Solutions

2.1

- The fatty streak – foam cells in the intima ✓.

2.2

- Rises 3–4 h after injury, stays elevated ~7–10 days ✓.

2.3

- FEV1/FVC < 0.70 ✓.

3.1

- 2 h: before the 3–4 h rise window – a normal value does not exclude; repeat ✓.
- 6 h: troponin raised – myocyte death confirmed ✓.
- Second event at day 2: CK-MB (1–3 day curve) rises again while troponin still rides the first ✓.
- Pattern: coagulative – solid organ, slow proteolysis keeps outlines ✓.

3.2

- A: $1.6/4.0 = 0.40 \rightarrow$ obstructive ✓.
- B: $1.8/2.0 = 0.90$, both low $\rightarrow$ restrictive ✓.
- Emphysema: alveolar walls destroyed $\rightarrow$ elastic recoil falls $\rightarrow$ airways collapse on expiration $\rightarrow$ FEV1 collapses more than FVC ✓.