

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:

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! 🌟

(2)
and eventually give rise to the present form of the universe.

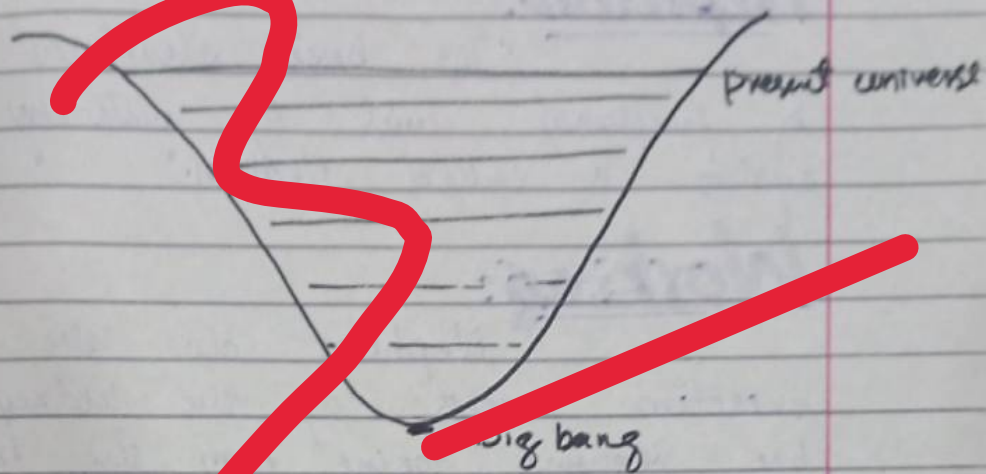
Description:

When energy started spreading it cooled down & start converting into matter. First of all protons & neutrons were made, then Helium & Hydrogen nuclei, when temperature got cold enough then nuclei got the capacity to attract e^- & form 1st element of the universe in the form of Hydrogen & Helium. These element provide base for all existing elements of the universe. The universe is not static but expanding at a continuous rate as given in Quran.

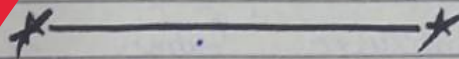
"We have created this world & indeed we are expanding [it]."

— Suresh Rahman

According to big bang the structure of universe is clearly depicted by Red shift. "A phenomenon which explains the moving of objects away from earth."



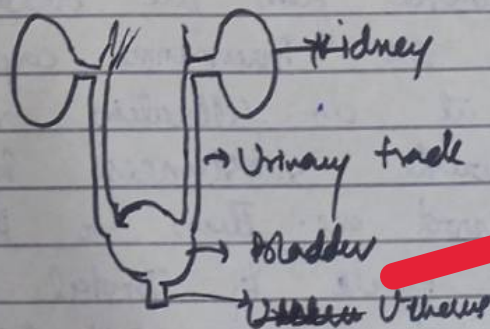
Universe is expanding continuously.
 Big bang happen 13.7 billion years ago.



~~Q2-b~~

Urinary System:

"The excretion system of the body consisting of kidney, urinary tract, urinary bladder & ureters is known as urinary system."

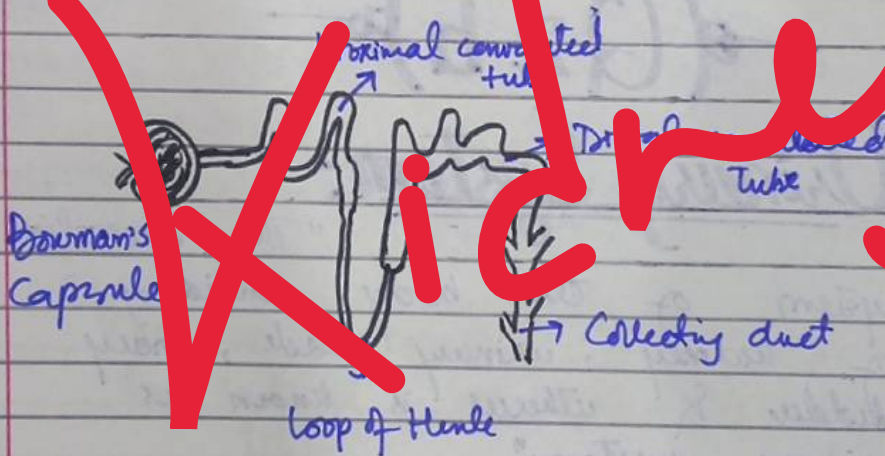


Nephron:

"The basic structural & functional unit of excretory system is called Nephron."

