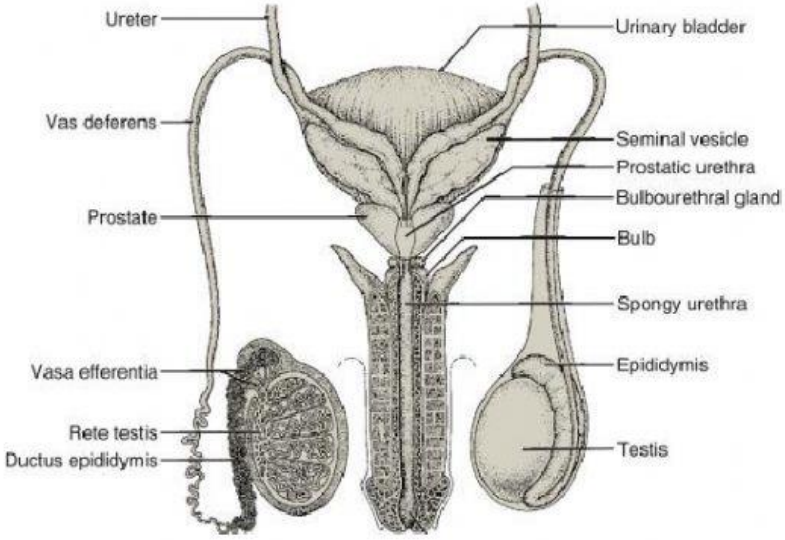
Chapter : 3 (Worksheet on Human Reproduction)

Observe the Diagram carefully and identify the name of Duct with the help of clue given:



1.The duct formed by union of duct from Seminal Vesicle and Vas Deferens-

2. Arises from Urinary Bladder and joins Ejaculatory Duct to form Urinogenital Canal-

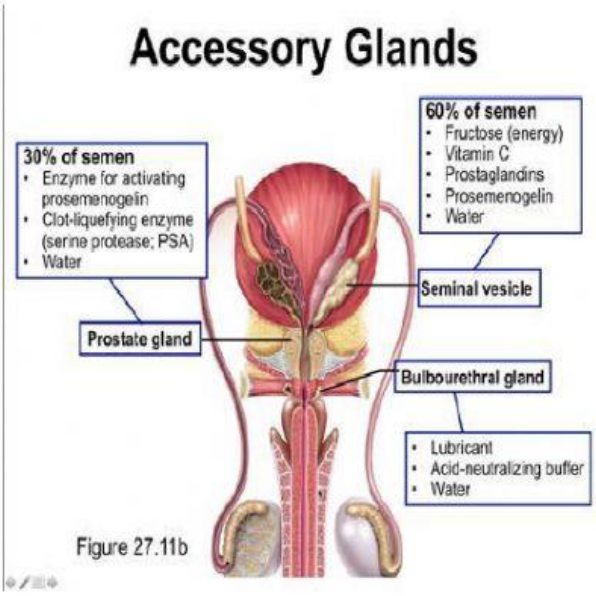
3. Network of all tubule arising from Testis

4. long coiled tubules (Stores & provide nutrition to sperm until they have matured.

