

(Hormones in reproduction (menstrual cycle, FSH, LH, oestrogen, contraception, fertility treatments))

Q1.a)(2018)

Figure 2 shows some changes that occur during the menstrual cycle.

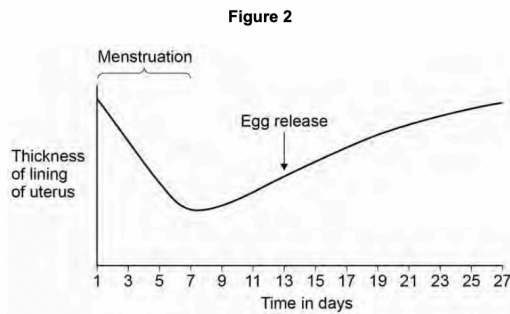


Figure 2 shows that the lining of the uterus thickens between days 7 and 27.

What is the purpose of thickening the lining of the uterus?

[1 mark]

Tick **one** box.

To allow implantation of the embryo

☐

To break down waste

☐

To prevent sperm reaching the egg

☐

Q1.b)(2018)

Which hormone causes thickening of the lining of the uterus?

[1 mark]

Tick **one** box.

Auxin

☐

Oestrogen

☐

Testosterone

☐

Q1.c)(2018)

On which day is fertilisation most likely to occur?

Use information from **Figure 2**.

[1 mark]

Q2.(2018)

Homeostasis and Response

<http://www.pcfgstudy.com>

Contraception can be used to lower the chance of pregnancy.

Draw **one** line from each method of contraception to how the method works. [3 marks]

Method of contraception	How the method works
Contraceptive pill	Barrier to prevent sperm reaching the egg
Diaphragm	Contains hormones to stop eggs maturing
Spermicidal cream	Kills sperm
	Slows down sperm production

Q3.(2018)

Table 2 gives information about some different methods of contraception.

Table 2

Method	Number of pregnancies per 100 women in one year	Possible Side effects
Diaphragm and spermicidal cream	8	Usually none, but can cause bladder infection in some women
Condom	2	None
Contraceptive pill	1	Mood swings, headaches, high blood pressure, blood clots, breast cancer

A man and a woman decide to use the condom as their method of contraception.

Suggest **three** reasons for this decision.

Use information from **Table 2** and your own knowledge.

[3 marks]

- 1 _____
- 2 _____
- 3 _____

Q4.(2022)

Homeostasis and Response

<http://www.pcfgstudy.com>

In the human female, an egg is released from one of the ovaries about once every four weeks.

During the four weeks, the lining of the uterus thickens and then breaks down.

This is called the menstrual cycle.

Which **two** hormones are female reproductive hormones?

[2 marks]

Tick (✓) **two** boxes.

Adrenaline

☐

Oestrogen

☐

Progesterone

☐

Testosterone

☐

Thyroxine

☐

Q5.(2022)

Follicle stimulating hormone (FSH) is another female reproductive hormone.

What is the function of FSH in the menstrual cycle?

[1 mark]

Tick (✓) **one** box.

FSH causes an egg to mature in the ovary.

☐

FSH causes breast development.

☐

FSH causes the uterus lining to break down.

☐

Q6.(2022)

Sperm cells can survive inside a woman's reproductive organs for five days.

An egg cell can survive for one day after ovulation.

In one woman ovulation occurred on day 14.

Give the range of days on which sexual intercourse could result in fertilisation.

[1 mark]

From day _____ to day _____

Q7.(2022)

Homeostasis and Response

<http://www.pcfgstudy.com>

If a man and a woman have sexual intercourse and do **not** want to produce a baby, they may use contraception.

Explain how different methods of contraception prevent pregnancy.

[6 marks]

Q8.(2023)

Some hormones control a woman's menstrual cycle.

Which hormone causes an egg to mature in the ovary?

[1 mark]

Tick (✓) **one** box.

Adrenaline	☐
Follicle stimulating hormone (FSH)	☐
Testosterone	☐

Q9.(2023)

Which **two** are hormones that help to maintain the lining of the uterus during pregnancy?

[2 marks]

Tick (✓) **two** boxes.

Amylase	☐
Oestrogen	☐
Progesterone	☐
Protease	☐
Thyroxine	☐

Q10.(2023)

Contraception prevents pregnancy.

Give **two** methods of contraception that use hormones.

[2 marks]

1 _____

2 _____