Working:

Nephron do the excretion process of the kidney by removing waste from the body & absorbing useful things from it. Nephron have four parts: Bowman's tube, Loop of Henle, Proximal convoluted tubule & Distal convoluted tubule.



The waste from the overall body entered the Bowman's capsule where it do filtration removing the waste substance & absorbing the good one. Then in Proximal loop of Henle & Distal convoluted tube the same filtration phenomena

happen, separating waste from useful ingredients. The useful ingredients are filtered into the walls of the nephron. The filtrate of the glomerulus is filtered into the tubule. The filtrate is eventually filtered from the human body.

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of R-CR

Unbalanced Diet:

"The combination of food in which all 5 groups are not properly included is known as unbalanced diet." The 5 important groups are fruits, pulses, green vegetables, vitamins & minerals. An unbalanced diet some time refer to unbalanced. inclusion of useful ingredients too, e.g. the diet rich of fats & carbohydrates is

happen, separating waste from useful ingredients. The useful ingredients are absorbed into the walls of diff part of the Nephron, directed to blood streams & the toxins are collected into the collecting duct, which is excreted eventually from human body.

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→ (2-c) →

Unbalanced Diet:

"The combination of food in which all 5 group are not properly included is known as un-balanced diet." The 5 important groups are Milk, pulses, green vegetables, vitamins & minerals. An unbalanced diet some time refer to un-balanced inclusion of useful ingredients too, e.g. the diet rich of fats & carbohydrate is

②
termed as un-balanced.

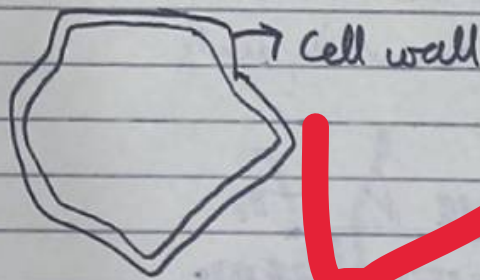
Effects of Unbalanced Diet on Healthy Living:

When human body don't receive the balance diet that is required then it creates several effects leading to diseases & conditions like malnutrition. Malnutrition is the condition in which a person either get low-level of useful ingredients or high-level both leading to diseases. The diseases caused by inappropriate food habits lead to Kwashiorkor & Marasmus while the overeating habit lead to Obesity. A person with unhealthy or unbalanced diet is unable to perform his daily work. As evident from the Children of Africa suffering from Kwashiorkor & Marasmus have thin body, big head & unable to walk properly. In the same way an obese person can't do his/her normal work. & often suffer from many other diseases.

(2-d)

Structure & Function of Cell wall:

"The outermost layer of plants & other eukaryotic organisms which protect the internal cell organelles from the outside environment is known as cell wall." It is present in plant cell & its primary function is safeguarding the cell parts from the external harsh condition.

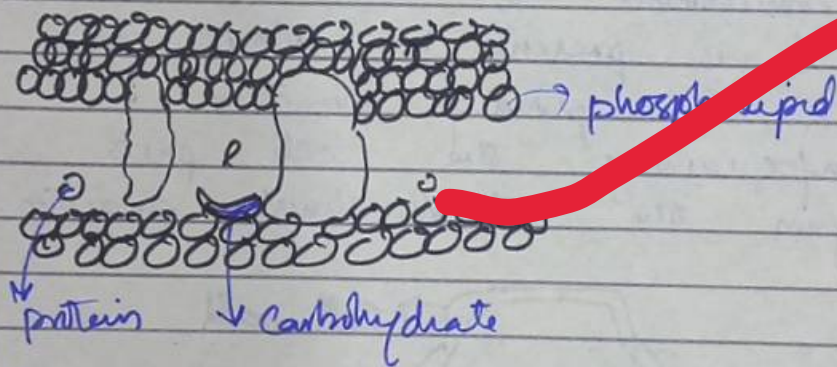


Cell wall is made up of cellulose or plant tissue.

