

NEET CRASH COURSE

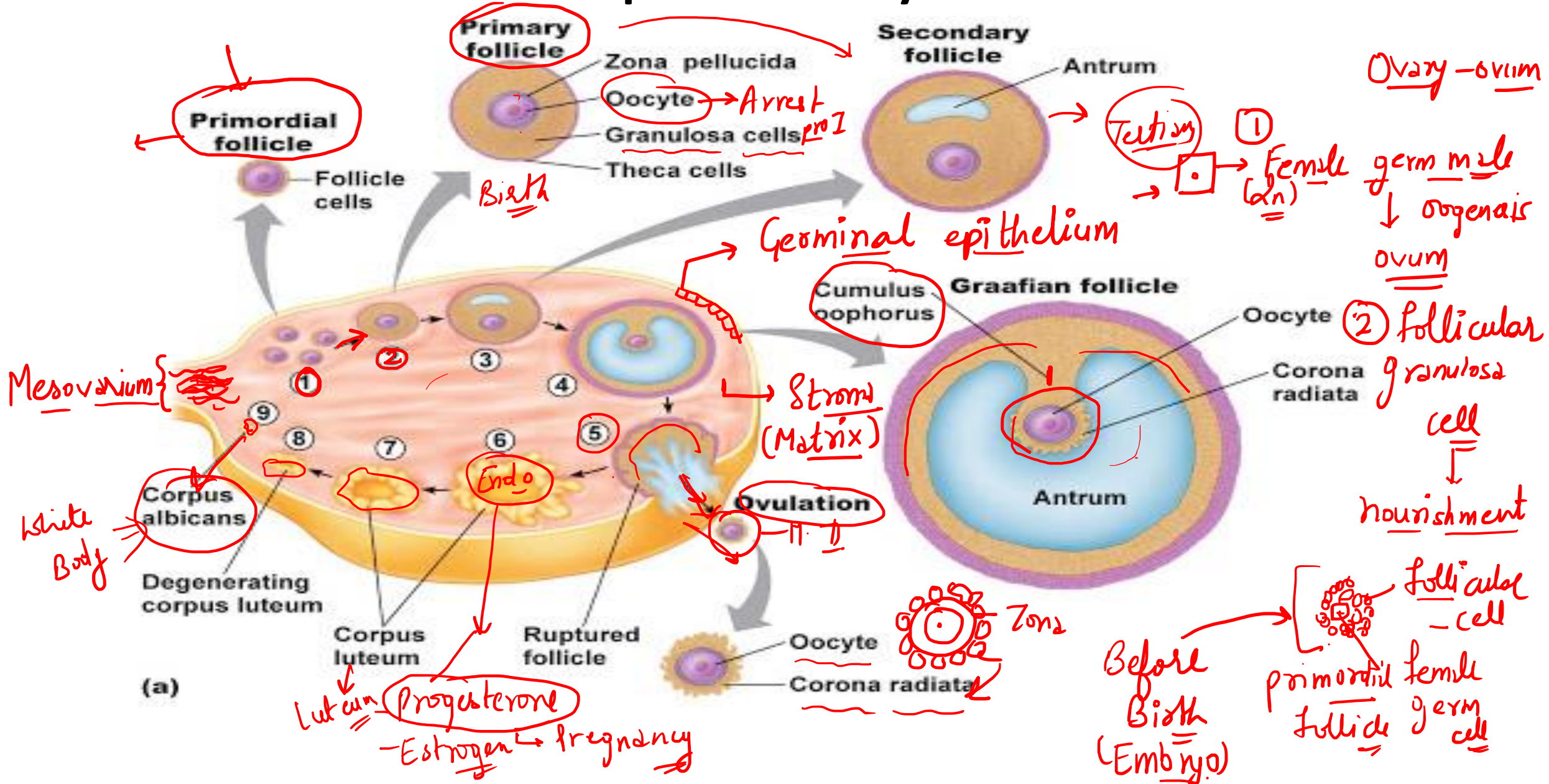
Human Reproduction



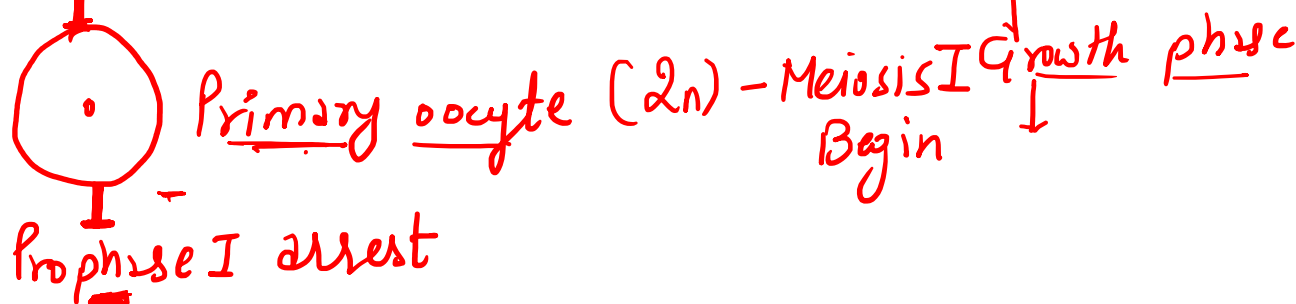
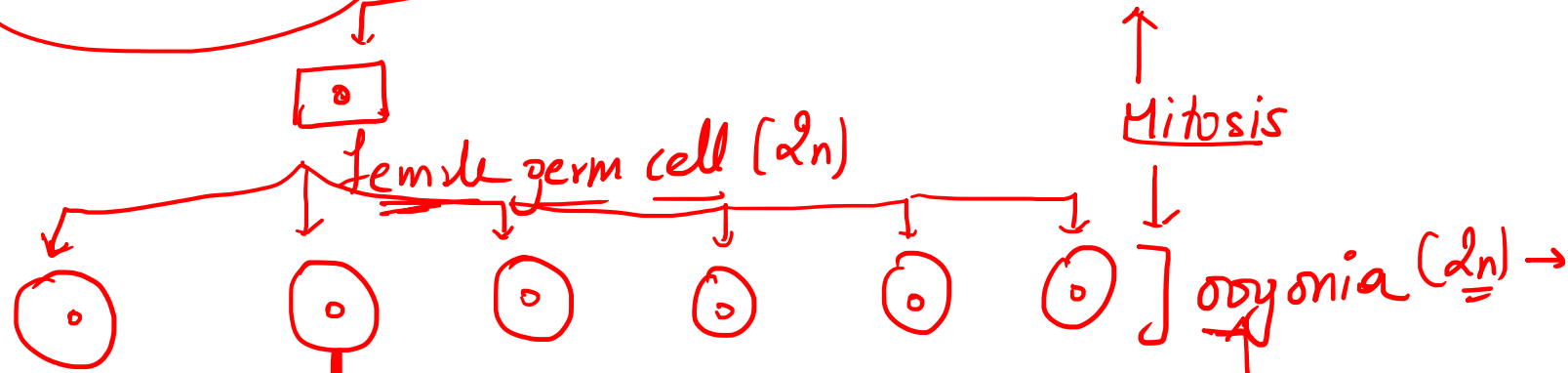
By, Perna Gaur, M.sc (Delhi University)

