DAY
1ST

SUPER
30

CLASS 12TH

BIOLOGY

Corpus luteum produces :

1. Oestrogen
2. Androgens
3. Progesterone
4. Prolactin

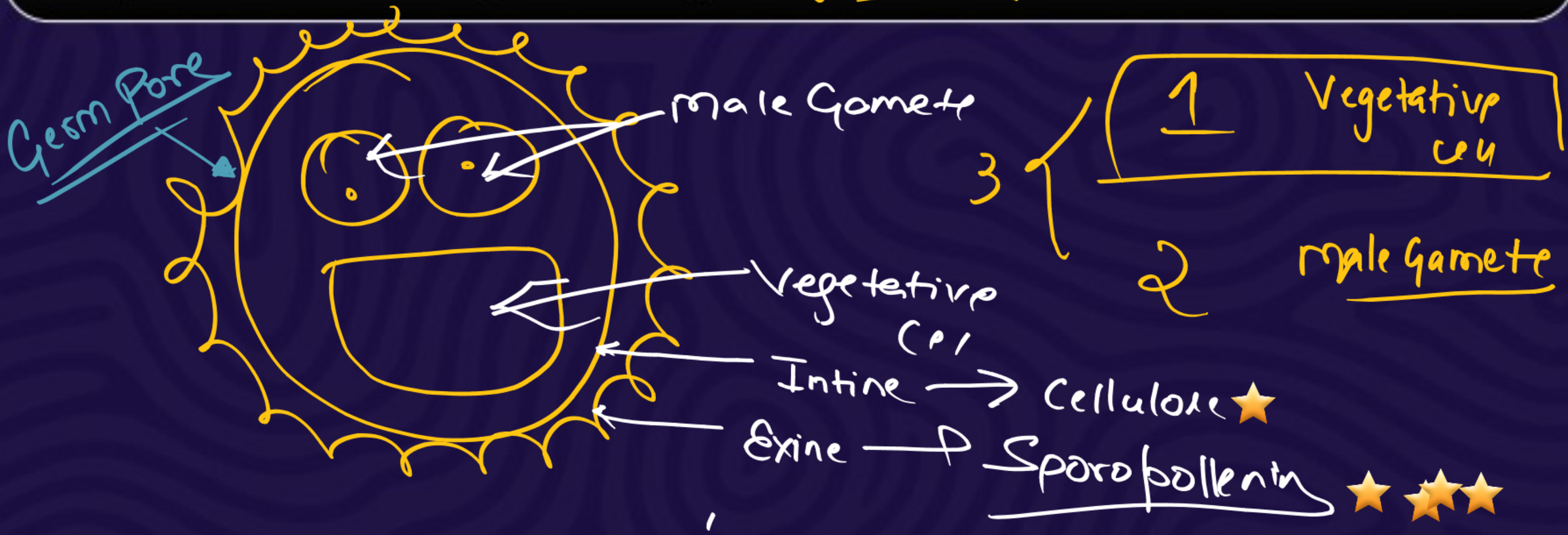
Yellow body → Produced after Ovulation

Progesterone → • Maintaining Pregnancy
• Endometrium

* Implantation → Endometrium

Write answers of following: :- Stigma

On reaching sigma pollen grains become _Three_ celled, out of which _2_ are male gametes, _1_ vegetative cell. The pollen tube emerges through _Vegetative cell



Draw a neat and labelled diagram of the longitudinal section of an ovule in an angiosperm. Also label the Embryo-sac and micropyle

Which one of the following adaptations is seen in plants to promote self-pollination ?

1. Cleistogamy → flowers do not open
2. Dichogamy
3. Unisexuality
4. Self-sterility

(Autogamy)
Self pollination

Geitonogamy

Promote
Cross pollination

Cross pollination
(Xenogamy)

The edible part of the Apple is

1. fleshy thalamus
2. Mesocarp
3. pericarp
4. endosperm

→ false fruit.

Widal test

List any two adaptations found in Entomophilous flowers. → Insect pollinating

OR

List any two adaptations found in Anemophilous flowers. → Wind pollinating

Insect →
- Colourfull flower, Pollen - Sticky.
- Nector - Rr.

Wind →
- Pollen - light wt., Pollen - Non-Sticky.
- Stigma - feathery.
- flower - may not be colourfull.

