

Unit SN2 (6132)

Question 1

Maximum mark

- (a) (i) Anaphase ; 1 mark
- (ii) The cells have just divided / new(ly formed) cells / eq ; 1 mark
- (iii) Because this stage of mitosis (anaphase) is {very short / over very quickly / quicker than other stages of mitosis} / only a small part of mitosis ; 1 mark
- (iv) Cells are {in interphase / in S-phase / between G1 and G2 / between one cell division and another / between mitotic divisions} / {chromosomes / DNA} {not condensed / unravelled} / section not through nucleus ; 1 mark
- (b) (i) (existing) DNA is copied / new DNA formed ;
Correct reference to {base pairing / formation of chromatids} ;
Correct reference to semi conservative replication ;
Correct reference to DNA polymerase ; 2 marks
- (ii) During interphase / during S phase / between G1 and G2 / between one cell division and the next / between mitotic divisions ; 1 mark
- (c) Three separate chromosomes shown ;
Each chromosome one chromatid ; 2 marks

Total 9 marks