MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.1) Learners who thrive in an environment with visual stimulation, such as looking at diagrams or  
illustrations, have a preference for a modality known as:  
1)  
A) auditory. B) visual. C) tactile. D) kinesthetic.  
2) Sierra says she learns more from reading the textbook for class than from listening to lecture. She is  
most likely a(n):  
2)  
A) kinesthetic learner. B) tactile learner.  
C) auditory learner. D) visual learner.  
3) Jesse felt comfortable using the microscope after listening to directions from his lab professor. His  
learning style preference must be:  
3)  
A) tactile learner. B) visual learner.  
C) kinesthetic learner. D) auditory learner.  
4) What does the SQ3R method stand for? 4)  
A) sort, query, read, recite, and review  
B) earch, quiet, research, read, and remember  
C) urvey, question, read, recite, and review  
D) hare, quiz, query, question, and read  
5) Why should a student use the SQ3R method? 5)  
A) The SQ3R method provides a plan for a student to improve textbook reading skills.  
B) student with a strategy for taking notes during lecture class.  
C) ways to improve time management skills.  
D) a strategy for improving test taking skills.  
6) What is a good way to manage time in preparation for your anatomy and physiology class? 6)  
A) I study only on the weekends when I have many hours of free time.  
B) make a schedule and budget my time.  
C) should delay studying until the day or two before the test to best remember the material.  
D) I should stay up all night the night before the test to maximize what is stored in short-term  
memory.  
7) What learning modality is engaged when students participate in study groups? 7)  
A) auditory learner B) tactile learner  
C) kinesthetic learner D) visual learner  
8) What is a good strategy for class or laboratory preparation? 8)  
A) Read and prepare notes before attending your class or laboratory.  
B) Only read after you have attended class or laboratory.  
C) Focus on reading your materials on the weekends when you have hours to spend.  
D) Avoid reading before class as you may get confused.  
1  
9) How could you use the Learning Outcomes in this book to help you study? 9)  
A) Read through the Learning Outcomes after you have completed a section.  
B) Write down the answers to the Learning Outcomes.  
C) Rewrite each Learning Outcome in your notes.  
D) cite the Learning Outcomes until you have them memorized.  
10) What results when anabolism occurs more than catabolism in an organism? 10)  
A) irritability B) movement C) growth D) excretion  
11) What is the smallest level of structural organization in the human body? 11)  
A) cellular level B) tissue level C) chemical level D) organ level  
12) Which of the following is the most complex structural level of organization? 12)  
A) organ level B) tissue level C) chemical level D) cellular level  
13) Which of the following is the correct sequence, from simplest to most complex, in the levels of  
structural organization of the human body?  
13)  
A) cellular level, chemical level, tissue level, organ level, organ system level, organismal level  
B) hemical level, cellular level, tissue level, organ level, organ system level, organismal level  
C) tissue level, cellular level, organ system level, organ level, organismal level  
D) ellular level, tissue level, chemical level, organ level, organ system level, organismal level  
14) In laboratory, you will study the overall structure and shape of the femur bone without the aid of a  
microscope. This is a study known as:  
14)  
A) systemic anatomy. B) regional anatomy.  
C) microscopic anatomy. D) gross anatomy.  
15) In laboratory, you will study tissues. This area of study is known as: 15)  
A) gross anatomy. B) physiology. C) cytology. D) histology.  
16) Which organ system supports the body and protects internal organs? 16)  
A) endocrine system B) muscular system  
C) skeletal system D) digestive system  
17) Which organ system includes blood vessels and the heart? 17)  
A) endocrine system B) lymphatic system  
C) cardiovascular system D) respiratory system  
18) Which two organ systems include the pancreas as a component? 18)  
A) respiratory and cardiovascular systems B) digestive and urinary systems  
C) endocrine systems D) endocrine and lymphatic systems  
19) What is a major function of the respiratory system? 19)  
A) produce vitamin D and retain water  
B) deliver oxygen to the blood and remove carbon dioxide from the body  
C) igest food and absorb nutrients into the blood  
D) return excess tissue fluid to the cardiovascular system  
2  
20) When we imagine a person exhibiting the anatomical position, the palms of the hands are assumed  
to be facing:  
20)  
A) forward. B) down. C) to the side. D) backward.  
