, 18\}$$

$$A' \cap B' = \{16, 18\}$$

$$R.H.S = A' \cap B' = \{16, 18\}$$

Hence Proved

$$L.H.S = R.H.S$$

(d) Find the number of triangles in the given figure.

The given figure having 12 triangles.

Question #7(a)

(a)

$$20/100(x) = y$$

y% of 20 in term of x

$$y/100(20) = x$$

$$\frac{y}{5} = x$$

$$y = 5x$$

So, the value is $y = 5x$.

Question #7(b)

Soln:-

(b) $\frac{P+Q}{2} = 5050 \rightarrow (i)$

$$\frac{Q+R}{2} = 6250 \rightarrow (ii)$$

$$\frac{P+R}{2} = 5200 \rightarrow (iii)$$

So, equation (i) becomes

$$P+Q = 2(5050)$$

$$P+Q = 10100 \rightarrow (4)$$

So, equation (ii) becomes

$$Q+R = 2(6250)$$

$$Q+R = 12500 \rightarrow (5)$$

So, equation (iii) becomes

$$P+R = 10400 \rightarrow (6)$$

Subtracting (4) from (6)

$$\begin{array}{rcl} P + Q & = & 10100 \\ \oplus P + R & = & 10400 \end{array}$$

$$Q - R = -300$$

$$Q - R = -300 \rightarrow (7)$$

Subtracting (5) from (7)

$$\begin{array}{rcl} Q + R & = & 12500 \\ \oplus Q - R & = & -300 \\ \hline \end{array}$$

$$2R = 12800$$

$$R = 6400 \text{ rupees}$$

putting value of R in equ (6)

$$P + R = 10400$$

$$P + 6400 = 10400$$

$$P = 10400 - 6400$$

$$P = \text{Rs. } 4000$$

So the value of P is Rs. 4000

Question #7(c)

Soln: -

Two coins are tossed = 500 times

$$\text{Probability} = \frac{\text{No. of ways of occurrence of an event}}{\text{Total number of outcomes}}$$

$$\text{prob(Event)} = \frac{\text{No. of ways of occurrence of event}}{\text{Total number of events}}$$

Two heads:

$$\text{i) prob(two heads)} = \frac{125}{500} = \frac{1}{4}$$

$$\text{prob(Two heads)} = \frac{1}{4}$$

Probability of two heads is $\frac{1}{4}$

ii) One heads:

$$\text{prob(one head)} = \frac{275}{500}$$

$$\text{prob(One head)} = \frac{55}{100}$$

$$\text{prob(One head)} = \frac{11}{20}$$

No head : 120 times

Prob(Event) = $\frac{\text{No. of ways of occurrence of event}}{\text{Total no. of outcomes}}$

$$\text{prob(No head)} = \frac{120}{500}$$

$$= \frac{24}{100}$$

$$= \frac{12}{50} = \frac{6}{25}$$

$$\text{prob(No head)} = \frac{6}{25}$$

Question #7(d)

Let

(d):

Jamie age = x

Jamie dad age = y

$$y = 4x$$

Jamie age = $x + 14$

Dad age After 14 years = $2(x + 14)$

$$\text{Jamie's dad age} = y = 4x$$

$$\text{Jamie's age} = x = x + 14$$

$$\text{Jamie dad} = y = 2(x + 14)$$

$$x = 4x$$

$$x + 14 = 2(x + 14)$$

$$x + 14 = 2x + 28$$

$$x - 2x = 14$$

$$x = 14 \text{ years}$$

$$\text{jamie age now} = 14 \text{ years}$$

$$\text{jamie's dad age} = 4(14) \text{ years}$$

$$= 56 \text{ years}$$

$$\text{Sum of jami and jamie's dad} = (14 + 56) \text{ years}$$

$$\text{Sum of Jamie's dad age} = 70 \text{ years}$$

Question #4(a)

Noise pollution: The unbearable sound which is unpleasant effect to our ^{human} ears is called noise pollution.

Example: Traffic, Heavy machinery sound, horn sound

Harmful effects:-

Noise pollution causes many consequences on human and environment.

1. It's directly damage to our human hearing system
2. It causes many diseases like depression ^{fussy} and short temperament which effects the human daily activity very badly.
3. Due to depression, no one perform proper in education and profession life.
4. Short Temperament are responsible for anghiness.
5. Due to noise pollution people on individual as well as national level also disturb headache start and people public do not perform

Totally generic

properly due to which our state
or government face many
serious crisis in economy and
other matters.

Ways to reduce noise pollution:-

- ⇒ The engineers must use sound absorbers in heavy machinery.
- ⇒ factories are settled away from the cities or population areas.
- ⇒ Drivers also use horn only where they need.
- ⇒ To enhance/promote public supports instead of own vehicles.

(b). Question (4b)

For spending healthy life people should take care of their balance diet in which minerals, vitamins, lipids and proteins are available in proper quantity.

Question 4(c):

(c) Drinking water:

Water is the most essential feature for the survival of life

- ⇒ Drink water must be clean and fertiliser
- ⇒ People use water in a pure and good quality.

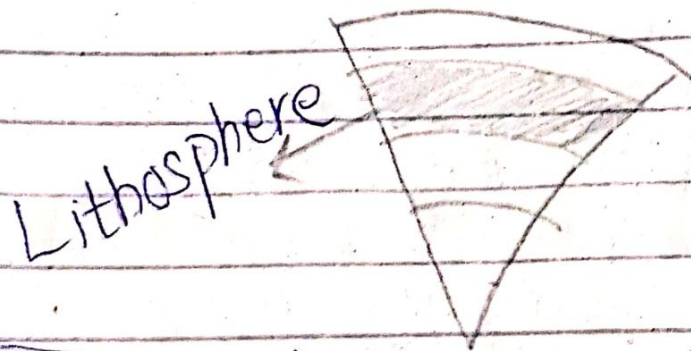
What's
this??

→ people boil water before use

⇒ IF drinking water is not good quality it causes serious consequences on human health like hepatitis B and C, stomach disorder, motion, and so on.

Question 4(d)

Lithosphere is outer layer of earth which comprises liquid and solid.



These Lithosphere contains rocks of different types and nature like igneous, metamorphic rocks.

Rocks: is a solid hard material which contains different kinds of minerals and stone.