HUMAN REPRODUCTION

Female Reproductive System



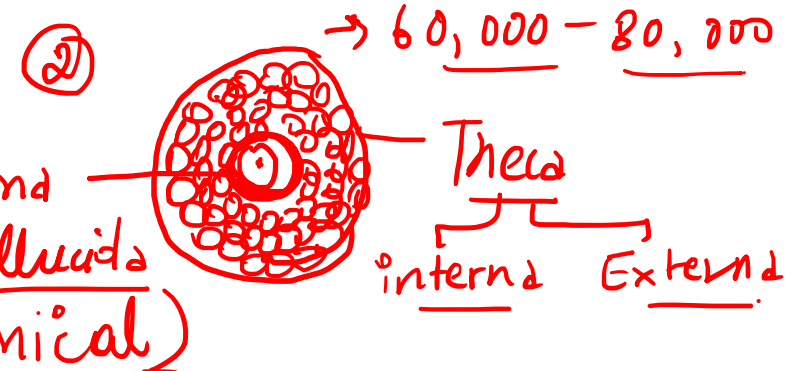
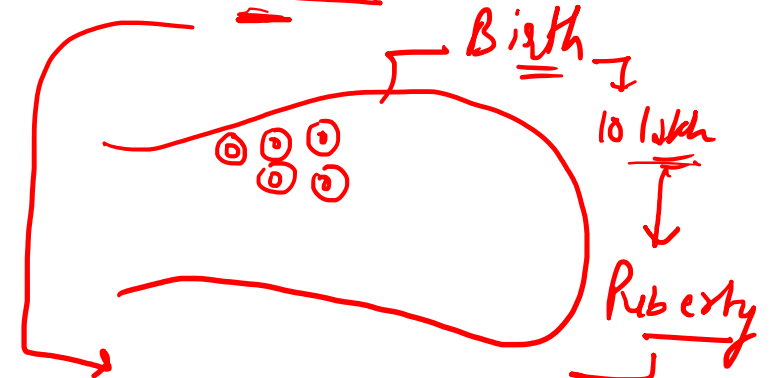
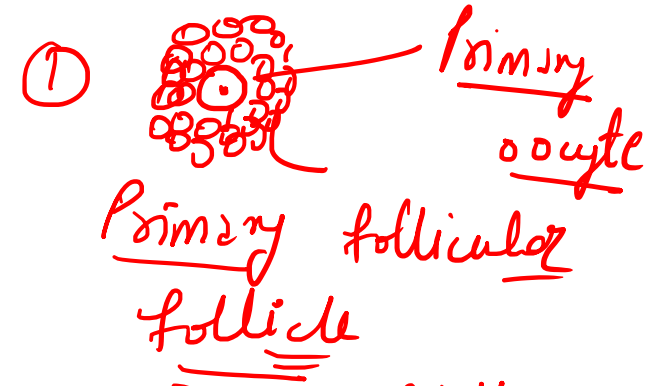
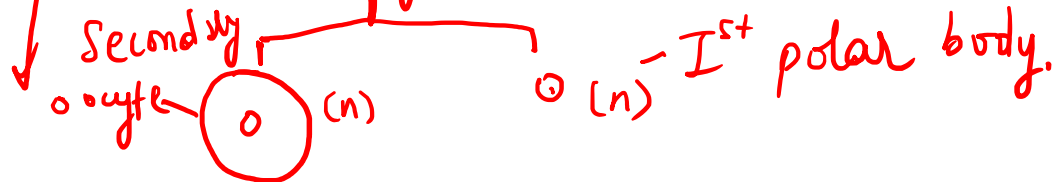
Before Birth → Embryo



