PART-I(MCQS): MAXIMUM 30 MINUTES	PART-I (MCQS) MAXIMUM MARKS = 20
NOTE: Part-I is Compulsory.	

PART-I

1. Which of the following is a type of non-renewable energy?
a) Solar power
b) Wind power
c) Coal mining ✓
d) Hydro power

2. Potassium nitrate is used in_____?
A. Medicine
B. Fertilizer ✓
C. Salt
D. Glass

3. Which of the following statements is true when we see 'rainbow'?
A. We face sun and raindrops
B. The Sun remains behind us and we face raindrops ✓
C. In light rainfall, we face Sun
D. The sky remains clear and the sun is at lower position in the sky

4. The major source of quick energy is _____?
A. Carbohydrates ✓
B. Minerals
C. vitamins
D. None of these

5. Which of the following has a least penetrating power?
A. All have same penetrating power
B. Beta Particles
C. Alpha particles ✓
D. Gamma rays

6. Who suggested that most of the mass of the atom is located in the nucleus?
A. Thompson
B. Bohr
C. Rutherford ✓
D. Einstein

7. The dark lines in the solar spectrum are due to
A. Absorption of corresponding wavelengths by the outer layers of the sun. ✓
B. Destructive interference between waves of certain definite wavelengths.
C. Absorption of corresponding wavelengths by the prism used in the photograph.
D. Absence of corresponding wavelengths from the light emitted by the core of the sun.

8. Which of the following are the main tasks of an AI agent?
A. Movement and Humanly Actions
B. Perceiving and acting on the environment ✓
C. Input and Output
D. None of the above

9. Which biome is characterized by dense forests and high rainfall?
A) Desert
B) Rainforest ✓
C) Tundra
D) Grassland

10. Which of the following are comprised within AI?

A. Machine Learning
B. Deep Learning
C. Both (A) and (B)
D. None of the above

11. What is the main cause of acid rain?
A) COx emissions
B) NOx emissions
C) SOx emissions
D) Particulate Matter

12. Which international agreement aims to reduce greenhouse gas emissions?
A) Montreal Protocol
B) Kyoto Protocol
C) Paris Agreement
D) Rio Declaration

13. What is the primary method of solid waste management?
A) Recycling
B) Landfilling
C) Incineration
D) Composting

14. Which nutrient is essential for healthy bones?
A) Vitamin A
B) Vitamin D
C) Calcium
D) Protein

15. What is the primary factor affecting bioavailability of nutrients?
A) Food processing
B) Storage conditions
C) Cooking methods
D) Nutrient interactions

16. Ribosomes are sites for:
A. Protein synthesis
B. Photosynthesis
C. Fat synthesis
D. Respiration

17. What play the most important role in regulating temperature and determining climate on the Earth?
(A) Oceans
(B) Mountains
(C) Deserts
(D) Forests

18. When existing rocks are subject to high pressures and temperatures and transformed without significant melting, they are called
(A) igneous rocks
(B) sedimentary rocks
(C) metamorphic rocks
(D) marble and onyx

19. Which of the following circuit elements is used to 'block' DC in an electronic circuit?
A. Resistances
B. Capacitance
C. Inductance
D. Diode

20. The type of mirrors used in the headlamp of cars is _?
A. Parabolic concave
B. Plane
C. Spherical convex
D. Cylindrical concave

****

Best of Luck for CSS-2026

TIME ALLOWED: THREE HOURS	**PART-I (MCQS)**	**MAXIMUM MARKS = 20**
PART-I(MCQS): MAXIMUM 30 INUTES	**PART-II**	**MAXIMUM MARKS = 80**

NOTE:
i. **Part-II is to be attempted on the separate Answer Book.**
ii. **Attempt ONLY FOUR questions from PART-II by selecting TWO questions from EACH SECTION. ALL questions carry EQUAL marks.**

PART-II
(SECTION-A)

Q. No. 2
a. Describe the structure of universe according to big bang theory.
b. Define urinary system & explain the working of nephron.
c. What is Un-balanced diet? How it affects the healthy living?
d. Describe the structure and functions of cell wall, cell membrane, cytoplasm and mitochondria.

Q. No. 3
a. How global warming can be reversed?
b. Define ceramics. Give properties and applications of ceramics.
c. Explain the working of Optic fibers & Mobile phone.
d. Define the following and give examples:
- Food Additives
- Food Preservatives
- Food Adulteration
- Food Contamination

Q. No. 4
a. Explain the role of heart and blood vessels in circulation.
b. What is cyclone? Describe the formation of cyclone.
c. Enlist the functions of:
    - Carbohydrates
    - Proteins
    - Fats
    - Calcium
    - Iron
d. How remote sensing can be employed for environmental purposes?

