

# Puberty and Menstrual Cycle

**Q:1** The human menstrual cycle is controlled by hormones.

(a) Name the gland which produces:

(a)(i) FSH

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(1 mark)

(a)(ii) oestrogen.

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(1 mark)

**Q:2** The human body produces many hormones.

(a) (i) What is a hormone?

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(1 mark)

(a) (ii) Name an organ that produces a hormone.

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(1 mark)

(a) (iii) How are hormones transported to their target organs?

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(1 mark)

(b) Describe how the hormones FSH, oestrogen and LH are involved in the control of the menstrual cycle.

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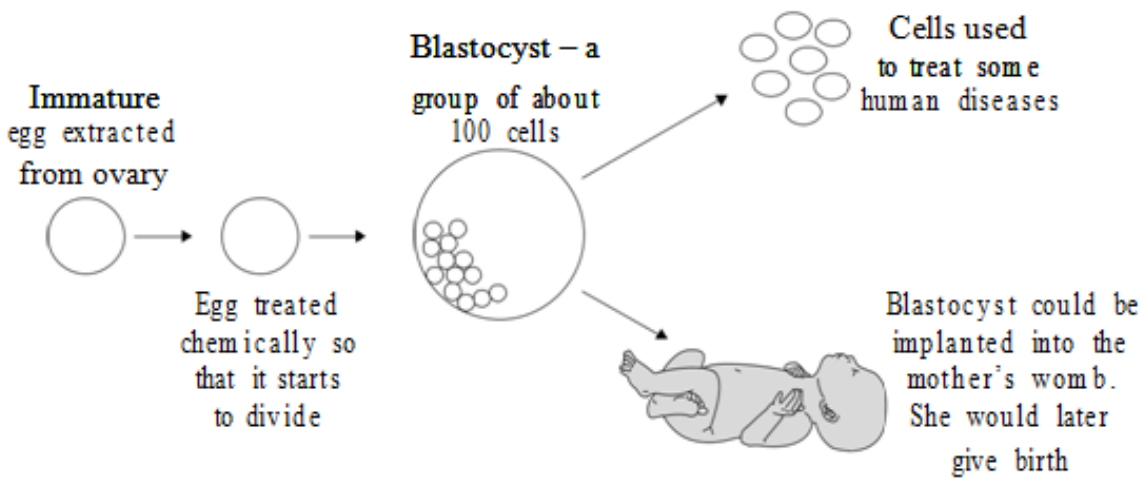
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(3 marks)

**Q:3** (a) The diagram shows how an immature egg could be used either to produce cells to treat some human diseases or to produce a baby.



Scientists may be allowed to use this technique to produce cells to treat some human diseases, but not to produce babies.

Using information from the diagram, suggest an explanation for this.

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(4 marks)

**Q:4** List A gives the names of three hormones.

List B gives information about the three hormones.

Draw a line from each substance in List A to the correct information in List B.

<b>List A Hormone</b>	<b>List B Information</b>
FSH	Used in some contraceptive pills to stop eggs maturing
LH	Used as a fertility drug to make eggs mature
Oestrogen	Causes the lining of the womb to break down
	Stimulates the release of eggs in IVF

(3 marks)

(b) The table gives information about three methods of giving hormones to stop a woman becoming pregnant.



	The 'pill'	The 'patch'	The 'implant'
How the hormone is given	Swallowed each day for 21 days out of every 28 days.	Stuck onto the skin. Each patch lasts three weeks. There is a one week gap between each patch.	Needs an operation to put it under the skin. Lasts for up to 5 years.

Use the information in the table to answer these questions.

(b) (i) Which of the three methods is likely to be the most reliable?

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(1 mark)

(b) (ii) Explain why you chose this method.

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(1 mark)

(b) (iii) Give one disadvantage of the method you have chosen.

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(1 mark)

**Q:5** Cholesterol has important functions in the body.

Some cholesterol is produced by the liver.

Cholesterol is needed in the body to make the hormone oestrogen.

**(a) (i)** Name the organ in the body which produces oestrogen.

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**[1 mark]**

**(a) (ii)** What effect does oestrogen have on the female reproductive cycle?

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**1 mark]**

**(a) (iii)** Oestrogen is a naturally occurring steroid hormone. Give one artificial use of a steroid hormone in the body.

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**[1 mark]**