BIRTH

Puberty - X

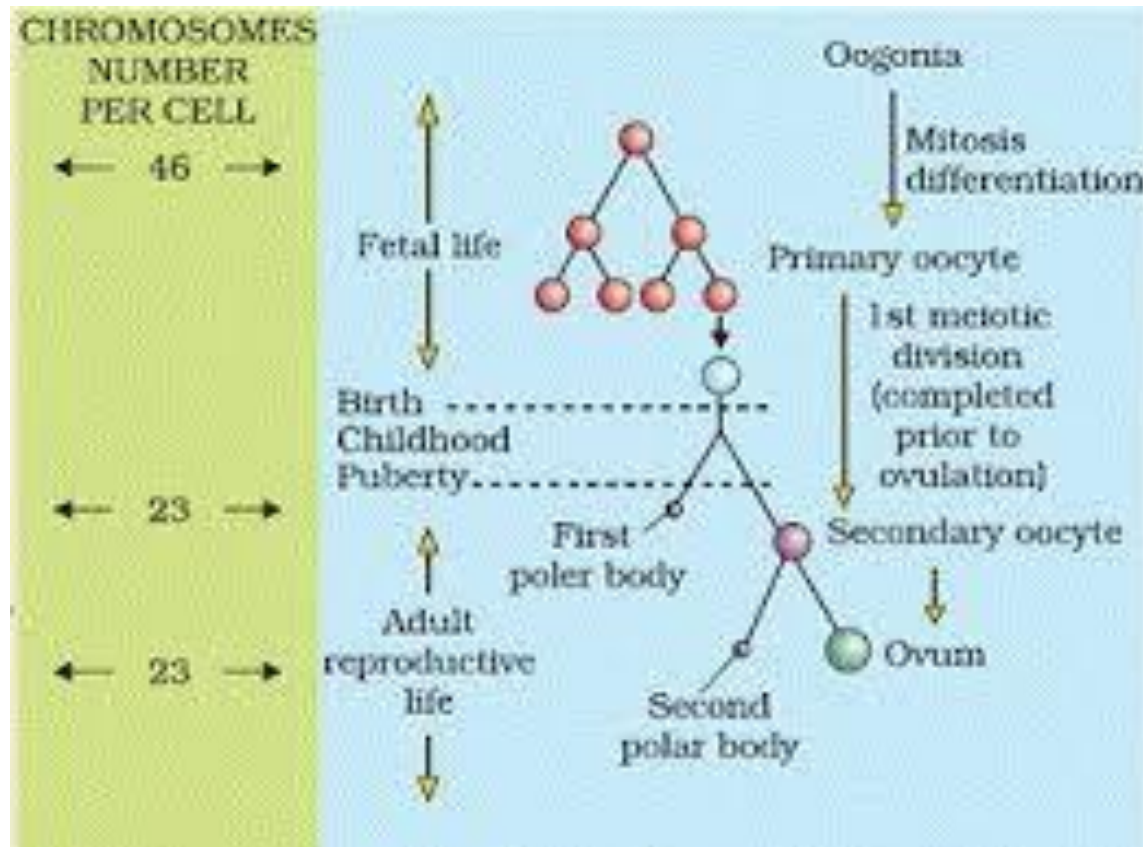
Every month 1 1° follicle undergoes complete Meiosis.



