

## NURS 8022 EXAM 2 LATEST 2023-2024 ACTUAL EXAM QUESTIONS AND CORRECT DETAILED ANSWERS WITH RATIONALES (VERIFIED ANSWERS) |ALREADY GRADED A+

1. Which action is a purpose of the inflammatory process?
  - a. To provide specific responses toward antigens
  - b. To lyse cell membranes of microorganisms
  - c. To prevent infection of the injured tissue
  - d. To create immunity against subsequent tissue injury
  
3. Which secretion is a first line of defense against pathogen invasion that involves antibacterial and antifungal fatty acids, as well as lactic acid?
  - a. Optic tears c. Sweat gland perspiration
  - b. Oral saliva d. Sebaceous gland sebum \*epithelial, skin first line\*
  
5. What causes the edema that occurs during the inflammatory process?
  - a. Vasodilation of blood vessels c. Endothelial cell contraction
  - b. Increased capillary permeability d. Emigration of neutrophils

\*release plasma ◇ swelling and edema, inflammation induced edema\*
  
6. What process causes heat and redness to occur during the inflammatory process?
  - a. Vasodilation of blood vessels c. Decreased capillary permeability
  - b. Platelet aggregation d. Endothelial cell contraction
  
7. Activation of the classical pathway begins with:
  - a. Viruses c. Mast cells (central cell in inflammation)
  - b. Antigen-antibody complexes d. Macrophages

8. What plasma protein system forms a fibrinous meshwork at an inflamed site?
- Complement
  - Coagulation
  - Kinin
  - Fibrinolysis
9. Which component of the plasma protein system tags pathogenic microorganisms for destruction by neutrophils and macrophages?
- Complement cascade
  - Kinin system
  - Coagulation system
  - Immune system
10. What is the vascular effect of histamine released from mast cells?
- Platelet adhesion
  - Vasodilation
  - Initiation of the clotting cascade
  - Increased endothelial adhesiveness
11. What is an outcome of the complement cascade?
- Activation of the clotting cascade
  - Prevention of the spread of infection to adjacent tissues
  - Inactivation of chemical mediators such as histamine
  - Lysis of bacterial cell membranes
12. The function of opsonization related to the complement cascade is to:
- Tag of pathogenic microorganisms for destruction by neutrophils and macrophages.
  - Process pathogenic microorganisms so that activated lymphocytes can be created for acquired immunity.
  - Destroy glycoprotein cell membranes of pathogenic microorganisms.
  - Promote anaphylatoxic activity, resulting in mast cell degranulation.
13. In the coagulation (clotting) cascade, the intrinsic and the extrinsic pathways converge at which factor?
- XII
  - X
  - VII
  - V
14. Which chemical interacts among all plasma protein systems by degrading blood clots, activating complement, and activating the Hageman factor?
- Kallikrein
  - Bradykinin
  - Histamine
  - Plasmin
15. The chemotactic factor affects the inflammatory process by:
- Causing vasodilation around the inflamed area
  - Stimulating smooth muscle contraction in the inflamed area
  - Directing leukocytes to the inflamed area
  - Producing edema around the inflamed area

16. What affect does the process of histamine binding to the histamine-2 (H2) receptor have on inflammation?

- a. **Inhibition** c. Acceleration
- b. Activation d. Termination

17. Frequently when H1 and H2 receptors are located on the same cells, they act in what fashion?

- a. Synergistically c. **Antagonistically**
- b. Additively d. Agonistically

18. Some older adults have impaired inflammation and wound healing because of which problem?

- a. Circulatory system cannot adequately perfuse tissues.
- b. Complement and chemotaxis are deficient.
- c. **Underlying chronic illness(es) exists.**
- d. Number of mast cells is insufficient.

\*19. Which chemical mediator derived from mast cells retracts endothelial cells to increase vascular permeability and to cause leukocyte adhesion to endothelial cells?

- a. Leukotrienes c. **Platelet-activating factor**
- b. Prostaglandin E d. Bradykinin

20. What is the inflammatory effect of nitric oxide (NO)?

- a. Increases capillary permeability, and causes pain.
- b. Increases neutrophil chemotaxis and platelet aggregation.
- c. Causes smooth muscle contraction and fever.
- d. **Decreases mast cell function, and decreases platelet aggregation.**

21. What is the correct sequence in phagocytosis?

- a. Engulfment, recognition, fusion, destruction
- b. Fusion, engulfment, recognition, destruction
- c. **Recognition, engulfment, fusion, destruction**
- d. Engulfment, fusion, recognition, destruction

22. When considering white blood cell differentials, acute inflammatory reactions are related to elevations of which leukocyte?

- a. Monocytes c. **Neutrophils**
- b. Eosinophils d. Basophils

23. In the later stages of an inflammatory response, which phagocytic cell is predominant?

- a. Neutrophils c. Chemokines

b. Monocytes d. Eosinophils

24. In regulating vascular mediators released from mast cells, the role of eosinophils is to release:

- a. Arylsulfatase B, which stimulates the formation of B lymphocytes
- b. Histaminase, which limits the effects of histamine during acute inflammation
- c. Lysosomal enzymes, which activate mast cell degranulation during acute inflammation
- d. Immunoglobulin E, which defends the body against parasites

25. What is the role of a natural killer (NK) cells?

- a. Initiation of the complement cascade
- b. Elimination of malignant cells
- c. Binding tightly to antigens
- d. Proliferation after immunization with antigen

26. Which cytokine is produced and released from virally infected host cells?

- a. IL-1 c. TNF-D
- b. IL-10 d. IFN-D

27. IFN-D is secreted from which cells?

- a. Virally infected cells c. Macrophages
- b. Bacterial infected cells d. Mast cells

28. Which manifestation of inflammation is systemic?

- a. Formation of exudates c. Redness and heat
- b. Fever and leukocytosis d. Pain and edema

29. The acute inflammatory response is characterized by fever that is produced by the hypothalamus being affected by:

- a. Endogenous pyrogens c. Antigen-antibody complexes
- b. Bacterial endotoxin d. Exogenous pyrogens

\*34. Many neonates have a transient depressed inflammatory response as a result of which condition?

- a. The circulatory system is too immature to perfuse tissues adequately.
- b. Complement and chemotaxis are deficient.
- c. Mast cells are lacking.
- d. The respiratory system is too immature to deliver oxygen to tissues.

35. During phagocytosis, what is occurring during the step referred to as opsonization?

- a. Phagocytes recognize and adhere to the bacteria.
- b. Microorganisms are ingested.
- c. Microorganisms are killed and digested.