Q. No. 5
a. What is DRM? Give the importance of Risk assessment in DRM.
b. Define biofuels. Explain the production of biodiesel and bio gas.
c. What is digestive system? Explain the role of stomach and small intestine.
d. Define plastics. Give their properties applications and environmental risks associated with plastics.
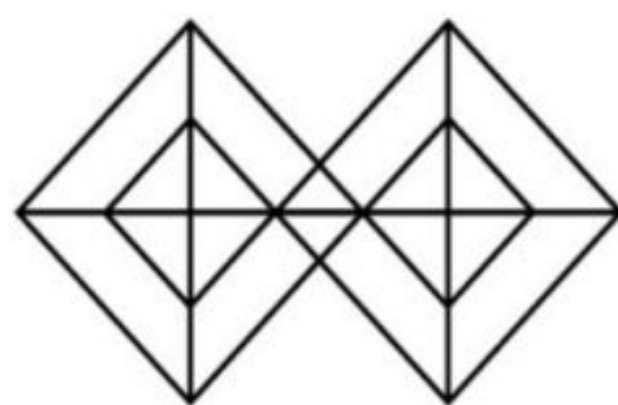
(SECTION-B)

Q. No. 6
A. Pointing to a woman, Ahsan said, "Her granddaughter is the only daughter of my brother." How is the woman related to Ahsan?
B. The ratio between the length and the breadth of a rectangular park is 3:2. If a man cycling along the boundary of the park at the speed of 12 km/hr completes one round in 8 minutes, then the area of the park (in sq. m) is?
C. In a two-digit number, if it is known that its unit's digit exceeds its ten's digit by 2 and that the product of the given number and the sum of its digits is equal to 144, then the number is?
D. The L.C.M. of two numbers is 48. The numbers are in the ratio of 2: 3. Then the sum of the number is?

Q. No. 7
A) If 40% of a number is equal to two-third of another number, what is the ratio of first number to the second number?
B) On selling 17 balls at Rs. 720, there is a loss equal to the cost price of 5 balls. The cost price of a ball is?
C) A man is 24 years older than his son. In two years, his age will be twice the age of his son. The present age of his son is?
D) Rashid and Kamran are working on an assignment. Rashid takes 6 hours to type 32 pages on a computer, while Kamran takes 5 hours to type 40 pages. How much time will they take, working together on two different computers to type an assignment of 110 pages?

Q. No. 8
A. There are five different houses A to E in a row. A is to the right of B and E is to the left of C and right of A. B is to the right of D. Which of the houses is in the middle?
B. If you start running from a point towards north and after covering 4km you turn to your left and run 5 km, and then again turn to your left and run 5km and then turn to left again and run another 6km and before finishing you take another left turn and run 1 km then answer questions based on this information.
How many km are you from the place you started?
In which direction will you be running while finishing?
After taking the second turn, in which direction will you be running?
From the finishing point if you have to reach the point from where you started, in which direction will you have to run?
C. Find the odd man out in the following anagrams. (a) THRSI (b) AOTC(c) EOUBSL (d) KTRIS (e) RETAEWS
D. How many triangles can you find in the figure given below?

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Best of Luck for CSS-2026
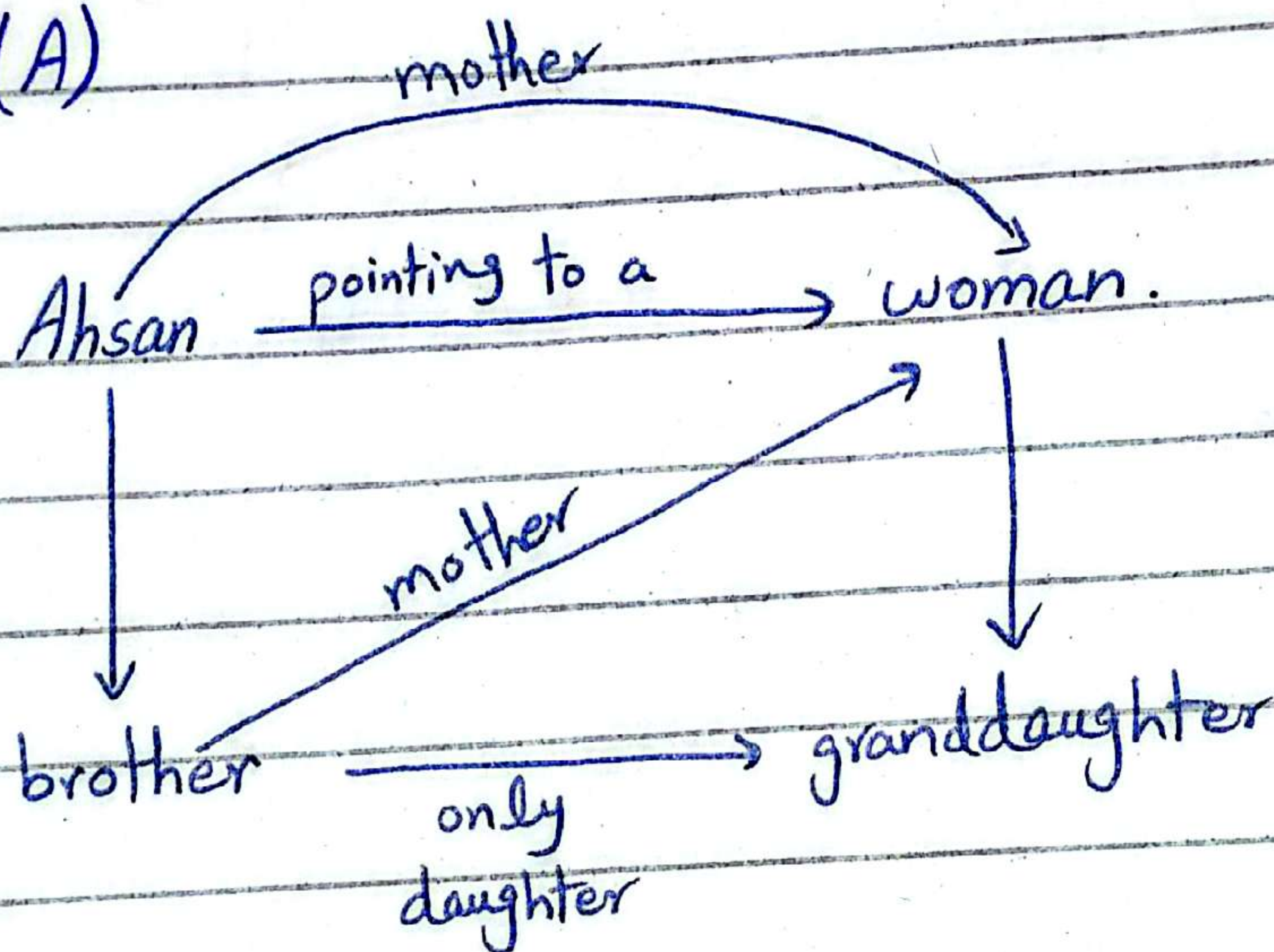
Name:- Snabil Ali
Batch # 157
Subject:-
Genenal Science and
Ability

