

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:

- Part - 11
Section - 1
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.
Balanced Diet
It is a part of a diet which contains the right proportion of nutrients. It can be macro and micro.
 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.
Macro nutrients
Carbs, Proteins, fats/lipids
 5. Mind your spelling and grammar — while GSA doesn't deduct marks for these, your expression leaves an impression.
Micro nutrients
Minerals, water, vitamins

6. In the ability portion, explain analytical ability questions in words. For a 5 mark part, show all steps and provide clear explanations.

Deficiency of vitamin A can cause,
(a) Night Blindness
(b) Weak immunity

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

Q.6 Deficiency of vitamin E can cause,
a) Candy ratio problem, weakness

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?
Deficiency of vitamin B can cause,
(a) Nerve set

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

(b) Osteomalacia

(b) Expansion of Universe:

Ballon Blowing:

Ballon Blowing is an analogy of Universe expansion. Dots on ballon represent galaxies and the ballon surface represents space. As air is blown into ballon, it stretches and inflates representing the expansion of space. There is no single central dot just as there is no single center of the Universe.

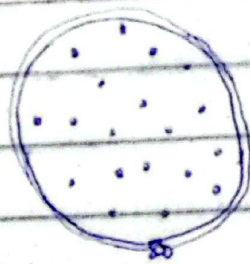


fig: Ballon

Qno#03

(d) Dengue:

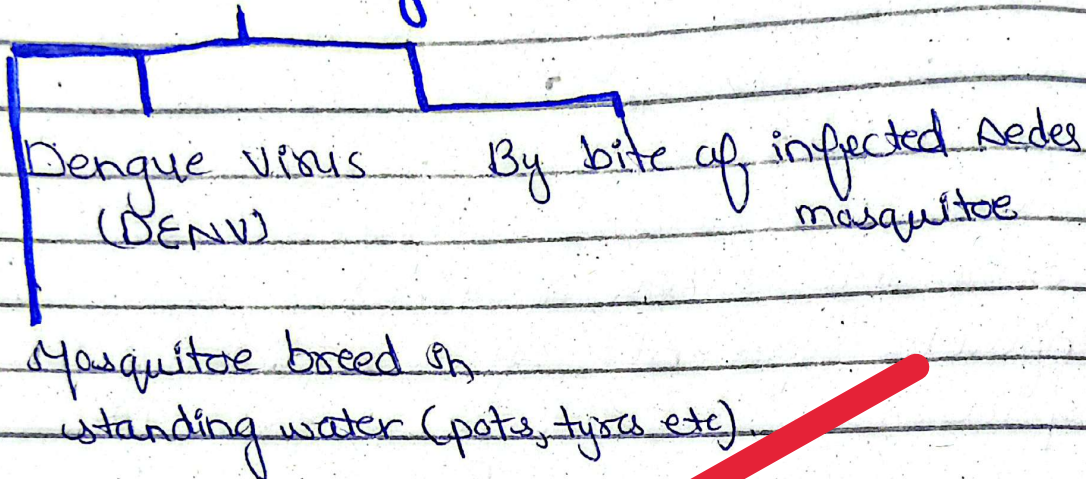
Dengue is a viral infection caused by dengue virus and spread by the infected *Aedes* mosquitoes.

(i) Symptoms:

(a) High fever

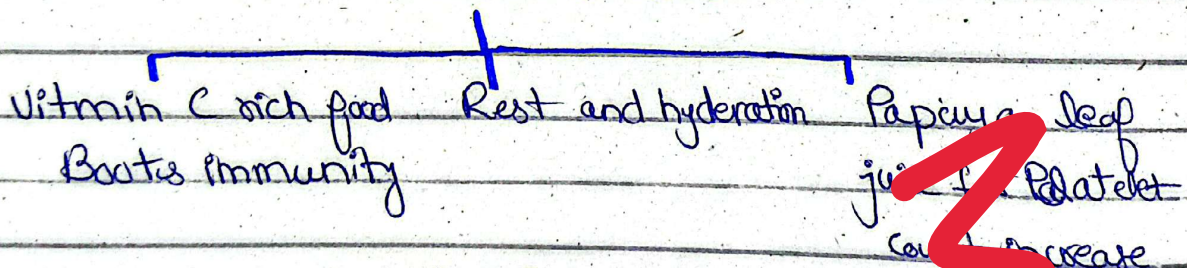
- (b) Pain behind eye
- (c) Nausea and vomiting
- (d) Severe headache

