**1.** The graph below shows the levels of hormones during the menstrual cycle.



(a) Identify hormones I and II.

I: ..................................................................................................................................

II: .................................................................................................................................

(2)

(b) Outline the roles of FSH in the menstrual cycle.

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(2)

(c) FSH is secreted by the pituitary gland. During pregnancy, FSH secretion is inhibited.  
Suggest how FSH secretion could be inhibited during pregnancy.

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(1)

(Total 5 marks)

**2.** The hormones progesterone and LH were measured in a woman’s blood over 40 days. When did her menstrual bleed start?



(Total 1 mark)

**3.** The diagram below shows the female reproductive system.



(a) Label the diagram above with the letter U to show the uterus.

(1)

(b) Outline the role of luteinizing hormone (LH) **after** ovulation.

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(1)

(c) Explain how sexual reproduction can lead to variation in a species.

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(3)

(Total 5 marks)

**4.** What is the consequence of insufficient secretion of FSH in women?

A. Embryo implantation fails because the uterus lining is too thin.

B. Mature eggs (oocytes) are not produced.

C. Menstruation starts before embryo implantation occurs.

D. Progesterone secretion is inhibited.

(Total 1 mark)

**5.** The levels of hormones vary during the menstrual cycle in women. Each hormone reaches its maximum level at a different time in the cycle. In what sequence do the hormones reach their maximum level, if the cycle begins at the start of menstruation?

A. LH, progesterone, FSH, estrogen

B. FSH, progesterone, LH, estrogen

C. LH, estrogen, FSH, progesterone

D. FSH, estrogen, LH, progesterone

(Total 1 mark)