Briefly explain double fertilization in angiosperms

+2

- Syngamy

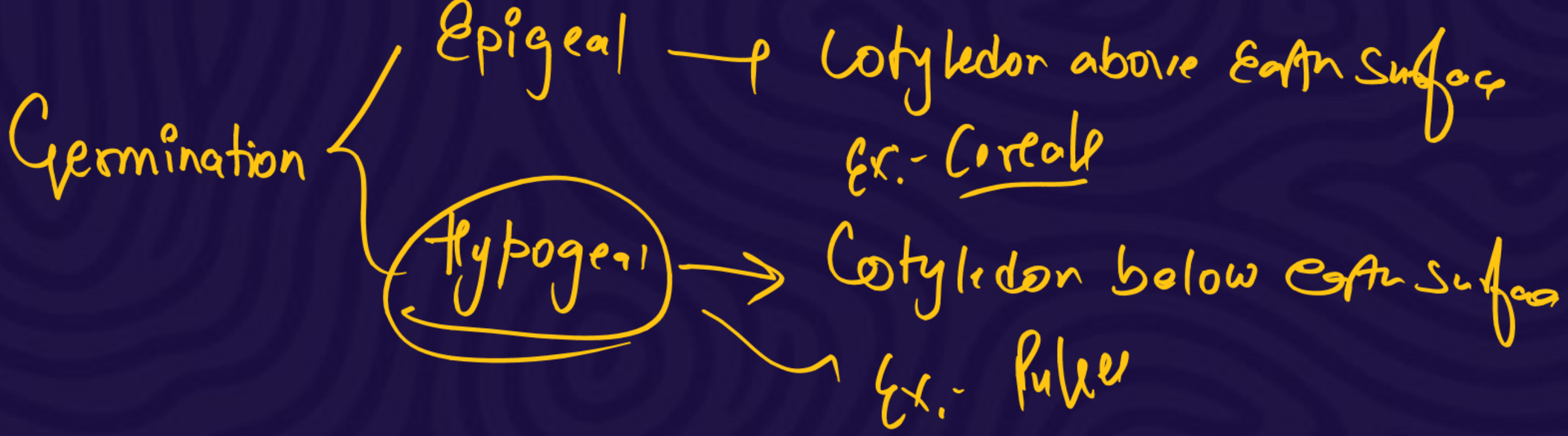
male Gamete (n) + female Gamete/egg cell (n) ⟶ Zygote (2n)

- Triple fusion

male Gamete (n) + 2 + Polar nuclei (n+n) ⟶ PEN (3n) (Primary Endosperm Nucleus)

write answers of following:

1. During germination of seeds, the first part energies out is _Radicle_.
2. _plumule_ part grows into shoot system .
3. When cotyledons come above the soil surface, the germination is known as _Epigeal_.
4. Hypogeal germination is observed in _Pulses_ plants.



The edible part of the coconut is

1. fleshy thalamus
2. Mesocarp
3. pericarp
4. endosperm

Endosperm
- Nuclear → fluid
- Cellular → Solid

when both Pre.
→ Helobial Endosperm
Coconut

→ liq – Nuclear Endo
White kernal → Cellular Endosperm.

What is the function of Endosperm in the flowering plants ? Write the names of any 2 types of endosperms.

→ Provide Nutrition to Embryo

Seed in a fruit is a :

