

Solutions

2.1

- *P. malariae* – quartan, bursting every 72 h ✓.

2.2

- A dimorphic fungus; the switch is thermal dimorphism ✓.

2.3

- *Aspergillus* ✓.

3.1

- Crescent (banana) gametocytes → *P. falciparum* ✓.
- Parasitaemia 3 % of erythrocytes – graded from the film in one look ✓.
- Falciparum synchronises poorly → irregular fevers, not textbook tertian.
- Cytoadherence sequesters infected cells in deep vasculature → organ disease: the killer ✓.

3.2

- 25 °C mould = environmental form; 37 °C yeast = tissue form ✓.
- The mould in soil/dust names the exposure route (inhalation of spores from disturbed environment).
- The yeast is what grows in the patient – diagnostics (culture at 37 °C, tissue forms) must target the tissue phase ✓.