The Female Reproductive System: It consists of:

- a)The primary sex organ that is a pair of ovaries
- b) Secondary sex organs- the duct system consisting of a pair of fallopian tube, a uterus, cervix and vagina
- c)External genitalia- Vulva
- d) Glands: 1: Paraurethral or Skene's Gland
 - 2: Bartholin /Vestibular Gland

d)Mammary glands

Primary Sex Organ/ Female Gonads (A Pair of Ovaries)

Produce Gametes (Ova/Ovum/Egg) & Several Steroidal Hormones like Estrogen & progesterone

Located on each side of lower abdomen & is connected to pelvic wall (Suspensory ligament) and uterus by (ovarian) ligament

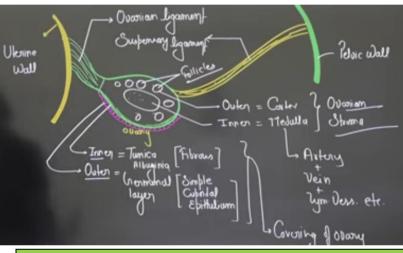
Almond shaped and 2-4cm in length, 1.5 cm in width and 1cm thick.

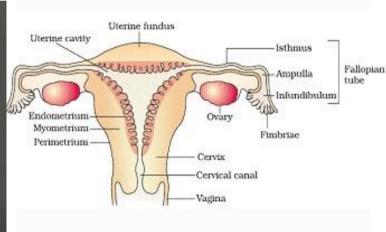
Each ovary is covered by:

- 1. Outer thin Simple cuboidal epithelium (germinal layer-but do not form ovarian follicles as they are formed in embryonic stage) enclosing ovarian stroma.
- 2. Tunica Albuginea- Inner fibrous layer.

Stroma inner part of ovary consist of:

- 1) Peripheral (Outer) Cortex: enclosing follicles.
- 2) Inner Medulla: Consist of arteries, veins and lymph vessels





Secondary Sex Organ

Fallopian Tube/ Oviduct: Tubes that carry egg from ovary to uterus and where fertilization takes place. 10-12 cm in length. Fertilization takes place at **Ampulla-Isthmus junction.**

Made up of simple ciliated columnar epithelium (helps in movement of ova).

- 1. **Infundibulum:** Interior part Funnel shaped part closer to ovary.

 Its edge consists of figure like projection called **fimbriae** (Receive egg after ovulation from ovary)
- 2. Ampulla: Wider part of fallopian tube.
- 3. Isthmus: Last narrow part joining the uterus.

Uterus/ Womb / Hystra: Embryo gets implanted and develop here till 9months.

Hysterectomy: Removal of uterus

Inverted pear shape, dimension (8cm length/5cm width /4cm thick)

Attached to pelvic walls by ligaments

Made up of three parts:

1. Uterine Fundus 2. Body 3. Cervix

Walls consist of three layers of tissue:

Perimetrium: External thin and membranous

Myometrium: Middle thick layer of smooth muscles

Exhibit strong contraction during parturition.

Endometrium: Inner Glandular.

Undergo Cyclic changes during menstrual cycle.

Vagina: A muscular and elastic tube (8-10cm) that connects the cervix to the external body.

- Acidic Medium prevent STDs and STIs maintained by organic acid produced by lactobacillus (fermentation of glycogen of mucus)
- Vaginal Rugae- Folds inside vagina use to excite glans penis.
- Vagina along with cervical canal forms birth canal.

Female External Genitalia/ Vulva/ Pudendum

Mons Pubis:

- Outermost structure
- Cushion of fatty tissue covered with skin & pubic hairs.

Labia Majora: fleshy fold extends from mons pubis & surrounds the vaginal opening.

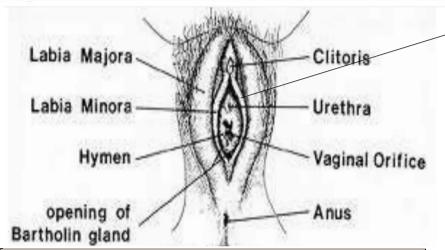
Labia Minora: Paired folds of tissue under labia majora.

Hymen: Perforated Vascular Mucus Membrane partially covering the Vagina.

- Not consider as true sign of virginity.
- Apart from Coitus (sexual intercourse) could also be broken due to Sudden fall or jolt, Insertion vaginal tampon, horse riding, cycling etc.
- In some women could persist even after coitus.

Clitoris: Tiny Finger like structure lies at anterior junction of two labia minora & above urethral opening

- Made up of erectile tissue same as penis and bears fore skin.
- Homologous to Male Penis.



Mammary Glands (A pair of Breast)-characteristic of all female mammals

A pair of Breast consist of glandular tissues and variable fats.

Each glandular tissue contains **15-20 mammary lobes** containing **alveoli.**

Alveoli (structural & functional unit)- secrete milk and store in its lumen, that opens into mammary tubules.

Each tubule of each lobe joins to form mammary duct that combines to form mammary ampulla.

Ampulla connects to **lactiferous ducts** (Through which milk is sucked).

Areola- Pigmented skin around the nipple.

Pectoralis muscles lie beneath the mammary glands

Para-Urethral Gland (skin's gland)

Vestibulum (Space between Labia Minora**)**-contains Urethral Orifice (Opening for Urine), Vaginal Orifice and

A pair of Para-Urethral (just below urethral opening also known as Skene's Gland): Release fluid that lubricate and prevent Urinary track infection.

A pair of Bartholin Gland (just below vagina): Secrete mucus to lubricate.