(SUBJECTIVE)

Section - B.

Q#6 (A)

Reason:- The granddaughter is niece of
Ahsan.

It means that the woman whom Ahsan
is pointing to is her own mother.

(B)

Data:-
length : breadth = 3:2
Speed = 12 km/hr
time = 8 minutes = $\frac{8\cancel{2}}{\cancel{60}_{15}}$ = $\frac{2}{15}$ hours.

Distance $= \dfrac{speed \times time}{\cancel{time}}$

$$= 12 \times \dfrac{2}{15}$$

$$= \dfrac{24}{15}$$

$$= 1.6 \text{ km}.$$

Perimeter $= 1.6 \text{ km} = 1600 \text{ m}.$

Let length $= 3x$, breadth $= 2x$

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

$$6x + 4x = 1600$$

$$10x = 1600$$

$$x = \dfrac{160\cancel{0}}{1\cancel{0}}$$

$$x = 160$$

$l = 3(160)$; breadth $= 2(160)$

$l = 480 \text{ m}$ breadth $= 320 \text{ m}$

Area $= 480 \times 320$

$$\boxed{A = 153600 \text{ m}^2}$$

(c)

Tens digit $= x$

units digit $= x + 2$

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

Sum : $x + (x + 2) = 2x + 2$

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

Try $x = 2$

$$[11(2)+2] [2(2)+2] = 144$$
$$(22+2)(4+2) = 144$$
$$(24)(6) = 144$$

$$\boxed{Number = 24}$$

(D)

Data :-

L.C.M = 48

Ratio = 2 : 3

Let, $2x$ and $3x$

L.C.M = $2 \times 3 \times x = 6x$

$$6x = 48$$

$$\boxed{x = 8}$$

$2x = 16$ \qquad $3x = 24$

$$16 + 24 = 40$$

$$\boxed{Result = 40}$$

$$\longleftrightarrow$$

Q#8 (A)

Data :-

$$D \longrightarrow B \longrightarrow A \longrightarrow E \longrightarrow C$$

Answer:-

The house in the middle is $\boxed{A}$

(B)