1. Ripened ovule
2. Formed by an embryo
3. Developed ovary
4. Developed thalamus

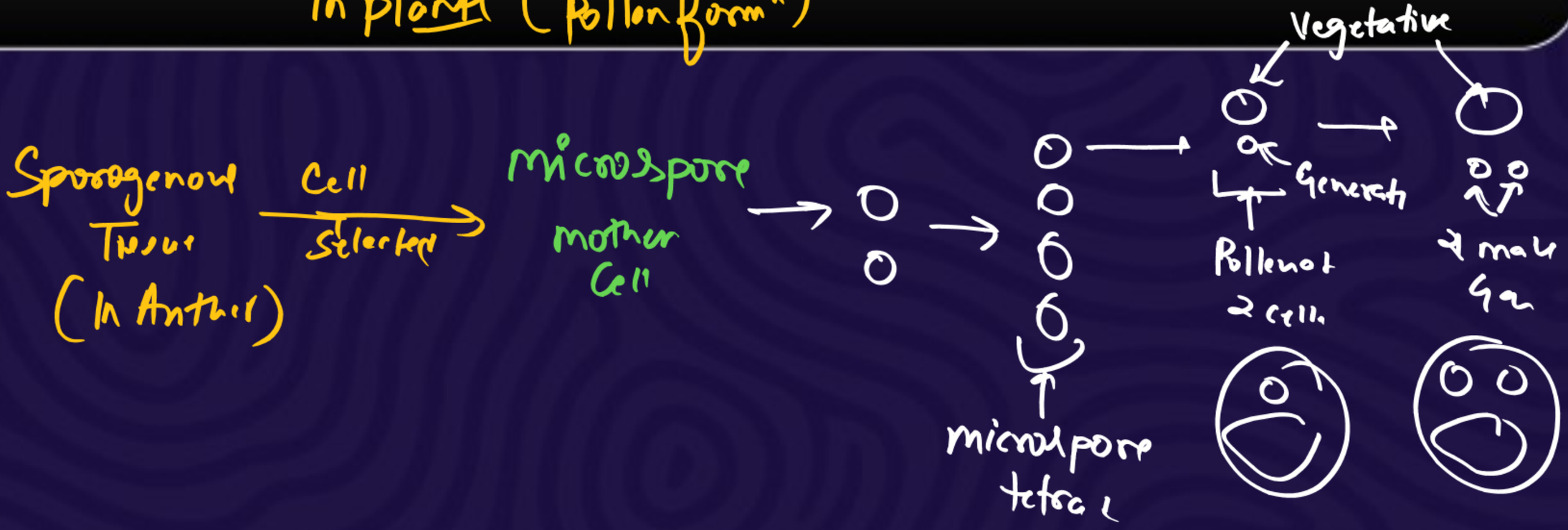
The edible part of the Mango is

1. fleshy thalamus
2. Mesocarp
3. pericarp
4. endosperm

fruit wall (Pericarp)
- Endocarp → Hard or Seed
- mesocarp → in mango → edible
- Ectocarp → chilka

What is microsporogenesis ? Explain its events.

Process of formation of male Gamete in plants (Pollen form")