Structure & fn of Cell membrane:

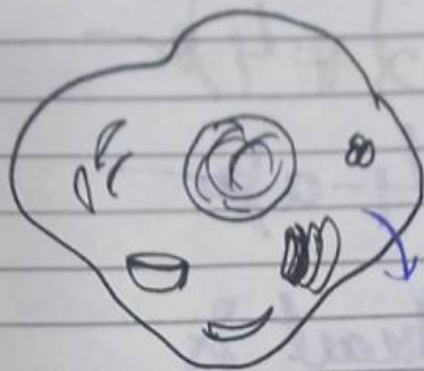
Also known as the plasma membrane, is the outer layer of animal

cell & cell membrane in plant cells. It is mainly composed of carbohydrates, phospholipids & protein. Its main function is the protection along with selective permeability of ingredients into & out of the cell. Phagocytosis & Pinocytosis are the process of engulfing solid & waste water by the cell membrane.



Structure & fn of cytoplasm:

Cytoplasm is the liquid part of the cell spreaded all over the cell. Due to this the cell organelles can float easily. It provide the base for the organelles. Its main function giving an environment to cell organelles.

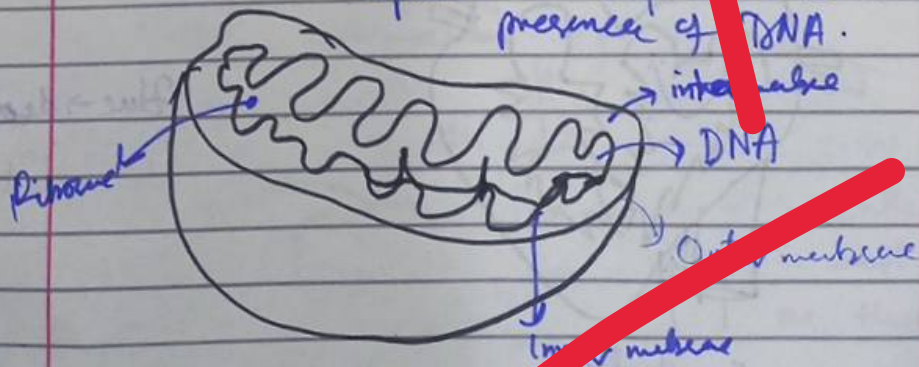


Cytoplasm

Structure & fn of Mitochondria:

Mitochondria

also known as power house of the cell is the structure which provide energy in the form of ATP. Along with energy it do signalling, protein synthesis etc. When Mitochondria give ATP to cell then it is called ADP & cell use the energy to work & perform. Similarly Mitochondria restore the energy convert ADP to ATP & the cycle goes on again & again. It can replicate itself due to the presence of DNA.

