

## Chapter 03

# HUMAN REPRODUCTION

## OOGENESIS-I

- It is a Discontinues process
- It start at 1<sup>st</sup> month of embryonic(Foetus) & closes after birth(**Gestation period**)
- It starts after puberty period and Ends **Menopause**

## ATRESIA

- 1<sup>st</sup> Month – 1700 primary Follicles
- 2<sup>nd</sup> Month – 6 lakhs
- 5<sup>th</sup> Month – 7 million
- After birth – 2 Million
- Till puberty – 60,000 – 80,000

Out of these every 500 Follicles – Only 1 develop into Egg.

**Oogenesis is completed in 3 - Phases.**

### Multiplication Phase:

- Mitotic dividion
- Mother cells(Oogonia) Diploid cells
- Primary oocyte

### Growth Phase:

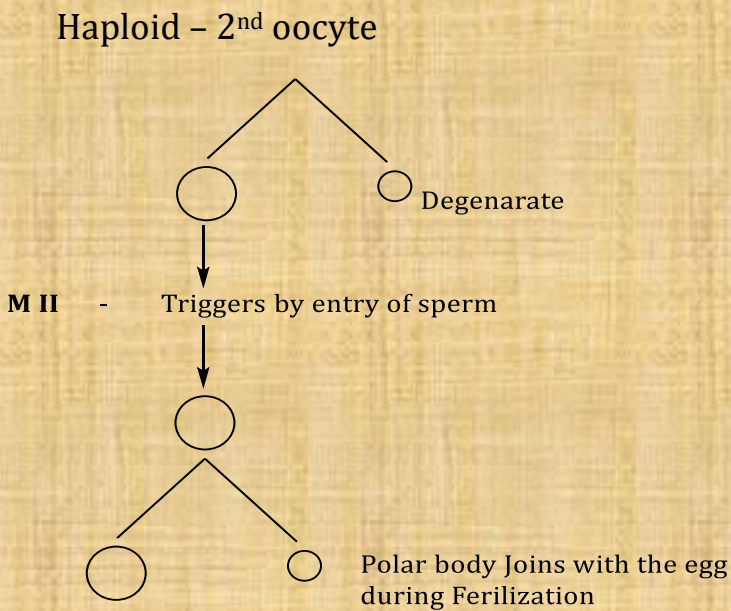
- Due to vitellogenesis Yolk formation
- Size increase 200 times
- Mother cells(Oogonia) Diploid cells

### Maturation Phase:

- Mieotic dividion.
- Primary oocyte : **MI & MII.**

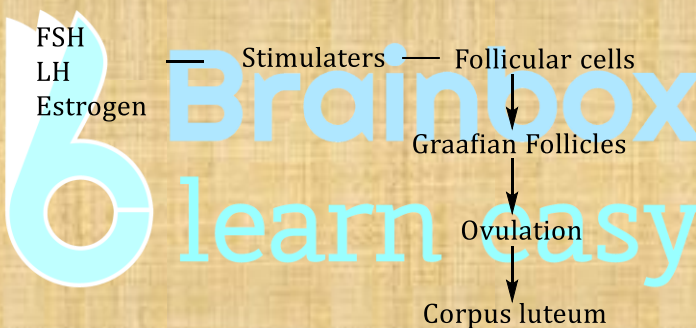
### MI :

- Oogenesis will arrested here

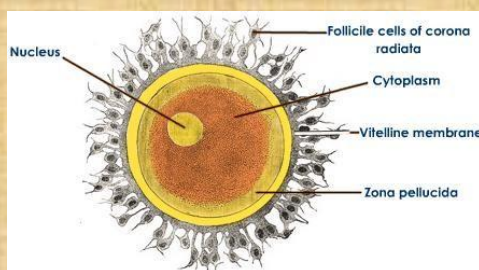


## OOGENESIS - II

### Hormones:



### STRUCTURE OF EGG:



*Figure: Egg structure(Ovum)*

- **3 - Membrane**
  - Primary - Vitalline
  - Secondary - zona pellucida
  - 3<sup>rd</sup> - Shell (Secreted Oviduct glands)