5. Tube that leads from the epididymis to the urethra

Epididymis **Ejaculatory Duct** **Vas Deferens**

Urethra **Rete Testes**

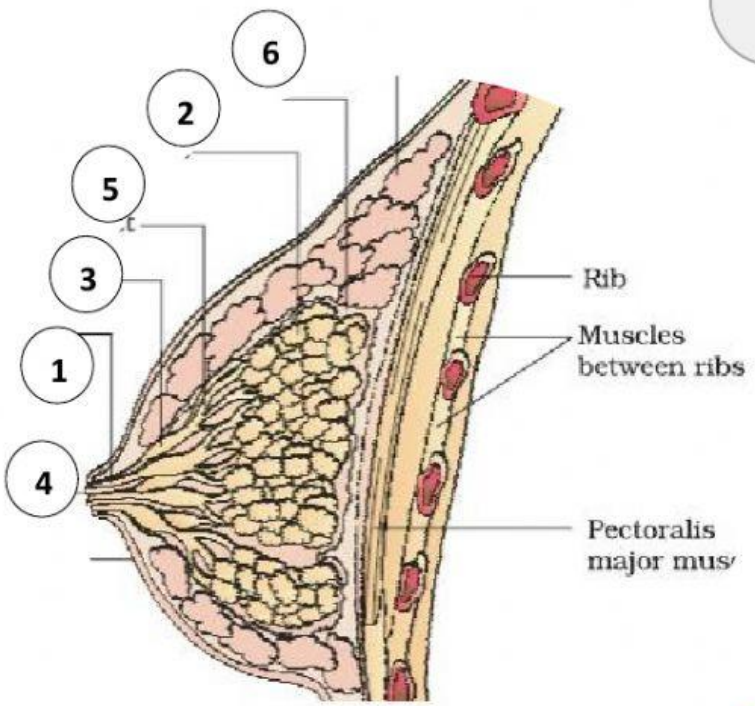


1. paired and elongated (5 cm) gland lying in pelvis between Rectum and bladder. Secretes Alkaline fluid pH=7.4 **(containing Fructose, Prostaglandin in, and clotting Proteins) that neutralizes acidity of Male urethra as well as Vaginal Tract**

2. Large, Chestnut shaped gland lying at junction of seminal duct and Urethra. Secretes Slightly Acidic fluid(pH=6.5)

3. Gland Present between glans penis and prostate.Secretes alkaline mucous Fluid .

MAMMARY GLANDS

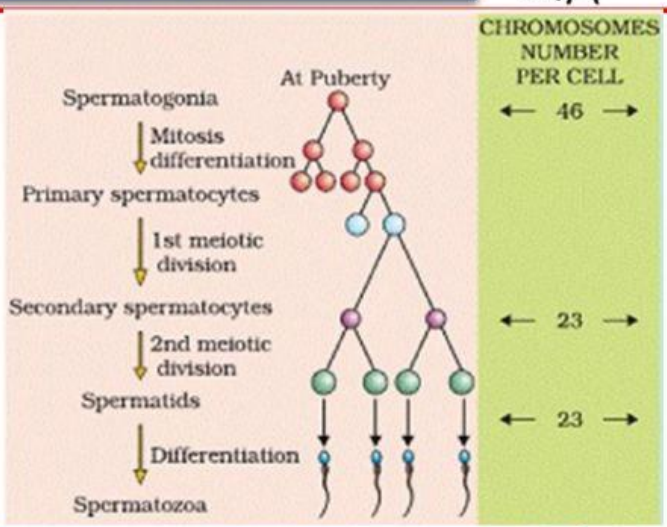


- Mammary Lobes
- Mammary Alveolus
- Mammary Duct
- Ampulla
- Lactiferous Duct
- Nipple

4 1 3 5 2 6

Spermatogenesis.

(Place the Blocks)



2N

2N

N

N

N

These further undergo **meiosis-II** to give rise to four **haploid spermatids**.

