

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

Hi there — you've prepared well! Remember, knowing the content is one thing, but presenting it in the paper exactly as required is another. Here are a few key points to keep in mind:

1. For a 5-mark part, aim to write at least 2 and at most 3 sides of the answer sheet. Often, a question has two or three parts, and the marks are divided accordingly — so address each part fairly.
2. Manage your time wisely — you have about 35 minutes per full question, which comes down to around 8 minutes for each 5-mark part. Stick to this to avoid rushing later.
3. Make your answers look scientific, not just theoretical. Use flowcharts and diagrams wherever they add clarity.
4. Neatness matters — keep your handwriting clean, avoid cutting or overwriting.
5. Mind your spelling and grammar — while GSA doesn't deduct marks for these, your expression leaves an impression.
6. In the ability portion, explain analytical ability questions in words. For a 5-mark part, show all steps and provide clear explanations.

Here's a brief key/sample of your Ability questions

Example:

Q.6

a) Candy ratio problem

Given: Packets in flavors Apple, Berry, Cherry, Date = 3 : 6 : 2 : 5.

Asked: If Apple candies exceed Date candies by 35, how many Berry candies are there?

Note (consistency check): The ratio shows Apple = 3 parts

Day:

Date:

strategies

Transport; Ride hailing and navigation depends upon real time data for navigation route optimization.

(b)

Expansion of universe - Ballon Analogy:

It's like cosmic expansion. Imagine galaxies as dots on ballon surface. When ballon is inflated every dot moves away from others, Not because they travel across surface because surface itself expands. Similarly, galaxies recedes from each other as space itself stretches. It clarifies that universe has no fixed center of expansion, just as no single dot is center of ballon surface.

Day: _____

Date: _____

(C)

Balance diet and vitamin deficiencies:

It contains all vital nutrients like carbohydrates, protein, fats, vitamins, minerals, and water in appropriate ratio to sustain body function.

Vitamin

Effect

A-Deficiency

cause night blindness and weak immunity.

D-

Rickets, osteomalacia.

(D)

GPS working and fiber optics:

It determines user location at least 4 satellites, transmitting time stamped signal, receiver calculate distance using time and day. Intersection give latitude, longitude and altitude.

Day: _____

Date: _____

Fiber optics: Transmits light pulses instead of electric signals, enabling high speed and long distance data transmission.

(Question 03)

(a)

why do cells form organelles:

cells form organelles to compartmentalize functions, ensuring efficiency and organization in biochemical reactions, performing specific tasks.

Add diagram

Mitochondria:

It's double membrane organelles known as powerhouse of cell generating ATP through oxidative phosphorylation. The inner membrane forms cristae that increase surface area for energy production.

Day:

Date:

and apoptosis regulation
(b)

Doping and types of semiconductors:

Doping is process of intentionally adding impurities to pure semiconductor to modify its electrical conductivity.

n-type: Doped with atoms providing extra electrons phosphorus in silicon.

p-type: Doped with atoms creating electronic deficiencies or holes (boron in silicon).

Doping enhances conductivity for modern electronic devices.

(c)

Merits

Fertile volcanic destruction of soil beneficial life and property for agriculture displacement creation of new population landforms and long term

Demerits

Day: _____

Date: _____

~~Economic loss~~ Emission
mineral resources causes air,
source of geo land, and
thermal energy climate
destruction

(d)

Dengue fever:

Causative Agents:

Dengue virus (Flavivirus group), transmitted by Aedes Aegypti mosquitoes

Symptoms:

High fever
severe headache
muscle and joint pain
Rash, bleeding.

Remedies:

No specific antiviral drug; management is supportive - fluid replacement, Rest and paracetamol for

for fever.

(Question 4)

(a)

Chlorophyll and its function:

It's green pigment in chloroplast responsible for absorbing light energy for photosynthesis. It primarily absorb red and blue wavelength light into chemical energy.

Two, chl-A and chl-b work together to initiate light dependent Reaction for photosynthesis.

(B)

Role of Ribosome in protein synthesis:

Ribosomes are molecular machine that translate genetic info from mRNA into protein. They link Amino Acid to form peptide bond by p-p chain. It can be

Day: _____

Date: _____

free or attached in
endoplasmic reticulum
depending upon synthesis
protein.

(c)

Methods for solid
waste managements:
Reduction and Reuse:

minimize waste gener-
ation at source.

Recycling:

convert material into
Reusable product.

Compositing:

Decompose organic
waste into manure.

Sanitary landfill:

safely dispose of non-
recyclable products.

Incineration:

Burn waste to reduce
volume and generate
energy.