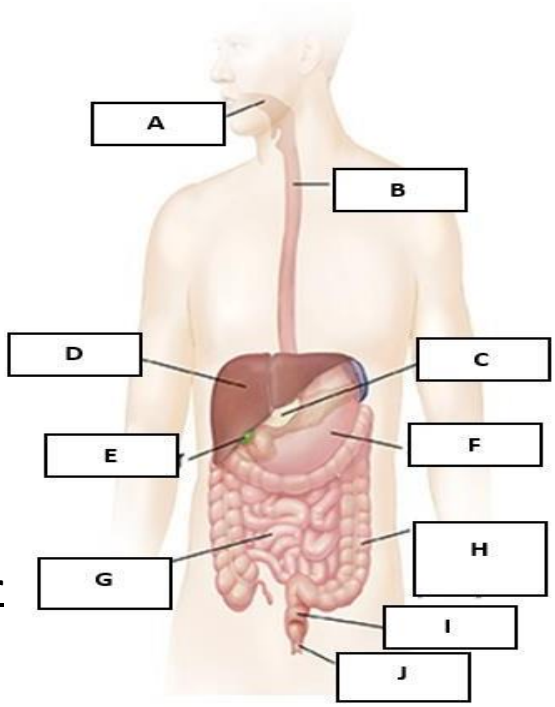
Digestive System

Label

A……..Pharynx
B……Esophagus
D…… Liver
E……..Gall Bladder
F…… Stomach
G…… Small intestine
H…….. Large intestine
I……Rectum
J……Anal canal



B. State the function of the following letter

E… Stores Bile
F… Stores food and digests protein
H…Absorbs water and salts
I…stores feces before defecation

Breakdown of large, food particles into smaller more soluble ones without enzymes.

a. Mechanical digestion
b. Assimilation
c. Chemical digestion
d. Absorption

Q.2.Complete:

1. The PH of the mouth is 7.2 ..... which is provided by the saliva.
2. The saliva provides the mouth with..... ptyaline enzyme, which breaks down starch in to ….Maltose
3.------digestion--------- the breakdown of large, insoluble food molecules into smaller more soluble ones by chemical and mechanical means.
4.--------absorption---------- is the passage of digested food molecules through the intestine into the blood stream.
5. Digestive system is consists of ……digestive canal …and ……glands……
6. The main accessory glands in the digestive system are salivary glands.., ……liver…… and pancreas.
8. Mouth contains ……teeth., …tongue…… and …salivary glands……..
9. The esophagus connects the mouth to the stomach .....and it is found behind the ……trachea……..
10 Epiglottis prevents the backflow of the food from the stomach to the esophagus.
11 Peristalsis is the movement of food along the esophagus as a result of the contraction of the muscles.
12. The stomach PH is 2 which is provided by the HCl and it is responsible for activating pepsinogen in to ……pepsin…… and kill ingested ……bacteria……
13. The inner wall of the stomach is lined by mucine ..... which prevents it from being harmed by the effect of the enzyme and the HCl.
14. Bolus is the name given to the food when it is mixed with …saliva……..
16. The gastric juice is secreted by the stomach and it consists of HCl ..... , ……mucin…… and pepsinogen enzyme.
17. The bile..... is secreted by the liver and stored in gall bladder, it Digests fats..... in to small drops.
18. ……insulin…….. and..... glucagon hormones are secreted by the pancreas.
19 insulin .....works in the liver to store extra glucose into glycogen, while glucagon .....breaks down glycogen in to glucose when the blood glucose level is low.

Q3. Choose the correct answer:

1. Breakdown of large, insoluble food molecules into smaller more soluble ones in presence of enzymes.
a. Mechanical digestion
b. Physical digestion
c. Chemical digestion
d. Absorption

2. Breakdown of large, food particles into smaller more soluble ones without enzymes.
a. Mechanical digestion
b. Assimilation
c. Chemical digestion
d. Absorption

3. The removal of undigested food materials out of the body through the anus.
a. Digestion
b. Ingestion
c. Assimilation
d. Egestion

4. Chewing food in the mouth and Churning action of the stomach are examples of ……
a. Mechanical digestion
b. Assimilation
c. Chemical digestion
d. Absorption

5.breaks down glycogen in to glucose in the liver.
a. Glucagon
b. Maltase
c. Insulin
d. Sucrase

