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 for B.Sc part 3<sup>rd</sup>, paper (V).

Q.:- Write Notes on Ovarian cycle?

Ans:- Each cycle can be divided into three phases based on events in the ovary (ovarian cycle) or in the uterus (uterine cycle). The ovarian cycle consists of the follicular phase, ovulation, and luteal phase whereas the uterine cycle is divided into menstruation, proliferative phase, and secretory phase.

Menstrual Cycle :-

The menstrual cycle is the regular natural change that occurs in the female reproductive system (specifically the uterus and ovaries) that makes pregnancy possible. The cycle is required for the production of oocytes, and for the preparation of the uterus for pregnancy.

The menstrual cycle (results) occurs in the thickening of the lining of the uterus, and the growth of an egg (which is required for pregnancy). The egg is released from an ovary around day fourteen in the cycle; the thickened lining of the uterus provides nutrients to an embryo after implantation. If pregnancy does not occur, the lining is released in what is known as menstruation or a "period".

Up to 80% of women report having some symptoms during the one to two weeks prior to menstruation. Common symptoms include acne, tender breasts, bloating, feeling tired, irritability and mood changes. These symptoms interfere with normal life and therefore qualify as premenstrual syndrome in 20 to 30%.



of women. In 9 to 8%, they are severe.

The first period usually begins between twelve and fifteen years of age, a point in time known as menarche. They may occasionally start as early as eight, ~~as~~ eight and this onset may still be normal. The average age of the first period is generally later in the developing world and earlier in developed world. The typical length of time between the first day of one period and the first day of the next is 21 to 45 days in young women and 21 to 35 days in adult (an average of 28 days). Menstruation stops occurring after menopause which usually occurs between 45 and 55 years of age. Bleeding usually lasts around 3 to 7 days.

The menstrual cycle is governed by hormonal

changes. These changes can be altered by using hormonal birth control to prevent pregnancy. Each cycle can be divided into three phases based on events in the ovary (ovarian cycle) or in the uterus (uterine cycle). The ovarian cycle consists of the follicular phase, ovulation, and luteal phase whereas the uterine cycle is divided into menstruation, proliferative phase, and secretory phase.

### Health effects :-

Some women with neurological conditions experience increased activity of their conditions at about the same time during each menstrual cycle. For example, drops in estrogen levels have been known to trigger migraines, especially when the woman who suffers migraines is also taking the birth control pill.



Menstrual Cycle

The endometrium is directly controlled by OVARIAN hormones (estrogen, progesterone), not by pituitary hormones

Menstrual cycle has 3 phases :-

- Proliferative phase is regulated by estrogens
- Secretory phase is under the control of progesterone
- Menstrual phase :- results from a decline in the ovarian secretion of progesterone & estrogens

see also :-

- Menstruation (mammal)
- Ovulatory shift hypothesis