(2) Causative agents:

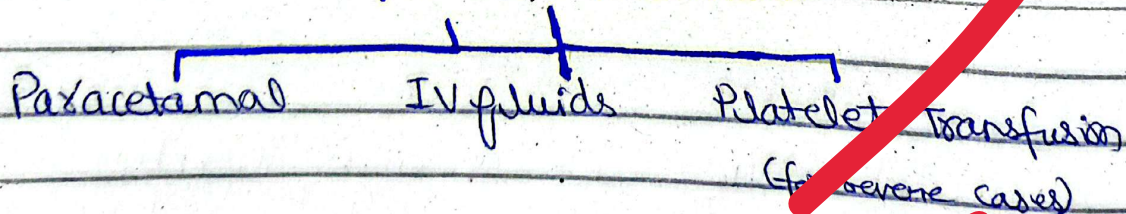


(3) Remedies:

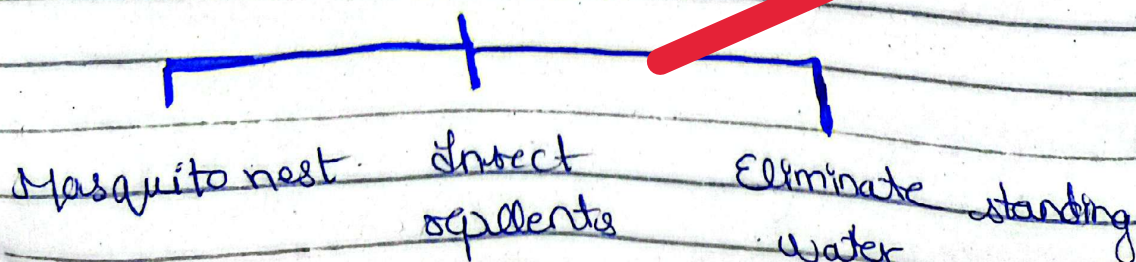
Home remedies



Medical Treatment



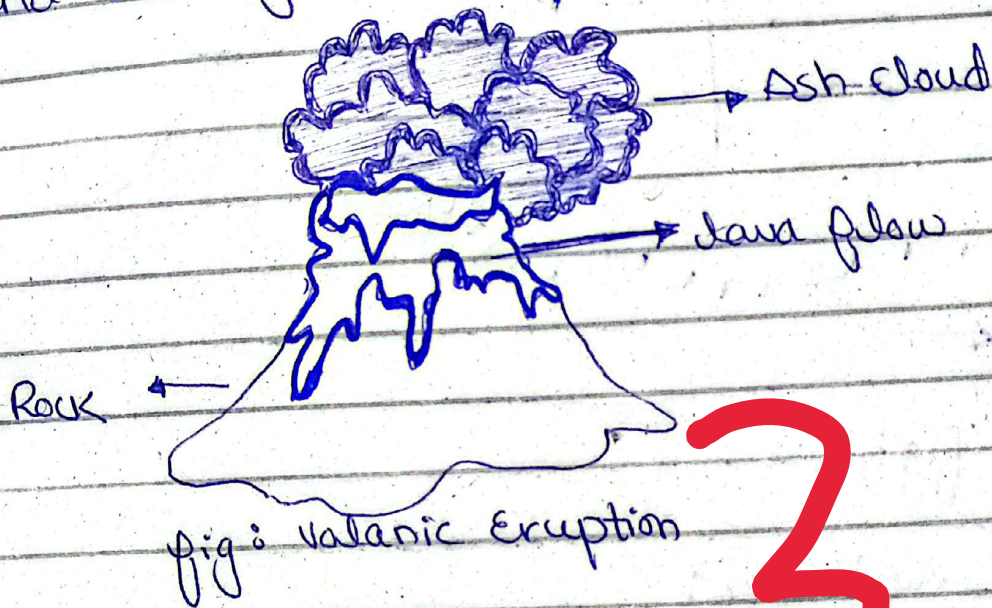
Prevention



(c) State some merits and demerits of volcanic eruption.

