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SECTION-A (17m)

(1) False ✗ True
(2) False ✓
(3) True ✓

(4) The microorganisms which feed on the excretory substance and the dead bodies of animal is called decomposers. ✓

(5)
(6) Liver ✗ Gallbladder
(7) Chloroflaroxcarbon Chlorofluorocarbons
(8) Nerves, spinal cord, genglia. ✓

(9) snail, frogs, butterflies, etc ✓
(10) Bryphollym. Bryophyllum
(11) Mimosa ✓
(12) Adrenaline ✓
(13) Spinal cord. ✓

Ans 5 A type of cell division in germ cells in which chromosome number is reduced to half is called meiosis.

(14) Pulmonary vein (D)

(15) 23 pairs (D)

(16) Mendel (B)

(17) (1-b), (2-a), (3-d), (4-c) (A)

SECTION-B

Ans-18. The large fat globules breaks down into smaller by the effect of bile juice from the liver. This process is called emulsification.

Pancreatic lipase acts on emulsified fat and finally intestinal lipase converts it into fatty acids and glycerol.

This process take place in small intestine.

Ans-19.

[Binary fission]	[Multiple fission]
• A unicellular organisms divides only in two equal parts.	• A unicellular organisms divides into one or many daughter cells.
• Nucleus divides at once.	• Nucleus divides multiple.
• Example : amoeba	• Example : Plasmodium.

Ans-20. Ozone is a water molecule formed by the two atoms of oxygen. It is present in the higher level at atmosphere.

Ozone absorbs the shorter wavelength of UV radiations. However at ground level it is deadly poisonous. Therefore, the food chain is disturbs due to atmosphere and cause affect on ecosystem.

Ans-21 (a) Uses of non-biodegradable substance such as plastic, polythene, etc. should be controlled in order to save environment. - Reduce

(b) The materials like tin, cane, paper, glass, should be recycled which can help in reusing the

products to form new products. – Recycle.

Ans-22 Living organisms of an ecosystem depends on each other for their food requirement. Dependency of organisms on food forms a food chain and succesive level of nourishment of food chain forms a trophic level.

write answers in points

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SECTION-C

Ans: 23.

Hormones	Endocrine gland	Functions
1) Growth Hormone	Pituitary gland	Regulates growth metabolism for of the human body
2) Insulin	Pancreas	Regulates the blood sugar level.
3) Testosterone	Testes	Regulates the development of male sex organs.

Ans: 24 There are sources of energy i.e. sunlight, CO_2, O_2, which plants obtain through the process of ~~photonyt~~ photosynthesis.

→ Plant use O_2 from the atmosphere during day and CO_2 at night.

→ Plant use sunlight energy to make the presence of chlorophyll in leaves.

→ They converts the chemical energy into food.

→ Green plants are named as producers and at first trophic level.

→ Food is transporated to other upper trophic level ~~th~~ from the producers i.e. green plants.

Ans: 25 When the sperms of the male and egg of the females meet in the ~~embroy~~ ovum then fertilisation occur and embroy start developing in the uterus of the female.

The sex of child is determined in the human beings through the sex pair of chromosomes.

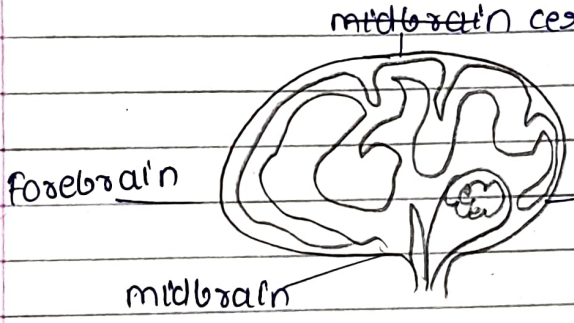
~~Male has two~~

There are total 23 pairs of chromosomes in human beings. Males contains X chromosomes and Y chromosomes while the female contains X and X chromosomes.

If the X chromosomes of female meets with X chromosomes of male then the child will be girl. But if the X chromosomes of ~~a~~ female meets with Y chromosomes of male then the child will be boy.

Thus, male and female contributes equal genetic during the sexual intercourse.

Ans: 21 Human brain consist of three main parts : (1) Fore-brain, (2) mid-brain and (3) Hind-brain.



(1) Forebrain : It is generally consist of cerebrum. It involved the various sensory recaptors. There is a specialised structure for thinking, sight, hearing and so on.

According to this, a decision is made about how to respond. It has a specialised centre for hunger.

(2) Midbrain : Corpora quadrigemina is the part of midbrain. Visual and auditor is controlled by the midbrain.

(3) Hindbrain : Medulla and cerebellum are the part of Hindbrain.

All involuntary actions like salivation, vomitting and including the blood pressure are controlled by medulla.

All voluntary actions like walking, riding, etc. and the balance of the body are controlled by cerebellum.

Ans:28 A single unicellular organisms is included in asexual reproduction while in sexual reproduction two individual a male and a female is involved in reproduction.

- In asexual reproduction the offsprings obtained all the genetic characters as similar as parent plant while in sexual reproduction they followed the DNA variations and not create a different species.
- In asexual reproduction there are many methods like fission, regeneration, budding, spore formation, etc. but in sexual reproduction there are no specialised method for it.

SECTION-D

Ans: 29 Life process includes the process of nutrition, Absorption, Digestion, excreation and Transportation.