Ans 1:- $\boxed{1 \text{ km}}$ away from the starting point.
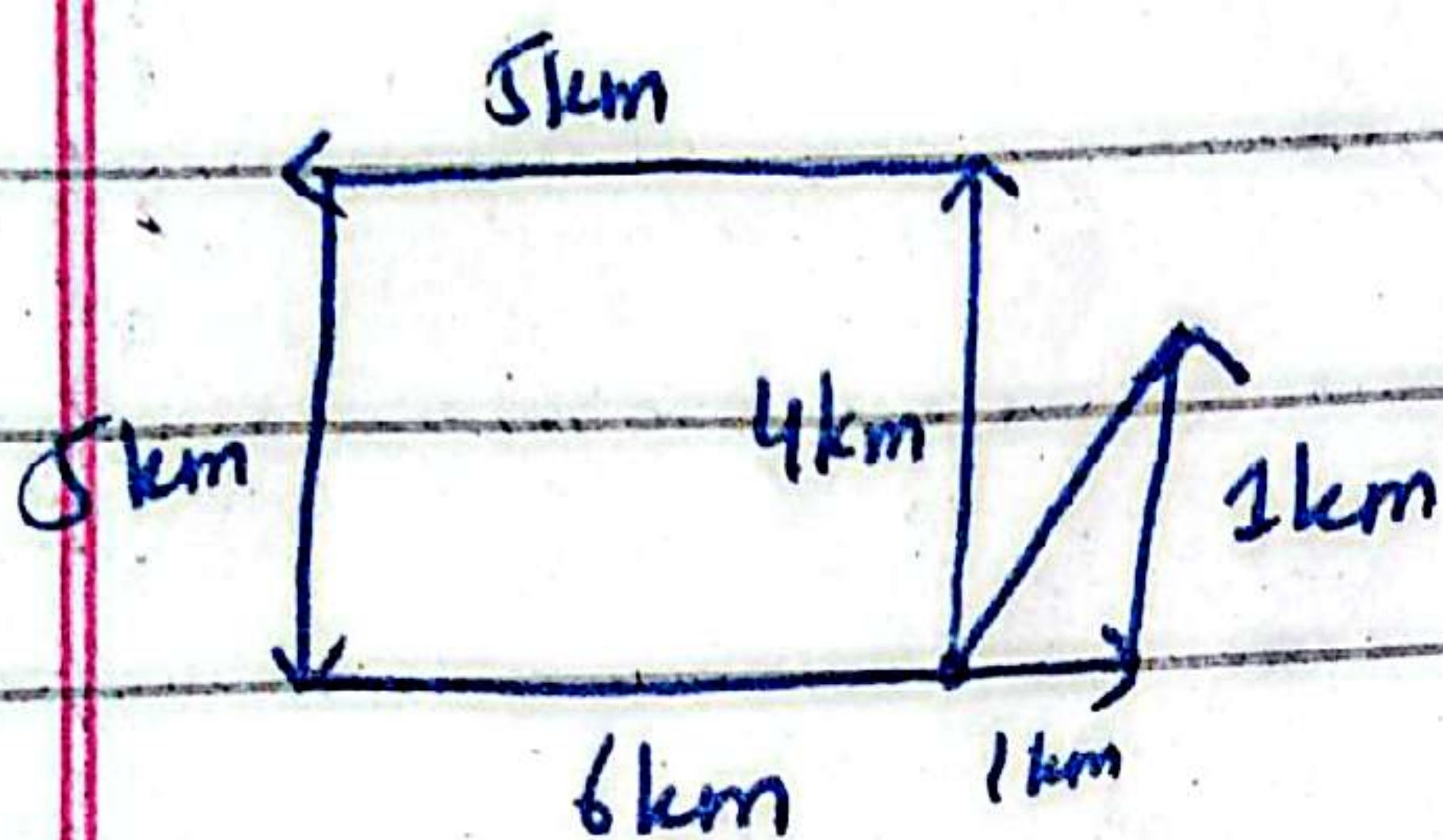
$$(\text{Hyp})^2 = (\text{base})^2 + (\text{perp})^2$$
$$(\text{hyp})^2 = (1)^2 + (1)^2$$
$$\sqrt{} = \sqrt{1+1}$$

Ans 2:- The direction of running is $\boxed{\text{North}}$

Ans 3:- After taking second turn, the direction will be $\boxed{\text{South}}$

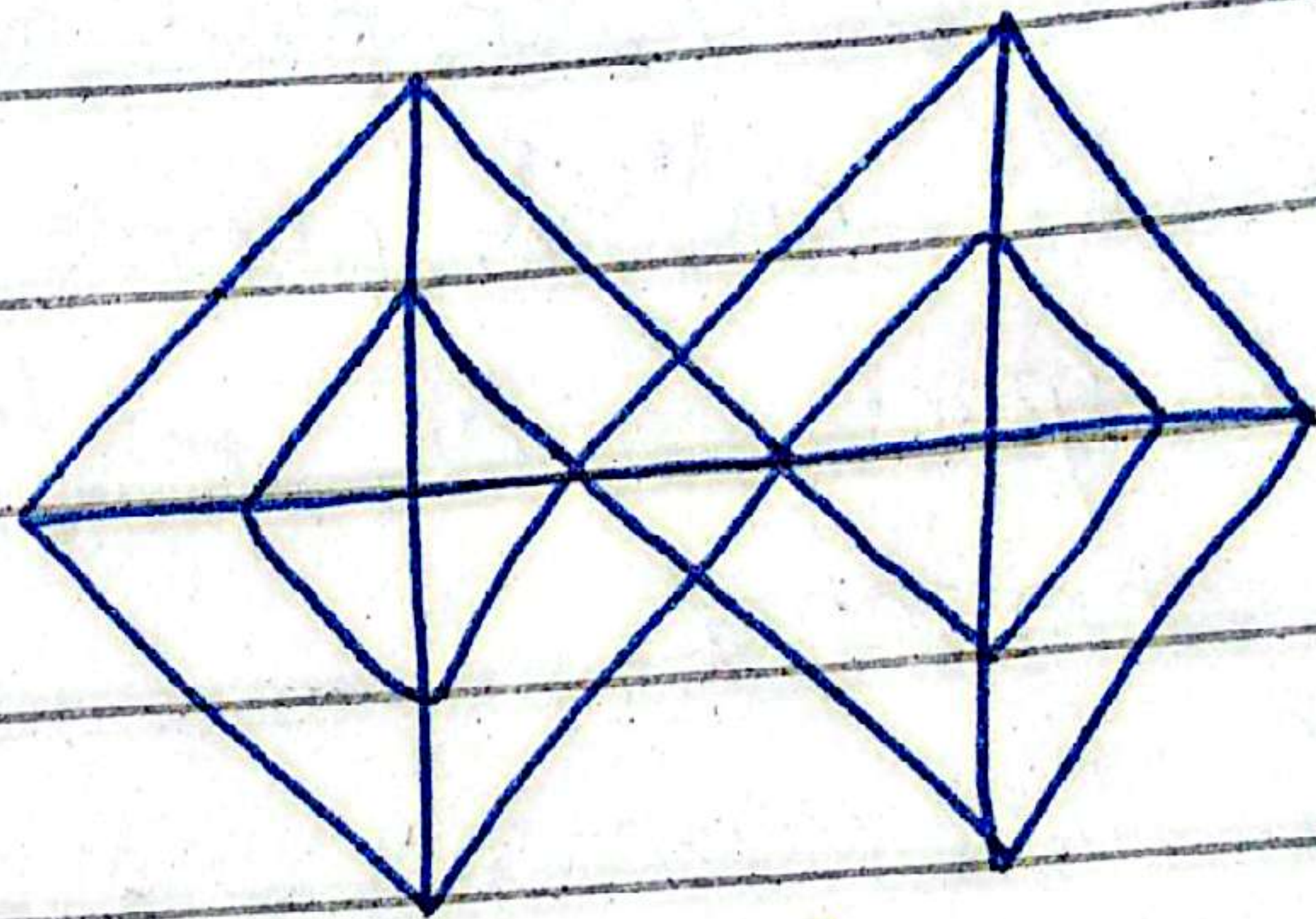Ans 4:- 9 will have to run in $\boxed{\text{South-west}}$ direction