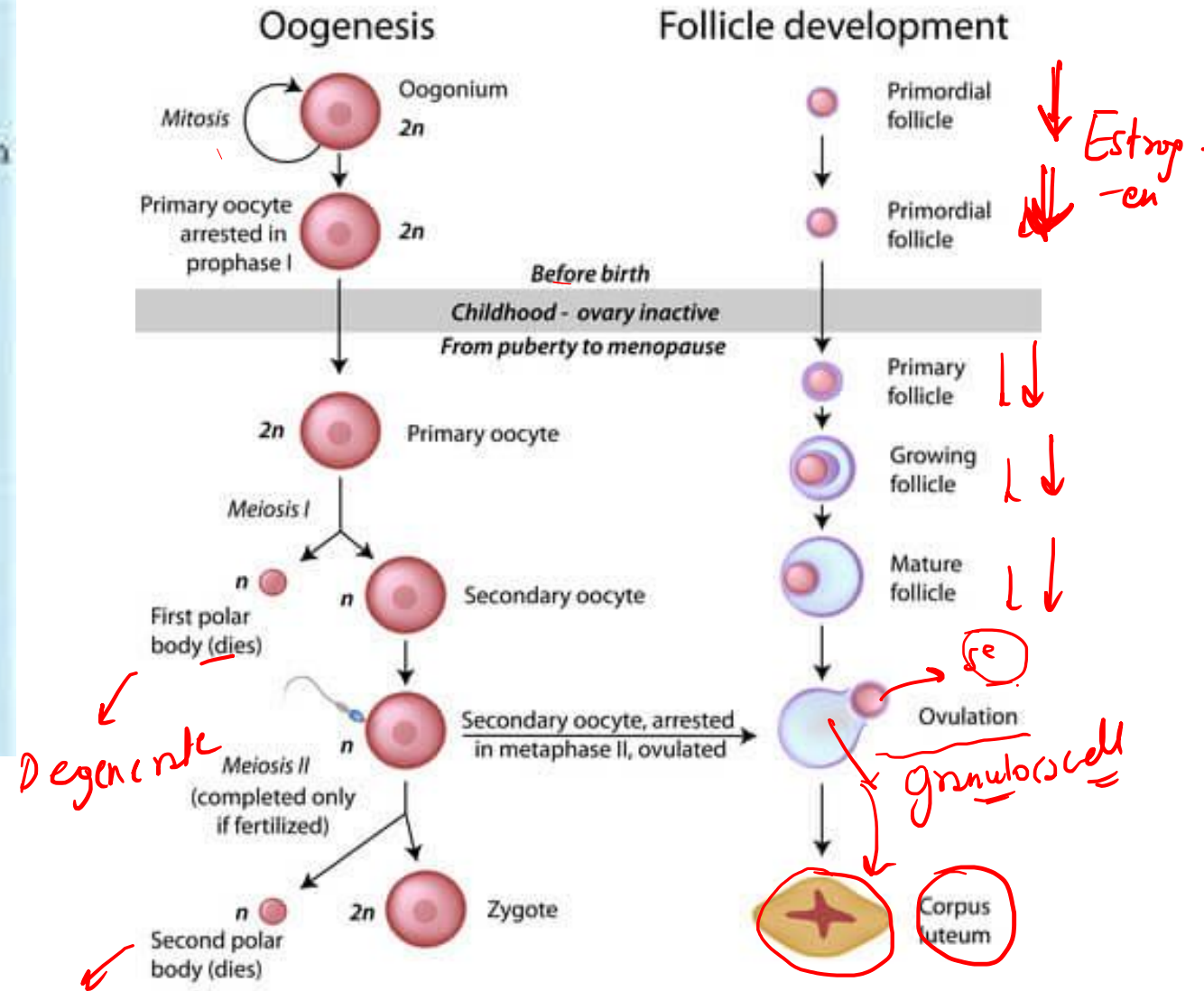
* Non-cellular

HUMAN REPRODUCTION

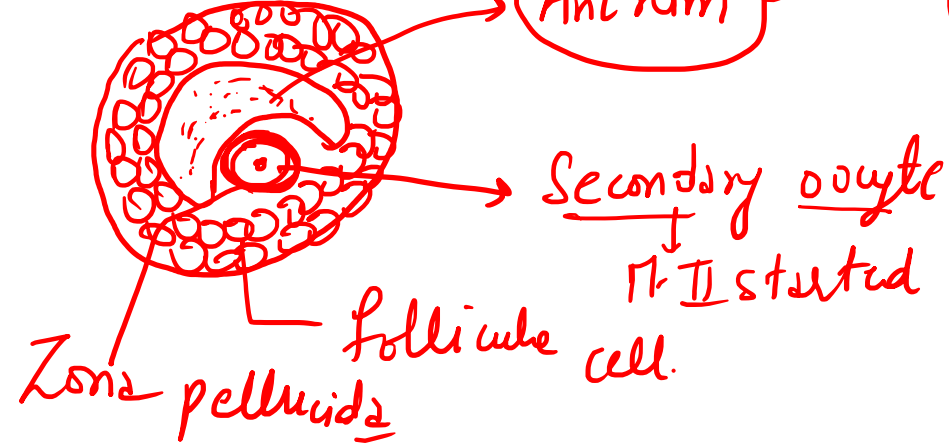
Female Reproductive System



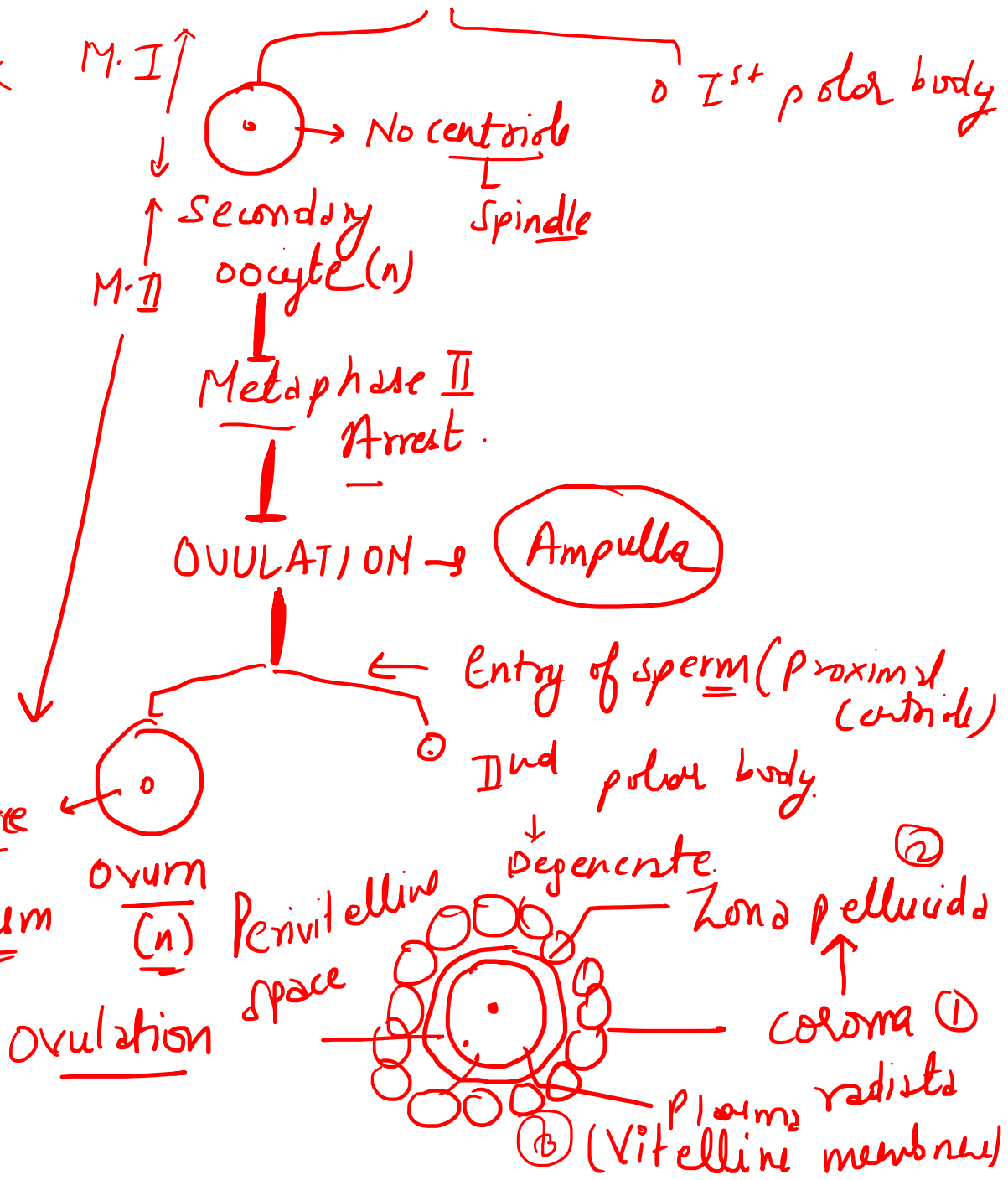
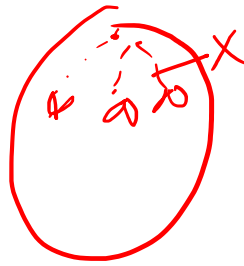
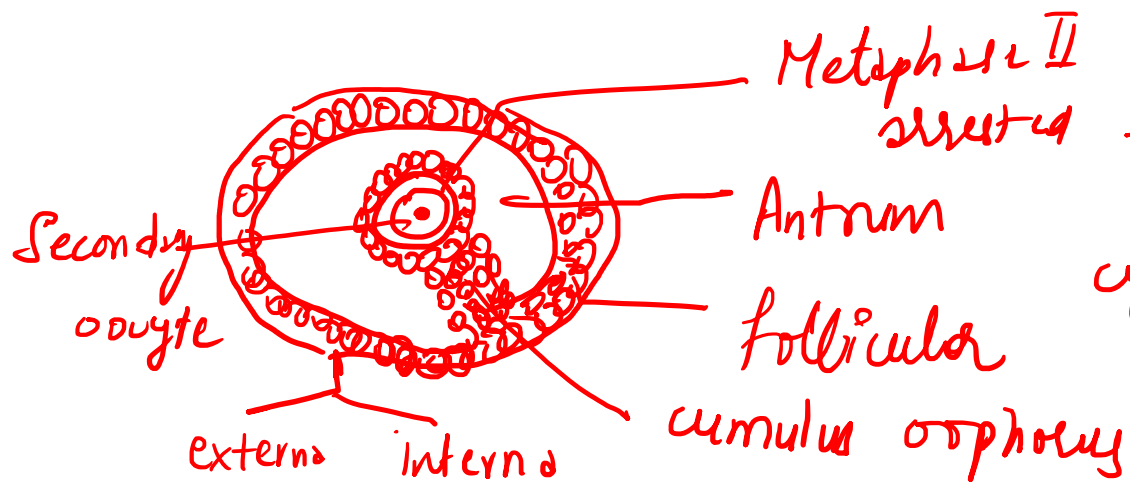
NCERT Image