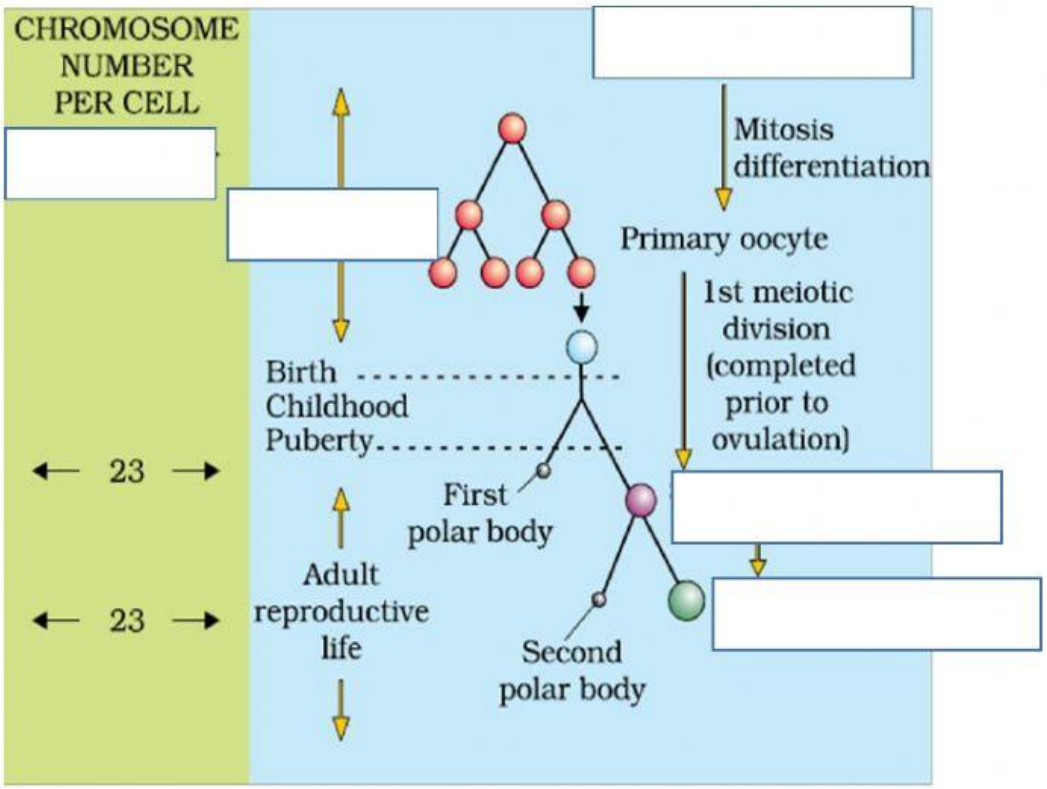
These spermatids are converted into **sperms** by spermiogenesis.

Some of the spermatogonia called **primary spermatocytes** periodically undergo meiosis.

After the **first meiotic division**, two **haploid** and equal **secondary spermatocytes** are formed.

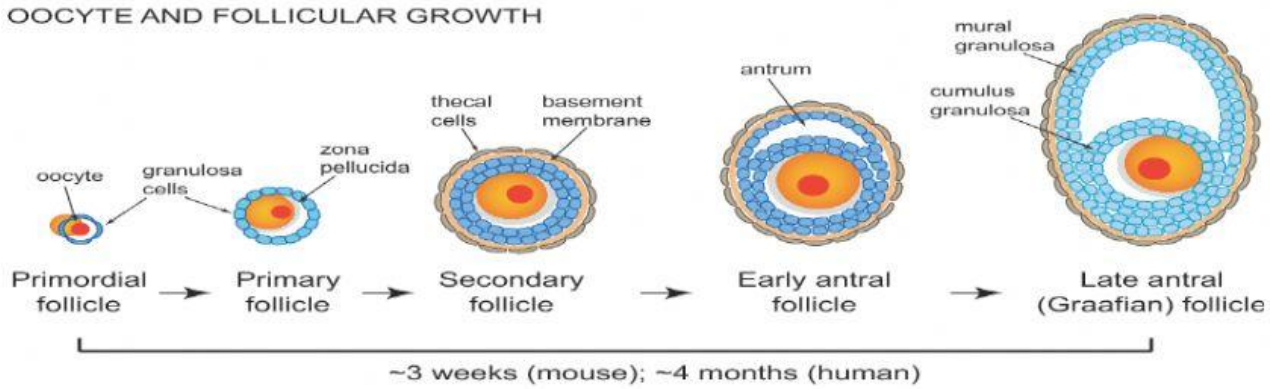
Spermatogonia increase in number by mitosis. These are diploid.

