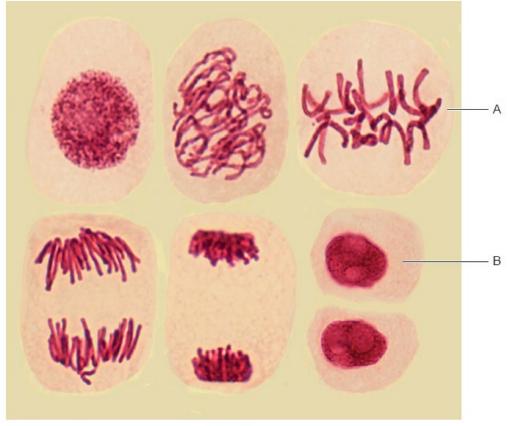


A Level Biology A H420/02 Biological Diversity

Question Set 7

1 (a)



×1000

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 $5.4 \times 10^4 \mu m^3$.	
		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 μ m 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]

[1]

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

State two other roles of mitosis in multicellular organisms.

2

Total Marks for Question Set 7: 11



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