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

Hi dear — 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.

Good luck for CSS 2026 — you're going to ace it, in sha Allah! 🌟

Syeda Tayed Fatima

CSS-I

Final mock

SECTION-B

QNo:6 (a)

Given That,

pointing to a woman Ahsan said, "Her grandfather is the only daughter of my brother"

To Find,

How is woman related to Ahsan =?

Answer,

Woman is the neice of Ahsan

QNo:6 (c)

Given That,

A two digit number and unit exceeds by 2,

$x + (x+2)$

$10x + (x+2) = 11x + 2$

The sum of two digits,

$x + (x+2) = 2x$ [illegible]

The product equals to = 144

$(11x+2) \times (2x+2) = 144$

To Find

A two-digit number = ?

Solution;

As per given condition,

$(11x+2) \times (2x+2) = 144$

$22x^2 + 4x + 22x + 4 = 144$

$22x^2 + 26x + 4 = 144$

$x = 24.$

QNo:6 (B)

Given that

Ratio between length and breadth of of a redangular park;

$l : b$

$3 : 2$

Man cycling at a speed = 12km/hr

Time taken to complete one round = 8min

To Find

Area of park in m^2 = ?

Solution

$v = 12km/hr = 12 \times 1000/60$

$v = 200\ m/min$

$S = vt = 200 \times 8$

S = 1600 m

Ratio of length and breadth : 3x : 2x

Perimeter of a rectangle = 2(l+b)

$2(l+b) = 1600$

$2(3x+2x) = 1600$

$2(5x) = 1600$

$\frac{10x}{10} = \frac{1600}{10}$

$x = 160$

Length of rectangular park = $3x = 3 \times 160$

$= 480$ m

(Lena) Breadth of rectangular park, $2x$

$= 2 \times 160 = 320$ m

Area of rectangular park = $l \times b$

$= 480 \times 320$

$= 153600 \text{ m}^2$

QNo:6(D)

Given that

The L.C.M of two numbers = 48

Numbers are in ratio = $2x : 3x$

To Find

Sum of numbers = ?

Solution

As per given condition,

$$2x + 3x = 48$$

$$5x = 48$$

$$x = 9.6$$

First number = $2x = 2 \times 9.6$

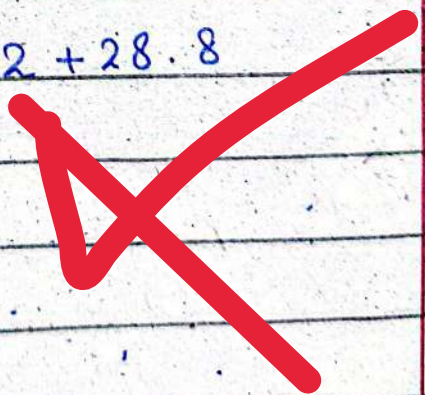
$= 19.2$

Seconed number = $3x = 3 \times 9.6$

$= 28.8$

Sum of numbers = $19.2 + 28.8$

$= 48$



QNo=7(B)

Given that

Selling price of 17 balls = Rs 720

Loss = Cost price of 5 balls

To Find

Cost price of one ball = ?

Solution

Let cost price of one ball = x

cost price of 17 balls = $17x$

cost price of 5 balls = $5x$

Loss = −Selling price + cost price

Loss = cost price − selling price

$= 17x - 5x$

$= 12x$

Selling price = 720

$\frac{12x}{12} = \frac{720}{12}$

$x = 60$

Cost price of one ball = 60 Rs.

Q No: 7(A)

Given that

40% of a number = $\frac{40}{100}x$

Two-third of a number = $\frac{2}{3}x$

To Find

Ratio of first number to seconed number = ?

Solution

A : B

$\frac{40}{5\,100}x : \frac{x}{3}x$

$\frac{2}{5}x : \frac{1}{3}x$

$\frac{12}{5} : \frac{1}{3}$

The ratio of first number to seconed is :

$\frac{1}{5} : \frac{1}{3}$

5/3 0

QNo: 7(c)

Given That

Present age of son = x

present age of father = $x+24$

Aage of son in two years = $x+2$

Age of father in two years = $x+26$

To Find

Present age of son = ?