Volcanic Eruption:

A volcanic eruption is an eruption of molten rocks, hot rocks and hot gases through a volcanic.



Merits

- Volcanic ash create fertile land for farming
- Volcano can create lakes and provide fresh water sources
- It create new landmass and islands
- It brings copper, gold, silver to surface of earth
- Unique landscape attract tourists

Demerits

- Loss of life and property and destruction
- It causes air, water pollution, soil degradation
- It destroys ecosystem
- It can cause respiratory issue from ash inhalation
- Economy can be affected by destruction

Qno # 04

(b) Ribosomes:-

Ribosomes are smaller organelles found throughout cytoplasm. It is composed of Ribosomal RNA and proteins.

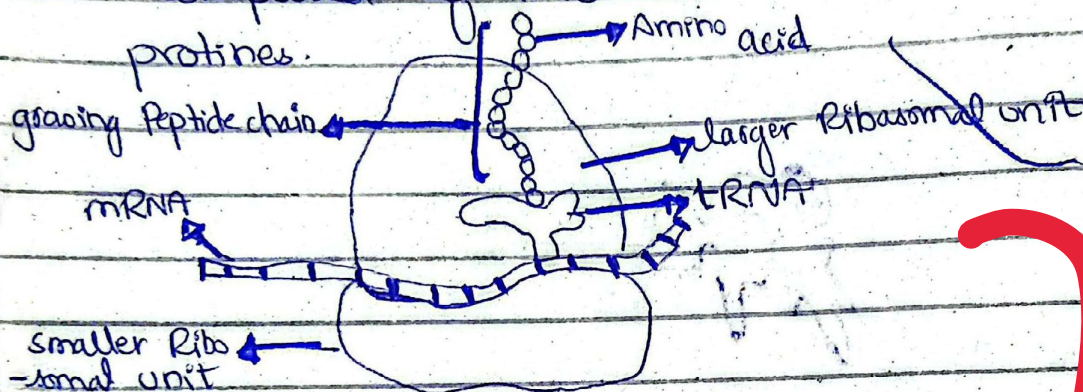


fig: Ribosome

Protein Synthesis:

Translation: Decode RNA into specific amino acid sequence

Amino acid link together via peptide bond

Build long chain of amino acids into protein

Read mRNA sequence and match with tRNA

Initiate folding of Peptide chains into protein structure.

(c) Methods of Solid Waste Management:
Solid waste management is collection
→ treatment and disposal of solid waste.

Methods:

Waste Hierarchy Method

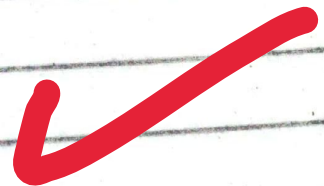
Reduce
minimize waste

Reuse
items like
bags, containers

Recycle
waste into new
products.

Recover
Energy recover
from waste

Dispose like
landfills



Q No # 05

(a) Population Explosion in Pakistan:
Cause and Control

Causes:

- (i) Cultural preference for large families
- (ii) Lack of family planning services
- (iii) Poverty, children sees as economic asset.
- (iv) Early marriages

Control measures:

- (i) Implementation of population policy.

- (ii) Enhance healthcare facilities
- (iii) Introduce economic incentives for small families
- (iv) Enhance awareness through media.

(b) Remote Sensing:

It is a scientific method to gather information related to any geographic area and location by using sensors.

