

Chapter 01: Introduction to Pathology

Kowalczyk: Radiographic Pathology for Technologists, 7th Edition

MULTIPLE CHOICE

1. The sequence of events producing cellular changes following injury best defines
 - a. manifestations.
 - b. pathogenesis.
 - c. sign.
 - d. symptom.

ANS: B

2. An abnormal disturbance of the function and structure of the human body following injury refers to
 - a. disease.
 - b. etiology.
 - c. manifestations.
 - d. pathogenesis.

ANS: A

3. The study of the cause of disease is termed
 - a. disease.
 - b. etiology.
 - c. pathogenesis.
 - d. prognosis.

ANS: B

4. Common agents that cause disease include
 1. bacteria.
 2. chemicals.
 3. heat.
 - a. 1 and 2 only
 - b. 1 and 3 only
 - c. 2 and 3 only
 - d. 1, 2, and 3

ANS: D

5. A *syndrome* is best defined as
 - a. a genetic abnormality of a single protein.
 - b. an adverse response to medical treatment.
 - c. the patient's perception of the disease.
 - d. signs and symptoms that characterizes a specific abnormal disturbance.

ANS: D

6. An adverse response to medical treatment itself is termed
 - a. autoimmune.

- b. iatrogenic.
- c. idiopathic.
- d. nosocomial.

ANS: B

7. *Prognosis* refers to
- a. diseases usually having a quick onset.
 - b. the name of the particular disease.
 - c. the predicted course and outcome of the disease.
 - d. the structure of cells or tissue.

ANS: C

8. Diseases that generally require a decrease in the exposure technique are considered
- a. destructive.
 - b. lytic.
 - c. subtractive.
 - d. All of the above.

ANS: D

9. The investigation of disease occurring in large groups best defines
- a. epidemiology.
 - b. incidence.
 - c. prevalence.
 - d. All of the above.

ANS: A

10. Data regarding the number of deaths caused by a particular disease averaged over a population are collected and reported by the
- a. American College of Radiology.
 - b. Centers for Disease Control.
 - c. Food and Drug Administration.
 - d. National Center for Health Statistics.

ANS: D

11. Which of the following are leading causes of death in the United States for adults aged 45 years and greater?
- 1. Heart disease
 - 2. Malignant neoplasm
 - 3. Polycystic kidney disease
- a. 1 and 2 only
 - b. 1 and 3 only
 - c. 2 and 3 only
 - d. 1, 2, and 3

ANS: A

12. In 2010 health spending accounted for approximately _____% of the US gross domestic product.

- a. 12
- b. 17
- c. 21
- d. 33

ANS: B

13. Each cell in the human body, except the reproductive cells, contains _____ pairs of autosomal chromosomes, _____ sex chromosomes.
- a. 11, 1
 - b. 11, 2
 - c. 22, 1
 - d. 22, 2

ANS: D

14. The types of gene maps that grew out of the identification of DNA sequences include
- 1. genetic maps.
 - 2. SNP maps.
 - 3. physical maps.
- a. 1 and 2 only
 - b. 1 and 3 only
 - c. 2 and 3 only
 - d. 1, 2, and 3

ANS: B

15. The identification of common DNA pattern sequences and common patterns of genetic variations of single DNA bases resulted in
- a. the Genome Project.
 - b. genetic linkage maps.
 - c. haplotype mapping.
 - d. physical mapping.

ANS: C

16. Diseases that are present at birth from genetic or environmental factors are classified as
- a. congenital.
 - b. degenerative.
 - c. genetic.
 - d. metabolic.

ANS: A

17. A genetic disorder caused by an abnormality on one of the 22 non-sex chromosomes is considered
- a. autosomal.
 - b. dominant.
 - c. recessive.
 - d. sex linked.

ANS: A

18. A protein coat surrounding a genome of either RNA or DNA without an organized cellular structure best describes which type of microorganism?
- a. Bacteria
 - b. Fungi
 - c. Virus
 - d. All of the above

ANS: C

19. The ease with which a pathogenic organism can overcome the body's defenses best describes
- a. etiology.
 - b. infection.
 - c. pathogenesis.
 - d. virulence.

ANS: D

20. Diseases caused by the disturbance of normal physiologic function are classified as
- a. degenerative.
 - b. metabolic.
 - c. neoplastic.
 - d. traumatic.

ANS: B

21. The lymph node into which the primary neoplasm drains during metastasis is termed the _____ node.
- a. primary
 - b. sentinel
 - c. metastatic
 - d. neoplastic

ANS: B

22. The spread of cancerous cells into surrounding tissue by virtue of the close proximity best describes
- a. lymphatic spread.
 - b. hematogenous spread.
 - c. invasion.
 - d. oncogenesis.

ANS: C

23. Cancer originating in epithelial tissue is termed
- a. carcinoma.
 - b. leukemia.
 - c. lymphoma.
 - d. sarcoma.

ANS: A

24. In classification of a tumor using the TNM system, the T refers to the
- a. size of the primary tumor.

- b. lymph node involvement.
- c. distant metastasis.
- d. histologic grading of the primary tumor.

ANS: A

25. Which of the following imaging modalities are used in the staging of neoplastic tumors?
- 1. CT
 - 2. PET
 - 3. MRI
 - a. 1 and 2 only
 - b. 1 and 3 only
 - c. 2 and 3 only
 - d. 1, 2, and 3

ANS: D

26. In the treatment of neoplastic disease, interferons and interleukins are associated with
- a. chemotherapy.
 - b. radiation therapy.
 - c. hormone therapy.
 - d. immunotherapy.

ANS: D

MATCHING

Altered cell biology

Directions: Match the type of altered cell biology with the correct description.

Description of altered cell biology

- a. A generalized decrease in cell size
 - b. A generalized increase in cell size
 - c. An increase in the number of cells in tissue as a result of excessive proliferation
 - d. Conversion of one cell type into another cell type
 - e. Abnormal changes of mature cells
- 1. Hypertrophy
 - 2. Atrophy
 - 3. Metaplasia
 - 4. Hyperplasia
 - 5. Dysplasia
- 1. ANS: B
 - 2. ANS: A
 - 3. ANS: D
 - 4. ANS: C
 - 5. ANS: E

TRUE/FALSE