Solution

$$x+26 = 2(x+2)$$

$$x+26 = 2x+4$$

$$26-4 = 2x-x$$

$$x = 22$$

Present age of son = 22 years.

QNo:7(D)

Given That

Time taken by Rashid:

6 hours To type 32 pages

Time taken by Kamran:

5 hours to type 40 pages

To Find

Collective time to type = 110 pages

Solution

Typing speed of Rashid = $\frac{32}{6} = \frac{16}{3}$

Typing speed of Kamran = $\frac{40}{5} = 8$

Combined speed = $\frac{16}{3} + 8 = \frac{16+24}{3}$

$= 40/3$

Time = $\frac{\text{Total pages}}{\text{combined speed}} = \frac{110}{40/3}$

Combined time by Kamran and Rashid to type 110 pages = 8 hours and 25 min.

Section - A

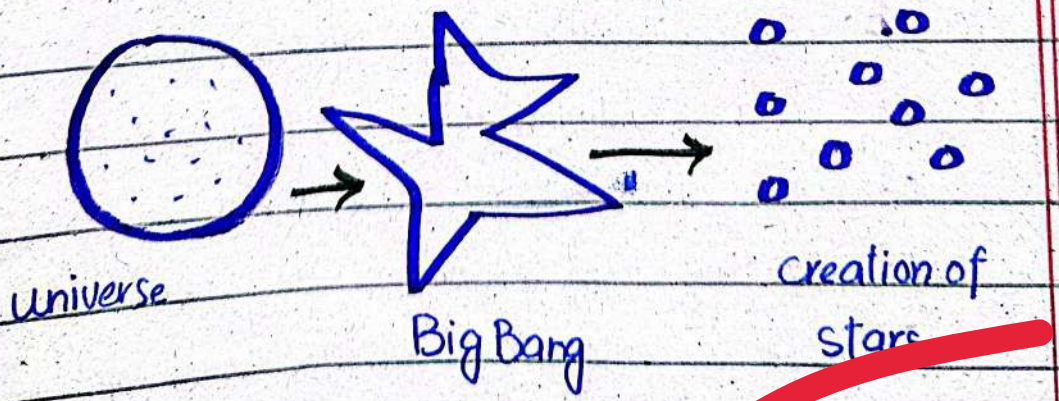
QNo: 2

Structure of universe as per big bang theory

1. What is big bang theory?

The theorists of big bang theory believe that universe was a giant star in the beginning. After afterwards, a huge astrological explosion took place in outer space. And as a result of this bang universe, its stars and planets were created.

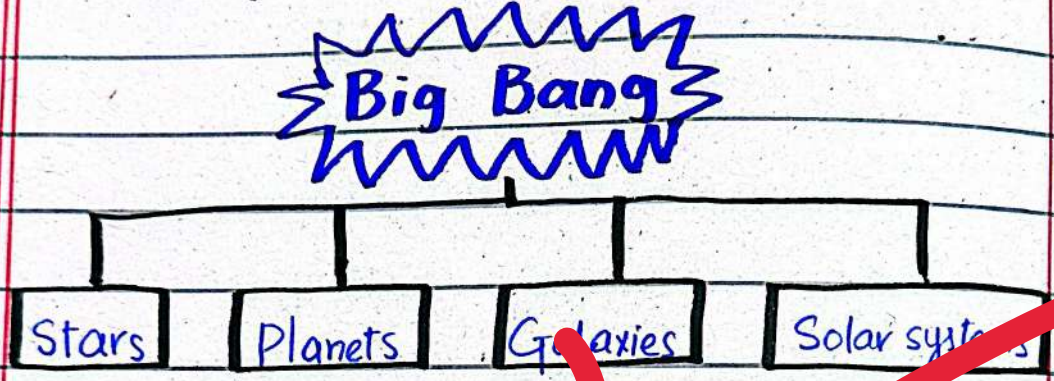
2. Pictorial representation;



3. Structure of universe;

The universe is vast, diverse and never ending. According to big bang theory universe was created as a result of massive explosion.

