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 practical, not just theoretical. Use flowcharts and diagrams wherever they add clarity.
4. Neatness matters. Keep your handwriting clean, avoid cutting or overwriting. Every...
5. Mind your spelling and grammar — while it doesn't deduct marks for these, your expression leaves an impression.
6. In the ability part, explain analytical ability questions in words. For a 5-mark part, show all steps and provide clear explanations.

Here's a brief key/template for your Ability Questions:

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 and Date = 5 parts, so Date is larger than Apple in the ratio. The statement "Apple candies exceed Date candies by 35" contradicts the ratio (Apple cannot exceed Date if ratio is 3:5). Two ways to handle this:

1. If the problem truly intends Apple − Date = 35, that's impossible with the given ratio (would require negative common factor).
2. Most likely the intended meaning is Date exceeds Apple by 35 (i.e., Date − Apple = 35). I will solve that reasonable interpretation.

Formula: Let common factor = k. Apple = 3k, Date = 5k.
So 5k − 3k = 2k = 35.

Solution: 2k = 35 → k = 35 ÷ 2 = 17.5.
Berry = 6k = 6 × 17.5 = 105.

Answer: 105 Berry candies.
(If you intended the other wording exactly as written, note that it is inconsistent with the ratio.)

b) Camera discount + tax

Given: Original price = $200. Discount = 25% off. After discount, 6% tax applied.
Asked: Total amount paid.

Formula / Steps:
Discount amount = 25% of 200 = 0.25 × 200.
Sale price = 200 − discount.
Tax = 6% of sale price.
Total = sale price + tax.

Solution (digit by digit):
Discount = 200 × 0.25 = 50.
Sale price = 200 − 50 = 150.
Tax = 150 × 0.06 = 9.

Date:

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Part II
Section 1

Q3) a) cells form organelles to perform different functions for the cell. Every organelles have a specific function e.g. cell wall in plant cell, provide protection, support and shape to the cell, cell membrane, provides passage for nutrients to pass through, Endoplasmic Reticulum (ER) largest organelle in the cell, is responsible for transported of proteins and other carbohydrates. Mitochondria in a human cell, is also known as the powerhouse of the cell. It is used in production of ATP molecules.

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(b) Doping is the process of addition of impurity to pure semi-conductor to make it an Extrinsic semi-conductor which is one of the type of semi-conductor. Extrinsic semi-conductor is formed when impurity is added to a pure semiconductor from periodic group III or V making it p-type or n-type semiconductor respectively. The second type of semi-conductor is known as intrinsic semi-conductor which is a semi-conductor in it's pure form e.g silicon and germanium

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Scanned with CamScanner

Date: _____

(c) The merits of volcanic eruption are Volcano is a vent in the earth's crust through which Lava and steam are expelled The demerits of volcanic eruptions are it destoys the human habitat and it when erupted with molten Lava.

(d) Dengue is a disease which is also known as dandy fever. It is caused by mosquito bite which transmit dengue virus [illegible] people. The Symptoms of dengue are high fever muscle and joint pain, headaches, swollen Lymph nodes. Remedies for dengue is wearing protective clothing like long sleeved shirts, long pants, Use of mosquito repellents and mosquito nets. The [illegible] of dengue should be given supportive care in hospital, replacement of body fluids, painkillers and monitoring of platelet count.

(4) a) Chlorophyll are only present in the plant cells situated in the leaves. Chlorophyll traps the sunlight and help the plant perform the process of photosynthesis. Chlorophyll is the agent which provides the leaves with the green colour.

Date: _____

(b) Ribosomes are present on the Rough Endoplasmic Reticulum (RER). Ribosomes serve as a site for protein synthesis by decoding the mRNA and linking amino acids to form a new protein.

(c) The different methods of Solid Waste Management are Landfill, digging a large hole in the ground to dump waste material; Another method is Incineration where the solid waste is burned at high temperature.

(d) (i) Biofuel

Biofuel are the alternative energy resource. It is a subsitude fuel derived from the Bio-mass. It is an environment friendly fuel

(ii) Adulteration

It is an act to debase the quality of food either through the removal of valuable ingridents or through adding an in ferior substance in food

(iii) Hydrosphere

It represents the water body of earth like rivers, lakes, streams, It is always in motion. Water move great distances and cover greater distances such as between the tropics and poles

Date: _____

(iv) Troposphere

It is the first atmospheric layer.
It extends upto 20 km from the earth surface
Weather occurs in troposphere, Temperature
drops as the height increases

(v) Isotopes

Isotopes are the atom of the same material
having same atomic numb but different
mass number such as Uranium - 235 and
Uranium - 237.

Section II

8(b) a)

Apple	Berry	Cherry	Date
3	: 6	: 2	: 5

Date — Apply = 35 = 17.5
Ratio = 2

17.5 × 6 = 105.0

Berry = 6 × 17.5 = 105 candies of Berry

(b) Price = $200 Discount = 25%

Discounted price = $ + 6 ×

6/100 × 200 = $12

Discounted price + t = Amount paid
$150 + $ = $16

Date: _____

(c) Distance = 36km
speed = 18 km/hr
Time = ?

$$\text{Time} = \frac{\text{Distance}}{\text{speed}}$$

$$T = \frac{36}{18} = 2$$

Time = 2 hours taken

It will reach by 3 pm Ans

(d) (i) STSTAICITS

STSTAICITS
STATISTICS

(ii) LGEBMAR

07) i) Volume of sphere with diameter 14cm

$$V = \frac{4}{3} \times \pi r^3$$

$$= \frac{4}{3} \times \frac{22}{7} \times 7^3$$

$$= \frac{4}{3} \times \frac{22}{7} \times 343$$

$$= 1436.73 \text{ Ans}$$

$$\begin{array}{r} 343 \\ \times\ 7 \\ \hline 2401 \end{array}$$

(ii) Saving = 25000 Rs
Ratio = 1:2:3:4:5 = 15

5000
25000
×5 3

smallest share = 1666.6 Rs Ans

(c) Spot the error / complete the Series

(i) 2 is the error

(ii) 3, 5, 7, 11, 13, 17