DIGESTIVE SYSTEM SAMPLE EXAM QUESTIONS
Sample Questions Worksheet

1. All organisms need energy. What are the two fundamentally different ways that they can get it?
   a) They can make it themselves, such as plants do by photosynthesis, or they can harness the energy released through hot sulfur vents in the Earth's crust.
   b) They can make it themselves, such as plants do by photosynthesis, or they can utilize inorganic molecules in the soil and water on Earth.
   c) They can make it themselves, such as plants do by photosynthesis, or they can generate it via cellular metabolism.
   d) They can make it themselves, such as plants do by photosynthesis, or they can utilize inorganic molecules in the atmosphere.

2. Dietary proteins
   a) are considered "complete" only if they contain the eight essential amino acids required by humans.
   b) are nutritionally identical since they are broken down into their constituent amino acids prior to absorption.
   c) are considered "complete" only if they contain the twelve essential amino acids required by humans.
   d) can be obtained from animals but not plants.
   e) can be absorbed as polypeptides in the small intestine.

3. Which of the following is NOT a way that the body loses substantial amounts of water?
   a) respiration
   b) sweating
   c) defecation
   d) urination
   e) crying
4. Which of the following could cause a situation where a human body has too little sodium to function properly, causing dizziness, nausea, and confusion?

   a) eating lots of salty food
   b) urinating too frequently
   c) hypothermia (below normal body temperature)
   d) overconsumption of water
   e) becoming dehydrated

5. Why must vegetarians worry about balancing complementary proteins?
   a) Certain essential amino acids occur only in animal proteins.
   b) Chemical reactions between certain vegetable proteins can lead to digestive difficulties.
   c) Plant proteins cannot be broken down easily by the stomach because they are enmeshed within the rigid cellulose cell wall.
   d) Plant proteins are less stable than animal proteins and so are more easily broken down

during food preparation.
e) Most plant proteins do not contain all of the essential amino acids.

6. Breakdown of the protein stored in our bodies usually takes place when
   a) we don't ingest enough calories.
   b) we drink too much water.
   c) we eat too many vitamins and minerals.
   d) we eat a balanced diet.
   e) we consume too many lipids in our diet.

7. Which of the following is NOT a critical purpose for which water is used in an animal body?
   a) lubricates joints
   b) regulates body temperature
   c) acts as a solvent for many nutrients
   d) All of the above are important roles for water in animal bodies.
   e) None of the above are a purpose for which water is used in animal bodies.

Fill in the blanks using the words below (write a, b, c, d, ……for questions from 8-19)

a. liver	b. colon	c. gallbladder	d. esophagus
e. mouth	f. pancreas	g. tongue	h. peristalsis
i. stomach	j. large intestine	k. villi	l. teeth

8. _____stores a substance called bile, which physically breaks down fat droplets
9. _____Digestion begins when salivary gland secretions enter this
10. _____Minute projection extending from the walls of the small intestine and involved in absorbing products of digestion
11. _____used to cut, tear, and grind food; adult has 32
12. _____when you swallow food, muscular movements carry the food along this structure to the stomach
13. _____this organ absorbs excess water form undigested food prior to its release from the body as a solid waste
14. _____Muscular movement involving the walls of the digestive tract that serve to mix materials and move them along the tract
15. _____it pushes food to the back of the mouth prior to swallowing
16. _____this organ produces bile and detoxifies a variety of substances
17. _____produces digestive juices that are released into the small intestine
18. _____another name for the large intestine
19. _____functions include mixing food and serving as a reservoir prior to the food being passed on to the small intestine

20. Energy used in cellular respiration can originate from
   a) carbohydrates only.
   b) proteins only.
   c) carbohydrates, proteins, and fats.
   d) proteins and fats only.

21. Saturated fatty acids have _____ than unsaturated fatty acids, which is why they exist as a _____ at room temperature.
    a) fewer double bonds; solid
    b) fewer hydrogen atoms; solid
    c) more double bonds; liquid
    d) more carbon atoms; solid
    e) more glycerol molecules; liquid

22. The four stages of food processing, in sequential order, are
    a) ingestion, digestion, absorption, and elimination.
    b) digestion, ingestion, absorption, and elimination.
    c) ingestion, absorption, digestion, and elimination.
    d) digestion, absorption, ingestion, and elimination.
    e) None of the above are correct.

23. Which of the following is NOT a major component of the digestive system?
    a) thyroid
    b) pancreas
    c) esophagus
    d) anus
    e) mouth

24. The stomach
    a) is lined with cells that can secrete highly acidic gastric juice.
    b) has muscular walls that can churn and mix the stomach's contents.
    c) is the chief digestive site of water absorption.
    d) Both a) and b) are correct.
    e) All of the above are correct.

25. Consumption of some types of beans causes gastrointestinal distress because
    a) the casing of the beans is largely cellulose, making the beans indigestible.
    b) the same enzymes responsible for digestion of lactose break down bean sugars and anyone who is lactose-intolerant will not be able to digest them.
    c) beans are not complete proteins and so without simultaneous consumption of complementary proteins, they cannot be digested completely.
    d) beans are highly basic and if there is sufficient acid in the stomach, the rapid neutralization of the beans produces a variety of gases that must escape from the digestive system.
    e) the beans contain sugars that are indigestible by many people and they are digested by bacteria in the intestine that produce gas, cramps, and flatulence.