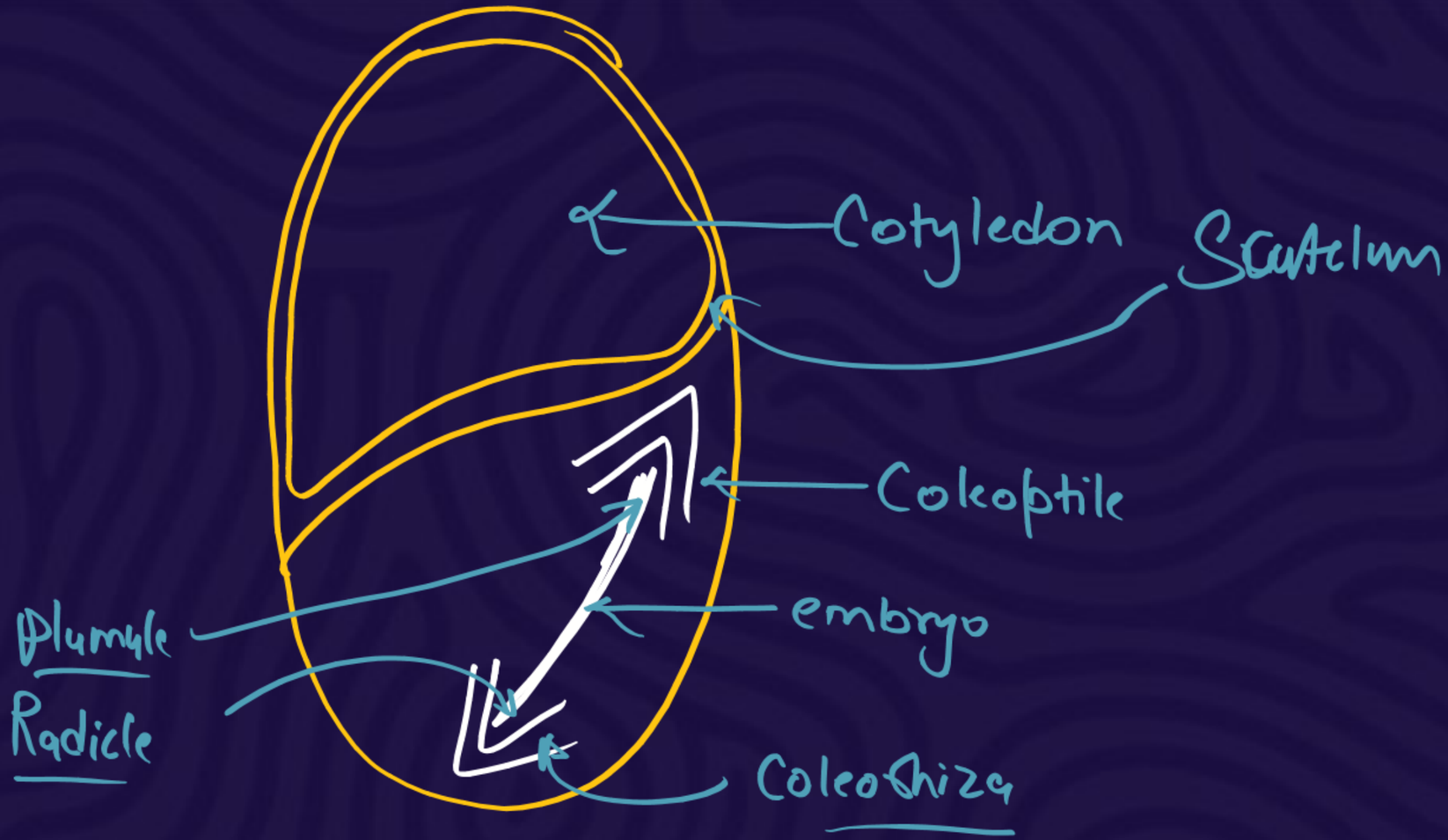


Seeds of angiosperms are

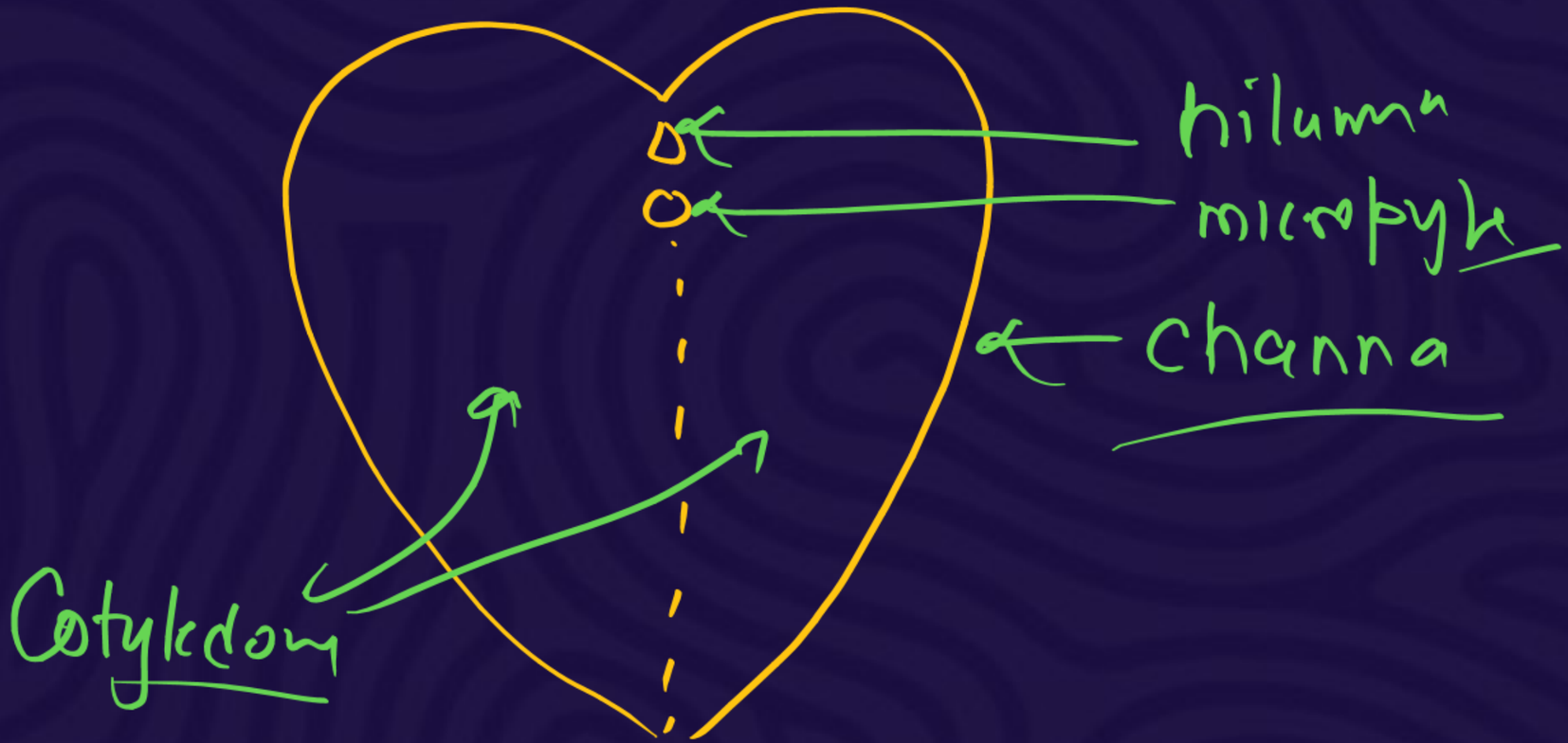
1. Covered by fruitwall
2. Naked seeds
3. Without seed coats
4. Ovules are present on ovuliferous scale

Covered Seed → with fruit wall

Draw diagram of monocot seed and label coleoptile and coleorhiza .



With the help of labelled diagram explain the structure of dicot seed.