6.stores glucose in to glycogen in the liver.
a. Glucagon

b. Maltase
c. Insulin
d. Sucrase

7.breaks maltose in to glucose.
a. Glucagon
b. Maltase
c. Insulin
d. Sucrase

8.breaks down sucrose in to glucose and fructose.
a. Glucagon
b. Maltase
c. Insulin
d. Sucrase

e. The PH of the stomach is 2 and 7.7
9. , while the PH of the intestine is
……
a. 2 and 7.7
b. 2 and 7.2
c 7.7 and 2
d. 7.2 and 7.7

10----------juice is secreted by the stomach.
a. Gastric
b. Pancreatic
c. Salivary
d. Intestinal

11----------juice is secreted by the pancreas.

a. Gastric
b. Pancreatic
c. Salivary
d. Intestinal

12 stores feces temporarily before it goes out of the body.
a. Anus
b. Large intestine
c. Rectum
d. Small intestine

13. Absorption is the transfer of digested food to the ……
a. Blood
b. Large intestine
c. Rectum
d. Small intestine

14..... s activated in to trypsin by PH 7.7
a. Trypsinogen
b. Pepsinogen
c. Glycogen
d. Glucagon

Respiratory and circulatory Systems

Q1 *Use each of the terms below only once to complete the passage.*

breathing	**carbon dioxide**	**external**	**internal**
lungs	**oxygen**	**respiration**	

The function of the respiratory system is to sustain cellular **(1)** _____.
This is done by supplying **(2)** _____ to cells and removing
(3) _____ waste from cells. **(4)** _____
is the mechanical movement of air into and out of the **(5)** _____.
(6) _____ respiration is the exchange of gases between the atmosphere
and the blood that occurs in the lungs. **(7)** _____ respiration is the exchange
of gases between the blood and the body's cells.

1- Respiration
2- Oxygen
3- Carbon dioxide

4- Breathing
5- Lungs
6- external
7- internal

Match the description in Column A with the structure in Column B.

	Column A	Column B
_____	**8.** large tubes that enter each lung from the trachea	**A.** mouth or nose
_____	**9.** thin-walled, individual air sacs within the lungs	**B.** trachea
_____	**10.** small branches off larger tubes within each lung	**C.** bronchi
_____	**11.** filters out dust; warms and moistens air	**D.** bronchioles
_____	**12.** branches into two large tubes that go to the lungs	**E.** alveoli

8- C
9- E
10- D
11- A
12- B

Write the term or phrase that best completes each statement. Use these choices:

atrioventricular node **pulse** **sinoatrial node** **systole**

13. A group of cells called the pacemaker, or _____, in the right atrium sends out signals that tell the heart muscle to contract.

14. The _____ transmits the signal that causes both ventricles to contract.

15. The alternating expansion and relaxation of the artery wall caused by contraction of the left ventricle is the _____.

16. The blood pressure caused by contraction of the heart is called _____.

13- Sinoatrial node
14- Atrioventricular node
15- Pulse
16- systole

Complete the table by checking the correct column(s) for each description.

Description	Red Blood Cell	White Blood Cell	Platelet	Plasma
17. Contains hemoglobin				
18. Carries glucose and fats				
19. Lacks a nucleus				
20. Releases chemicals that form fibrin				
21. Transports oxygen				
22. Produced in bone marrow				
23. Clear, yellowish fluid				
24. Helps clot blood				
25. Fights infection				

17- RBCs
18- Plasma
19- RBCs
20- Platelets
21- RBCs
22- WBCs
23- Plasma
24- Platelets
25- WBCs

Aerobic respiration requires ……

a. Oxygen
b. Carbon dioxide
c. Nitrogen
d. Hydrogen

prevents the backflow of blood from the right ventricle to the right atrium.

a. Mitral valve
b. Tricuspid valve
c. Aortic valve
d. Pulmonary valve

Figure 2

1. Waste product released by anaerobic respiration in muscles is…….

    a. Fatty acid
    b. Amino acid
    c. Lactic acid
    d. Acetic acid

.....has a thick wall to withstand the higher pressure.

    a. right atrium
    b. left ventricle
    c. right ventricle
    d. left atrium

7. Carries blood away from the heart.

    a. artery
    b. vein
    c. blood capillary
    d. blood vessel

8. The functional unit of the lung is called ……..

    a. Nephron
    b. Neuron
    c. Alveoli
    d. Neon

filters out dust, warms and moistens air.

