



QUESTION WORKBOOK

Cell structure: what each organelle is shaped for

Cells, microscopy and biological organisation · Unit B01

AQA 3.2.1.1 · OCR A 2.1.1 (d)–(f) · Edexcel A Topic 3.1–3.5 · CAIE 1.2

5 questions · 16 marks

PRINT EDITION

SECTION A · Short, 1 to 2 marks

- A1** State one function of smooth endoplasmic reticulum, and state the one structural feature that distinguishes it from rough endoplasmic reticulum. [2]

SECTION B · Standard, 3 to 5 marks

- B1** Compare the structure of a mitochondrion with the structure of a chloroplast. [4]

- B2** Explain why the enzymes of a lysosome must be kept behind a membrane, and explain how those enzymes reach the lysosome after they have been made. [4]

- B3** Describe the structure of the Golgi apparatus, and describe what happens to a protein while it passes through it. [3]

- B4** An electron micrograph of a cell from the adrenal gland shows very little rough endoplasmic reticulum but an unusually large amount of smooth endoplasmic reticulum. The adrenal gland releases steroid hormones. Suggest an explanation for these two observations. [3]
