17.1 Inheritance

Question Paper

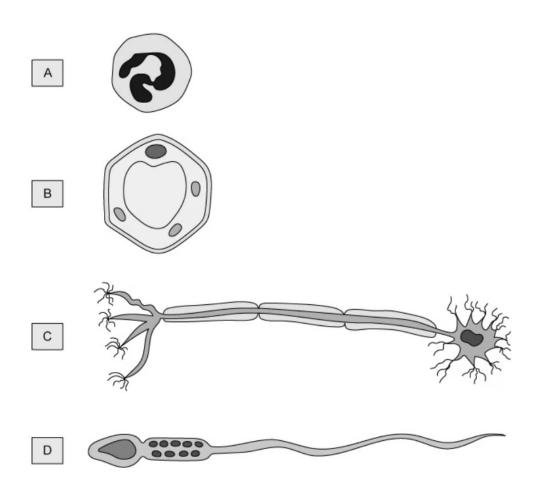
Course	CIEIGCSEBiology	
Section	17. Inheritance	
Topic	17.1 Inheritance	
Difficulty	Medium	

Time allowed: 10

Score: /6

Percentage: /100

New cells are formed by cell division of existing cells. The diagram below shows four different cells. Which one is formed by meiosis?

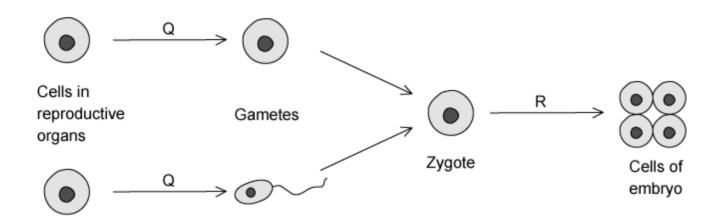


Albinism is a condition where the pigment melanin does not get produced in the skin, hair and eyes. This is an inherited condition that is caused by a recessive allele.

If both parents have albinism what are the chances of the offspring being an albino child?

A 0% **B** 25% **C** 75% **D** 100%

The diagram below shows the process of sexual reproduction.



Which of the processes are shown by stages Q and R?

	Q R		
Α	meiosis mitosis		
В	mitosis mitosis		
С	meiosis	meiosis meiosis	
D	mitosis	meiosis	

	What	does	the	term	haploid	mean?
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- A nucleus containing two sets of chromosomes
- **B** A nucleus containing a single set of chromosomes
- **C** A person with only one X chromosome
- **D** A person with XXY chromosomes

[1 mark]

Question 5

When a somatic (body) cell undergoes cell division, two daughter cells are produced with the same chromosome number as the parent cell.

Which type of division has taken place?

- A Meiosis producing genetically different cells.
- **B** Mitosis producing genetically identical cells.
- **C** Meiosis producing genetically identical cells.
- **D** Mitosis producing genetically different cells.

Two individuals are crossed.

One is homozygous dominant (TT), the other heterozygous.

What will the genotypes of the offspring be?

Α	all Tt
В	50% TT, 50% Tt
С	50% TT, 50% tt
D	25% TT, 50% Tt, 25% tt