1. Which change is still reversible?

   ☐ Enzymes leaking into the blood

   ☐ Calcium flooding the mitochondria

   ☐ Cell swelling from a failing Na^+/K^+ pump

   ☐ Ruptured cell membranes

2. Which cell dominates acute inflammation?

   ☐ Lymphocyte

   ☐ Plasma cell

   ☐ Neutrophil

   ☐ Fibroblast

3. At a capillary's arterial end, hydrostatic pressure is 32 mmHg and plasma oncotic pressure is 25 mmHg (ignore tissue pressures). What is the net outward pressure?

   _____ mmHg

4. Which feature proves a tumour is malignant?

   ☐ Metastasis

   ☐ A capsule

   ☐ Large size

   ☐ Slow growth

5. Which plaque is most likely to rupture?

   ☐ Thin cap, large lipid core, many inflammatory cells

   ☐ Any plaque narrowing the artery by over 70%

   ☐ Thick cap, small core, heavily calcified

   ☐ A fatty streak in a teenager

6. Which pair defines cirrhosis?

   ☐ Fatty change and swelling

   ☐ A single large tumour

   ☐ Bridging fibrosis and regenerative nodules

   ☐ Granulomas and caseation

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_____ %

8. Apoptosis causes a strong inflammatory reaction.

   ☐ True ☐ False

9. Granulation tissue is a kind of granuloma.

   ☐ True ☐ False

10. Lung infarcts are usually pale.

    ☐ True ☐ False

1. **Cell swelling from a failing Na^+/K^+ pump**

   Swelling and fatty change reverse when oxygen returns; membrane damage does not.

2. **Neutrophil**

   Neutrophils arrive first and in the greatest numbers.

3. **7 mmHg**

   $32 - 25 = 7$ mmHg pushing fluid out.

4. **Metastasis**

   Only malignant tumours metastasise.

5. **Thin cap, large lipid core, many inflammatory cells**

   Vulnerability depends on the cap and core, not the size.

6. **Bridging fibrosis and regenerative nodules**

   Scar and nodules across the whole liver.

7. **5 %**

   The interval holds the central 95%, so 2.5% on each side fall outside.

8. **False**

   Apoptotic fragments are eaten quietly; it is necrosis that leaks and inflames.

9. **False**

   Granulation tissue is repair tissue of fibroblasts and new vessels; a granuloma is a cluster of macrophages.

10. **False**

    The lung has two blood supplies and loose tissue, so its infarcts fill with blood and are red.

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