

Question text

Magnetic resonance imaging is based on the movement of

Select one:

- ☐ a. electrons in a magnetic field.
- ☐ b. carbons in a magnetic field.
- ☒ c. protons in a magnetic field.

- ☐ d. cells in a magnetic field.

Question **7**

Correct

1.75 points out of 1.75

Flag question

Question text

A tissue is a

Select one:

- ☐ a. structure contained within a cell.
- ☐ b. lower level of organization than a cell.
- ☐ c. group of organs that perform specific functions.
- ☒ d. group of cells with similar structure and function.

- ☐ e. structure that contains a group of organs.

Question **8**

Correct

1.75 points out of 1.75

Flag question

Question text

The study of the external form of the body and its relationship to deeper structures is

Select one:

- ☐ a. systemic anatomy.

- ☐ b. regional anatomy.
- ☐ c. molecular biology.
- ☐ d. microbiology.
- ☒ e. surface anatomy.

Question **9**

Correct

1.75 points out of 1.75

Flag question

Question text

The study of the structural features and functions of the cell is

Select one:

- ☒ a. cytology.
- ☐ b. histology.
- ☐ c. molecular biology.
- ☐ d. microbiology.
- ☐ e. surface anatomy.

Question **10**

Correct

1.75 points out of 1.75

Flag question

Question text

Which subdivision of anatomy involves the study of organs that function together?

Select one:

- ☐ a. regional
- ☐ b. developmental
- ☒ c. systemic

Flag question

Question text

Which of the following is *not* a function of the control center within a feedback mechanism?

Select one:

- ☐ a. receives and processes information
- ☐ b. controls effectors
- ☐ c. establishes a set point
- ☒ d. detects a change in the value of a variable

Question **18**

Correct

1.75 points out of 1.75

Flag question

Question text

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Started on	Friday, February 5, 2021, 9:58 PM
State	Finished
Completed on	Friday, February 5, 2021, 10:38 PM
Time taken	40 mins 1 sec
Grade	26.25 out of 35.00 (75%)

Question **1**
Incorrect

0.00 points out of 1.75

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Flag question

Question text

Carbon dioxide is considered a(n)

Select one:

- ☐ a. molecule.
- ☒ b. compound.
- ☐ c. molecule and a compound.
- ☐ d. element.
- ☐ e. ion.

Question **2**
Incorrect

- ☐ d. A buffer releases acid to maintain proper pH.

Question **15**

Incorrect

0.00 points out of 1.75

Flag question

Question text

Which of the following is NOT true of enzymes?

Select one:

- ☐ a. They are catalysts that increase the rate of a reaction.
- ☐ b. One enzyme can have many reactions.
- ☐ c. They may need a cofactor to be functional.
- ☐ d. The active site has a specific shape to match the reactants.
- ☒ e. A slight change in shape can effect function.

Question **16**

Correct

1.75 points out of 1.75

Flag question

Question text

A solution that contains one osmole of solute in one kilogram (kg) of water is called a

Select one:

- ☐ a. 1% solution.
- ☐ b. 1 molar solution.

- ☐ c. 10% solution.
- ☒ d. 1 osmolal solution.
- ☐ e. None of these choices are correct.

Question **17**

Correct

1.75 points out of 1.75

Flag question

Question text

Normal pH for blood is 7.35 to 7.45. Maintenance of the pH in this range is

Select one:

- ☒ a. critical because enzymes work best within narrow ranges of pH.
- ☐ b. not critical because extreme pH values do not affect enzyme function.
- ☐ c. called denaturation.
- ☐ d. not required.
- ☐ e. None of these choices is correct.

Question **18**

Correct

1.75 points out of 1.75

Flag question

Question text

Which of the following lists includes only monosaccharides that are isomers of one another?

Select one:

- ☐ d. a substance that conducts electricity when placed in solution.
- ☐ e. an alteration in the three-dimensional structure of a protein.

Question **5**

Correct

1.75 points out of 1.75

Flag question

Question text

The smallest particle of an element that still exhibits the chemical characteristics of that element is a(n)

Select one:

- ☐ a. electron.
- ☒ b. atom.
- ☐ c. chemical bond.
- ☐ d. orbital.
- ☐ e. proton.