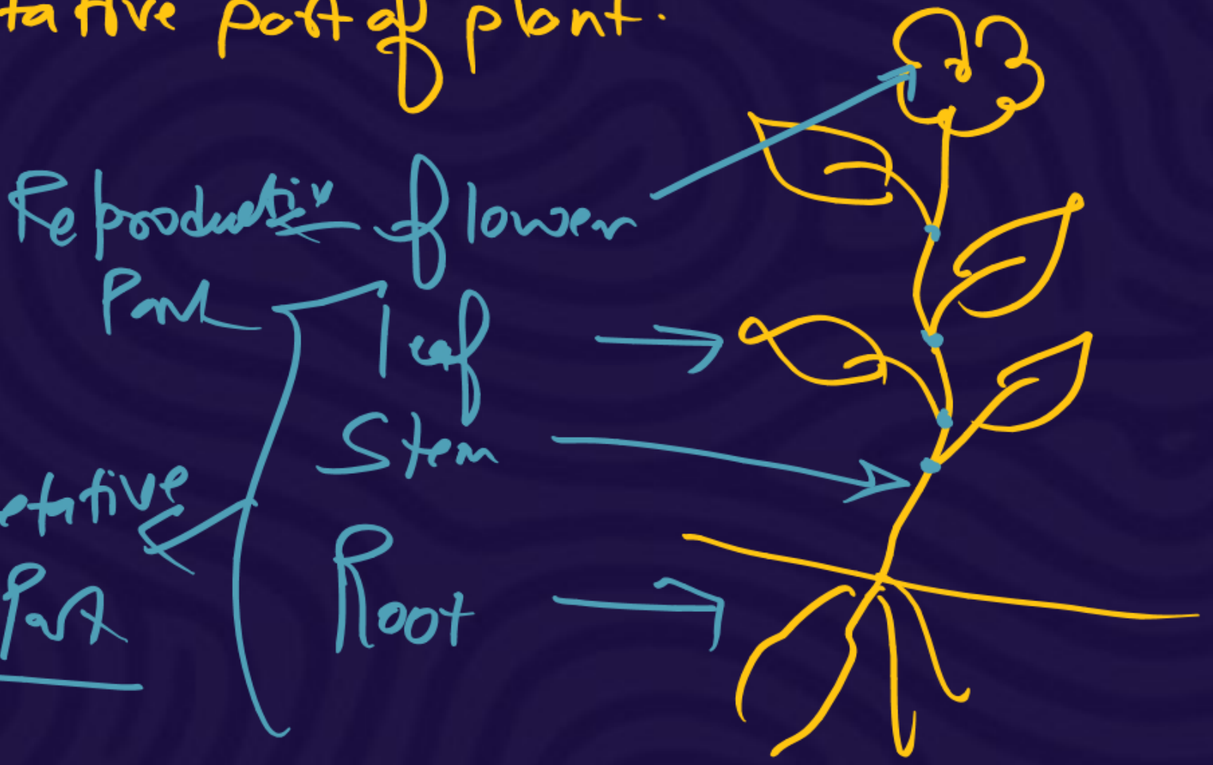


A. Define vegetative propagation.
B. With the help of one example explain the artificial method of vegetative reproduction adopted for propagating flowering pants.