(c)

The following correct words are as follows:-

a) SHIRT

b) COAT

c) BLOUSE

d) SKIRT

e) SWEATER.

Ans:-

The odd man anagram among these would be [Blouse].

(D)

The total number of triangles in this figure are:- [18]

Section-A

Q#2 (A).

Big Bang Theory:-

The Big Bang Theory is the most widely accepted scientific explanation of the origin and structure of the universe According to this theory, the universe began about 13.8 billion years ago from an
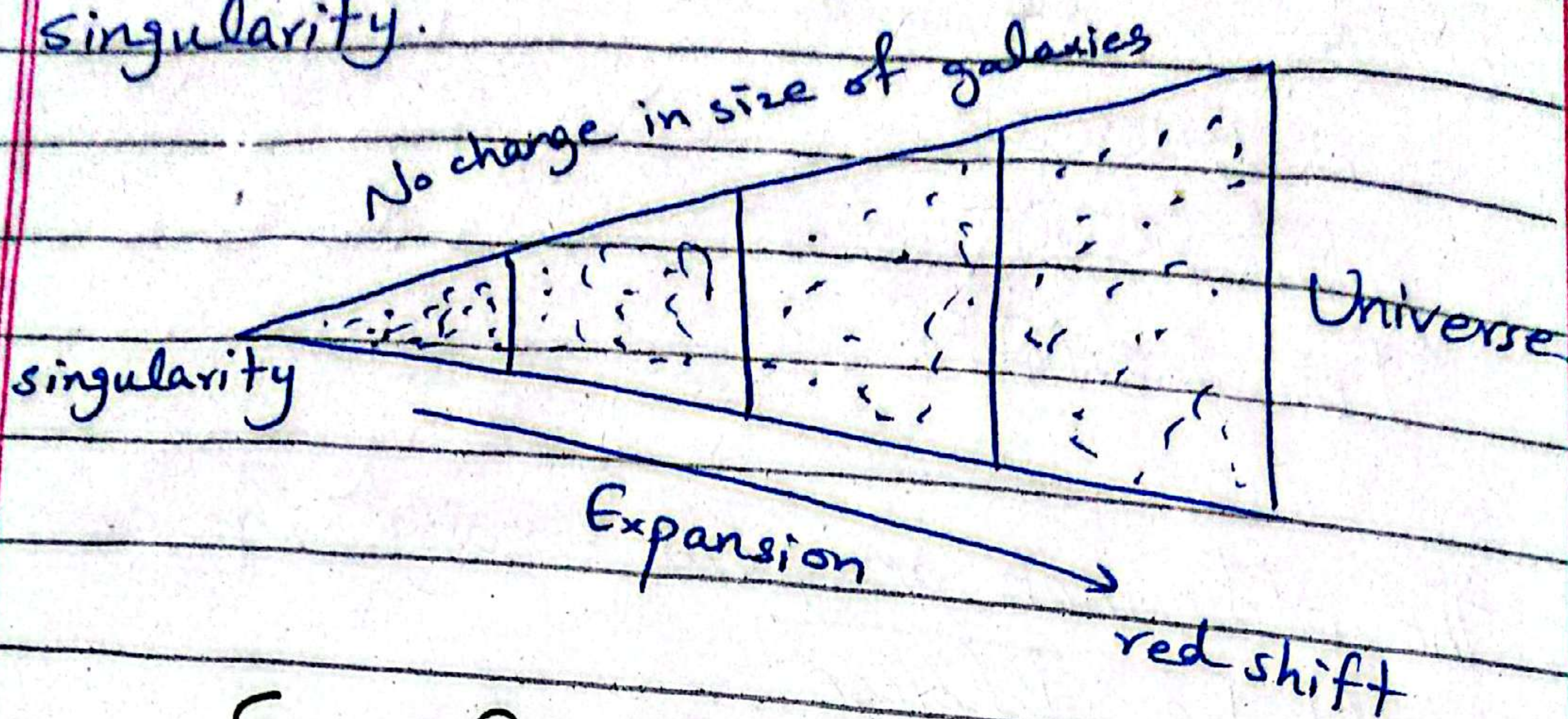
extremely hot, dense point known as a
singularity.