Question **6**

Correct

1.75 points out of 1.75

Flag question

Question text

If the ratio of products and reactants are stable, the system is in _____.

Select one:

Question text

Molecules that form when electrons are shared unequally between atoms are called

Select one:

- ☐ a. salt molecules.
- ☒ b. polar molecules.
- ☐ c. nonpolar molecules.
- ☐ d. lopsided molecules.
- ☐ e. None of these choices are correct.

Question **11**

Incorrect

0.00 points out of 1.75

Flag question

Question text

Which of the following statements best describes RNA?

Select one:

- ☐ a. RNA is found outside a cell.
- ☐ b. RNA contains the base thymine.
- ☐ c. RNA is a single-stranded molecule.
- ☒ d. RNA molecules are antiparallel.
- ☐ e. RNA is a double helix.

Question **12**

Correct

1.75 points out of 1.75

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Arrange the following in correct sequence:

- (1) protein moves through ER and then carried in vesicles to Golgi apparatus
- (2) vesicle pinches off from the Golgi apparatus and carries product to plasma membrane
- (3) Golgi apparatus modifies protein and then packages them into vesicles
- (4) protein made by ribosomes on rough ER

Select one:

☐ a. 1, 2, 3, 4

☒ b. 4, 1, 3, 2

☐ c. 2, 3, 1, 4

☐ d. 3, 2, 4, 1

☐ e. 4, 3, 2, 1

Question **9**

Correct

1.75 points out of 1.75

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Flag question

Question text

Communication between cells occurs when chemical messengers from one cell bind to _____ on another cell.

Select one:

☐ a. channel proteins

☒ b. receptor proteins

☐ c. marker molecules

☐ d. second messengers

☐ e. integrins

Question **10**

Correct

1.75 points out of 1.75

Flag question

Question text

Ion movement across the plasma membrane creates an electrical charge difference known as _____.

Select one:

- ☒ a. membrane potential
- ☐ b. extracellular glycocalyx
- ☐ c. respiration
- ☐ d. transcription

Question **11**

Correct

1.75 points out of 1.75

Flag question

Question text

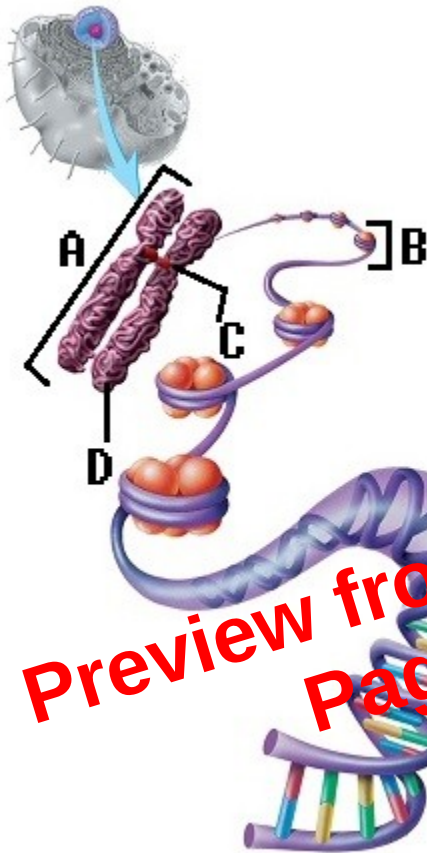
When a person trains for running long distances, which of the following organelles increase in his/her muscles?

Select one:

- ☐ a. rough endoplasmic reticulum
- ☐ b. enzymes for glycolysis
- ☐ c. basal bodies
- ☐ d. lysosomes

Flag question

Question text



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Answer these questions about chromosome structure. What does "D" represent?

Select one:

- ☒ a. chromatid
- ☐ b. proteins
- ☐ c. chromosome
- ☐ d. centromere

☐ e. chromatin

Question **19**

Correct

1.75 points out of 1.75

Flag question

Question text

Chromatin condenses and nucleoli disappear during

Select one:

☐ a. interphase.

☒ b. prophase.

☐ c. metaphase.

☐ d. anaphase.

☐ e. telophase.

