## <u>Disease and immunity – 2022 June O Level 5090</u>

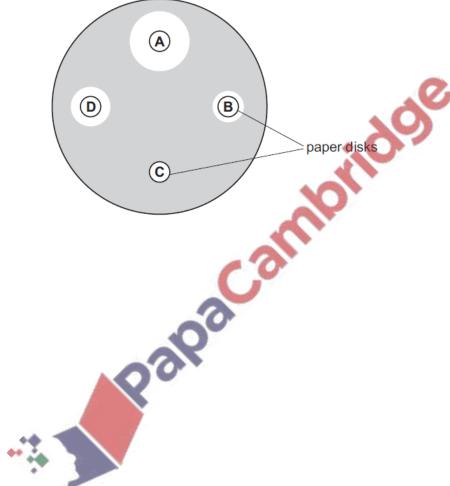
## 1. June/2022/Paper 11/No.27

A patient has a bacterial infection. A sample of the bacteria is taken to identify which antibiotic to use for this patient.

The sample from the patient is spread evenly on an agar plate. Small paper disks soaked in each of four antibiotics are placed on the agar plate which is kept warm overnight.

The diagram shows the results of the test. The shaded area shows where bacteria have grown.

Which antibiotic is the most effective against these bacteria?



## 2. June/2022/Paper 11/No.31

Malaria is spread by the .....1..... which acts as a .....2..... for the disease.

Which terms correctly complete the sentence?

	1	2
Α	bacterium	parasite
В	bacterium	vector
С	mosquito	parasite
D	mosquito	vector

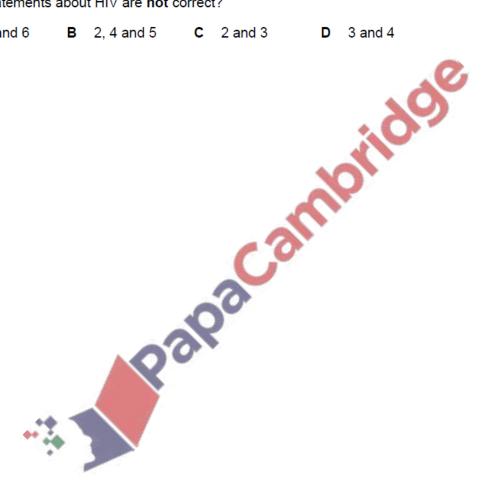
## **3.** June/2022/Paper\_12/No.35

Some statements about the human immunodeficiency virus (HIV) are listed.

- 1 Its spread can be reduced by using condoms.
- 2 It can pass across the placenta.
- 3 It can be spread by coughing or sneezing.
- It is the same as AIDS. 4
- 5 It is transmitted in blood and semen.
- Its spread can be reduced by screening donated blood.

Which statements about HIV are **not** correct?

**A** 1, 3 and 6 **B** 2, 4 and 5



(b) (	i)	Human immunodeficiency virus (HIV) is one type of virus.					
		Describe	Describe how HIV is transmitted.				
					[3]		
			e shows the numbers of people treatment in different years.	infected with HIV globally and th	e numbers		
		year	millions of people infected with HIV	millions of people receiving treatment for HIV			
	2	2000	24.9	0.77			
	2	2010	31.7	7.7			
	2	2015	35.6	17.0			
	2	2018	37.9	23.3			
(i	ii)		information in the table to describ ted between the years 2000 and 2	e changes in the numbers of peopone 018.			

[3]

**4.** June/2022/Paper\_21/No.6(b)