③ Tertiary follicle



④ Graafian



HUMAN REPRODUCTION

Female Reproductive System

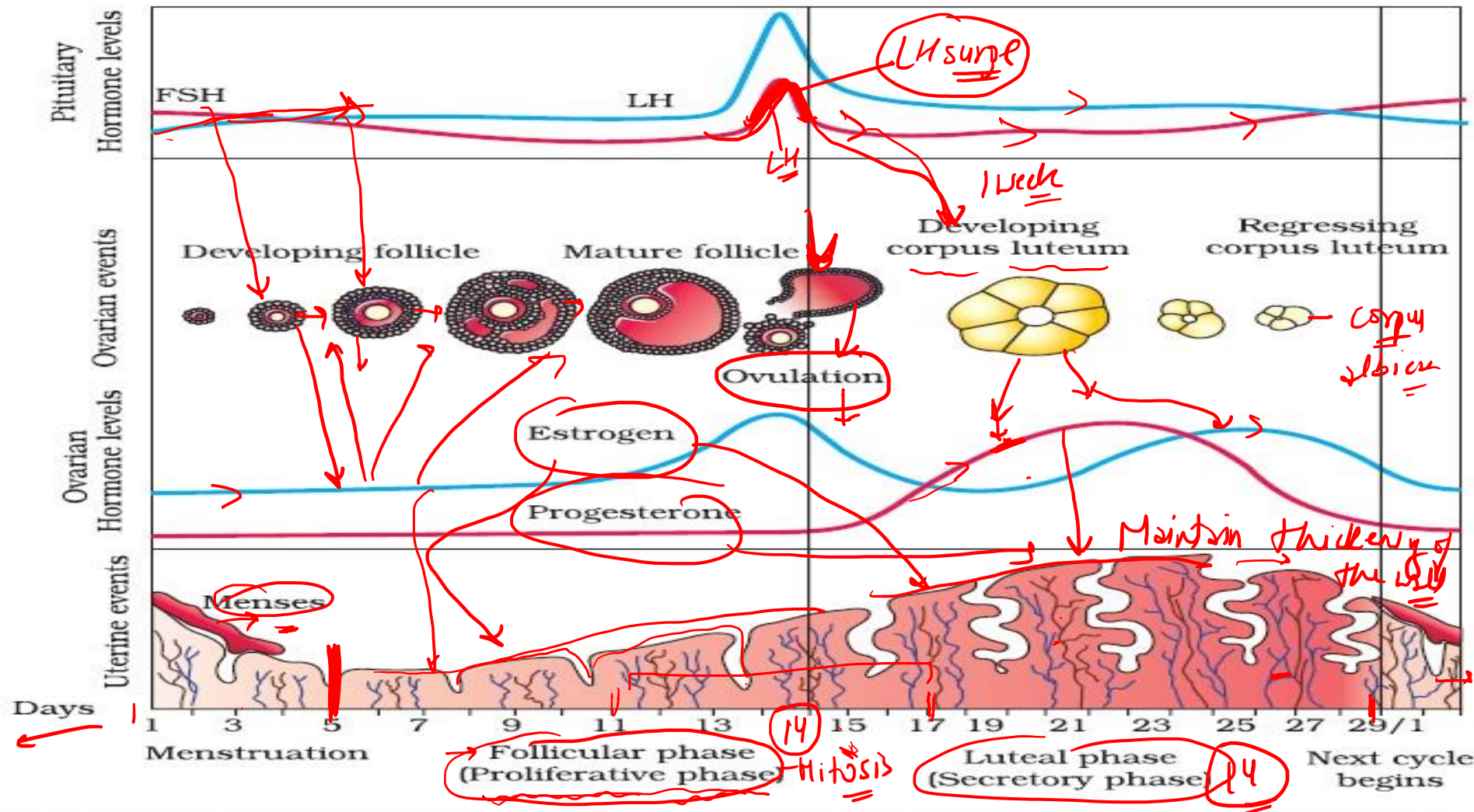
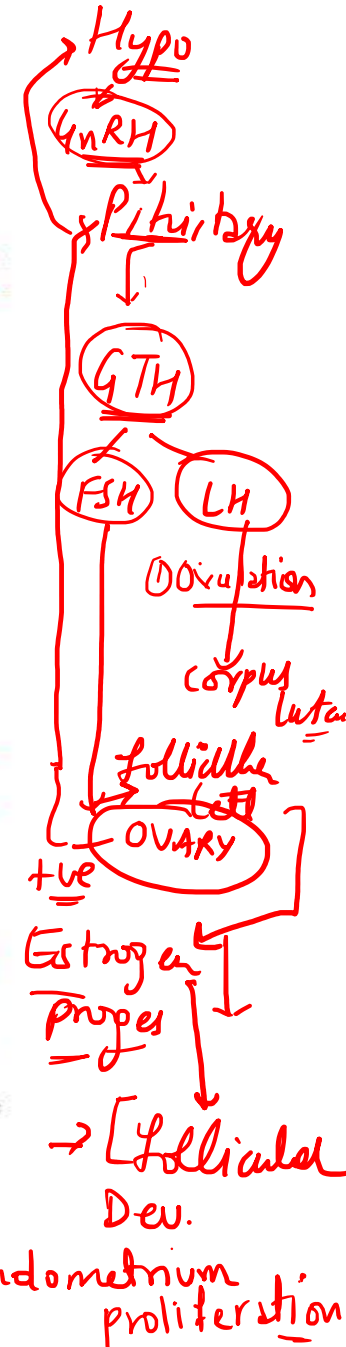