4. Components of universe;



5. Composition of universe;

a. The universe is comprised of unlimited number of stars and planets, created as a result of big bang.

b. These stars are either gaseous bodies or sedimentary rocks (planets).

c. These stars are sustaining in their own solar system.

d. And many solar systems combine to form galaxy i.e galaxy of earth is milky way.

QNo: 2 (b)

Define urinary system and working of nephron.

1. Defining urinary system;

A set of specific organs in human body by which blood is refined and filtered and waste materials are collected from blood and excreted out of body in form of urine is called urinary system.

2. What is nephron?

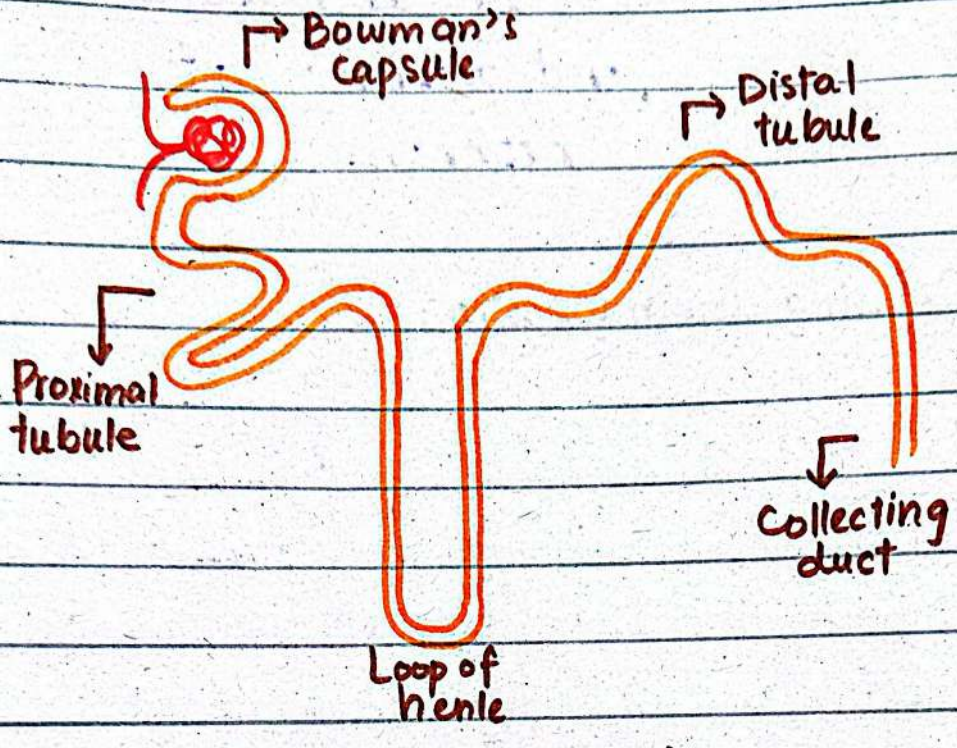
Nephron is the basic functional unit of kidney. There are millions of nephron in one kidney that filters the blood.

3. Parts of nephron:

A nephron has following parts;

a. Bowman's capsule
b. Glomerulus
c. Proximal tubule
d. loop of henle
e. Distal tubule
f. Collecting ducts.

4. Diagram of nephron:



a. Bowman's capsule;

is a network of small capillaries through which blood enters into the nephron for filtration.

b. Proximal tubule;

The blood is passed onto proximal tubule where it is filtered.

c. Loop of henle.