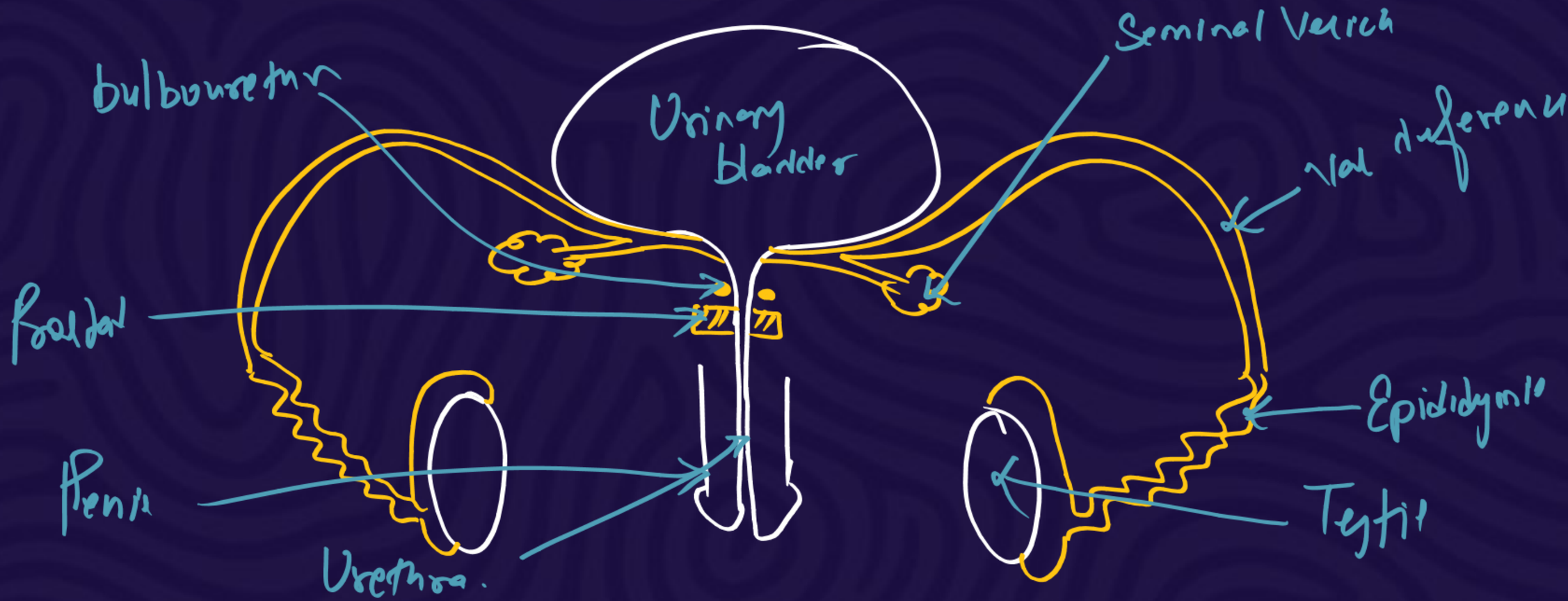
A → Reproduction by using vegetative part of plant.

Ex:- Rose — Cutting

Stem cut → node - Underground



Draw a neat and labelled diagram of the male reproductive system in humans.



The male hormone testosterone is produced by :

1. Epididymis
2. Prostate gland → alkaline fluid
3. Cowper's gland → lubrication
4. leydig cells →

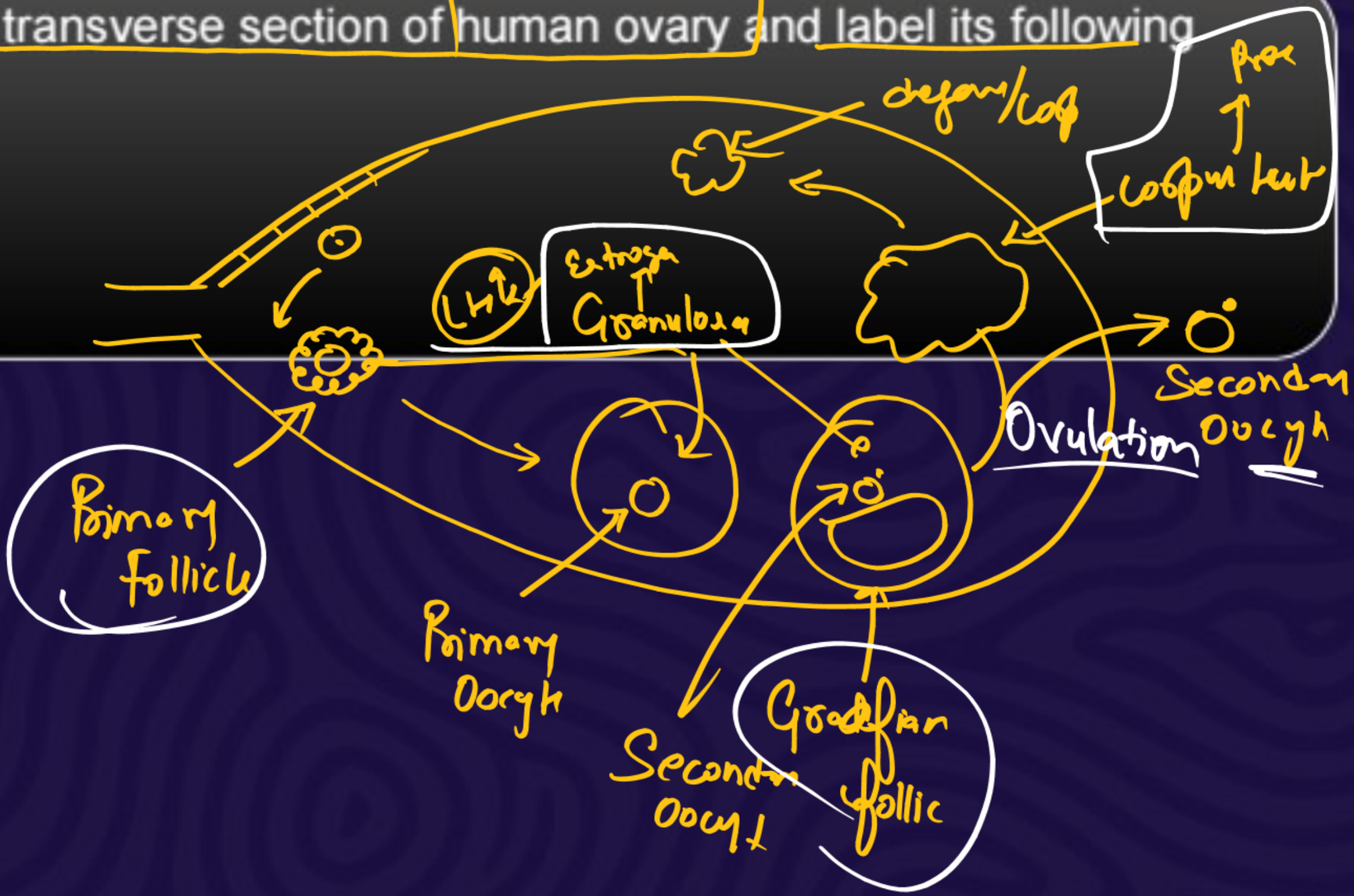
Write answers of following:

Human testis are a _Gonads_ ("Primary sex organ"), present outside the abdomen in a pouch called _Scrotum_. Each testis is encased in a capsule of white fibrous tissue called _albugenia_. Each testis has several highly coiled tubules called _Seminiferous tubules_

Site of Spermatogenesis

Draw a neat diagram of transverse section of human ovary and label its following parts:

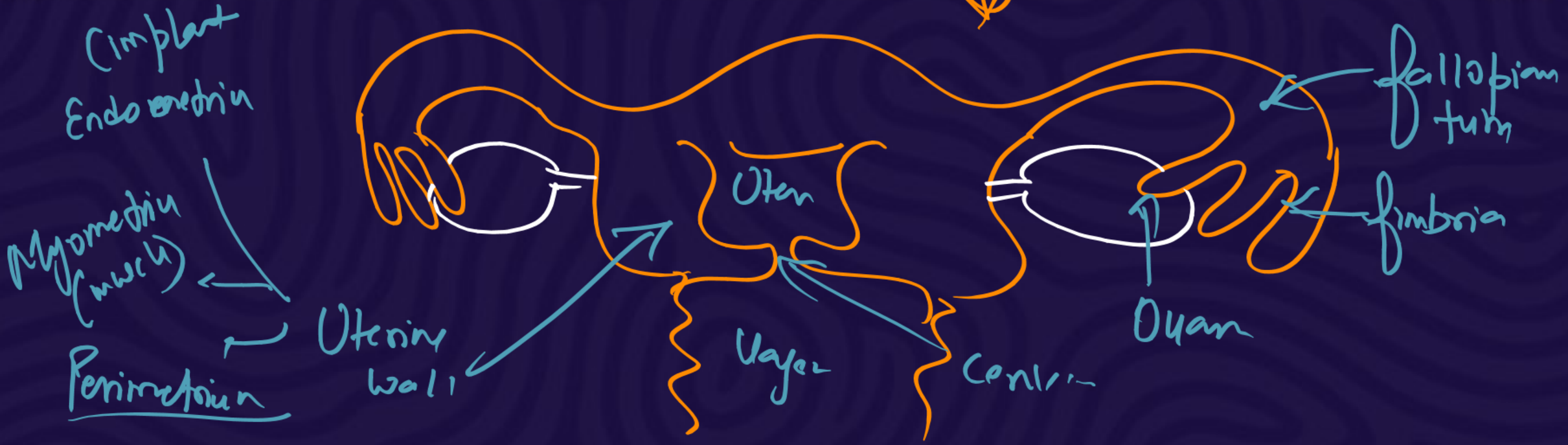
1. Primary follicle
2. Graafian follicle
3. Corpus luteum
4. Released ovum



