

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 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 2026. You're gonna rock in sha Allah. :)

Causes Of Malnutrition:

- It occurs due to inappropriate dietary choices
- Low income
- Difficulty in obtaining food.
- Various physical and mental condition.

Consequences Of Malnutrition:

- Increased vulnerability.
- Increased complications
- May even lead to death.

"6"

Difference Between Food Contamination and Adulteration.

Food Contamination

Food Adulteration:

Definition

It refers to the undesirable changes in food, which are harmful.

Intentional Addition/ Removal of substances to low quality.

Intent

Accidental or due to negligence

Deliberate and fraudulent.

Cause

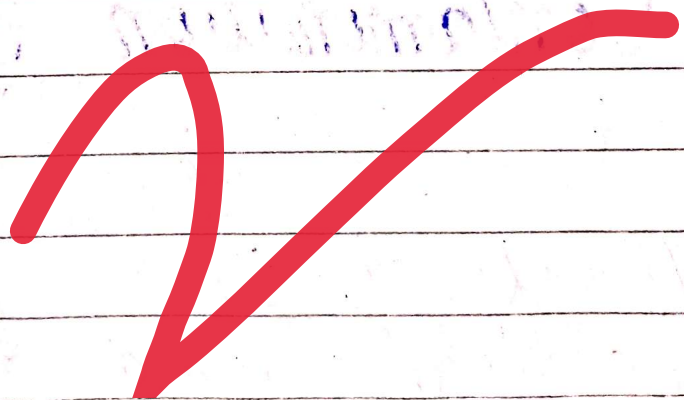
Caused by poor hygiene, handling, environment or addition of micro-organisms.

Caused by mixing or substituting with inferior or harmful substances

Example

A piece of metal
or bacteria like
Salmonella
typhi found
in packaged
food.

Mixing water
in milk; or
adding brick
powder to
chili powder.



"C"

Computer Buses; Communication System that transfers data :

It consist of a set of parallel lines that functions as a communication system and transfers data between components inside a computer or between computers.

Types

- Address Buses
- Data Buses
- Control Buses

"C"

Computer Buses; Communication

~~System that transfers data:~~

~~It consist of a set of parallel lines that functions as a communication system and transfers data between components inside a computer or between computers.~~

Address Buses

~~Data Buses~~

~~Control Buses~~

~~Super~~

Difference Between RAM and ROM:

RAM

ROM

Definition

Temporary memory that can hold the data and instructions if there is adequate power supply.

Permanent memory holding the data even the power is switched off.

Type

The content in RAM can be accessed and processed.

The content in ROM can not be processed. It can only be read.

Utility

It stores immediate instructions required by the processor.

It keeps the booting instructions of a computer.

"d"

Geostationary Satellite;

Rotates in the same direction as the Earth: It is an earth orbiting satellite that rotates in the same direction as the earth. It is placed at an altitude of approximately 35,800 km directly over the equator (west to east).

Difference Between Natural and Artificial Satellite:

Natural Satellite

Artificial Satellite

Definition

A celestial body which revolves around any other celestial body in space.

A man-made machine that is launched from Earth in space and revolves around the Earth or any other celestial body.

Example

Earth is a satellite for sun.
Moon is a satellite of Earth.

Hubble Telescope.
Chandrayaan
Mangalyaan.

Artificial Satellites Of Jupiter:

According to NASA Science, there are 95 moons that have been officially recognized by the International Astronomical Union. However there ZERO artificial satellites of Jupiter. But NASA's Juno spacecraft is currently orbiting Jupiter, and can be considered as an artificial satellite.

Qno:4

Difference Between Temperate and Tropical Cyclones

Temperate Cyclones

- Move from west to east.

- It affects a much larger area.

- Can last for a duration of 15 to 20 days.

Tropical Cyclones

- Move from east to west.

- A tropical cyclone has an effect on a comparatively smaller area than a temperate cyclone.

- Does not last more than 7 days.

"6"

Difference Between Star and a planet:

Stars

Stars are huge celestial bodies made up of hydrogen and helium that can emit either light and energy from nuclear fusion reactions.

