

Dos and Don'ts for General Science & Ability Paper

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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.

(a) -

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.

(b) -

4. Your handwriting and neatness can be really impactful. Avoid cutting and overwriting.

(c) -

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. :)

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(ii) 1, 2, 6, 24, 120, _____

Answer is 720.

There is a multiplication of number from 1, 2, 3, 4, ... onwards with each provided number.

$$1 \times 2 = 2$$

$$2 \times 3 = 6$$

$$6 \times 4 = 24$$

$$24 \times 5 = 120$$

$$120 \times 6 = 720$$

(d)

(T)

|

S

|

Q

|

P

|

(R)

Tallest

180 cm

—

170 cm

—

166 cm

—

158 cm

Shortest

150 cm

Third Tallest = Q

Maximum Possible height range

= 30 cm.

Range will be 30 cm from tallest to shorter friends.

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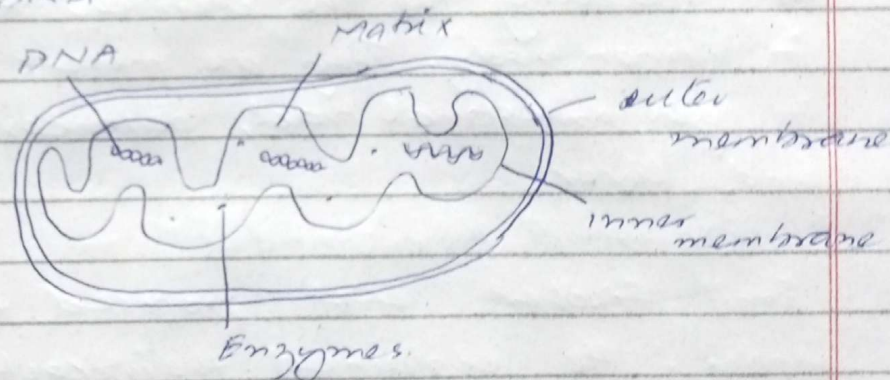
SECTION - I

Answer 03

(a) - Structure and function of Mitochondria within a animal cell.

Structure:

Mitochondria is an organelle with double membrane. Outer membrane is smooth while inner membrane is folded with space in it called matrix. This matrix contains enzymes and DNA.



Function:

It is the powerhouse of a cell, providing energy, "ATP production, by breaking down the glucose".

Structure and function of Ribosomes within an animal cell.

Structure:

Ribosomes are composed of protein and RNA, Ribonucleic Acid, present inside the nucleus.

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Functions:

Ribosomes are responsible for protein synthesis. They read the genetic coding on messenger RNA (mRNA) through the process of translation. They read the information on mRNA and by using this information, they assemble amino acids into polypeptide chains, which synthesizes the proteins.

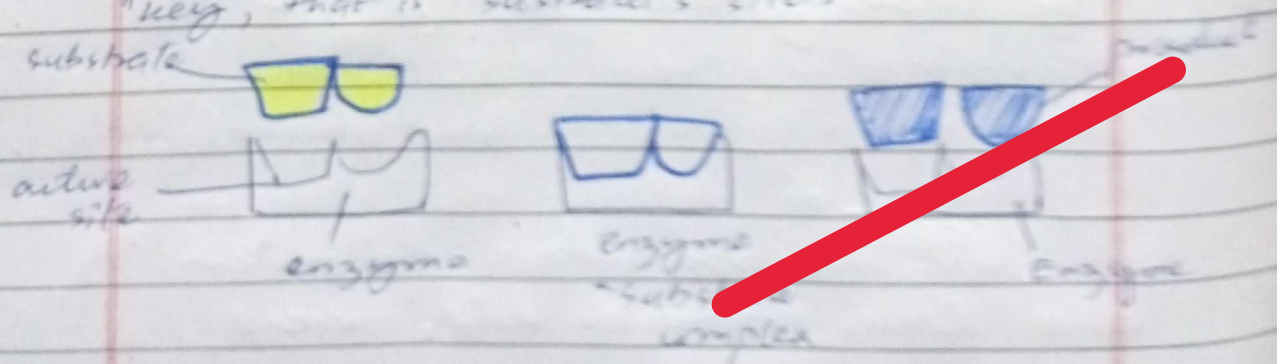
(b) - Enzymes

Enzymes are proteins found in the body, they are responsible for speeding up the chemical reactions in human body. They are present in gastrointestinal tract, pancreas and liver.

"Lock and Key" model

Emil Fischer first proposed this model. He explained the interaction between enzyme and substrate.

Enzyme has an active site, depicted as "lock" which fits into only one "key", that is substrate's site.



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Factors affecting enzyme activity

There should be an optimum temperature and pH for proper enzyme activity. High temperature can change the shape of enzyme and low temperature can slow down the enzymatic activity. Same is with pH.

(d) - Dengue fever:

Dengue, also known as break-bone fever, is an ~~an~~ ^{acute} viral disease.

It is caused by a single-stranded RNA virus from the family of Flaviviridae.

The main vector is a female mosquito with black body and white linings.

It can be asymptomatic in some cases with incubation period.

The common symptoms are;

- High grade fever (continuous pyrexia)
- Arthralgia - Pain in joints.
- Severe headache
- Retro-Orbital pain - pain around the eye region
- Nausea or vomiting.
- Diarrhea
- In severe cases bleeding can occur along with fever known as DHF

Phase wise symptoms

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dengue hemorrhagic fever.

Thrombocytopenia (low platelets) and leukopenia (low white blood cells) are the common findings.

Preventive measures

As there is no antiviral use for dengue, preventive measures are of significant value.

Prevention should be focused on;

- a- Full clothing with each part of body covered except for face and some few others.
- b- Elimination of standing water, as its the breeding site of mosquito.
- c- Usage of nets and mosquito repellants
- d- Community awareness about the disease outbreak, and its effects over society and human beings