21) A person who is standing facing forward with hands at the sides, palms facing forward, is in the: 21)  
A) frontal position. B) sagittal position.  
C) upine position. D) anatomical position.  
22) A person in the anatomical position is visualized to be: 22)  
A) sitting down. B) standing upright.  
C) laying down on his or her back. D) laying down on the stomach.  
23) Which directional term indicates the front side of the body? 23)  
A) superior (cranial) B) anterior (ventral)  
C) posterior (dorsal) D) medial  
24) A directional term that means the same as posterior is: 24)  
A) sagittal. B) anterior. C) dorsal. D) ventral.  
25) Body parts that are described as medial are considered to be: 25)  
A) closer to the midline of the body. B) toward the head.  
C) front. D) point of origin.  
26) Select the appropriate directional term to complete this sentence: The mouth is \_\_\_\_\_\_\_\_ to the  
nose.  
26)  
A) inferior (caudal) B) superior (cranial)  
C) distal D) posterior (dorsal)  
27) Select the appropriate directional term to complete this sentence: The skeletal muscles are \_\_\_\_\_\_\_\_  
to the skin.  
27)  
A) posterior B) inferior (caudal)  
C) deep D) superficial  
28) In the anatomical position, the palms are on the: 28)  
A) posterior (dorsal) surface. B) superior (cranial) surface.  
C) anterior (ventral) surface. D) lateral surface.  
29) The point of the shoulder is also known as the: 29)  
A) brachial region. B) antebrachial region.  
C) digital region. D) cromial region.  
30) James sustained a cut to his mental region, also known as his: 30)  
A) cheek. B) mouth. C) nose. D) chin.  
31) The vertebral region is superior to the: 31)  
A) cervical region. B) occipital region.  
C) phalic region. D) sacral region.  
3  
32) The hand is also known as the: 32)  
A) acromial region. B) pedal region.  
C) manual region. D) lantar region.  
33) A plane that divides the body into superior and inferior parts is known as a: 33)  
A) transverse (horizontal, or cross) plane. B) midsagittal (median) plane.  
C) frontal (coronal) plane. D) sagittal plane.  
34) Dr. Mitchell performs open heart surgery. The incision he makes through the sternal region of his  
patient divides the thoracic cavity into equal left and right parts. This incision must be made along  
a:  
34)  
A) midsagittal (median) plane. B) transverse (horizontal) plane.  
C) frontal (coronal) plane. D) sagittal plane.  
35) What are the two subcavities of the dorsal body cavity? 35)  
A) cranial and vertebral (spinal) cavities B) thoracic and abdominopelvic cavities  
C) pleural and pericardial cavities D) abdominal and pelvic cavities  
36) What major organs are housed in the thoracic cavity? 36)  
A) lungs, heart, esophagus, trachea B) urinary bladder, reproductive organs  
C) stomach, intestines, liver, pancreas D) brain and spinal cord  
37) What separates the thoracic cavity from the abdominopelvic cavity? 37)  
A) diaphragm B) pleura C) pericardium D) mediastinum  
38) The thoracic cavity is situated superior to the abdominopelvic cavity and separated by the  
diaphragm. Therefore, the diaphragm creates a:  
38)  
A) frontal (coronal) plane.  
B) transverse (horizontal) plane, or cross section.  
C) parasagittal plane.  
D) midsagittal (median) plane.  
39) What smaller cavity within the thoracic cavity houses the heart, great blood vessels, esophagus,  
and trachea?  