(1) Nutrition : Nutrition is necessary to sustain the life of organisms on the earth. And nutrition is obtained from the foods that we eat.

(2) Absorption : The food we eat contains protein, fats, carbohydrates, etc that need to absorb for our body and this all is absorbed in small intestine from the intestinal Lipase.

write about respiration too

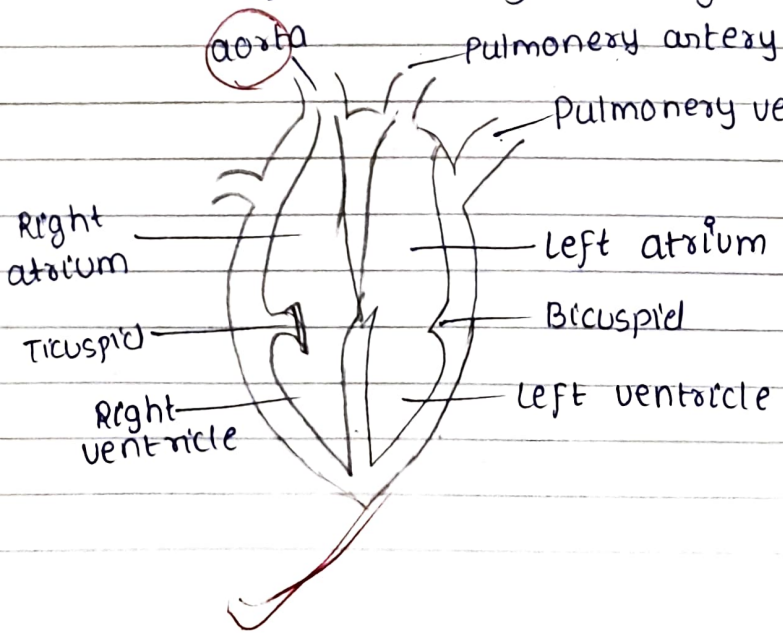
(3) Digestion : Digestion of food is also necessary. If the food will not digested then the waste material of the body cannot be thrown outside. Therefore, digestion is occurs in stomach and small intestine.

include organs included for digestion, excretion etc

(4) Transportation : Transportation of blood, oxygen is necessary to the whole body. Blood contains plasma which transport food, ~~[illegible]~~, salt and nitrogenous waste products and RBC transport O2.

(5) Excredition : Excredition of nitrogenous waste products from the body is also necessary process of life. The excredition occurs after the digestion and comes out of the body through Appendix.

Ans: 30



Ans: The heart is as big as our first.
It acts as an pumping organ.

Circulation Path: It has four chambers. The two upper chambers i.e. atrium and two lower chambers i.e. ventricles.

In ~~right~~ left:

- The blood (oxygenated) comes from the lungs to the heart in left atrium through pulmonery veins.
- The left atrium relaxes while collecting the blood.
- Now, the left atrium contracts when the left ventricle relaxes as it collects the blood.
- Now, left ventricle contracts and the blood is pumped out from heart through aorta and transport to the whole body.

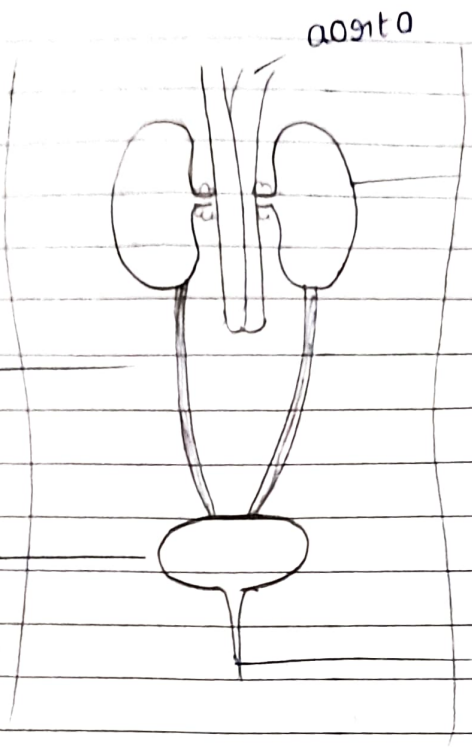
In Right:

- The Deoxygenated blood coming from the body is collect in Right ~~ventricles~~ atrium and it relaxes while collecting the blood.
- Now, the Right ~~ventric~~ atrium contract and the Right ventricle relaxes while collecting the blood.
- Now, the Right ventricle contract and the blood is send ~~the~~ to the lungs for oxygenation.

Valves are present in the heart in order to ensure that the blood does not ~~colla~~ flow backward and collapsed.

As the atrium carries deoxygented blood, its wall is relatively thick from ventricle.

Ans: 31



The excretory system of human contains a pair of kidney, a pair of ureter, a urinary bladder and a urethra.

(1) Kidney : A pair of kidney is located in the abdomen of the human being and one on the either side of backbone.

→ Urine is produced by the filteration of blood in the kidneys.

(2) Ureters : It is a long tube extending from kidney to urinary bladder.

→ The urine produced in kidneys are transport to urinary bladder through Ureters.

(3) Urinary bladder : It is a muscular bag for storing urine. Urine is temporarily stored in it until the passage through the bladder leads to the urge to thrown out.

(4) Urethra : It is a passage of urinary bladder to outside of the body.

→ Urine is excreated through it.