Question **20**

Correct

1.75 points out of 1.75

Flag question

Question text

The sequence of nucleotides in a messenger RNA molecule is needed to determine the sequence of

Select one:

☐ a. nucleotides in a gene.

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Genes on the X chromosomes are

Select one:

- ☐ a. polygenic.
- ☒ b. X-linked.
- ☐ c. simple.
- ☐ d. holandric.
- ☐ e. Y-linked.

Question **6**

Correct

1.75 points out of 1.75

Flag question

Question text

Which of the following genotypes will result in a male?

Select one:

- ☐ a. XO
- ☒ b. XY
- ☐ c. XX
- ☐ d. XXX
- ☐ e. YY

Question **7**

Correct

1.75 points out of 1.75

- ☒ e. simple squamous epithelium.

Question **17**

Correct

1.75 points out of 1.75

Flag question

Question text

What type of epithelial tissue is found in the mouth?

Select one:

- ☐ a. simple cuboidal epithelium
- ☐ b. simple columnar epithelium
- ☒ c. stratified squamous epithelium
- ☐ d. pseudostratified ciliated columnar epithelium
- ☐ e. transitional epithelium

Question **18**

Correct

1.75 points out of 1.75

Flag question

Question text

An example of a gap junction is

Select one:

- ☐ a. a desmosome.
- ☐ b. an adhesion belt.

- ☐ c. a striation.
- ☒ d. an intercalated disk.
- ☐ e. goblet cell.

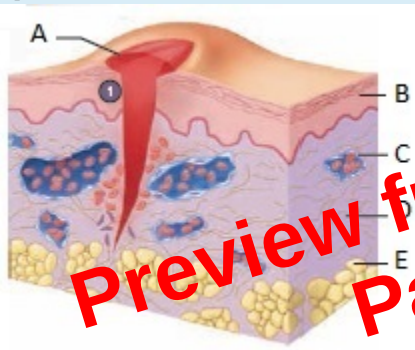
Question **19**

Correct

1.75 points out of 1.75

Flag question

Question text



This is a picture of a skin wound. What does "C" represent?

Select one:

- ☐ a. dermis
- ☐ b. subcutaneous fat
- ☐ c. epidermis
- ☒ d. blood vessel
- ☐ e. blood clot

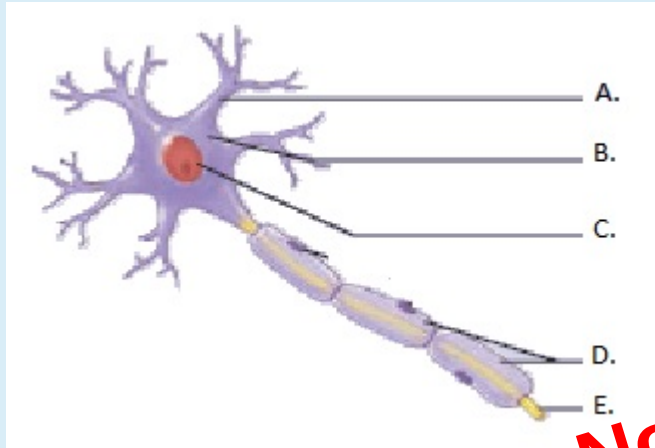
Question **20**

Correct

1.75 points out of 1.75

Flag question

Question text



This is a diagram of a multipolar neuron. What does "E" represent?

Select one:

- ☐ a. nucleus of neuron
- ☐ b. dendrite
- ☐ c. cell body of neuron
- ☒ d. axon
- ☐ e. neuroglia cells

Started on Monday, March 1, 2021, 5:58 PM

State Finished

Completed on	Monday, March 1, 2021, 6:23 PM
Time taken	24 mins 50 secs
Grade	31.50 out of 35.00 (90%)