39)  
A) mediastinum B) diaphragm  
C) abdominal cavity D) peritoneal cavity  
40) Which regions of the abdominopelvic cavity are situated medially? 40)  
A) epigastric, umbilical, hypogastric regions  
B) right and left lumbar regions and the umbilical region  
C) hypochondriac, right lumbar, and right iliac (inguinal) regions  
D) and left hypochondriac regions, and the epigastric region  
4  
41) Select the letter that represents the left iliac (inguinal) region. 41)  
A) A B) B C) C D) D  
42) Which region of the abdominopelvic cavity lies between the right and left lumbar regions? 42)  
A) epigastric region B) hypogastric region  
C) right lumbar region D) umbilical region  
43) Serous membranes line certain cavities within the: 43)  
A) ventral cavities. B) cranial cavity.  
C) rtebral (spinal) cavity. D) dorsal cavities.  
44) What is deep to the visceral pericardium? 44)  
A) pericardial cavity B) visceral peritoneum  
C) heart muscle D) arietal pericardium  
45) What would a needle travel through as it enters the right lung? 45)  
A) visceral pleura, serous fluid, parietal pleura, right lung  
B) parietal pleura, serous fluid, visceral pleura, right lung  
C) right lung, visceral pleura  
D) visceral pericardium, serous fluid, parietal pericardium, right lung  
5  
46) What organ(s) is/are covered by the pleura? 46)  
A) heart B) lungs  
C) brain and spinal cord D) digestive organs  
47) The maintenance of a relatively constant internal environment is termed: 47)  
A) integration. B) homeostasis.  
C) positive feedback. D) effector control.  
48) What part of a feedback loop causes physiological responses to return the variable to the normal  
homeostatic range?  
48)  
A) receptor (sensor) B) effector  
C) stimulus D) control center  
49) A cell or organ that responds to the directions of the control center in a negative feedback loop is  
termed a(n):  
49)  
A) regulator. B) receptor. C) stimulus. D) effector.  
50) When you go outside on a hot summer day, your body temperature heats up above the normal  
range. Receptors in your brain detect the change in body temperature. The brain activates nerve  
cells that send messages to sweat glands, causing the body temperature to fall as the sweat  
evaporates from the skin. What part of this feedback loop is the stimulus?  
50)  
A) nerve cells B) increased body temperature  
C) sweat glands D) brain  
51) When you go outside on a hot summer day, your body temperature heats up above the normal  
range. Receptors in your brain detect the change in body temperature. The brain activates nerve  
cells that send messages to sweat glands, causing the body temperature to fall as the sweat  
evaporates from the skin. What part of this feedback loop is the effector?  
51)  
A) sweat glands B) nerve cells  
C) increased body temperature D) brain  
52) How does the effector restore homeostasis in a negative feedback loop? 52)  
A) The effector opposes the initial stimulus and shuts off when conditions return to the normal  
range.  
B) The effector causes a rapid change in a variable.  
C) increases and reinforces the initial stimulus.  
D) The effector amplifies the response, but does not continue indefinitely.  
53) A mother breastfeeds her infant. As long as the baby suckles his mother's breast, the mother's  
mammary glands produce milk. Suckling, the stimulus, increases milk production, the response.  
This scenario is best described as:  
53)  
A) anatomical position.  
B) negative feedback loop.  
C) positive feedback loop.  
D) principle of complementarity of structure and function.  
54) The type of feedback that increases or enhances the effects of the variable is: 54)  
A) negative. B) neutral. C) positive. D) responsive.  
6  
55) Which of the following best summarizes the principle of complementarity of structure and  
function?  
55)  
A) structure drives function  
B) function follows structure  
C) form follows function  
D) maintenance of a stable internal environment  
56) Which of the following illustrates a gradient? 56)  
A) more of something exists in one area than another and the two areas are connected  
B) equal amounts of something exist in areas that are connected  
C) maintenance of a relatively stable internal environment  
D) equilibrium or balance between two unconnected areas  
57) Blood pressure in arteries is higher than the blood pressure in capillaries. Blood flows from arteries  
to capillaries due to the presence of a:  
57)  
A) negative feedback loop. B) homeostatic imbalance.  
C) positive feedback loop. D) pressure gradient.  
