**Question 1**

All are causes of cell injury EXCEPT

Select one:

a. Hypoxia

b. Homeostasis

c. Trauma

d. Genetic defects

Answer B. Robbins 8th Edition pg 11

**Question 2**

Which is a recognized mechanism of cell membrane damage in hypoxic injury?

Select one:

a. Lipid byproducts of cell membrane breakdown, only toxic to cell membranes if converted to free radicals

b. Activation of intracellular lipases causing damage to the cytoskeleton

c. Activation of membrane phospholipases in response to low levels of calcium

d. Toxic oxygen radicals produced primarily by local cells

Answer A. Robbins 8th Edition pg 22 Figure 1-21

**Question 3**

Which of the following is NOT a feature of reversible cell injury?

Select one:

a. Clumping of nuclear chromatin

b. Blebs at the cell surface

c. Rupture of lysosomes

d. Mitochondrial swelling

Answer C. Robbins 8th Edition pg 13 figure 1-8

**Question 4**

Hyperplasia:

Select one:

a. Occurs after partial hepatectomy Correct. Robbins 8th Edition pg 8

b. Often occurs in cardiac and skeletal muscle

c. Refers to an increase in the size of cells

d. Usually progresses to cancerous proliferation

**Question 5**

Select the correct sequence of events seen in reversible cell injury:

Select one:

a. Hypoxia → loss of oxidative phosphorylation → cellular oedema → ↓ ATP generation → detachment of ribosomes from the endoplasmic reticulum

b. Hypoxia → detachment of ribosomes → loss of oxidative phosphorylation → ↓ ATP generation → cellular oedema

c. Hypoxia → cellular oedema → detachment of ribosomes → loss of oxidative phosphorylation → ↓ ATP generation

d. Hypoxia → loss of oxidative phosphorylation → ↓ ATP generation → cellular oedema → detachment of ribosomes

Answer D. " " pg 7

**Question 6**

An example of an antioxidant is:

Select one:

a. Nitric oxide

b. Cytochrome p450

c. Superoxide

d. Glutathione peroxidase

Answer D. Robbins 8th Edition pg 21

**Question 7**

Concerning coagulative necrosis:

Select one:

a. It is characteristic of focal bacterial infections

b. It is characteristic of hypoxic death of cells in the brain

c. It is the process behind caseous necrosis

d. It is brought about by enzymatic digestion of the cell

Answer C. Robbins 8th Edition pg 15

**Question 8**

In hypoxic cell injury, swelling of the cells occurs because:

Select one:

a. Intracytoplasmic glycogen increases

b. Water enters the cell

c. Intracytoplasmic proteins accumulate

d. Intracytoplasmic liquids accumulate

Answer B. Robbins 8th Edition pg 13

**Question 9**

Which change is NOT specifically associated with irreversible cell injury?

Select one:

a. Large amorphous densities within the mitochondrial matrix

b. Damage to plasma membranes

c. Lysosomal membrane injury

d. Clumping of nuclear chromatin

Answer D. Robbins 8th Edition pg 13 figure 1-8

**Question 10**

A patient presents with a greater muscle mass in one lower limb than the other. Possible explanations include all of the following EXCEPT:

Select one:

a. Ischaemia of the smaller limb

b. Muscular atrophy in the smaller limb

c. Muscular hyperplasia in the larger limb

d. Damage to motor nerves of the smaller limb

Answer C. Robbins 8th Edition pg 8