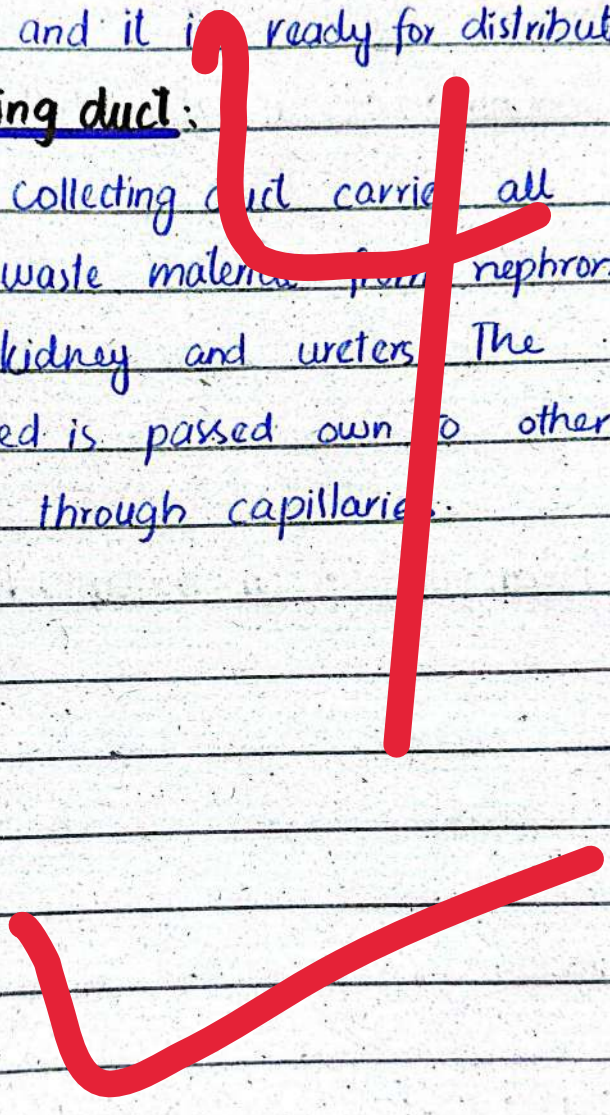
Loop of henle is the U-shaped structure of nephron that again filters the blood and remove excess salts.

(d) Distal tubule;

Distal tubule makes sure and testify that there is no waste in blood and it is ready for distribution

(e) Collecting duct;

The collecting duct carries all the waste material from nephron to kidney and ureters. The filtered is passed own to other parts through capillaries.



QNo: 2(c)

What is un-balanced diet and its affects?

1. Defining an un-balanced diet;

An un-balanced diet is the one that does not contain all the macro and micro nutrients required by the human body for proper functioning.

2. Examples of un-balanced diet;

The common examples of unbalanced diet are;

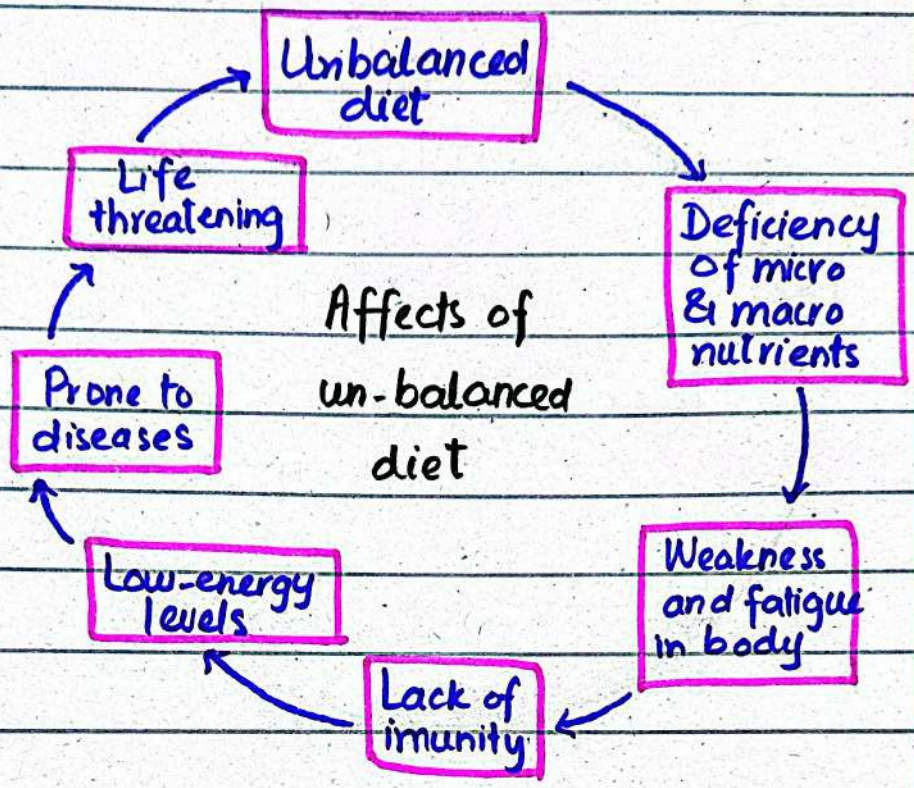
- Alcohol
- Fast food
- Beverages e.g soft drinks
- Sugars, starch, etc.

