

GCSE Biology A (Gateway)

J247/01 B1-B3 and B7 Foundation (Foundation Tier)

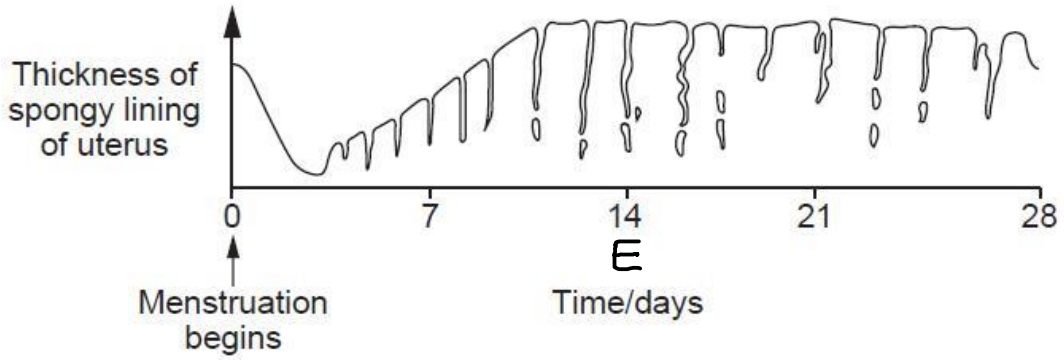
Question Set 15

1 (a) How are hormones transported around the body? [1]
In the blood stream.

(b) Finish these sentences to explain what is happening in the body of a female during the menstrual cycle.
The pituitary gland in thebrain..... releases the hormone FSH.
FSH causes anegg..... to mature in a follicle.
FSH also causes the follicle to release the hormoneoestrogen.....
After ovulation, the empty follicle releases another hormone called
Progesterone

[4]

(c) The diagram shows how the lining of the uterus changes during the menstrual cycle.



(i) Mark on the diagram with the letter **E** the most likely point when ovulation occurs. [1]

(ii) If a fertilised egg is **not** present, a change happens to the uterus lining after 28 days.

How does the uterus lining change? [1]

The lining breaks down.

(d)*

The table shows the effectiveness of some different forms of contraception.

Form of contraception	Percentage pregnancies per year (%)
Hormonal	
Injection	<1
Patch	<1
Pill	2
Non-hormonal	
Diaphragm	6
Male condom	2
Male sterilisation	<1

Suggest explanations for the differences in the effectiveness of the methods of contraception and explain why the pill is a popular method.

[6]

As can be seen in the table hormonal methods are more reliable than non-hormonal methods. For example the pill has a percentage of 2 pregnancies per year whereas diaphragm has 6% more and stands at 6% per year. This is because hormonal methods like the pill prevent ovulation while non-hormonal methods like the diaphragm are barrier methods. So reliability is higher for hormonal methods like the pill. This is one reason why it is more popular. This is proven further as the patch produces <1% pregnancies per year compared to condoms 2% per year. Yet another reason why the pill is more popular is because it is easier to use and apply than other hormonal methods like the patch. Finally the pill is more appealing as it allows people to reverse their decision unlike sterilisation.

Total Marks for Question Set 15: 13

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