

A Level Biology A
H420/02 Biological Diversity

Question Set 7

1 (a)



Fig. 16

(i) Fig. 16 shows 6 onion cells at various stages of mitosis.

Name the stage of mitosis shown in cell **A**.

[1]

(ii) Fig. 16 shows 6 onion cells at various stages of mitosis.

In the space provided below draw cell **A**. Label your drawing to show visible features.

[4]

(b) (i) Fig. 16 shows 6 onion cells at various stages of mitosis.

The volume of cell **A** is $5.4 \times 10^4 \mu\text{m}^3$.

Assume that cell **B** is spherical. Calculate the volume of cell **B**.

Use the formula: volume of sphere = $\frac{4}{3}\pi r^3$

Give your answer in standard form in μm^3 .

Answer.....

[3]

(ii) Fig. 16 shows 6 onion cells at various stages of mitosis.

State the type of microscope that was used to view these images. Justify your answer.

[2]

(iii) Mitosis is involved in growth and repair of tissues.

State **two** other roles of mitosis in multicellular organisms.

1

2

[1]

Total Marks for Question Set 7: 11

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