

Do's and Don'ts for the General Science & Ability Part
 Hi there — you've prepared for the exam by 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 like you've written them in a notebook. Write clearly, and show your working where there are calculations.
4. Neatness matters — keep your handwriting clean, and avoid cutting or overwriting.
5. Mind your spelling and grammar — while GSA doesn't deduct marks for these, your examiner will be looking for clear communication.
6. In the ability portion, explain analytical ability questions. You'll need to show your working for the 5-mark part, and your answers should be clear explanations.

MOCK GSA

DATE:

DATE:

Question NO 03

Here's a brief key/sample of 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). This gives a consistent, solvable equation.

Formula: Let common factor = k . Apple = $3k$, Date = $5k$.

So $5k - 3k = 35 \Rightarrow 2k = 35$

Solution: $2k = 35 \Rightarrow k = 35 \div 2 = 17.5$.

Berry = $6k = 6 \times 17.5 = 105$.

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, 8% tax applied.

Asked: Total amount paid.

Formula / Steps:

Discount amount = 25% of 200 = $0.25 \times 200 = 50$.

Sale price = 200 - discount.

Tax = 8% of sale price.

Total = sale price + tax.

Solution (digit by digit):

Discount = $200 \times 0.25 = 50$.

Sale price = $200 - 50 = 150$.

Tax = $150 \times 0.08 = 12$.

Total paid = $150 + 12 = 162$.

Answer: \$162.00

c) Bicycle travel time

Given: Distance = 36 km, speed = 18 km/hr. Start time = 1:00 PM.

Asked: Arrival time.

Formula: Time = Distance $\div$ Speed.

Solution: Time = $36 \div 18 = 2$ hours. Start 1:00 PM + 2 hours = 3:00 PM.

Answer: 3:00 PM

d) Unscramble math terms

i. STATISTICS

ii. GAMBLER

Q7.

Given:

- Diameter (d) = 14 cm

- Radius (r) = $d/2 = 14/2 = 7$ cm

- $\pi = 22/7$

Asked: volume of sphere

Formula:

Volume = $(4/3)\pi r^3$

Now, let's plug in the values:

Volume = $(4/3) \times (22/7) \times (7)^3$

= $(4/3) \times 22 \times 7 \times 7$

= 1437.33 cm^3

Answer:

The volume of the sphere is approximately 1437.33 cm^3

(b) Five friends' savings (total Rs. 25,000; ratio 1:2:3:4:5)

Given: Total = Rs. 25,000. Ratio = 1 : 2 : 3 : 4 : 5.

Asked: Smallest share (the "1" part).

Formula: Sum of ratio parts = $1+2+3+4+5 = 15$. Smallest = $(1/15) \times \text{total}$

cells form organelles to divide their

functions into specialized compartments.

This helps them in working with greater

efficiency and controlling over biochemical

processes. Each organelle performs a

specialized function that contribute to

overall survival of a cell.

Mitochondria is also called the "power house" of cell. It produces Adenosine

Triphosphate (ATP) through cellular

respiration.

It is a double-memb-

sane banded organelle.

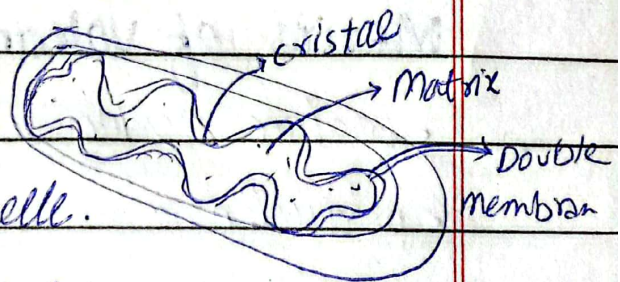
Its main functions are:

- Energy metabolism

- Cellular function.

(ii)

Doping is the process of intentionally adding small amount of impurities to a pure semiconductor. It is of



two types:

1) n-type

It is formed by the addition of pentavalent impurities such as phosphorus or arsenic.

It has extra number of ~~free~~ electrons.

2) p-type

It is formed by the addition of trivalent impurities such as boron or gallium.

These creates holes by accepting electrons.

(iii)

Merits of volcanic eruption

- produce fertile soil rich in minerals
- production of geothermal energy.
- expose valuable mineral resources

Demerits of Volcanic eruption

- loss of life and property
- Air and water pollution
- Disturbed weather patterns

(iv)

Dengue is a viral infection transmitted

of *Aedes aegypti* mosquitoes.

- Its symptoms are high fever, headache, pain behind the eyes, muscle and joint pain, and nausea.

- Its causative agent is *Yersinia enterocolitica*.

Remedies:

- Take rest and prevent dehydration
- Use repellents or nets
- Use medicines.

• Question NO # 07

(i)

Diameter = 14cm

Radius = $\frac{d}{2} = 7\text{cm}$

Volume of sphere = $V = \frac{4}{3} \pi r^3$

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

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

$$V = \frac{4 \times 22 \times 49}{3} = \frac{4312}{3}$$

$$V = 1437.3\text{cm}^3$$

(ii)

Friend's total saving = 25,000 Rs

Ratio = 1:2:3:4:5

Sum of ratios = 1+2+3+4+5 = 15

DATE: _____

DATE: _____

$$1 \text{ part} = \frac{25000}{15} = 1666.6$$

$$\text{Smallest share} = 1 \times 1666.6 = 1666.6$$

Answer

(iii)

a. Each number is multiple of 3, so it is correct series.

b. 3, 5, 7, 11, 13, 17

(iv)