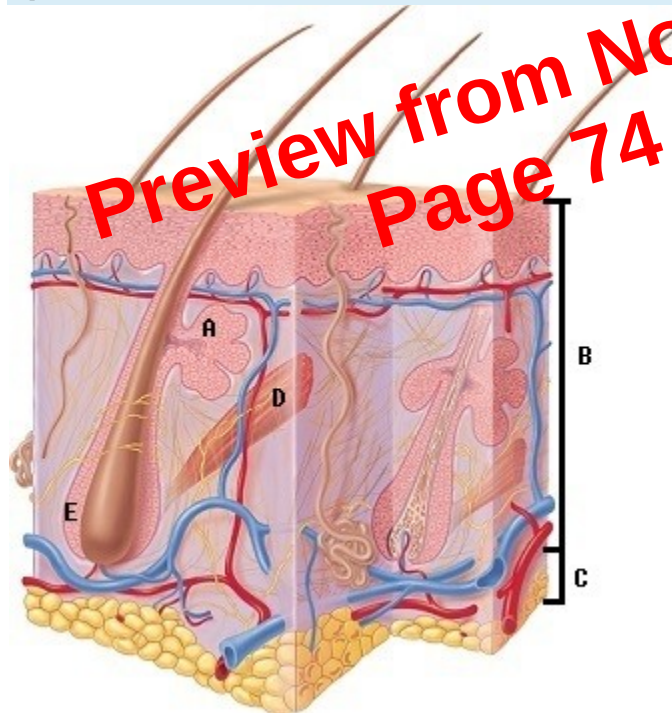
Question **1**

Correct

1.75 points out of 1.75

Flag question

Question text



What does structure "A" represent on the diagram?

Question **18**

Correct

1.75 points out of 1.75

Flag question

Question text

This condition is characterized by a thicker-than-normal stratus corneum producing large silvery scales.

Select one:

☒ a. psoriasis

☐ b. decubitus ulcer

☐ c. bullae

☐ d. vitiligo

☐ e. eczema

Question **19**

Correct

1.75 points out of 1.75

Flag question

Question text

A genetic disease characterized by the inability to produce melanin is

Select one:

☐ a. melanosomes.

☒ b. albinism.

Why does muscle activity affect the temperature of the body?

Select one:

- ☒ a. The rate of chemical reactions increases in muscle fibers during contraction, so the rate of heat production also increases.
- ☐ b. Muscle contraction generates pyrogens which reset the body's internal thermostat to a higher temperature.
- ☐ c. Muscle activity directs more warm blood to the muscles away from the central core causing a cooling effect on your internal organs.
- ☐ d. Increased muscle activity causes a rise in adipose stores which increases the insulation value of the body.

Question **10**

Correct

1.75 points out of 1.75

End question

Question text

Which of the following actions is caused by contraction of skeletal muscle?

Select one:

- ☐ a. contraction of the heart
- ☒ b. moving your feet in walking
- ☐ c. movement of food through the digestive tract
- ☐ d. emptying of the urinary bladder
- ☐ e. vasoconstriction

Question **11**

Correct

1.75 points out of 1.75

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Flag question

Question text

The muscle that is used to cross the legs is the

Select one:

- ☒ a. sartorius.
- ☐ b. gastrocnemius.
- ☐ c. vastus lateralis.
- ☐ d. gluteus maximus.
- ☐ e. biceps femoris.

Question **20**

Incorrect

0.00 points out of 1.75

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Flag question

Question text

The term "shin splints" is associated with

Select one:

- ☐ a. injuries resulting from excessive stress on the tibialis anterior.
- ☒ b. stress fractures of the fibula 2 to 5 cm distal to the knee.
- ☐ c. posterior compartment syndrome.
- ☐ d. injuries resulting from excessive stress on the tibialis posterior.
- ☐ e. RICE.

Started on Monday, March 8, 2021, 7:18 PM

State Finished

Identify structure "B" on the neuron.

Select one:

- ☐ a. Schwann cell
- ☐ b. Node of Ranvier
- ☒ c. neuron cell body (soma)
- ☐ d. dendrites
- ☐ e. axon

Question **9**

Correct

1.75 points out of 1.75

Question text

Multiple sclerosis is a neurological disorder in which myelin sheaths in the CNS are destroyed. Which of the following neuroglial cells is being damaged in multiple sclerosis?

Select one:

- ☐ a. astrocyte
- ☐ b. microglial cell
- ☒ c. oligodendrocyte
- ☐ d. ependymal cell
- ☐ e. Schwann cells

Question **10**

Correct

1.75 points out of 1.75

Flag question

Question text

Which of the following statements regarding neuroglia is false?