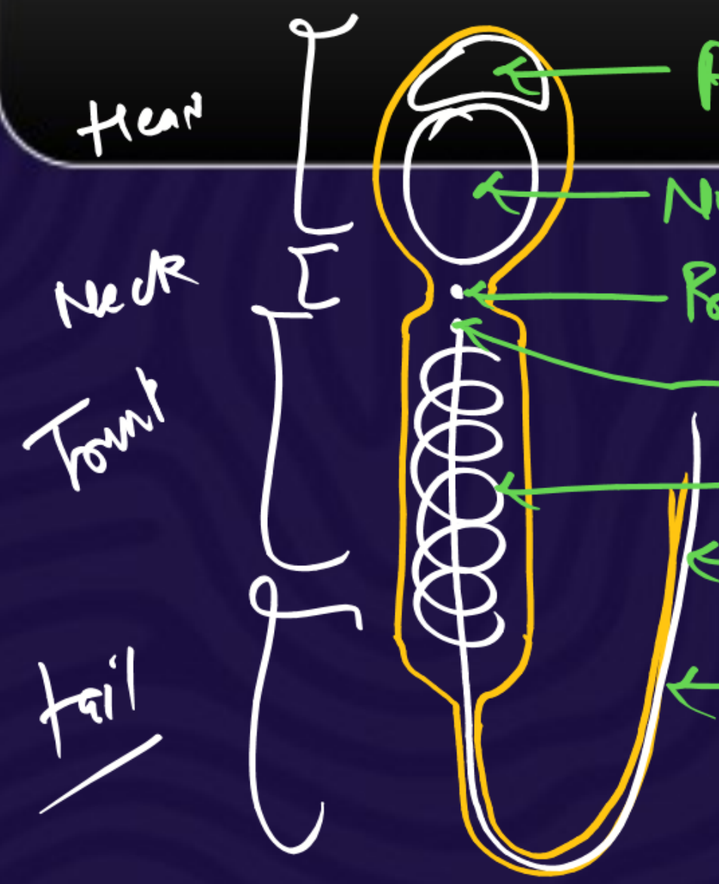
In human female ovulation takes place

1. Between 13-14 days after onset of menstruation
2. First day of menstruation
3. 25th -28th day of menstrual cycle
4. Last day of menstruation

Draw a neat and labelled diagram of the female reproductive system in humans.



Draw a neat diagram of human sperm and label any three parts.



Acrosome → Hydrolytic enzyme - help in entry into ovum

Nuclei → DNA

Proximal centriole → Cleavage

distal centriole → form axial flow

Spiral mitochondria → Energy

Axial filament → help in tail movement

tail → help in swimming.

Fill in the blanks with suitable words (attempt any two from A to D) :

The secretion of milk from the mammary glands is called A. The first secretion that comes from the mammary glands of the mother is called B . The synthesis of milk from the mammary glands is stimulated by the hormone C which is secreted by the anterior lobe of the pituitary gland. Another hormone D is secreted by the posterior lobe of the pituitary gland, which stimulates the release of milk from the mammary glands.

A → lactation
B → Colustrum
C → Prolactin
D → Oxytocin

With regard to human reproductive system write answers of following:

1. In human female union of sperms and ova takes place in fallopian tube.
2. Attachment of blastocyst in uterine wall is called Implantation
3. The fluid present around embryo is Amniotic fluid.
4. In mothers womb placenta . . supplies o2 and nutrients to growing embryo

Write the name of the hormone secreted by the human placenta.

- HCG → maintain Pregnancy.
- Human Prolactin → milk secretion
- Estrogen → female secondary ch.
- Progesterone → Maintain Preg.
- Relaxin → help in uterine contraction during Parturition

State the function of each

1. Oxytocin → Release of milk / Uterine contraction (parturition)
2. Progesterone → Maintain Endometrium ∴ Pregnancy.
3. Estrogen → female Secondary Sexual character
4. HCG → maintain Corpus luteum → Produce Progesterone ∴ maintain Preg
5. FSH → Start development of follicle.
6. LH → Ovulation
7. Prolactin → Milk secretion
8. Testosterone → Male Secondary sexual character.

Write answers of following:

1. In certain plants ovary develops into fruits without being fertilised, this is called _____Parthenocarpy_____
2. Due to double fertilisation , zygote and _____PEN_____ are formed in the ovary.
3. Site of fertilization in human beings is _____fallopian tube_____
4. Sometimes zygote divides into two cells and each of them develops into two embryos, this phenomenon is called _____Twin_____.

Name the surgical methods of contraception in human male and female. Also mention the basic procedure involved in two methods

Match the statement given in Column-I with the right option in Column-II :

Column-I	Column-II
(i) Copper-T (ii) Condoms	(a) Interfere with the ovulation process and prevent fertilization (b) Prevent sperms from meeting the ovulated egg (c) Implantation is not possible (d) Permanently prevent fertilization

Write any one temporary method and one permanent method of birth control .

Explain the following :

A. Acrosome
B. identical twins
C. Test tube baby

What do you understand by Artificial insemination

OR

What do you understand by Test Tube Baby.

One of the following statements not the correct reason for overpopulation in our country:

1. Wrong social beliefs
2. Illiteracy
3. Observing proper family planning methods
4. Desire for a male child

What is amniocentesis ? how is it performed ? write an advantage and one misuse (disadvantage) of it.

SUPER 30 BIOLOGY

THANK YOU

KEEP LEARNING KEEP GROWING

Comment :- Class Kaisi lagi ?