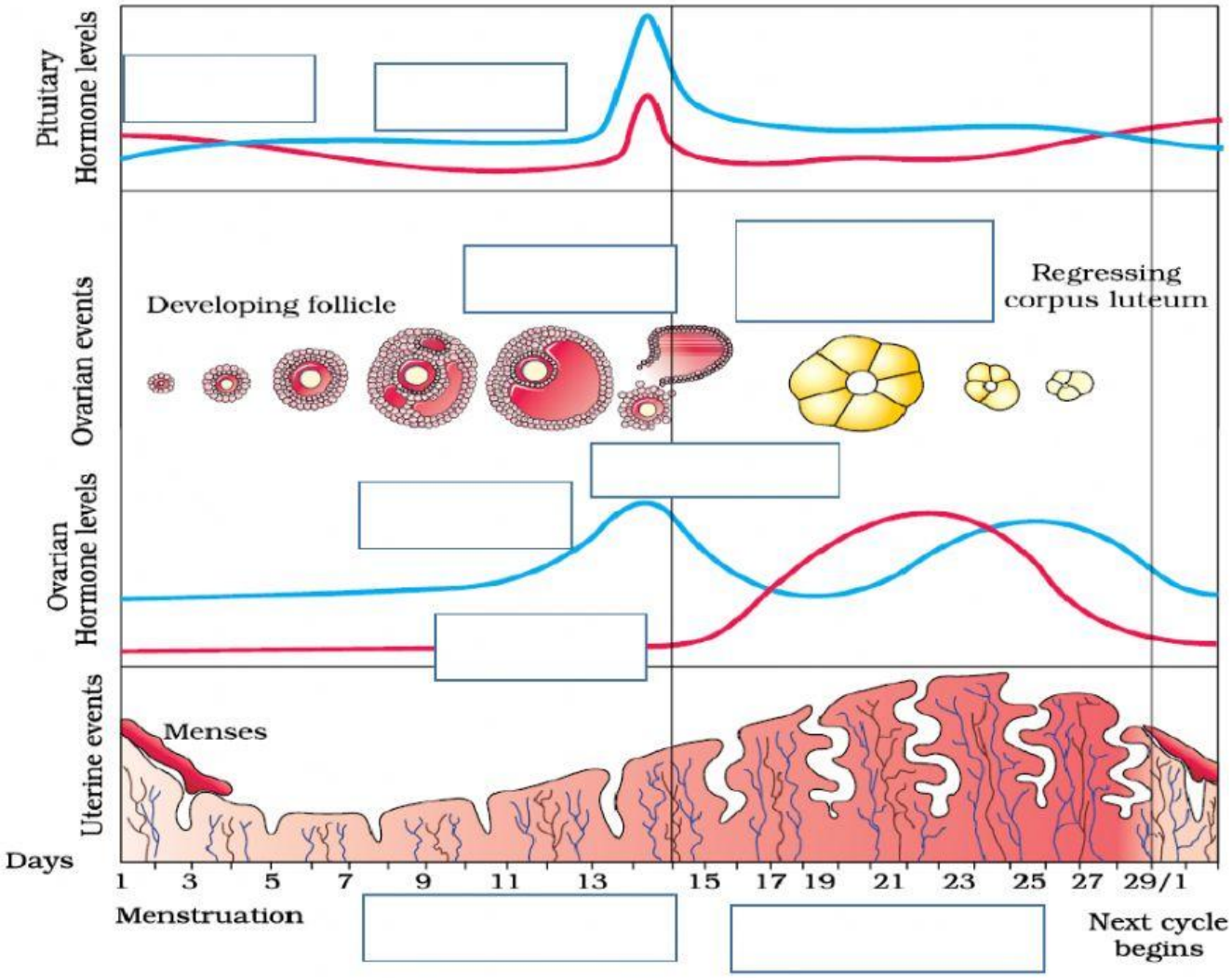
OOGENESIS



Oogonia **Secondary Oocyte** **Ovum** **46** **Fetal Life**

(Pick the labels and place in appropriate Boxes)