Fig ~ Big Bang Theory.

☆ Initially, the universe underwent rapid
expansion called cosmic inflation, during
which space, time, matter and energy came
into existence.

☆ As the universe expanded and cooled,
subatomic particles formed first, followed
by atoms mainly hydrogen and helium.
These atoms later condensed under gravity
to form stars, galaxies and galactic
clusters.

(B).

Urinary system :-
        The urinary system is a vital
excretory system responsible for removing
metabolic wastes and maintaining water,

electrolytes and acid-base balance in the body.

Working of Nephron

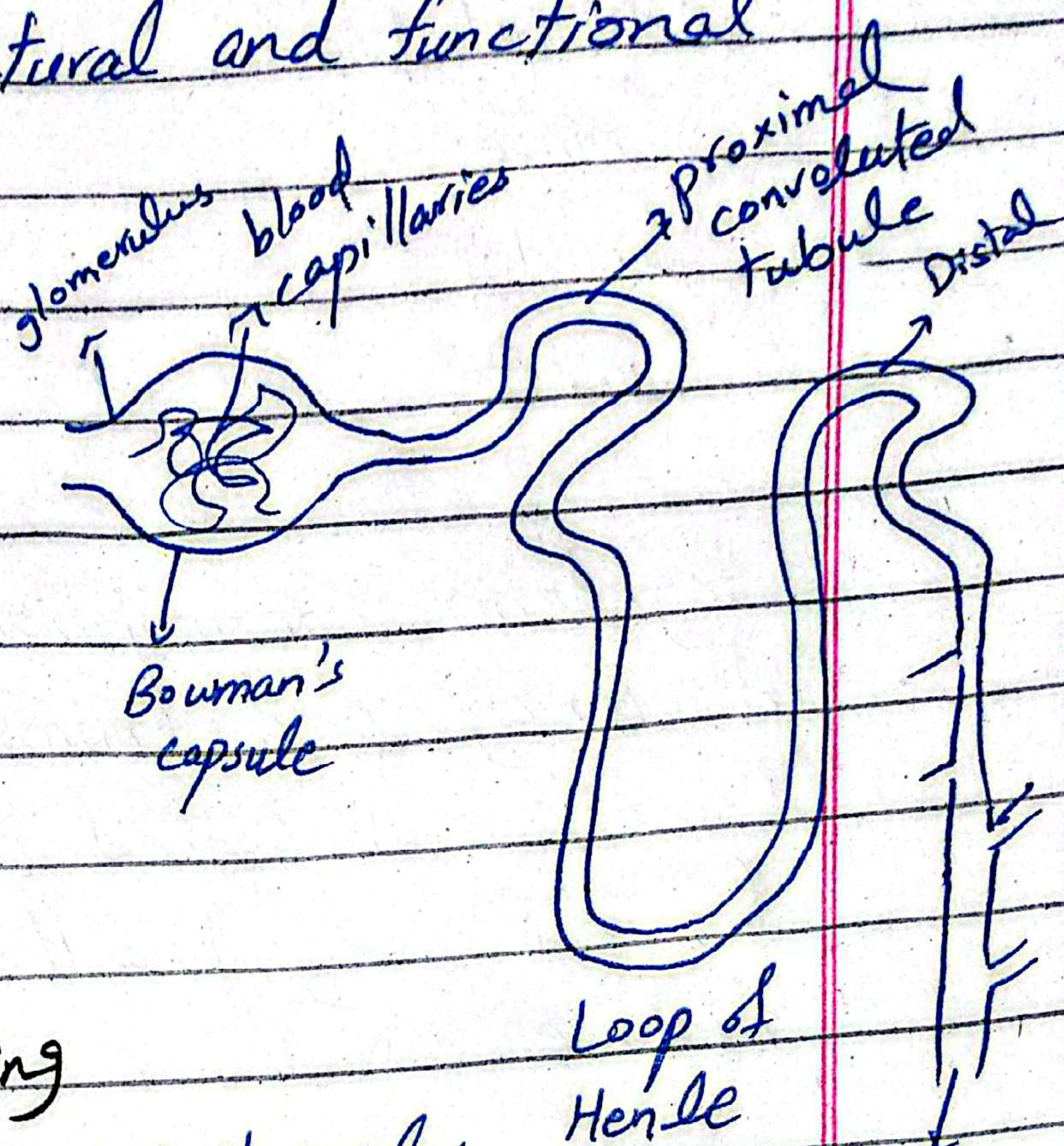Nephron is structural and functional unit of kidney.