    a. Trachea
    b. Nose
    c. Bronchus
    d. Bronchioles

is a cartilage which prevents the food from entering the trachea.

    e. C-shaped
    f. Epiglottis
    g. Sternum
    h. Nasal

The pressure inside the lungs ..... with the mechanism of inhalation.

i. Increase
j. Decrease

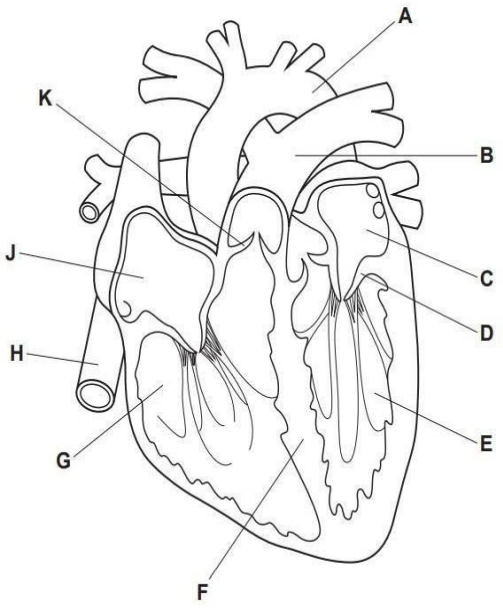
12..... carries blood with high pressure.

a. artery
b. vein
c. blood capillary
d. blood vessel

Q6: From figure 4, write the letter beside it's label:

Figure 4

1. Aorta (…A….)
2. Septum (…F….)
3. Pulmonary artery (…B….)
4. Right atrium (…J…)
5. Mitral Valve (…D…)



Choose the correct answer:

1. Which is the function of the circulatory system?

A. get rid of excess blood, salt, and water
B. maintain a low internal body temperature
C. supply body cells with oxygen and food
D. transport oxygen, nutrients, and wastes

2. Which is the function of the respiratory system?

A. activate the body's defenses against airborne pathogens
B. regulate oxygen and carbon dioxide supplies in cells
C. supply energy to maintain the metabolism of cells
D. transport gases such as oxygen into the human body

Match:

Statement	Artery	Capillary	Vein
1. Smallest type of blood vessel		True	
2. Has a thick wall to withstand the higher pressure of blood being pumped from the heart	True		
3. Carries blood away from the heart	True		
4. Carries blood containing little oxygen			True

Label:

Figure 1

A. Rt. Ventricle
B:… Rt. Atrium……..
C:… left ventricle……..
D:… left atrium……..

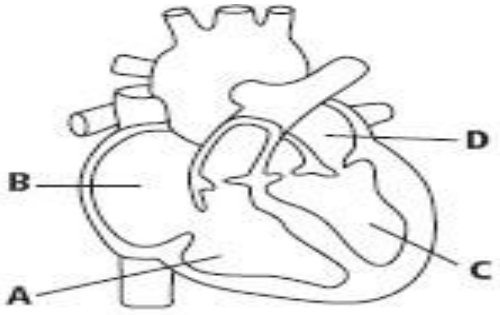


Figure 1

Figure 2

A:……artery……
B:…vein……..
C:……capillaries……..