Planets

Definition

Planets are celestial bodies that orbit around the sun. They don't have the ability to emit light and energy from nuclear fusion reactions.

Size

Stars are bigger than planets.

Planets are smaller than stars.

Stars are made
up of huge gas
balls that have
high temperature.

Temperature

Planets have
low temperature.

Formation of a Blackhole from Star:

Star → Burst and explode
as Supernova

↓
then star's core left
behind

↓
Gravitational Collapse

↓
Formation of Stellar
Mass

↓
i.e Black hole.

"C"

Reasons for the formation of Chemical Bond

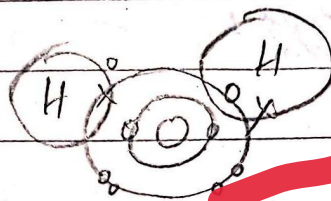
- Everything of Universe wants stability.
- Atoms also gain stability involve themselves in chemical bonding.
- If any atom possess 2 or 8 electrons in its valence it is stable.
- Obtaining electron from to complete 2 electrons in valence shell is called duplet rule.

Structure Of Water (H_2O)

Water is formed when two atoms of hydrogen combine to with one atom of Oxygen.



Each hydrogen atom is covalently bonded to oxygen through a shared pair of electron.



"d"

Conductors: Materials that allow electricity to flow through.

Example: Copper.

~~**Semiconductors:** Materials with electrical conductivity between conductors and insulators; used in electronics.~~

Example: Silicon.

Metals: Solid elements with high conductivity, luster, and malleability.

Example: Iron.

Plastics: Synthetic polymers that are lightweight, moldable and insulating.

Example: Polyethylene.

Ceramics: Hard brittle, heat resistant materials made by firing inorganic substances.

Example: Porcelain.

Section - II

"a"

$$x + y = 23 \quad (1)$$

$$y = 23 - x$$

$$xy = 132 \quad (2)$$

Put eq. (1) in eq. 2

$$x(23 - x) = 132$$

$$23x - x^2 = 132$$

$$x^2 - 23x + 132 = 0$$

$$x^2 - 11x - 12x + 132 = 0$$

$$x(x - 11) - 12(x - 11) = 0$$

$$(x - 11)(x - 12) = 0$$

$$x - 12 = 0$$

$$x = 12$$

$$x - 11 = 0$$

$$x = 11$$

"b"

$$\frac{40}{100} \times x = \frac{20}{100} \times 650 + 190$$

$$0.4x = 0.2 \times 650 + 190$$

$$0.4x = 130 + 190$$

$$0.4x = 320$$

$$x = \frac{320}{0.4}$$

$$x = 800$$

"c"

Discount = 20%

Selling price (after discount) = 70,000,000

Formula 2

$$\text{Market price} = \frac{\text{Selling price}}{1 - \frac{\text{Discount}}{100}}$$

$$= \frac{70,000,000}{1 - \frac{20}{100}} = \frac{70,000,000}{0.80}$$

$$= 87,500,000$$

~~(x-y)~~

"d"

Formula

$$= \left(x - y - \frac{xy}{100} \right) \%$$

Solution

$$= \left(10 - 10 - \frac{10 \times 10}{100} \right) \%$$

$$= -1\%$$

$$= 1\%$$

Q no: 6.

"d"

A B C.

$$2 : 3 \rightarrow 5 : 8$$

$$2 \times 5 : 3 \times 5 : 3 \times 8.$$

$$10 : 15 : 24$$

"a"

$\Rightarrow$ Sum of 3 prime Numbers = 159.

$$= \frac{159}{3} \cdot 53$$

$$= 53$$

Consecutive Numbers around 53 are =

47 and 59.

So, 47, 53, 59

Check: $47 + 53 + 59 = 159$

"b"

Radius = 6cm

$$\text{Perimeter} = 2\pi r$$

$$= 2(3.14)(6)$$

$$= 12(3.14)$$

$$= 12\pi$$