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### **Menstrual Cycle:**

- **Menstrual Cycle:** The reproductive cycle in the female primates like monkeys, apes and human beings is called as the **menstrual cycle**.

The cycle of events starting from one menstruation till the next one is called menstrual cycle.

This cycle is essential for the production of oocytes and for the preparation of uterus for pregnancy.

The cycle repeats 28-35 days and normally one egg is released per cycle.

- **Menstruation:** Menstruation is the process by which blood and mucosal tissue are regularly discharged in a periodic manner from the inner lining of the uterus through the vagina.

It is also known as a period or monthly.

- **Menarche:** Menarche is the first menstruation for a human female. It begins at puberty.

The actual age for menarche varies from person to person.

Menarche signals the beginning of reproductive age in females.

- **Menopause:** Menopause is the permanent ceasing of menstrual cycle in females due to the depletion of oocytes as a result of aging.

The age of menopause varies from person to person.

The average age of menopause is between 45-50 years.

### **Phases of the Menstrual Cycle:**

Menstrual cycle follows four phases:

1. Menstrual phase
2. Follicular phase
3. Ovulation
4. Luteal Phase

1. **Menstrual Phase:** This is the period of menstruation when the menstrual flow occurs.

- It typically lasts from 3-5 days.
- There is breakdown of the endometrial lining of the uterus and its blood vessels which forms a liquid substance that comes out of the vagina.

- It occurs when the ovum released by the ovary is not fertilised.
- Lack of menstruation may indicate pregnancy
- Menstruation may also be affected due to stress, poor diet, poor health, etc.

**2. Follicular Phase:** This is the phase of maturation of follicle

- The primary follicles in the ovary grow to form a fully mature Graafian follicle.
- The endometrium of the uterus regenerates through proliferation.
- These changes in ovary and uterus are induced by ovarian hormones- Luteinising Hormone (LH) and the Follicle Stimulating Hormone (FSH).
- The levels of gonadotropins gradually increase through the follicular phase
- The increased levels of LH and FSH gonadotropins stimulate follicular development.  
They also stimulate secretion of oestrogens by the growing follicles.

**DRAW THE SECTIONAL VIEW OF THE OVARY FROM NCERT.**