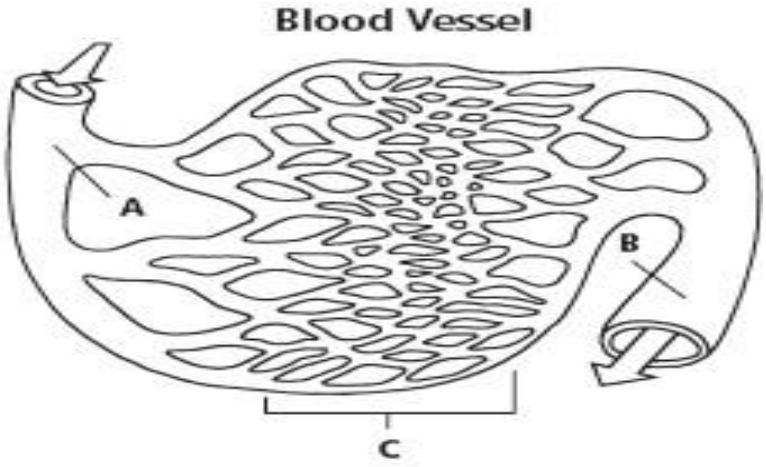
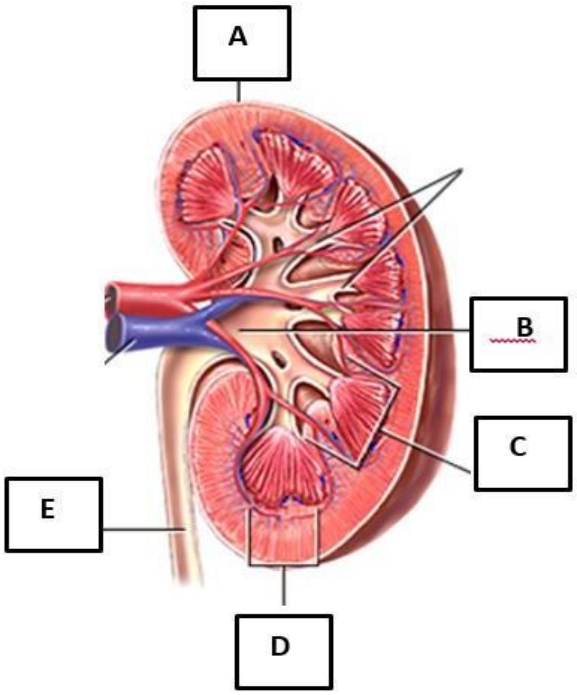


Figure 2

Excretory system

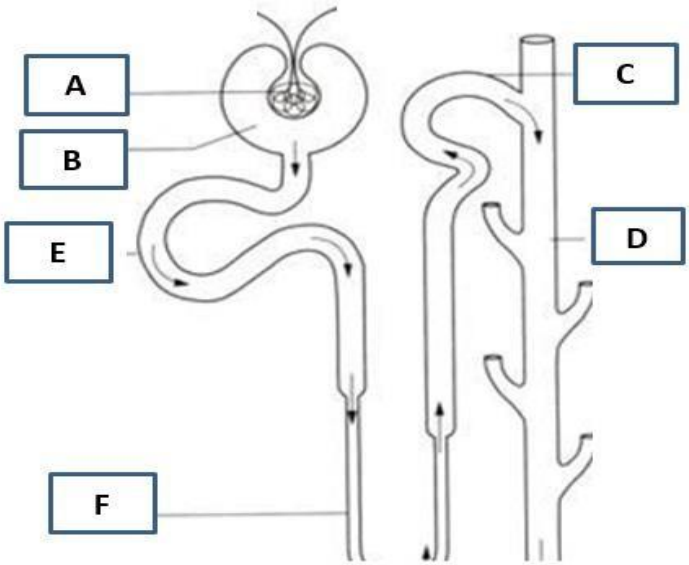
Q.1. Label:

A……Renal Capsule……
B……pelvis of ureter……
C……Pyramid……
D……Cortex……
E……ureter ……



Label:

A…… Glomerulus
B…… Bowman's capsule
C…… Distal convoluted tubule
D…… Collecting duct
E…… Proximal convoluted tubule
F…… Loop of Henle



2. Connects kidney with the urinary bladder
   a. Ureter
   b. Urethra
   c. Collecting duct
   d. Loop of Henle

2. The functional unit of the kidney is ……..
   a. Nephron
   b. Neuron
   c. Alveoli
   d. Neon

(henle - esophagus - central nervous system - urea - insulin – immunosuppresent – peristalisis – urinary bladder – synape - gall bladder)

1. The **esophagus**..... connects the mouth to the stomach.
2. is the movement of food along the esophagus as a result of the contraction of the muscles. **peristalisis**
3. is made of brain and spinal cord. **central nervous system**
4. The bile is secreted by the liver and stored in …… **gall bladder**
5. Deamination is the removal of nitrogen part from the amino acids to form …….. **urea**
6. The gap between neurons are called …….. **synape**
7. ..... **insulin** works in the liver to store extra glucose into glycogen.
8. Reabsorption takes place loop of ..... **henle** of the nephron.
9. To avoid tissue rejection the patient must be given ..... **immunosuppresent** Drug.
10. ..... **urinary bladder** works as reservoir for storing urine temporarily.