Figure 3.9 Diagrammatic presentation of various events during a menstrual cycle



Menstrual cycle → Puberty ① - Menarche

45+ → Menopause

① → Menstrual phase → 1-5 → $\begin{matrix} \text{FSH} \\ \text{Estrogen} \end{matrix}$

② → Follicular phase / Proliferative → 6-13 $\begin{matrix} \uparrow \text{FSH} \\ \downarrow \text{Estrogen} \end{matrix}$ → Follicles dev.

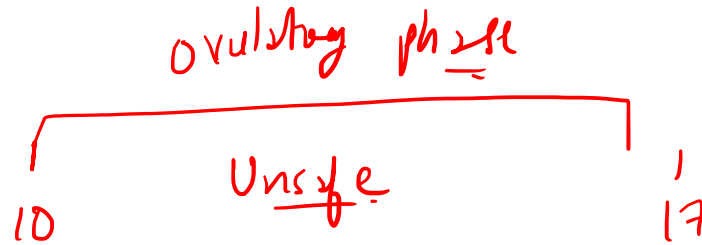
③ → Ovulation - 14th → • Urine - LH Hormone → Kit
• Cervix - mucus - Thick
• Temp. ↑

④ → Secretory / Nutcal → 15th → 28th

$\begin{matrix} \text{LH} \\ \text{FSH} \end{matrix} \downarrow$ $\begin{matrix} \text{Proges.} \\ \text{Estrogen} \end{matrix} \uparrow$