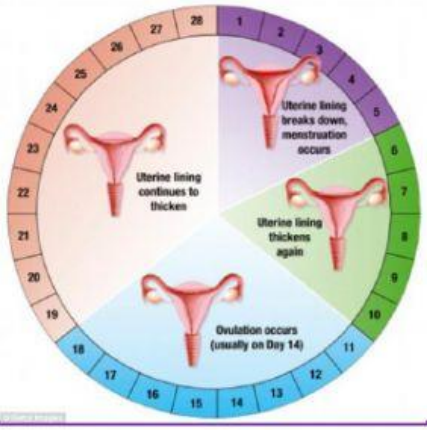


Ovulation | **Estrogen** | **Follicular Phase**

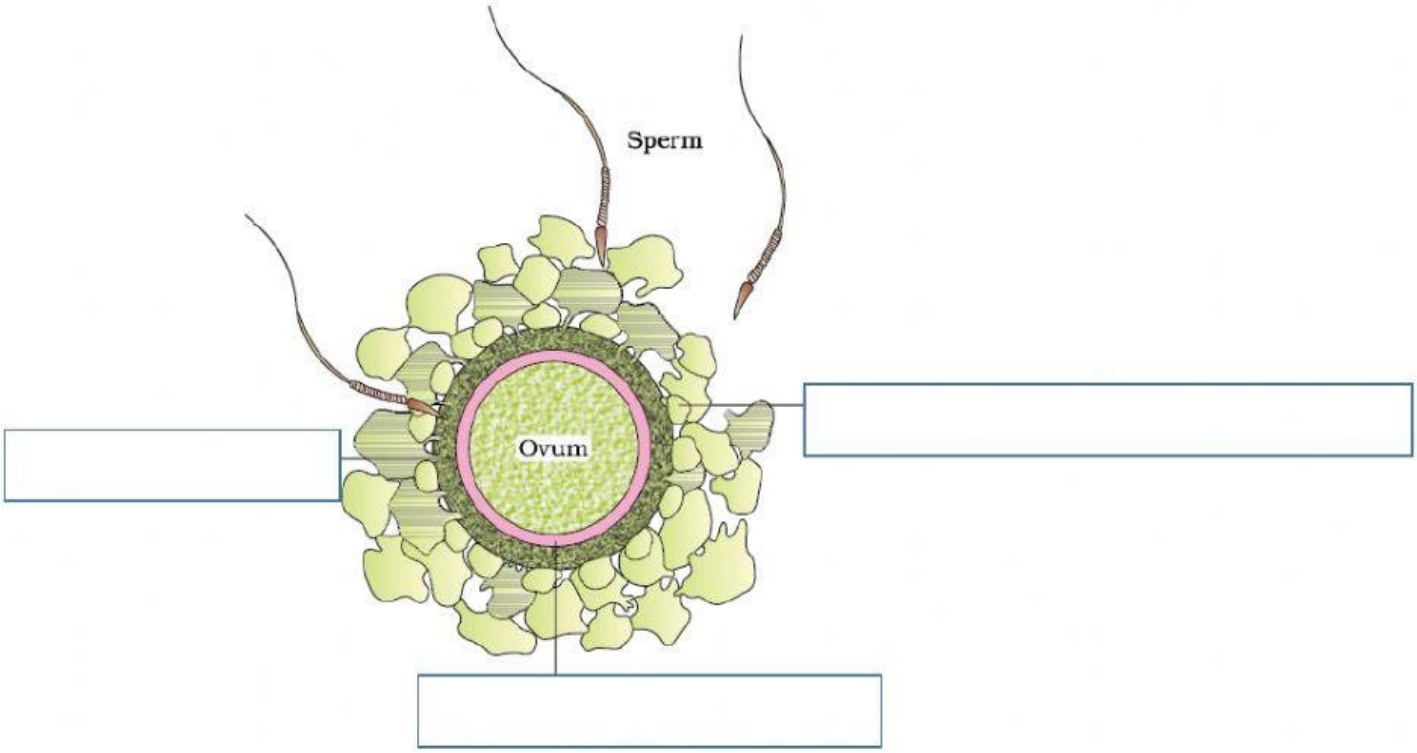
Luteal Phase | **Mature follicle** | **FSH**