Complete:

1. is the removal of nitrogen part from the amino acids to form urea. deamination
2. Kidneys remove ……metabolic……. waste products and toxines ..... from the blood with extra water as urine.
3. Ureter connects kidney with the urinary bladder.
4. Urethra ----extended from the urinary bladder for urine to pass out of it.
5. Bladder works as reservoir for storing ..... urine temporarily.
6. Nephron is the building functional unit of the kidney.
7. Renal pelvis is the cavity which leads to ureter.
8. There is a network of blood capillaries entering the Bowman's capsule called ……glomerulus…….
9. A cup shaped structure ,where filtration takes place is called ……Bowman's' Capsule……
10. Reabsorption takes place loop of .....Henle of the nephron.
11. All nephrons end up with long tube called ----collecting ducts --- .....where content is transported to the pelvis.
12. Kidney failure ..... means that the kidney fails to function anymore.
13. A process by which a machine is used to remove the wastes and excess substances out of the patients blood dialysis.
14. To avoid tissue rejection the patient must be given ……immunosuppressive drugs……..
18 ..... Kidney transplantation is the surgical transfer of a healthy kidney from a donor to patient with kidney failure.

Nervous System

Q.1.A.Label:

A……dendrites……..
B……soma……..
C……axon……..

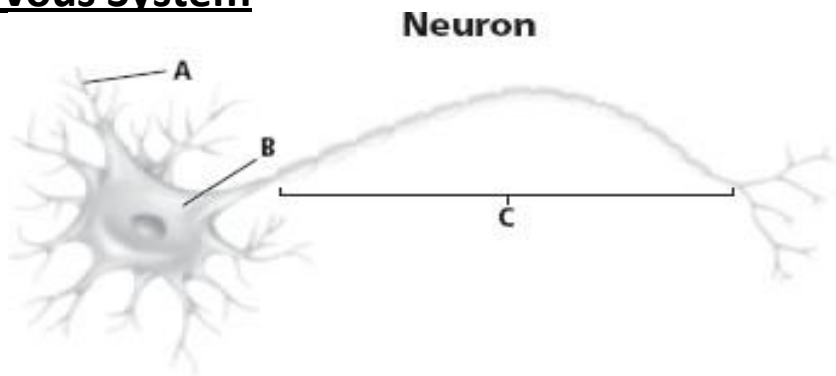
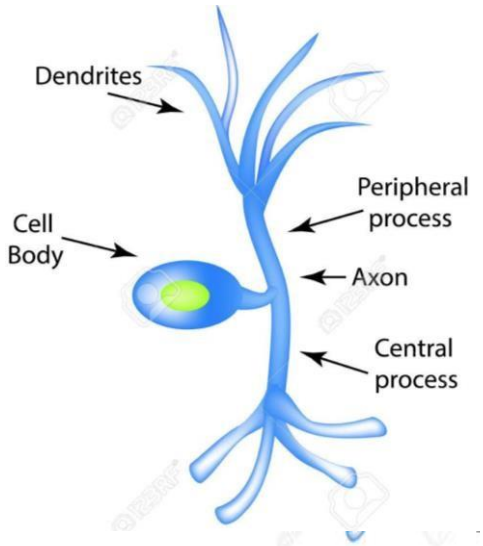


Figure 1

B. Identify the type of the neuron in figure 1:
……Motor neurone……

C. Identify the type of the neuron:
……Relay neurone……



Q.2.Label:

A……white matter……
B……sensory neurone……
C……interneurone……
D……motor neurone……
E……grey matter……
G……synapse……

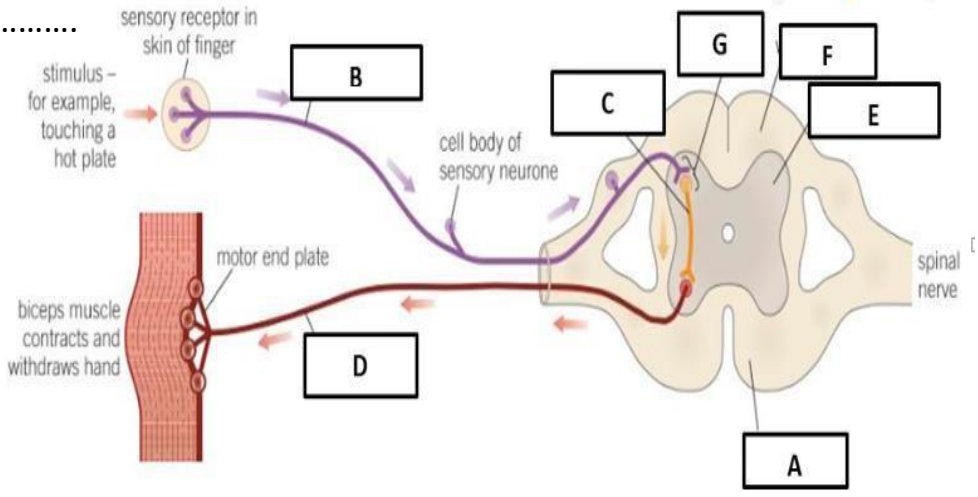


Figure 3

Q.2.Complete:

1. Central Nervous System is made of ……Brain…. and ……spinal cord……
2. Electrical impulses are transmitted in neurons.....which are the building block of the nervous system.
3. Neurons are made of ……soma……., axon.....and dendrites.
4. There are three types of neurons in the peripheral nervous system ……motor…….. , ……sensor…….. and ……relay……
5. The gap between neurons are called ……synapse…….
6. Sensory neuron connects the electrical impulse from the sensory organ to the relay neuron.
7. Motor neuron sends impulses to the effector organ .....Which may be a gland or ……a muscle……..
8. Reflex action is an involuntary, automatic, fast response to a stimulus which has a protective function.
9. The nervous pathway for the reflex action is called ……reflex arc……
10. The gap between the axon of one neuron and the dendrite of a second neuron is called ……synapse……

In Figure 4:

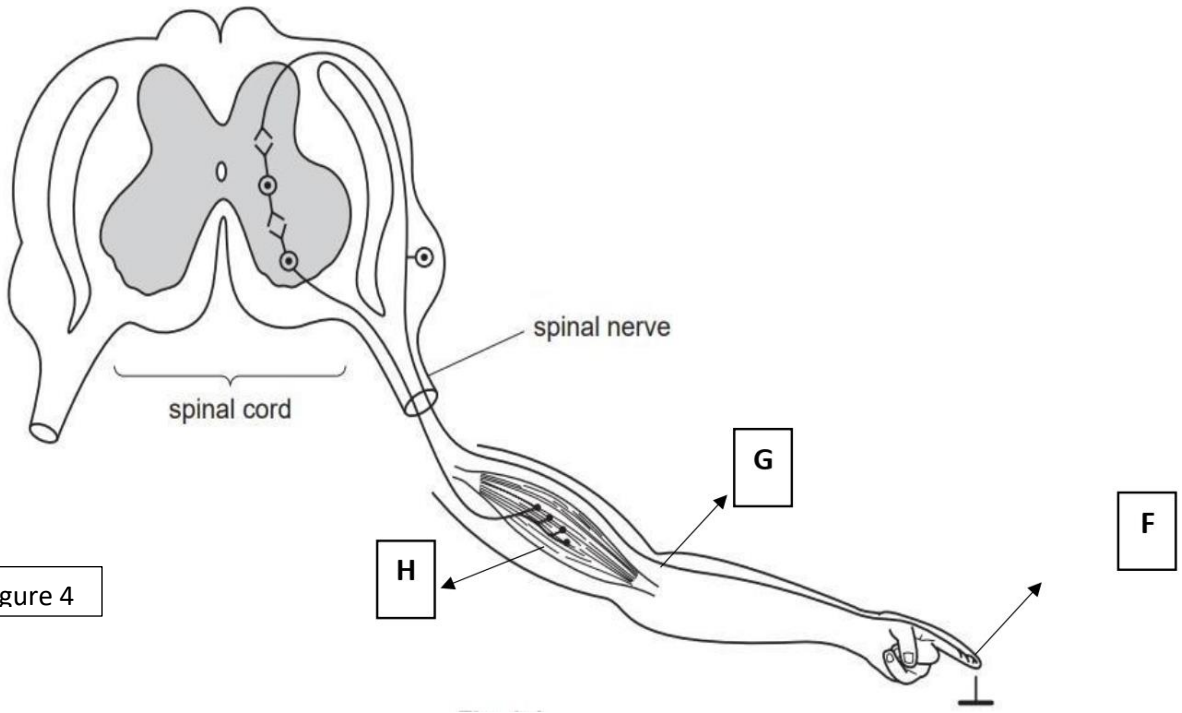


Figure 4

1. A receptor in the skin is --------f---------
2. The neuron that transmits impulses to the spinal cord is -------g----------
3. The effector in this reflex arc is ----------h---------

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