3. Identification of balanced diet;

A balanced diet can be identified if it contains following minerals and nutrients,

- Proteins
- Carbohydrates
- Lipids
- Micro nutrients
- Vitamins
- Minerals
- Healthy fats

4. How unbalanced diet affects healthy life;



a. Deficiency of nutrients;

An unbalanced diet causes deficiency of macro and micro nutrients in humanity and this deficiency affects the working of healthy human body.

b. Weakness and fatigue body;

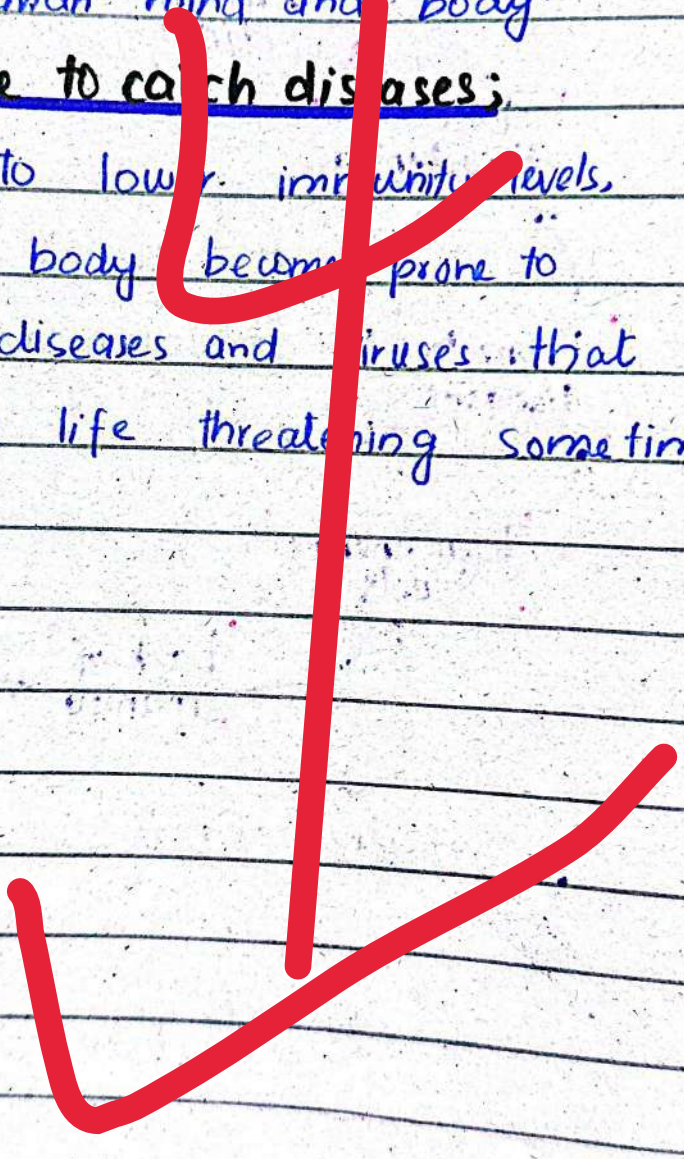
An unbalanced diet causes fatigue, weakness and inflammation thus restricting the activity of healthy life.

c. **Lack of immunity and low energy levels;**

Excessive intake of sugars and fast foods affects energy levels and immunity of human mind and body.

d. **Prone to catch diseases;**

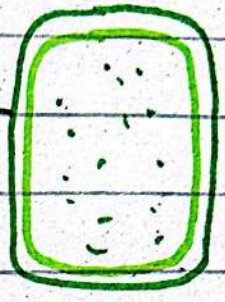
Due to lower immunity levels, human body becomes prone to catch diseases and viruses that can be life threatening sometimes.