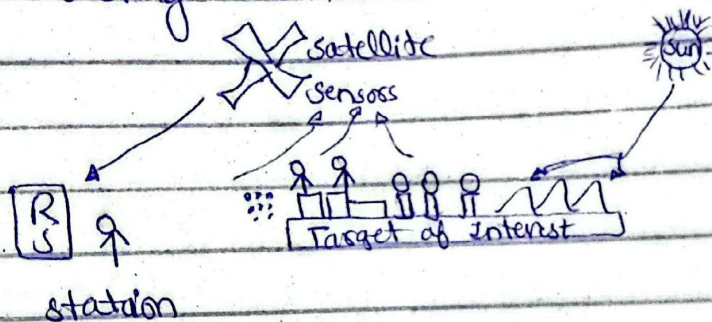
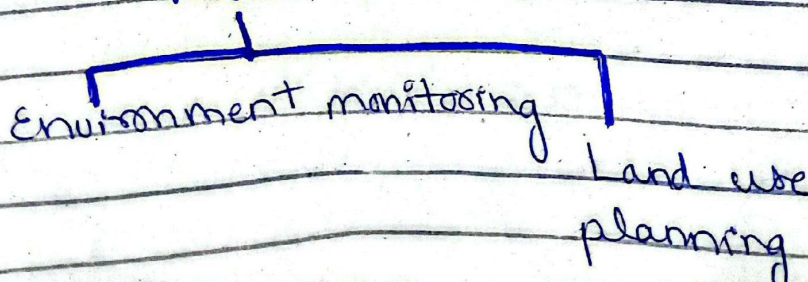


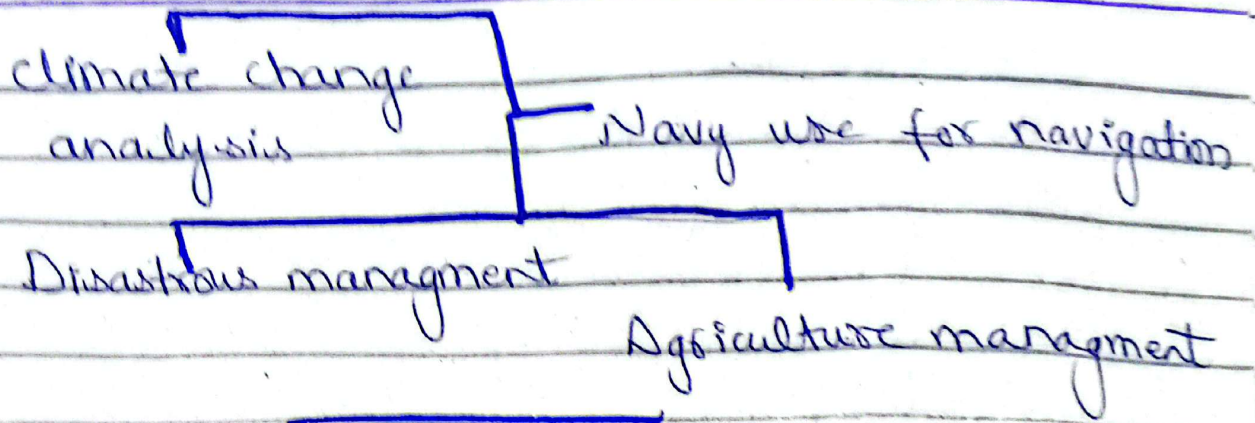
Fig:- Remote Sensing

GIS:

Geographic information system is a computer system which is responsible for sharing and presenting the information in the form of map.

~~Role in E.S~~ Role in E.S





Section II

Q No # 06:

Bicycle Time to reach

(c)

Given value Distance = 36

Speed = 18 km/hr

Time = Distance / speed

$$= \frac{36}{18} = 02$$

Starting at 1 pm $\therefore 1+2 = 3$

Time = 3 pm | Ans

(d)

Math Terms

(i) Statistics

(ii) Algebra

Q No # 07

(c) Spot the error

(i) 2, 6, 18, 54, 162, 486 (which no does not fit)

= 2, 6, 18, 54, 162, 486
All the numbers divided by 3, all the numbers fit the pattern.

$$2 \times 3 = 6$$

$$6 \times 3 = 18$$

$$18 \times 3 = 54$$

$$54 \times 3 = 162$$

$$162 \times 3 = 486$$

(ii) 3, 5, 7, 11, 13, —

Complete the series

This is the series of prime numbers
So the next number is 17.

(b) Friend's saving

Total saving = 25000

Ratio = 1:2:3:4:5

Solution:

$$1+2+3+4+5 = 15$$

$$\text{smallest share} = \frac{1}{15} \times 25000$$