

DO NOT WRITE ON THIS TEST. IT MAY BE USED AGAIN. **On the separate answer sheet**, in the spaces provided, write your **team #, school name (& team color)**, and **your names**.

Phoenix Invitational 2012, IA East, Troy, Michigan
Anatomy

For multiple choice questions, always choose the BEST answer. When given a list from which answers are to be chosen, the list may contain more choices than you need, or are correct, and in some sets of questions, the same choice may be correct for more than one answer.

Questions 1-50 are based on the Stations. This part begins with question 51.

- I. For each numbered item 51-60, choose the lettered option that best completes or answers it.
51. Which of the following statements regarding fiber is false?
A. *Fiber is found mostly in plant sources*
B. *Fiber increases the bulk and water content of the material in the intestine*
C. *Fiber slows down the absorption of triglycerides*
D. *Fiber makes feel satisfied longer*
52. Which of these hormones causes contraction of the gall bladder?
A. *cholecystokinin*
B. *gastrin*
C. *gastric inhibitory polypeptide*
D. *secretin*
E. *zymogen*
53. All of these are enzymes that digest protein EXCEPT
A. *lipase*
B. *carboxypeptidase*
C. *chymotrypsin*
D. *pepsin*
E. *trypsin*
54. The _____ secretes peptidases and disaccharidases, whereas the _____ secretes trypsin, chymotrypsin, amylase, lipase, and nucleases.
A. *stomach, liver*
B. *stomach, small intestine*
C. *liver, small intestine*
D. *liver, pancreas*
E. *small intestine, pancreas*
55. Which of these statements about the movement of food from the mouth to the stomach is incorrect?
A. *swallowing is a voluntary process*
B. *muscles of the pharynx contract to move the food to the esophagus*
C. *food falls down the esophagus purely by gravitational force until it reaches the stomach*
D. *peristalsis in the esophagus occurs in esophageal reflux*
56. All of these are functions of the liver EXCEPT:
A. *biotransformation of molecules*
B. *production of digestive enzymes*
C. *storage of glycogen, fat, vitamins, and iron*
D. *synthesis of bile*
E. *synthesis of blood components*

WRITE ALL ANSWERS ON THE ANSWER SHEET ONLY

57. Most nutrient absorption takes place in the
- A. *duodenum and jejunum*
 - B. *stomach and duodenum*
 - C. *jejunum and ileum*
 - D. *esophagus and stomach*
 - E. *ileum and cecum*
58. The liver, gallbladder, and pancreas are connected to ducts which enter the
- A. *cecum*
 - B. *descending colon*
 - C. *duodenum*
 - D. *ileum*
 - E. *jejunum*
59. If a person's vital capacity is 4000mL, her expiratory reserve volume is 1000mL, and her inspiratory reserve volume is 2500mL, and her tidal volume is
- A. *3500mL*
 - B. *3000mL*
 - C. *1500mL*
 - D. *1000mL*
 - E. *500mL*
60. Most of the carbon dioxide (CO₂) carried in the blood is carried
- A. *as a dissolved gas in the water of the plasma*
 - B. *as the bicarbonate ion (HCO₃⁻) in plasma*
 - C. *bound to hemoglobin in the red blood cells*
 - D. *as micro-bubbles in the plasma*
61. The acronym COPD is the abbreviation for:
- A. *Cystic Occlusion Pneumatic Disorder*
 - B. *Colloid Osmotic Pressure Disorder*
 - C. *Cancerous Oncologic Pleural Disease*
 - D. *Chronic Obstructive Pulmonary Disease*
- II. State whether each of the statements 62-70 is True (T) or False (F)
62. *Helicobacter pylori* is associated with a high percentage of duodenal and gastric ulcers.
63. Peptic ulcer may require surgery in the form of partial gastrectomy which removes the acid secreting portion of the stomach.
64. Alcohol abuse frequently leads to necrosis of the pancreas.
65. Smoking can lead to lung cancer and cigarette smoke contains numerous known carcinogens.
66. Billions of bacteria are permanent residents of a healthy colon.
67. Wheezing and Asthma result from constriction (narrowing) of the smaller bronchi and bronchioles.
68. External respiration is the movement of air from the outside to the lungs.
69. In the lungs oxygen molecules (O₂) get attached to carbon atoms to become carbon dioxide (CO₂).
70. Hyperventilation can lead to a lowering of blood pH, referred to as metabolic acidosis.