QNo.2(d)

(i) Structure and function of cell wall

(a) Structure;

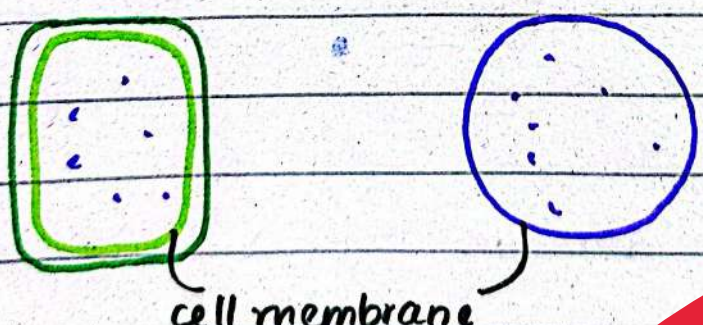


Cell wall is a rigid strong structure encovering cell membrane in plant cells. It is the specification of plant cells only.

(b) Function;

Cell wall in plant cells maintain the rigidity and structure of cells and keep cells protected from any rupture.

(ii) Structure and function of cell wall/membrane



(a) Structure;

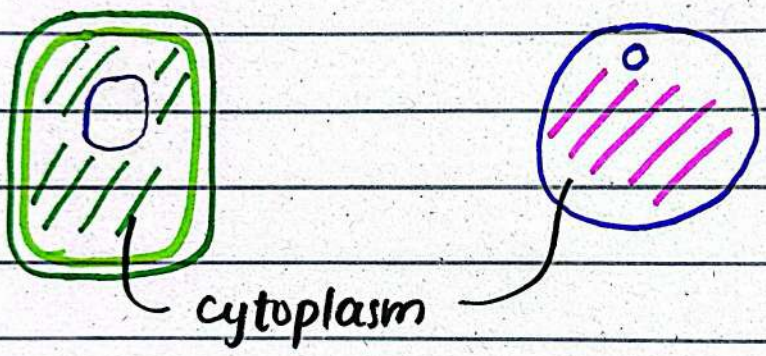
Cell membrane is thin layer encolosing and protecting the cell

organelles. It is found in both animal and plant cells.

(b) Function;

Cell membrane protects the cell organelles from any external distortion that may hinder the functioning of cell.

(iii) Structure and function of cytoplasm



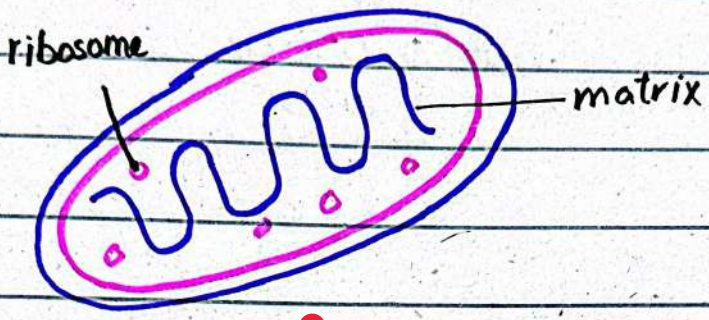
(a) Structure;

Cytoplasm is a fluid like substance inside the cell. All the cell organelles are found in the cytoplasm inside the cell. It is found in both animal and plant cells.

(b) Function;

Cytoplasm keeps the cell organelles protected, distant and keep a check on the materials entering cell.

(vi) Structure and function of mitochondria



(a) Structure;

Mitochondria is a double membraned cell organelle composed a unique zig zag structure called matrix and small granules known as ribosome.

(b) Function;

(Rib) Mitochondria is also called the energy production of cell. Its main function is the assistance in the formation of energy and ATP.

