Answer all the questions.

1 Fig. 1.1 shows a student's diagrams of two plant cells. Each cell was observed using a different type of microscope. The cells are not drawn to scale.

(a)

Fig. 1.1

Cell A

Cell B

(i)	Cell B in Fig. 1.1 was observed using an electron microscope.
	Give one piece of evidence from Fig. 1.1 that supports this.
	[1]
(ii)	Give one way that an image produced by a laser scanning confocal microscope differs from that produced by an electron microscope.
	[1]

(b) Meiosis is a type of nuclear division.

Fig. 1.2 shows a photomicrograph of plant cells undergoing meiosis.

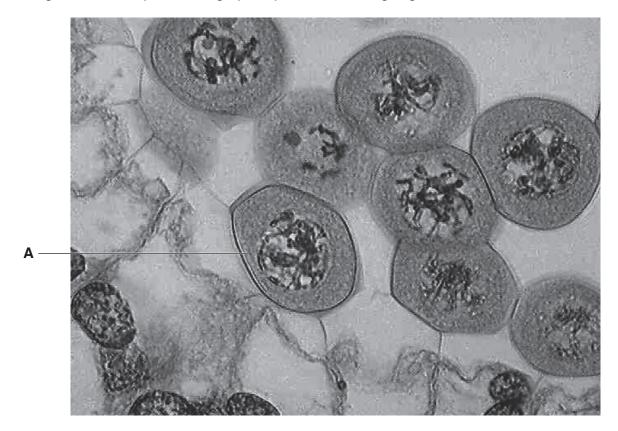


Fig. 1.2

(i)	Identify the stage of meiosis 1 shown in the cell labelled A.				
		[1]			
(ii)	Based only on your observations of Fig. 1.2, state two reasons for your answe (b)(i) .	ər ir			
		[5]			

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	(,	Another stage of melosis is metaphase 1.	
		Explain how the organisation of homologous chromosomes during metaphase increases genetic variation.	: 1
			[3]
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