1.2 Cells: Origin & Ultrastructure

Question Paper

Course	DP IB Biology
Section	1. Cell Biology
Topic	1.2 Cells: Origin & Ultrastructure
Difficulty	Easy

Time allowed: 10

Score: /5

Percentage: /100

Question 1

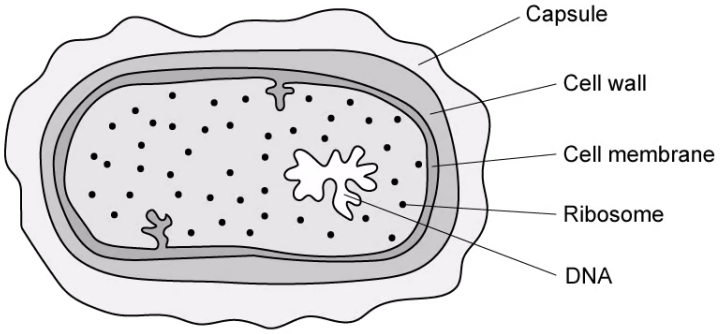
Which row correctly compares the magnification and resolution of an electron microscope with a light microscope?

	Magnification	Resolution
A.	Lower	Higher
B.	Higher	Lower
C.	Higher	Higher
D.	Lower	Lower

[1 mark]

Question 2

The diagram shows a type of prokaryotic cell, a bacterium.



Which three structures are found in **both** an animal cell and this bacterium cell?

A. cell membrane, cell wall and DNA

B. cell membrane, DNA and ribosome

C. capsule, DNA and ribosome

D. capsule, cell membrane and cell wall

[1 mark]

Question 3

Which of the following can **not** be viewed using a light microscope?

A. Nucleus

B. Cell wall

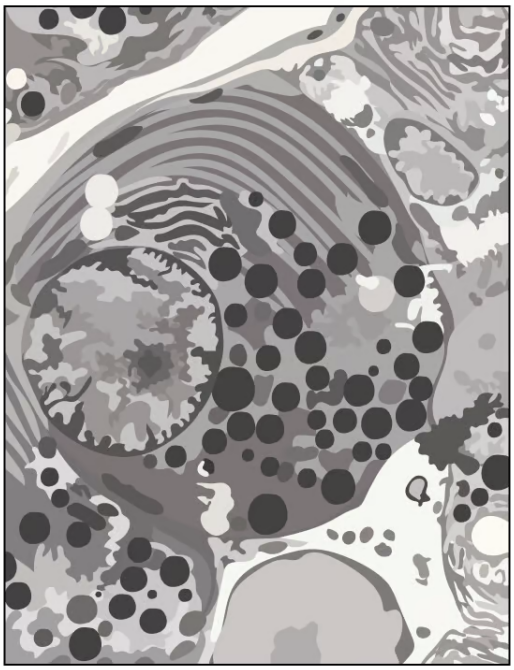
C. Chloroplasts

D. Ribosomes

[1 mark]

Question 4

The image below shows an electron micrograph of a specialised cell.



Based on the image, which of the following would correctly identify the function of this specialised cell?

A. This is a cell found in a gland that secretes enzymes for digestion.

B. This is a cell that carries out photosynthesis in the leaf of a plant.

C. This is a cell that transports oxygen around the body in the blood.

D. This is a cell that absorbs nutrients from digested food and transports them into the food in the small intestine.

[1 mark]

Question 5

Which of the following correctly identifies the process that allows prokaryotic cells to reproduce?

A. Mitosis

B. Binary fission

C. Fertilisation

D. Meiosis

[1 mark]