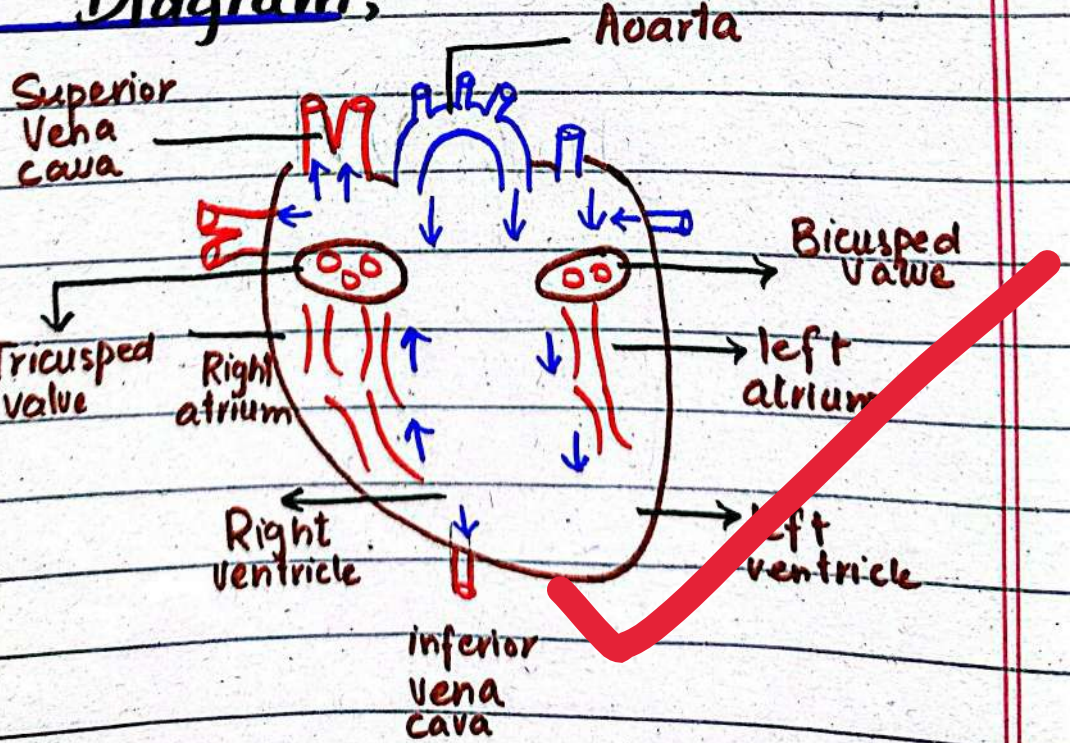
QNo:4 (a)

Role of heart and blood vessels

1. Heart in human body;

Heart is the main life sustaining organ in a living body. It manages the circulation of blood to all parts of body. The complex network of blood vessels emerging from hearts, maintains the smooth circulation of blood in the body.

2. Diagram;



3. Role of heart;

- Heart manages the circulation of blood in human body.
- It filters the blood from de-oxygenated to oxygenated.
- De-oxygenated blood enters the heart by superior vena cava
- It is passed to atriums and ventriculum
- The oxygenated bloods leaves the heart from aorta and inferior vena cava.

4. Role of blood vessels;

(a) **Arteries:** carry oxygenated blood from heart to all parts of body.

(b) **Veins:** carry deoxygenated blood from body and drops it to the heart.

(c) **Capillaries:** are the thin blood vessels that distribute the blood to all parts of body from veins and arteries.

