**Question 1**

Which is NOT true regarding the kinin system?

Select one:

a. Kallikrein directly converts C5 to C5a

b. Kallikrein converts high molecular weight kininogen into bradykinin

c. Kallikrein is an inhibitor of Hageman factor, providing a negative feedback loop

d. Kallikrein has chemotactic activity

Answer C. Robbins 8th Edition pg 65 "potent activator of Hageman factor"

**Question 2**

With regards to chemical mediators in inflammation, which is NOT true?

Select one:

a. Interleukin 1 and prostaglandins are involved in fever production

b. Complement components C3 and C5 are key factors

c. Activated Factor XII initiates clotting, fibrinolytic and kinin systems

d. Leukotrienes formed via the cyclo-oxygenase pathway are potent in chemotaxis and in increasing vascular permeability

Answer D. Robbins 8th Edition pg 58 figure 2-11

**Question 3**

With regard to the role of nitric oxide as an inflammatory mediator:

Select one:

a. It acts only on cells in close proximity to its release

b. It is a primary chemotactant for macrophages

c. It is responsible for activating macrophages

d. It has important platelet aggregating effects

Answer A. Robbins 8th Edition pg 60 "acts only on cells in close proximity"

**Question 4**

Mediators of increased vascular permeability include all EXCEPT:

Select one:

a. Complement C5b

b. Bradykinin

c. Leukotriene E4

d. Leukotriene C4

Answer A. Robbins 8th Edition pg 63 "C5b binds the late components, resulting in the formation of the MAC"

**Question 5**

Which is INCORRECT in regard to the complement system?

Select one:

a. C5a is a powerful chemotactic agent

b. C3b can opsonise bacteria

c. Fixation of C1 to the Fc portion of an antibody triggers the classical pathway

d. MAC is the only active product of complement activation

Answer D. Robbins 8th Edition pg 64 figure 2-14

**Question 6**

Which is the most common mechanism of vascular leakage in acute inflammation?

Select one:

a. Leukocyte-dependant leakage

b. Formation of endothelial gaps in venules

c. Direct injury

d. Regenerating endothelium

Answer B Robbins 8th Edition pg 47 "increased interendothelial spaces"

**Question 7**

Interleukin 1 causes:

Select one:

a. Increased collagen synthesis

b. Decreased sleep

c. Decreased prostaglandin synthesis

d. Neutropenia

Answer A. Robbins 8th Edition pg 62 figure 2-13

**Question 8**

In acute inflammation, which is INCORRECT?

Select one:

a. Platelet activating factor increases leukocyte chemotaxis and activation

b. IL-1 and IL-8 may cause mast cell degranulation

c. IL-8 increases leukocyte chemotaxis and activation

d. Mast cells release serotonin in humans

Answer D. Robbins 8th Edition pg 58 "in mast cells in rodents but not humans"

**Question 9**

With regard to the complement system

Select one:

a. C5a stimulates arachidonic acid metabolism

b. The alternate pathway is activated by Ag-Ab complex

c. C3b is responsible for negative feedback on C3 convertase

d. C3a is chemotactic to most leukocytes

Answer A. Robbins 8th Edition pg 64 "C5a"

**Question 10**

Which is INCORRECT regarding the acute inflammatory response?

Select one:

a. Leukocyte margination in blood vessels is mainly due to stasis

b. Stasis is the result of vasoconstriction of the venules

c. Transudate formation is due in part to a fall in colloid oncotic pressure

d. Transudate formation is partly due to an increase in hydrostatic pressure

Answer B Robbins 8th Edition pg 46 "loss of fluid and increased vessel diameter leads to stasis"