

Chapter 2: Mechanisms of Disease

TRUE/FALSE

1. Chromosomal and genetic abnormalities are always incompatible with life.

ANS: F

Numerous conditions are congenital due to chromosomal and genetic abnormalities, but they are not necessarily lethal.

PTS: 1

2. Tissue can be inflamed but not infected.

ANS: T

Inflammation and *infection* are often used synonymously even though they are quite different. A tissue may be inflamed but not infected (sunburn), but usually tissue that is infected will also be inflamed.

PTS: 1

3. Obesity has no effect on an individual's life span.

ANS: F

Obesity can shorten an individual's life span.

PTS: 1

4. Hypervitaminosis develops in individuals who consume large amounts of vitamins for extended periods of time.

ANS: T

Consuming large quantities of vitamins over an extended period can lead to a condition called hypervitaminosis.

PTS: 1

5. Immunodeficiency is the immune response of the body being unable to defend itself due to a decrease or absence of leukocytes, primarily lymphocytes.

ANS: T

Immunodeficiency is the immune response of the body being unable to defend itself due to a decrease or absence of leukocytes, primarily lymphocytes.

PTS: 1

6. The aging process is progressive and reversible.

ANS: F

The aging process is progressive, but is not reversible.

PTS: 1

7. The aging process leads to death due to a decrease in the ability of the body to fight disease.

ANS: T

The aging process leads to death due to a decrease in the ability of the body to fight disease.

PTS: 1

8. Diseases that are not lethal during the younger years could be the cause of death in older individuals.

ANS: T

Diseases that are not lethal during the younger years could be the cause of death in older individuals.

PTS: 1

9. Once the heart quits functioning, the person is considered brain dead.

ANS: F

The criteria for determining brain death include a lack of response to stimuli, loss of all reflexes, absence of respirations or breathing effort, and a lack of brain activity as shown by an electroencephalogram (EEG).

PTS: 1

10. Symptoms of inflammation include redness, pain, swelling, and warm to the touch.

ANS: T

Symptoms of inflammation include redness, pain, swelling, and warm to the touch.

PTS: 1

MULTIPLE CHOICE

1. Hereditary diseases are classified in which of the following ways?

- a. single gene abnormality
- b. abnormality of several genes
- c. abnormality of a chromosome, either the entire absence of a chromosome or the presence of an additional chromosome
- d. all of the above

ANS: D

- a. This is a possible classification, but there are others.
- b. This is a possible classification, but there are others.
- c. This is a possible classification, but there are others.
- d. All are possible classifications.

PTS: 1

2. *Congenital* means:

- a. begins in childhood.
- b. begins at puberty.
- c. born with.
- d. begins in middle age.

ANS: C

- a. *Congenital* does not mean "begins in childhood."

- b. *Congenital* does not mean “begins at puberty.”
- c. *Congenital* means “born with.”
- d. *Congenital* does not mean “begins in middle age.”

PTS: 1

3. An example of a congenital disease or disorder is:
- a. cerebral palsy.
 - b. hypertension.
 - c. Down syndrome.
 - d. both a and c.

ANS: D

- a. Cerebral palsy is a congenital condition, but more are listed.
- b. Hypertension is not congenital.
- c. Down syndrome is a congenital condition, but more are listed.
- d. Both cerebral palsy and Down syndrome are congenital conditions.

PTS: 1

4. Classifications of trauma include:
- a. motor vehicle accidents.
 - b. falls.
 - c. burns.
 - d. all of the above.

ANS: D

- a. *Motor vehicle accidents* is a classification of trauma, but others are also listed.
- b. *Falls* is a classification of trauma, but others are also listed.
- c. *Burns* is a classification of trauma, but others are also listed.
- d. Motor vehicle accidents, falls, and burns are all traumas.

PTS: 1

5. An example of triage, in general, is giving priority care to a patient who:
- a. has ear pain.
 - b. has a small laceration on the forehead.
 - c. complains of crushing, radiating chest pain.
 - d. has low back pain.