→ Irregular Menses

3 months - 90 day cycle



Day of ovulation → 90 - 14

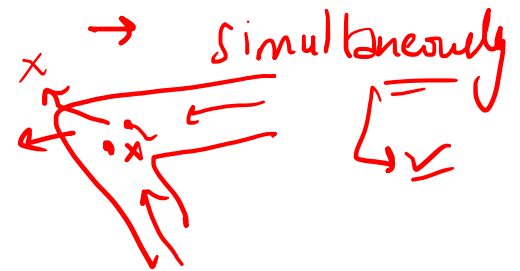
→ No. of days in the cycle → 14
76 - 14

NEET

ovum (2° oocyte)
Amphulla

24 hour - viability

Sperms - 48-72 hour
↓
viability



HUMAN REPRODUCTION

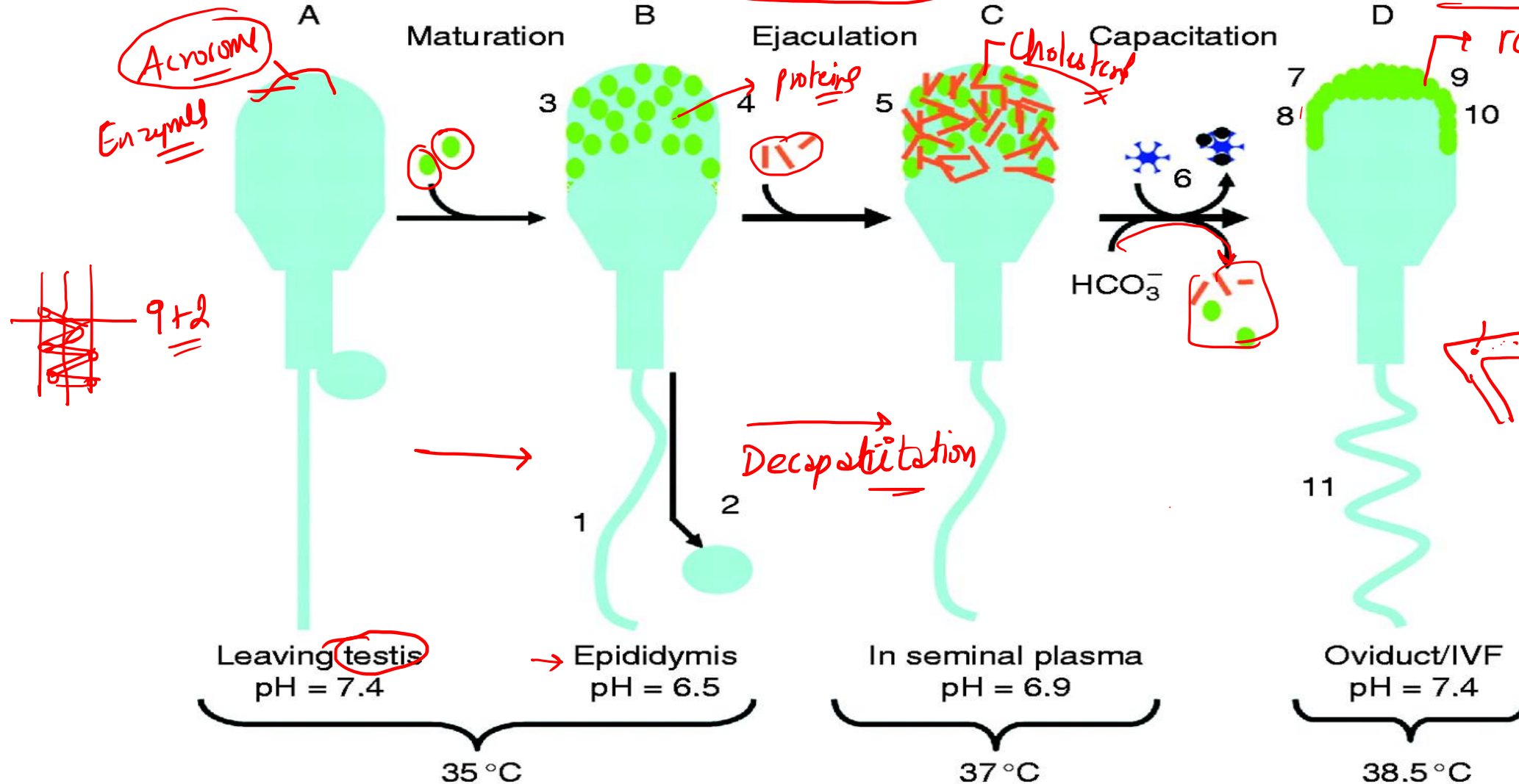
Fertilization

Capacitation Activation of sperm

fusion of gametes

Capacitation
Syngamy
Cortical reaction (Block to

remove →
polyspermy!



Peristalsis

Aspirin - on

move.