Fig :- Nephron

Working

i) Blood filtration occurs in glomerulus, where waste products then transfers towards Bowman's capsule

ii) Useful substances like glucose, amino acids are reabsorbed in tubules while excess salts and minerals are formed as urine which is then later sent to collecting duct.

(c)

Unbalanced diet :

" An unbalanced diet is the one that does not provide any nutrients

in the required portions for proper body functioning.

Such a diet leads to -
- Malnutrition
- Anime
- Scurvy
- Diabetes
- Weak immunity
- Rickets
- Obesity
- Cardiovascular diseases.

Long-term Effects

Long-term consumption reduces work efficiency and lowers life expectancy.

Hence, a balanced diet is essential for maintaining health and preventing diseases.

(D)

Cell Wall-

Outer layer present in plant cells made of cellulose. It provides structural support.

Cell membrane-

It is a thin semi-permeable membrane made up of lipids and proteins.

It regulates movements of substances.
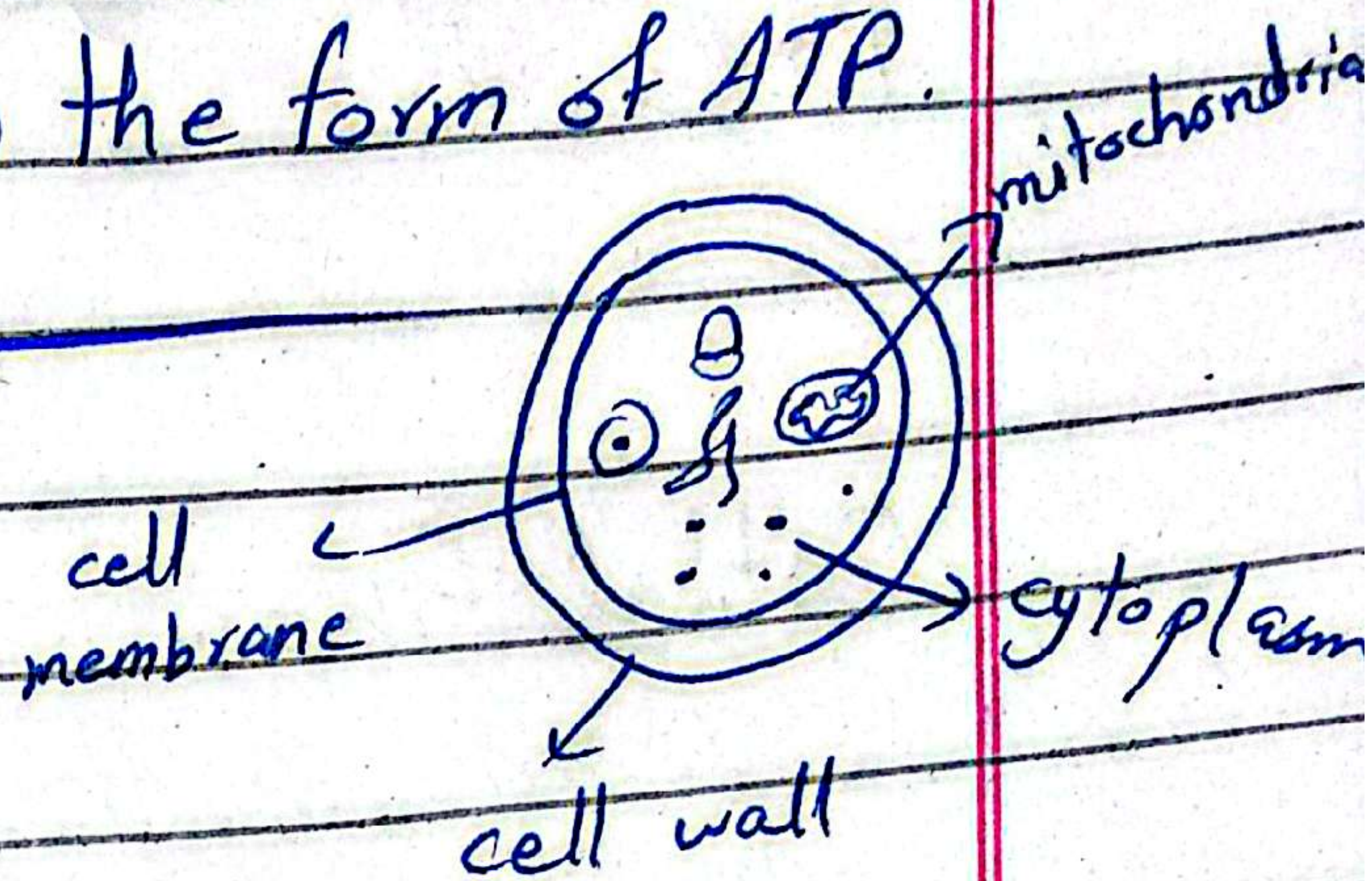
Cytoplasm-

It is the jelly-like substance

inside the cell containing enzymes and organelles.

Mitochondria:-

They are double-membrane organelles known as the powerhouse of cell. They produce energy in the form of ATP.

cell membrane

cell wall

mitochondria

cytoplasm

Q#3 (A)

Reversal of Global Warming.