Select one:

- ☐ a. Neuroglia serve as the major supporting tissue in the CNS.
- ☐ b. Neuroglia form part of the blood-brain barrier.
- ☒ c. Neuroglia produce action potentials for skeletal muscles.
- ☐ d. Neuroglia form myelin sheaths around some axons.
- ☐ e. Neuroglia produce cerebrospinal fluid.

Question **11**

Correct

1.75 points out of 1.75

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Flag question

Question text

Groups of related nerve cell bodies located outside of the central nervous system are called _____.

Select one:

- ☒ a. ganglia
- ☐ b. plexus
- ☐ c. tracts
- ☐ d. nerves

Select one:

- ☐ a. astrocytes
- ☐ b. microglial cells
- ☐ c. oligodendrocytes
- ☐ d. macrophages
- ☒ e. ependymal cells

Question **18**

Correct

1.75 points out of 1.75

Flag question

Question text

Cell bodies of the peripheral nervous system are located in

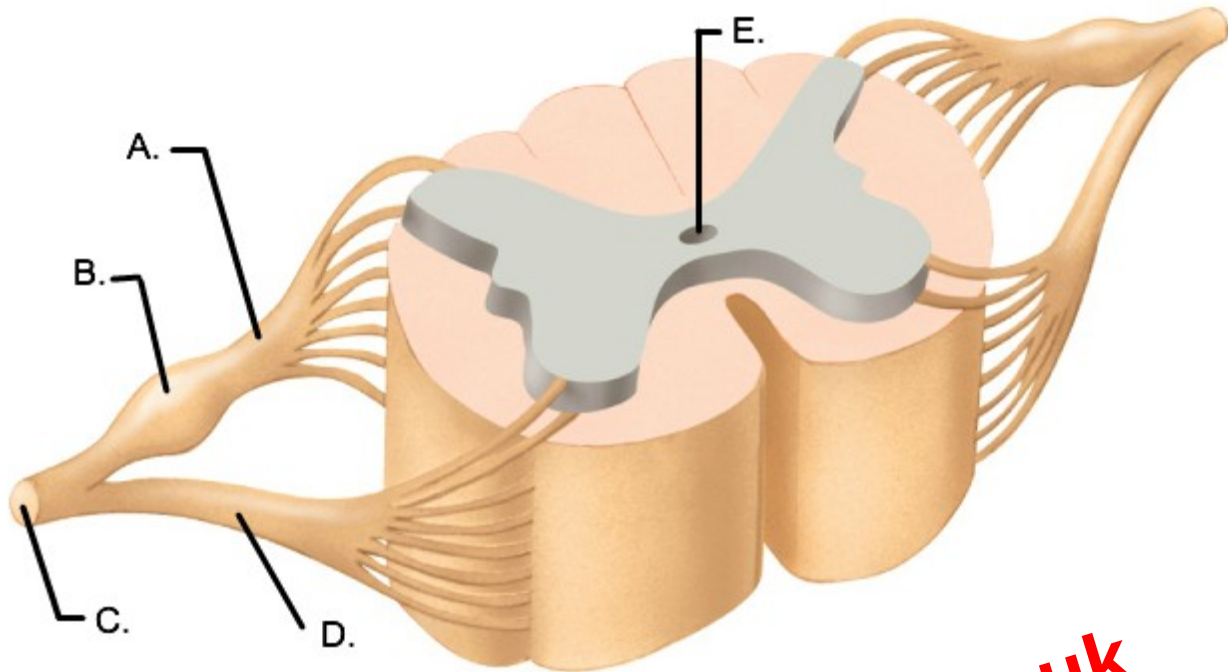
Select one:

- ☒ a. ganglia.
- ☐ b. Schwann cells.
- ☐ c. the motor division.
- ☐ d. the sensory division.
- ☐ e. nerves.

Question **19**

Correct

1.75 points out of 1.75



What does "B" represent?

Select one:

- ☐ a. central canal
- ☐ b. ventral root
- ☒ c. dorsal root ganglion
- ☐ d. spinal nerve
- ☐ e. dorsal root

Question **4**

Correct

1.75 points out of 1.75

Flag question

What does "C" represent?