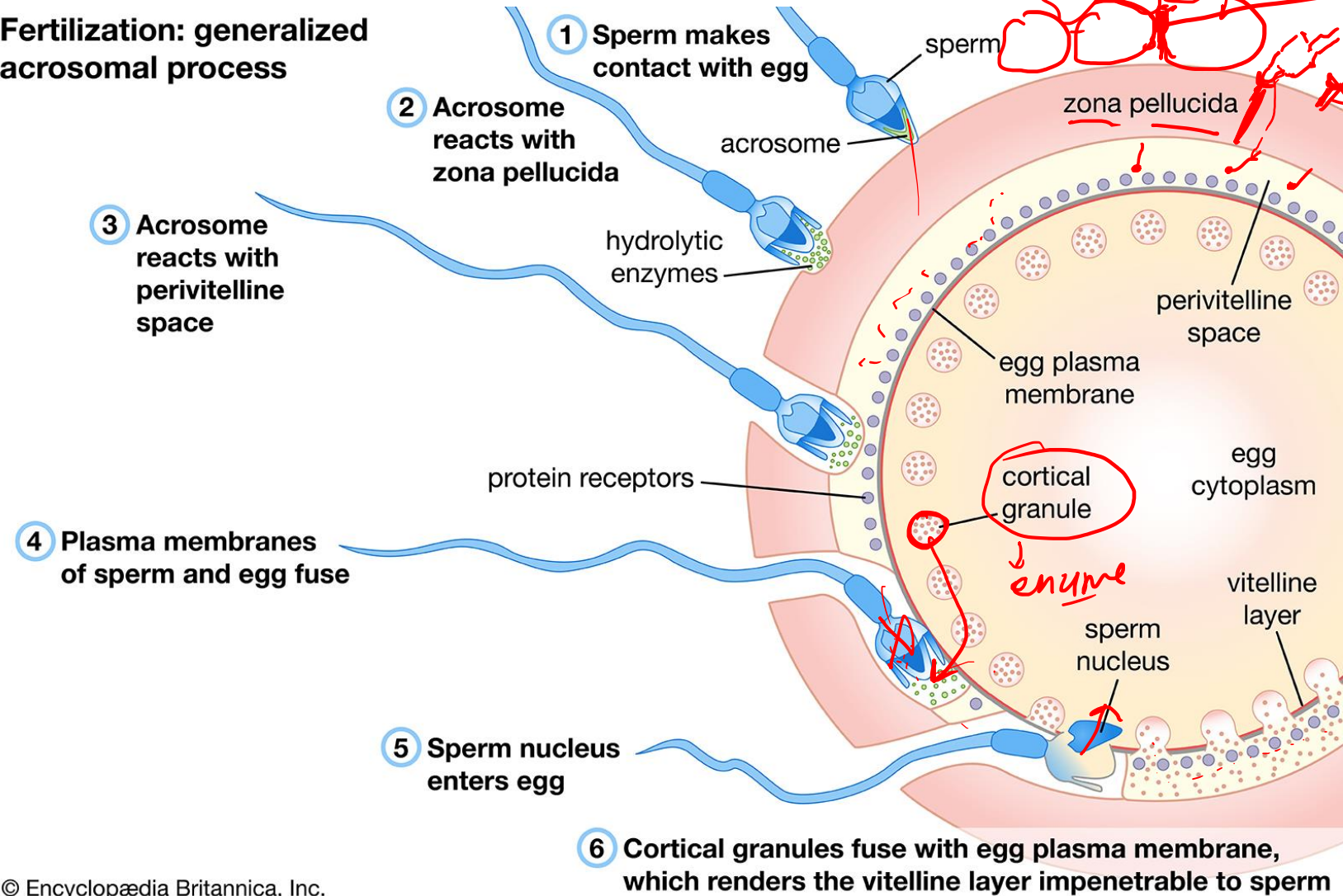
Kill

200 million → 300-400 sperm

HUMAN REPRODUCTION

Fertilization

Fertilization: generalized acrosomal process

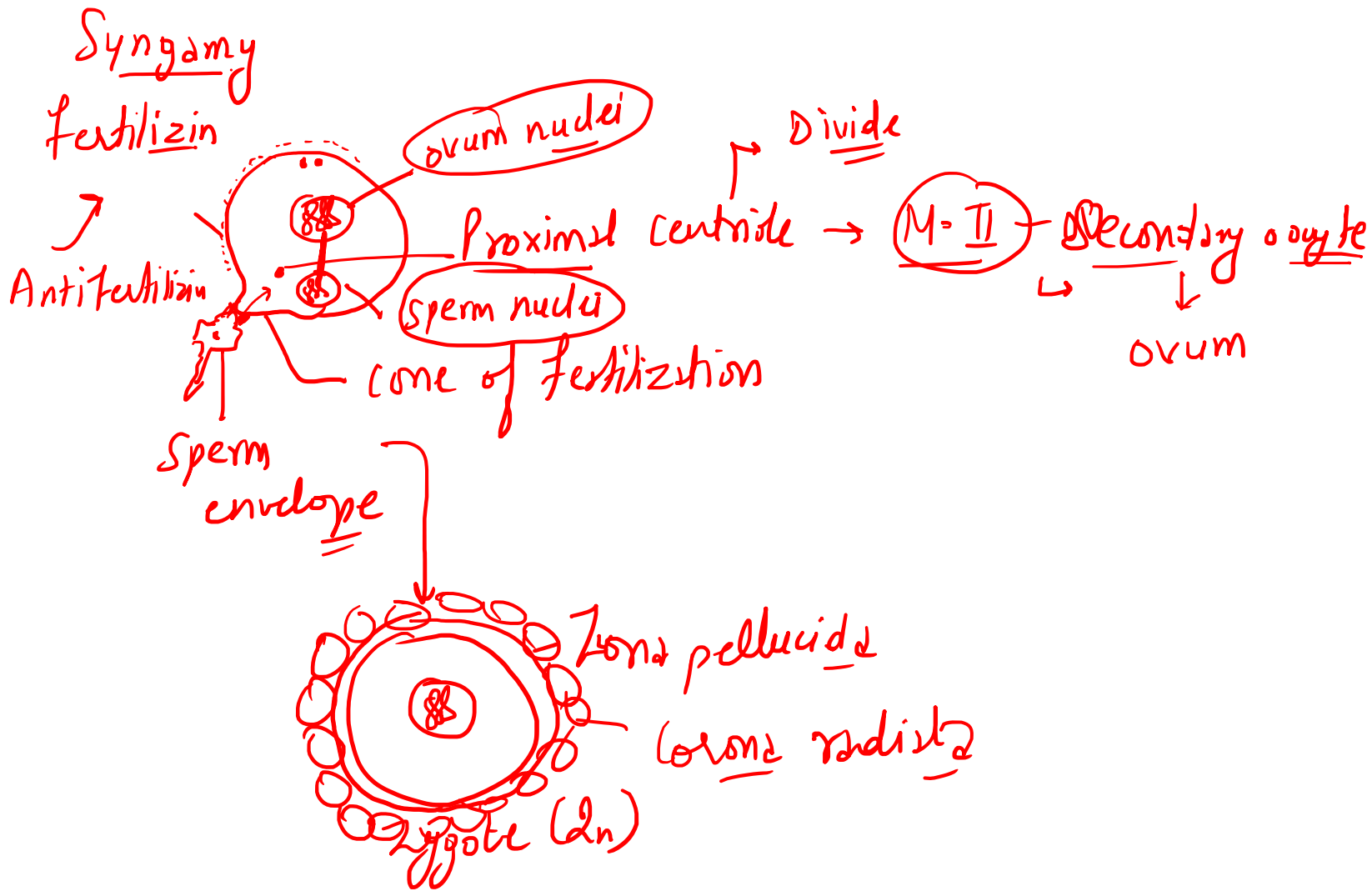


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② Acrosomal reaction

③ Syngamy

① Hyaluronidase
enzyme →
Hyaluronic acid
↓
Digest
② CPE - connective
penetrating enzyme
③ Zona lysis
Zona pellucida
digest
↓
Sperm lysins.



Thank You