Developing Corpus Luteum | **Progesterone** | **LH**

MENSTRUAL CYCLE



Fertilization

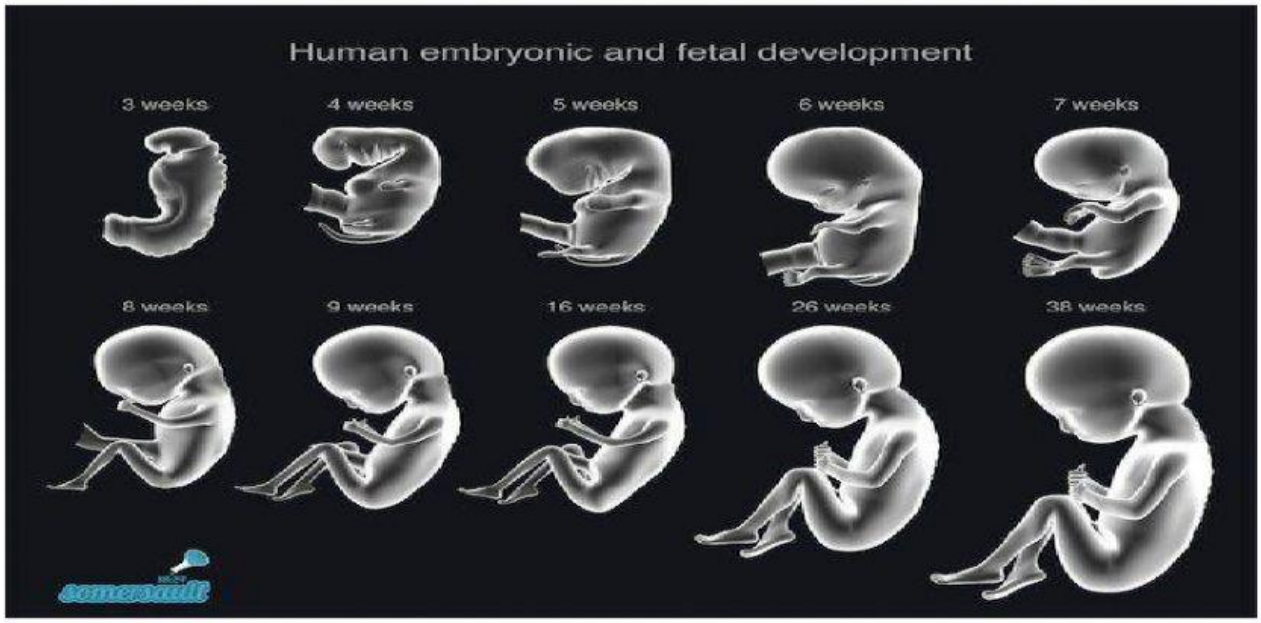


Cells of Corona Radiata **Perivitelline Space** **Zona Pellucida**

Fertilisation

- ✓ The process of fusion of a sperm (male gamete) with an ovum (female gamete) is called fertilisation.
- ✓ During coitus, semen is released by the penis into the vagina (insemination).
- ✓ The motile sperms swim rapidly, through the cervix, enter into the uterus and reach the ampullary–isthmic junction of the oviduct.
- ✓ A sperm comes in contact with the **zona pellucida** layer of the ovum and induces changes in the membrane to block the entry of additional sperms.
- ✓ The enzymes of the acrosome of sperm help to dissolve zona pellucida and plasma membrane of the ovum and sperm head is allowed to enter into the cytoplasm of the ovum,*i.e.,* **secondary oocyte**.
- ✓ Ultimately, diploid zygote is produced by the fusion of a sperm and an ovum.

FETUS DEVELOPMENT

Match the events corresponding to Development of Foetus

Column 1		Column 2
First month		Testis descend into scrotum.
Second month		Development of body mass & at last parturition.
First Trimester (Three month)		Body covered with hair, Eye lids separates, eye lashes formed.
Fifth Month		Eruption of hair & foetal movement.
Second Trimester (Six month)		Heart development & starts heart beat
Eight month		Limbs & digits
Third Trimester (Nine month)		Organ system develops.