Select one:

- ☐ a. spinal nerves
- ☒ b. conus medullaris
- ☐ c. cervical enlargement
- ☐ d. filium terminale
- ☐ e. cauda equina

Question **5**

Correct

1.75 points out of 1.75

Flag question

Question text

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What are the group of loosely packed nuclei within the length of the brainstem called that are involved in cyclic activities such as sleep-wake cycles?

Select one:

- ☒ a. reticular formation
- ☐ b. diencephalon
- ☐ c. limbic system
- ☐ d. hypothalamus
- ☐ e. basal nuclei

Question **14**

Correct

1.75 points out of 1.75

Flag question

Question text

The mammillary bodies

Select one:

- ☐ a. influence breast milk production.
- ☐ b. produce reproductive hormones.
- ☒ c. are involved in emotional responses to odors.
- ☐ d. are found in the thalamus.
- ☐ e. influence the onset of puberty.

Question **15**

Correct

1.75 points out of 1.75

Correct

1.75 points out of 1.75

Flag question

Question text

Tracts of white matter that connect the right and left hemispheres are composed of

Select one:

- ☐ a. decussation fibers.
- ☐ b. association fibers.
- ☒ c. commissural fibers.
- ☐ d. projection fibers.
- ☐ e. pyramidal fibers.

Question **18**

Incorrect

0.00 points out of 1.75

Flag question

Question text

What is the function of the arachnoid granulations?

Select one:

- ☐ a. Reabsorb CSF into the blood of the dural sinuses
- ☒ b. Drain the CSF from the arachnoid mater
- ☐ c. Transfer CSF to the cerebral aqueducts

Question **19**

Correct

1.75 points out of 1.75

Flag question

Question text

In the CNS, clusters of gray matter containing cell bodies are called

Select one:

- ☒ a. nuclei.
- ☐ b. pyramids.
- ☐ c. tracts.
- ☐ d. peduncles.
- ☐ e. ganglia.

Question **20**

Correct

1.75 points out of 1.75

Flag question

Question text

Which of the following brain areas serves as the major control center of the autonomic nervous system and endocrine system?

Select one:

- ☒ a. hypothalamus
- ☐ b. midbrain

Flag question

Question text

In order for a molecule to be detected by the olfactory neurons, it must

Select one:

- ☐ a. be present in high concentrations.
- ☐ b. be one of the seven primary classes of odors.
- ☒ c. be dissolved in fluid covering the olfactory epithelium.
- ☐ d. interact with the mechanoreceptors of the olfactory hair membrane.
- ☐ e. enter the nose slowly.

Question 9

Correct

1.75 points out of 1.75

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Flag question

Question text

Rhodopsin is found in the

Select one:

- ☒ a. rods.
- ☐ b. cones.
- ☐ c. choroid.
- ☐ d. pigmented retina.
- ☐ e. amacrine cells.

Question **17**

Correct

1.75 points out of 1.75

Flag question

Question text

More sound volume is perceived when

Select one:

- ☒ a. sound wave amplitude increases.
- ☐ b. action potentials from hair cells are blocked.
- ☐ c. sound wave amplitude decreases.
- ☐ d. sound wave frequency decreases.
- ☐ e. sound wave frequency increases.

Question **18**

Correct

1.75 points out of 1.75

Flag question

Question text

The ability of the olfactory system to adapt to a particular odor may involve

Select one:

- ☐ a. sensitivity of the olfactory cortex.
- ☐ b. an increase in the sensitivity at the receptor sites.
- ☐ c. neurons from the medial olfactory area stimulating mitral cells and tufted cells.

- ☐ b. preganglionic parasympathetic
- ☒ c. postganglionic sympathetic
- ☐ d. postganglionic parasympathetic
- ☐ e. postganglionic somatic motor

Question **7**

Correct

1.75 points out of 1.75

Flag question

Question text

Parasympathetic preganglionic axons from the sacral region of the spinal cord course through ____ nerves that innervate the ____

Select one:

- ☐ a. splanchnic; urinary bladder and adrenal glands
- ☒ b. pelvic; lower colon and reproductive glands
- ☐ c. sacral; lower colon and urinary bladder
- ☐ d. lumbar; stomach and intestines
- ☐ e. coccygeal; anus and vagina

Question **8**

Correct

1.75 points out of 1.75

Flag question