

Pathology Week 1

1. In hypoxic cell injury, cell swelling occurs because of increased intracellular:

- Answer A** lipid
- Answer B** protein
- Answer C** glycogen
- Answer D** lipofuscin
- Answer E** water

2. Which of the following is a feature of apoptosis?

- Answer A** Karyolysis
- Answer B** Cellular swelling
- Answer C** Involvement of a large number of cells
- Answer D** Chromatin condensation
- Answer E** Associated inflammatory changes

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

- Answer A** Cellular swelling
- Answer B** Reduction of ATP synthesis
- Answer C** Reduced cellular pH
- Answer D** Clumping of nuclear chromatin
- Answer E** Defects in cell membrane

4. Fatty change:

- Answer A** Is irreversible
- Answer B** Does not impair cellular function
- Answer C** Is most commonly due to diabetes
- Answer D** Is caused by alcohol by an increase in intracellular alpha glycerol phosphate
- Answer E** Only occurs in the liver

5. Metastatic calcification:

- Answer A** Is encountered in areas of necrosis.
- Answer B** Can be associated with metastatic malignancy.
- Answer C** Can occur with normal serum levels of calcium.
- Answer D** Commonly develops in aging or damaged heart valves.
- Answer E** Is commonly associated with hypoparathyroidism.

6. Regarding apoptosis, which of the following is FALSE?

- Answer A** It is the responsible for programmed destruction of cells during embryogenesis.
- Answer B** Occurs in pathologic atrophy in parenchymal organs after duct destruction.
- Answer C** Cell death by cytotoxic T cells.
- Answer D** Associated with inflammation
- Answer E** Chromatin condensation and fragmentation are features.

7. With regard to mechanisms of cellular adaptation, which of the following statements is TRUE?

- Answer A** Hyperplasia refers to an increase in cell size.
- Answer B** TNF always acts as an inhibitor of hyperplasia.
- Answer C** Barrett's metaplasia is squamous to columnar epithelium in the distal oesophagus
- Answer D** Metaplasia is irreversible.
- Answer E** The myocardium adapts to increased workload by hypertrophy and hyperplasia.

Answers Pathology Week 1

- 1. E**
- 2. D**
- 3. E**
- 4. D**
- 5. B**
- 6. D**
- 7. C**