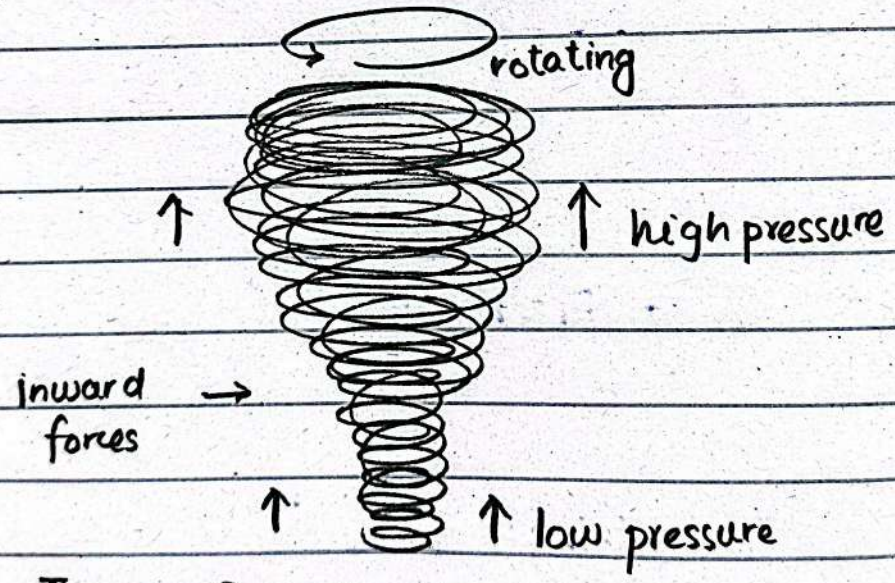
QNo:4(b)

Cyclone

1. Defining cyclone:

A cyclone is a large scale mass of strong wind that rotates and move upward with strong pressure.

2. Figure of cyclone:



3. Types of cyclone;

→ Tropical cyclone
→ Polar cyclone
→ Mesocyclone.

3. Formation of cyclone;

The formation of cyclone occurs in following steps;

- It is formed in strong windy and stormy weather.
- Due to the lower pressure on ground and high pressure above the air, wind and dust begin to rise upward.
- The high pressure above the grounds keeps the wind, dust particles to [illegible] and move in circular direction.
- The pressure difference at the ground and above the surface maintains the shape and time-span of cycle.
- The extreme pressure inside the cyclone pulls the surrounding material inside it.

Q No: 4(c)

(i) **Carbohydrates:**

The complex structure of hydrocarbons obtained through glucose and starch are called carbohydrates.

Functions of carbohydrates:

- Direct energ source
- Maintain sugar levels inside the body.
- Instant source for glucose spike.
- Carbohydrates are the main energy source for metabolism and other body functions.
- On average an adult requires 60-70% of carbohydrates in diet.

(ii) Proteins

"Proteins are the complex chained structures that makes up the body muscles and mass"

Functions;

(i) Proteins are essential for muscle growth and development.

(ii) Proteins make up the hair, skin and muscle in the body.

(iii) Proteins support growth and development in the body.

(iv) Proteins are required by body organs for proper functioning and sustainance.

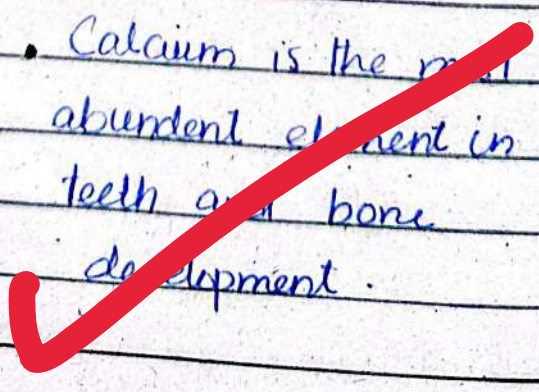
(v) Proteins supports healthy tendons and ligaments in body avoiding muscle cramps.

(iii) Function of fats:

- Maintains proper cell functioning.
- Essential for development and metabolic function.
- Healthy fats improve blood circulation, eye-
- sight and immunity.
- Healthy fats are great source of energy.

(iv) Function of calcium:

- Calcium is a vital nutrient from bone developments.
- It is essential for healthy and normal growth of bones.
- Calcium supports healthy teeth and bones.
- Calcium is the most abundent element in teeth and bone development.



(v) Function of iron;

- It is also known as riboflavin.
- Iron is a key element of blood in the body.
- Iron supports the production of haemoglobin and red blood cells inside the body.
- Iron is essential for eye-sight and healthy growth.
- Deficiency of iron in the blood can lead to anemia.