1. One of the following statements about cellular adaptations is false:
   *In physiologic hypertrophy, the beta form of myosin heavy chain is replaced by the
   more energetically economical alpha form

2. One of the following processes is irreversible:
   *Myocardial infarction

3. The causative agent of skin wart is:
   *Human papilloma virus

4. One of the following statements about metaplasia is false:
   *The most common cause of squamous metaplasia of respiratory epithelium is
   alcohol

5. The most common cause of hypoxia is:
   *Ischemia

6. One of the following is not a cause of ascites due to decreased blood colloid
   osmotic pressure:
   *Heart failure

7. Which of the following diseases does have single etiology:
   *Measles

8. At which time after ischemia does the cardiac myocyte necrosis appear on light microscope:
   *6-12 hours
9. One of the following is not a feature of reversible injury:
* Extensive membrane damage

10. The first manifestation of cell injury is:
* Cellular swelling

11. One of the following statements about specific patterns of necrosis is false:
* Coagulative necrosis appears as a granular pink material of lysed cells on light microscopy

12. The enzyme that is responsible for the formation of HOCL from O2- is:
* Myeloperoxidase

13. Which of the following is protective from free radical injury:
* All of the above

14. One of the following doesn’t occur in cell injury:
* Decreased mitochondrial permeability

15. One of the following statements about necrosis and apoptosis is false:
* Apoptosis in embryogenesis is pathological

16. One of the following statements about apoptosis is false:
* Adenovirus cannot induce apoptosis directly in infected cells

17. One of the following is an anti-apoptotic molecule:
* Bcl-2

18. Which of the following components does mainly act in the mitochondrial pathway of apoptosis:
* Cytochrome c

19. One of the following statements about p53 is false:
* It activates cell proliferation

20. One of the following disease-protein combinations is false:
* Alzheimer---------hexosaminidase beta subunit
21. The most common cause of hypercalcemia in outpatients is:
*Primary hyperparathyroidism

22. Mallory hyaline bodies are composed of:
*Keratin

23. Hyaline cytoplasmic droplets that are seen in the kidney tubules in nephrotic syndrome are composed of:
*Protein

24. One of the following statements about lipofuscin is false:
*It is a major cause of membrane damage

25. One of the following statements about calcification is false:
*Dystrophic calcification is usually a cause of cell injury

26. One of the following is associated with increased aging process:
*Decreased Sir2

27. The most important factor in angiogenesis among the following is:
*Vascular endothelial growth factor

28. One of the following is not a feature of proteasome:
*It activates caspase 8 which activates IL-1

29. The most important factor for increased transcytosis of proteins through endothelial cells in inflammation is:
*Vascular endothelial growth factor

30. One of the following combinations is false:
*LFA-1---------rolling

31. Which of the following does describe the sequence of leukocyte recruitment:
*Margination-Rolling-Stable adhesion-Transmigration

32. The leukocyte that predominates after 24-48 hours of inflammation is:
*Monocyte/macrophage
33. One of the following combinations is false:
*Chronic granulomatous disease----------defective adhesion and chemotaxis

34. Which of the following leukotrienes is especially chemotactic for neutrophils:
*Leukotriene B4

35. One of the following causes vasoconstriction:
*Thromboxane A2

36. Which of the following is associated with increased vascular permeability:
*All of the above

37. Which of the following is not one of the effects of platelet-activating factor:
*Vasoconstriction

38. One of the following is not one of CC chemokines:
*IL-8

39. Which of the following is one of the neuropeptide features:
*All of the above

40. Macular degeneration of the eye is associated with deficiency of which of the following:
*Factor H

41. Paroxysmal nocturnal hemoglobinuria is caused by deficiency of which of the following:
*Decay accelerating factor

42. One of the following has a major anti-inflammatory function:
*IL-10

43. One of the following is especially important in fibrosis:
*TGF-beta

44. The lymphocyte that is especially important for neutrophil activation:
*TH17
45. One of the following is not of systemic manifestations of inflammation:

* Decreased blood pressure

46. Which of the following is an acute phase reactant:

* All of the above

47. Which of the following can be associated with leukopenia:

* All of the above

48. One of the following is less associated with the classical pathway of macrophage activation:

* IL-4

49. One of the following is less associated with the alternative pathway of macrophage activation:

* IFN-gamma

50. The complement component that is most associated with opsonization among the following is:

* ...
*C3b