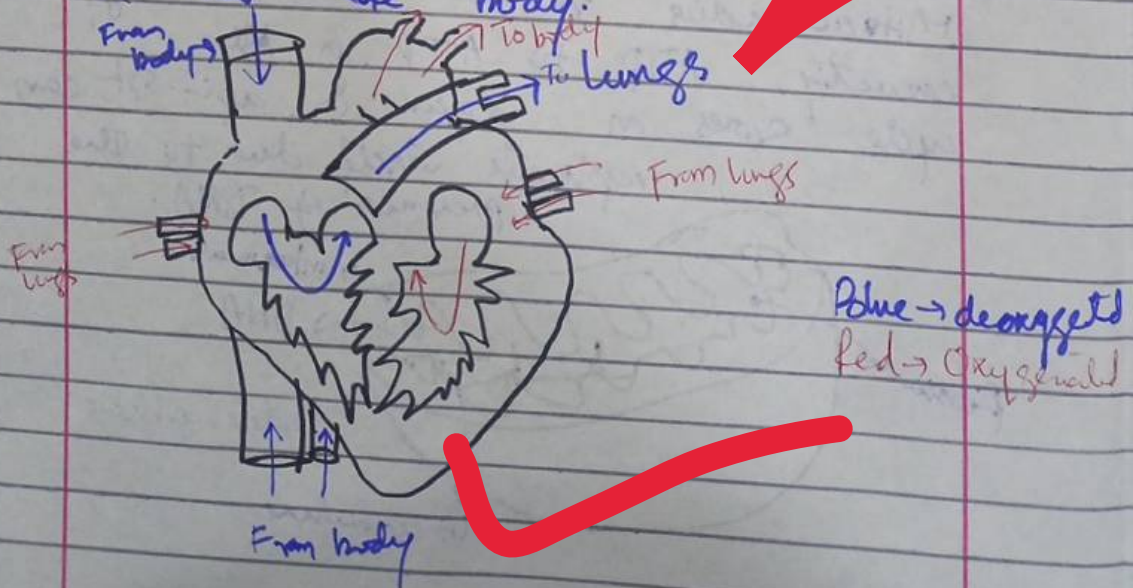


(Q#4)

(4-a)

Role of heart & blood vessels in Circulation.

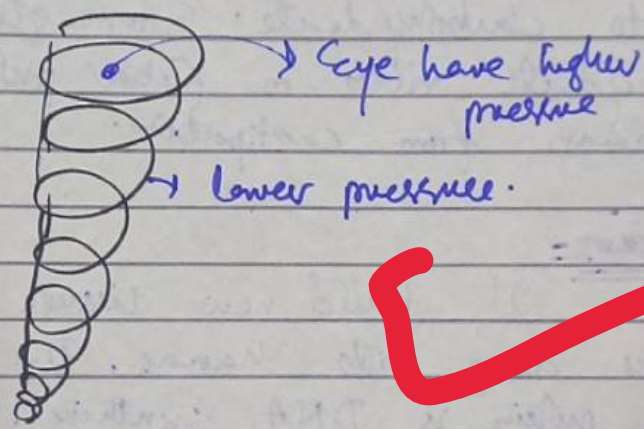
Heart & blood vessels carries the blood from & to the body parts. Blood vessels collected blood from upper & lower part of the body & bring it to heart through veins. Heart take that de-oxygenated blood transport it to lung for oxygenation & return it to arteries which through capillaries distribute it all over the body.



(4-b)

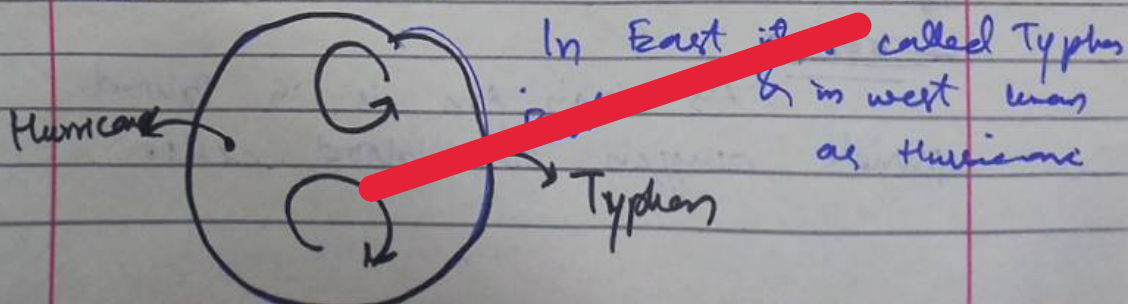
Cyclone:

A natural disaster in which there is high pressure at center & lower at outer surface. The pressure gradient attract diff substances causing destruction.



Formation of Cyclone:

When sun heats the earth, especially over an area of low air pressure is created. Equator get more heat than poles thus creating a pressure gradient w/h resulted in the formation of cyclone. In the north it move A.C.W while in south it moves C.W.



(12) (4-c)✓

Fns of Carbohydrate:

It gives instant energy to human cell. The day to day work a human do is due to carbohydrate. Store glucose. Carbohydrate rich in fiber protect a human from constipation.

Protein:

It build new tissues & enzymes along with hamae. The major fn of protein is DNA synthesis. It form nail & hair of living.

Fats:

Lipid are found in cell membrane & helpful in the solubility of ADEK vitamins.

Calcium:

It is mainly found in bone & help strengthen the bone.

Iron:

Its main fn is to provide oxygen to blood cells.

→ (4-d) →

Remote Sensing for environmental purposes:

Remote Sensing could be used for environmental purposes as it provides live images & location. From satellites one can find any disaster arising & change in pattern & that early information will automatically help in the efficient sustaining policies.