ANS: C

- a. This needs attention, but would not be the priority.
- b. This needs attention, but would not be the priority.
- c. Crushing, radiating chest pain would be a priority. It may indicate the person is having a heart attack (myocardial infarct) and needs care immediately.
- d. This needs attention, but would not be the priority.

PTS: 1

6. Signs of inflammation include:
- a. redness.
 - b. being warm to the touch.
 - c. pain.
 - d. all of the above.

ANS: D

- a. A sign of inflammation includes redness, but more are listed.
- b. A sign of inflammation includes being warm to the touch, but more are listed.
- c. A sign of inflammation includes pain, but more are listed.
- d. Redness, being warm to the touch, and pain are all signs of inflammation.

PTS: 1

7. Nutrition administered through the enteral route includes which of the following methods?
- a. TPN
 - b. subcutaneous
 - c. gastrostomy
 - d. intravenous

ANS: C

- a. TPN is given intravenously. *Enteral* refers to the small intestine.
- b. *Subcutaneous* means “into the fatty tissue.” *Enteral* refers to the small intestine.
- c. The enteral route would include a gastrostomy tube. A gastrostomy tube is passed through an opening through the abdomen into the stomach.
- d. *Intravenous* is “into the vein.” *Enteral* refers to the small intestine.

PTS: 1

8. Cachexia describes:
- a. a well-nourished individual.
 - b. an overweight individual.
 - c. an ill, thin individual.
 - d. an ill, overweight individual.

ANS: C

- a. Cachexia does not describe a well-nourished individual.
- b. Cachexia does not describe an overweight individual.
- c. Cachexia describes an ill, thin individual.
- d. Cachexia does not describe an overweight individual.

PTS: 1

9. General guidelines for a healthy lifestyle include all of the following EXCEPT:
- a. maintaining body weight.
 - b. excessive alcohol consumption.
 - c. getting enough sleep and rest.
 - d. maintaining a moderate exercise schedule.

ANS: B

- a. Maintaining body weight at a healthy level is one of the guidelines for a healthy lifestyle.
- b. Excessive alcohol consumption is not a guideline for a healthy lifestyle.
- c. Enough sleep and rest is one of the guidelines for a healthy lifestyle.
- d. Maintaining a moderate exercise schedule is a guideline for a healthy lifestyle.

PTS: 1

10. The aging process is affected by such factors as:
- a. lifestyle.
 - b. heredity.
 - c. stress.
 - d. all of the above

ANS: D

- a. Lifestyle affects the aging process, but other factors are listed.
- b. Heredity affects the aging process, but other factors are listed.
- c. Stress affects the aging process, but other factors are listed.
- d. Lifestyle, heredity, and stress all impact the aging process.

PTS: 1

11. Criteria to determine brain death include:
- a. a normal EEG.
 - c. rapid respirations.

PTS: 1

MATCHING

Match each item to a word or phrase listed below.

- | | |
|-----------------|-------------------------------|
| a. congenital | f. total parenteral nutrition |
| b. oncology | g. enteral |
| c. malignant | h. degeneration |
| d. encapsulated | i. ischemic |
| e. metastatic | j. infarct |

1. cellular death
2. moving from site of origin
3. enclosed in a capsule
4. hypoxia caused by decreased blood flow
5. present at birth
6. usually deadly
7. area of dead cells commonly due to obstruction of arteries
8. nutrition through the small intestine route
9. study of cancer
10. providing total nutrition needed by giving nutritive liquid through the venous route

- | | |
|------------|--------|
| 1. ANS: H | PTS: 1 |
| 2. ANS: E | PTS: 1 |
| 3. ANS: D | PTS: 1 |
| 4. ANS: I | PTS: 1 |
| 5. ANS: A | PTS: 1 |
| 6. ANS: C | PTS: 1 |
| 7. ANS: J | PTS: 1 |
| 8. ANS: G | PTS: 1 |
| 9. ANS: B | PTS: 1 |
| 10. ANS: F | PTS: 1 |