It can be done by:

⟹ reducing concentration of greenhouse gases.

⟹ shifting from fossil fuels to renewable energy resources.

⟹ Promoting afforestation and reforestation

⟹ Promoting public transport.

⟹ International cooperation through agreements like Paris Agreement.

(B)

Ceramics.

They are inorganic, non-metallic

materials formed by heating and cooling
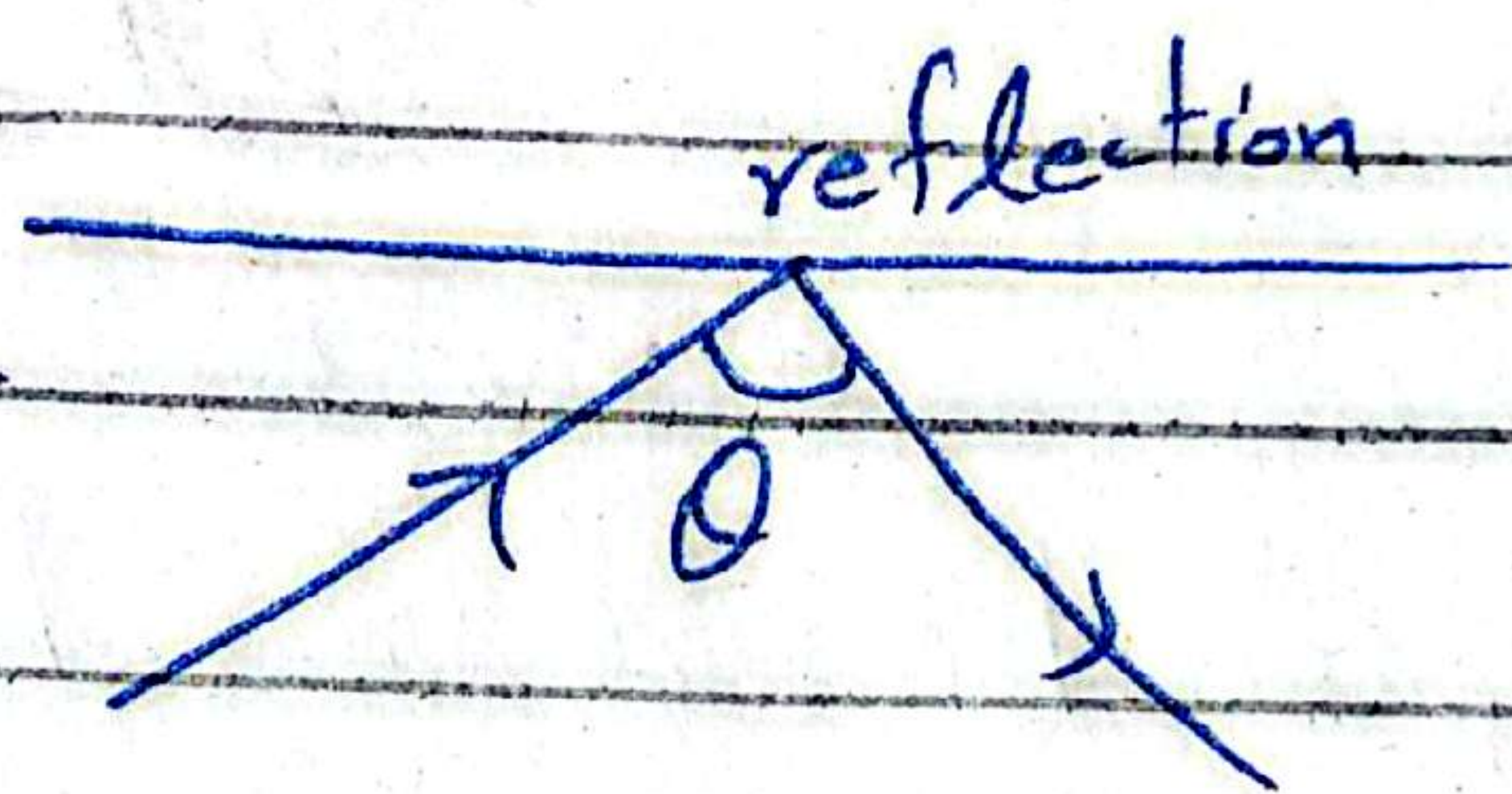of natural or synthetic compounds.
They are hard, brittle and resistant to
heat.
Used in pottery, tiles, bricks, cutting
tools etc

(C)

Optical Fibres.

Work on the principle of total
internal reflection

reflection

Mobile phone

Mobile phone works by converting
voice into electrical signals, transmitted
as radio waves. Then routed through
communication networks to the receiving
phone and then they are converted
back into sound.

(D)

Food Additives.

" Substances added to food
to improve flavor, color or

texture."

      Example- Monosodium glutamate.

Food Preservatives-

    "Chemicals used to prevent food spoilage by inhibiting microbial growth"   e.g.- Sodium Benzoate

Food Adulteration-

    "Intentional addition of harmful substances to food."

e.g.- Mixing water in milk

Food Contamination:-

    "Presence of harmful microorganisms or toxic substances in food

e.g.- Bacterial contamination in improperly stored meat."