

# 16. Reproduction

## 16.6 Sexually transmitted infections

### Paper 3 and 4

#### Question Paper

**Questions are applicable for both core and extended candidates**

- (i) State the words that the letters HIV represent.

..... [1]

- [3]

(b) Chlamydia, gonorrhoea and syphilis are sexually transmitted infections (STIs).

Table 7.1 shows the numbers of people infected with these STIs in one country from 2014 to 2018.

Table 7.1

year	number of people infected		
	chlamydia	gonorrhoea	syphilis
2014	1 400 000	350 000	19 000
2016	1 600 000	468 000	27 000
2018	1 800 000	583 000	35 000

(i) The list shows some conclusions.

Place ticks (✓) in the boxes to identify **two** correct conclusions for the data shown in Table 7.1.

In 2014, there were 1 050 000 more people infected with chlamydia than were infected with gonorrhoea in 2014.	
In 2016, the number of people infected with chlamydia was three times greater than the number of people infected with gonorrhoea.	
In 2018, more people were infected with syphilis than with gonorrhoea.	
The number of people with STIs has increased each year.	
Between 2016 and 2018, the number of people infected with syphilis increased by 16 000.	

[2]

(ii) Syphilis can be treated with antibiotics.

Suggest the type of organism that causes syphilis.

..... [1]

[Total: 7]

2 (b) HIV infection is an example of an STI.

(i) State the name of the type of pathogen that causes an HIV infection.  
..... [1]

(ii) Describe how HIV can be transmitted.  
.....  
.....  
.....  
.....  
.....  
.....  
..... [3]

3 (a) HIV is a pathogen that can cause AIDS.

Table 3.1 shows the adult population size of a country and the estimated number of people infected with HIV/AIDS in that country in 2016.

Data for six countries are shown.

Table 3.1

country	adult population size	estimated number of adults infected with HIV/AIDS
A	808 824	220 000
B	248 490	8 200
C	221 000	221
D	3 250 000	130 000
E	5 111 111	46 000
F	1 333 333	48 000

(i) State which country in Table 3.1 had the greatest number of adults infected with HIV/AIDS.

..... [1]

(ii) Calculate the percentage of adults in country **B** that were infected with HIV/AIDS.  
Give your answer to one decimal place.

..... %  
[2]

(iii) State why antibiotics are **not** effective against HIV.  
.....  
.....  
..... [1]

Paper 4

Questions are applicable for both core and extended candidates

- 4 (a) Chlamydia is a sexually transmitted infection (STI) that is caused by a bacterium.

Fig. 2.1 shows the number of chlamydia cases in a country in 2018.

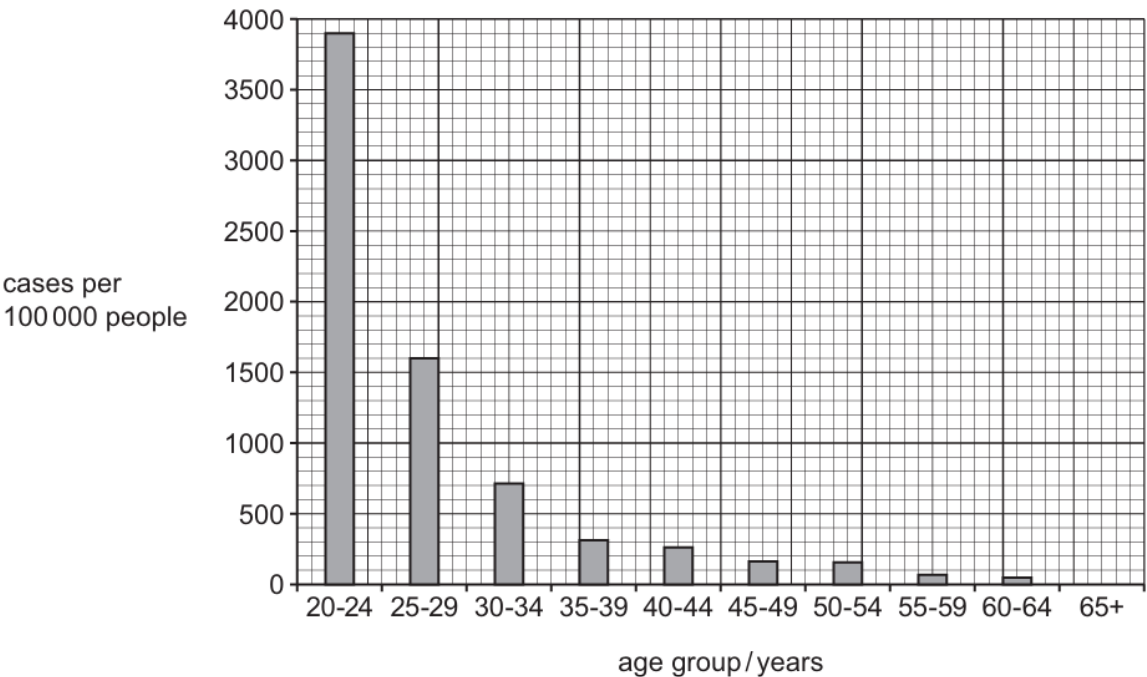


Fig. 2.1

- (i) Calculate the percentage decrease in the number of chlamydia cases between the age groups 20–24 and 25–29.

Give your answer to **two** significant figures.

Space for working.

.....% [3]

[4]