58) What are the two major methods by which cells communicate to coordinate their functions? 58)  
A) positive feedback loops and negative feedback loops  
B) effectors and responses  
C) chemical messengers and/or electrical signals  
D) temperature gradients and pressure gradients  
59) A nerve cell releases chemical messengers to trigger changes in a nearby muscle cell. This is  
example of a core principle known as:  
59)  
A) principle of complementarity of structure and function.  
B) gradients.  
C) cell-cell communication.  
D) feedback loops.  
60) What is NOT one of the four core principles related to homeostasis? 60)  
A) cell-cell communication B) metabolism  
C) feedback loops D) gradients  
TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.61) When studying, you should actively read the textbook by taking notes and making diagrams. 61)  
62) You should wait to read the textbook until you have heard the material presented in lecture or  
laboratory.  
62)  
63) The smallest level of organization in the human body is the cellular level. 63)  
64) The endocrine system is responsible for generating heat. 64)  
65) Patients are always examined while they are standing in the anatomical position. 65)  
66) The crural region is posterior (dorsal) to the sural region. 66)  
7  
67) The transverse (horizontal plane or cross section) plane divides the body into anterior and posterior  
parts.  
67)  
68) Serous fluid lubricates around organs and reduces friction as the organ moves against adjacent  
structures.  
68)  
69) Negative feedback loops produce responses in the opposite direction of the initial stimulus while  
positive feedback loops produce responses in the same direction of the initial stimulus.  
69)  
70) According to the principle of complementarity of structure and function, structure and function are  
related only at the cellular level.  
70)  
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.Match the following with the correct regional anatomical term.71) Identify the thoracic region. 71)  
72) Identify the vertebral region. 72)  
8  
73) Identify the cephalic region. 73)  
74) Identify the popliteal region. 74)  
75) Identify the gluteal region. 75)  
Match the following with the correct body cavity or subdivision.76) Identify the thoracic cavity. 76)  
77) Identify the abdominopelvic cavity. 77)  
78) Identify the cavity where the left lung is housed. 78)  
79) Identify the mediastinum. 79)  
80) Identify the cavity that houses the heart. 80)  
ESSAY. Write your answer in the space provided or on a separate sheet of paper.81) Gillian prefers to study alone. She mostly draws diagrams from the textbook or makes charts and tables to  
organize her thoughts as she reads. Determine and discuss her learning style.  
9  
82) Describe the SQ3R method for reading a textbook.  
83) Define metabolism.  
84) Explain how gross anatomy and microscopic anatomy differ.  
85) Describe anatomical position.  
86) Instead of using the directional terms superior and inferior to describe positions on the upper and lower limbs,  
what directional terms are used? Define these terms.  
87) Peggy is having surgery on the right carpal region. A 3 cm incision will be made deep to the skin and muscle,  
but will be superficial to the bone. Explain to her where her surgery will occur.  
88) During lab dissections, Kelly's instructor directs the students to make a midsagittal cut into their specimen.  
However, Kelly's lab partner thought she heard the instructor say that a cut along the median plane was to be  
made. Explain what type of cut should be made into the specimen.  
89) A female patient presents at the emergency room with pain in the right lower quadrant. Which organs might be  
involved?  
90) List the four quadrants and nine regions of the abdominopelvic cavity.  
91) Explain where the pericardial cavity is situated in relation to the pericardial membranes.  
92) Define homeostasis and homeostatic imbalance.  
93) List and describe the components of a feedback loop.  
94) Discuss the role of effector in both the negative and positive feedback loops.  
95) List the four core principles that relate to homeostasis.  
96) Summarize the principle of complementarity of structure and function.  
97) Discuss why anatomical position is used.  
98) Explain how the popliteal and patellar regions differ.  
99) Jose is having back surgery. Discuss the specific type of section the surgeon should use to make a cut along his  
vertebral region.  
100) Pleurisy is the inflammation of the serous membranes surrounding the lungs. With pleurisy, the inflamed  
membranes may secrete more serous fluid than normal. Predict the effects of excess serous fluid on serous  
membrane function.  
101) Explain how scratching a chaffing label on a shirt is an example of a negative feedback loop.