

VEER KUNWAR SINGH UNIVERSITY - ARA

B.Sc.

ZOOLOGY (HONOURS) -

PART - III

PAPER - VI

FROM

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PARTHENOGENESIS

• i.e. - Reproduction - from an ovum - without fertilization -

- Especially - as a normal process in -
Some Invertebrates and lower plants

- Ex: of - Cyclic Parthenogenesis - in Aphids

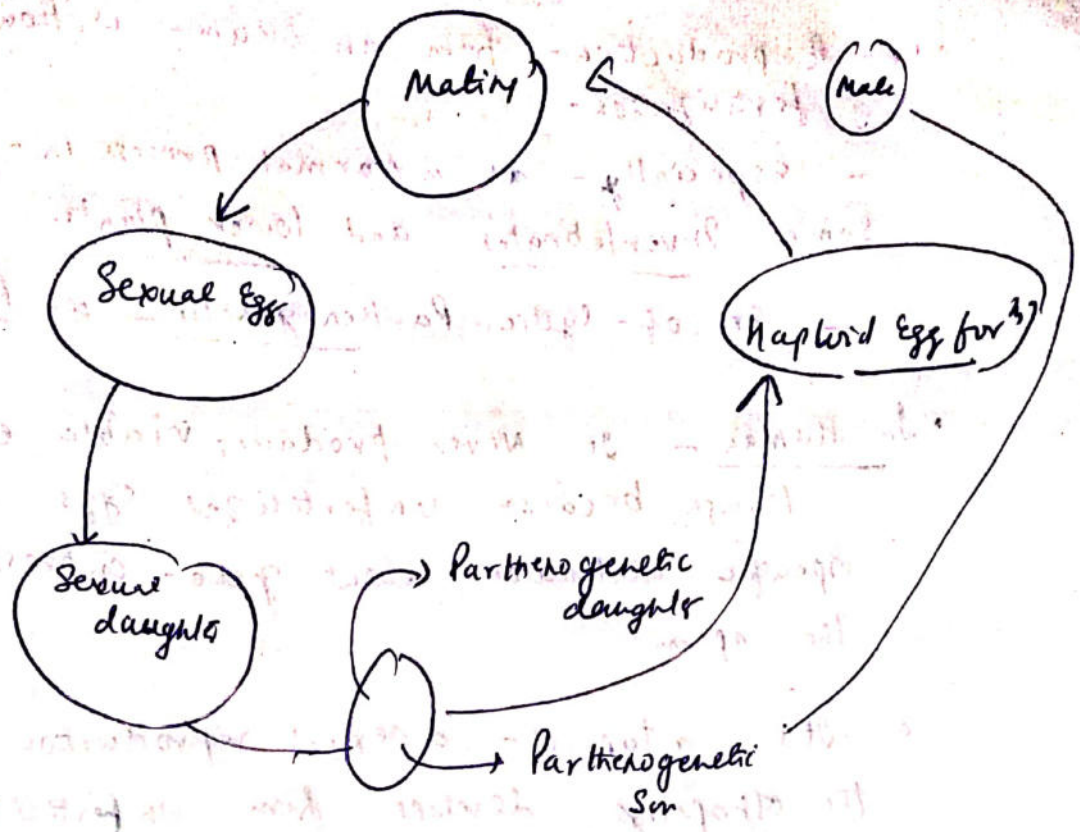
• In Humans - It never produces - viable embryos though because unfertilized eggs lack specific instruction about gene-expression from the sperm

• It's a type of - asexual reproduction in which the offsprings develops from unfertilized eggs.

• It's particularly common amongst - arthropods and rotifers, in some species of fish, amphibians, birds, and reptiles.

• It's an adaptive strategy that allow organism to reproduce - when sexual repⁿ is not possible due to environmental cond^s.

(2)



Cyclic Phase - Parthenogenesis

Types - 2

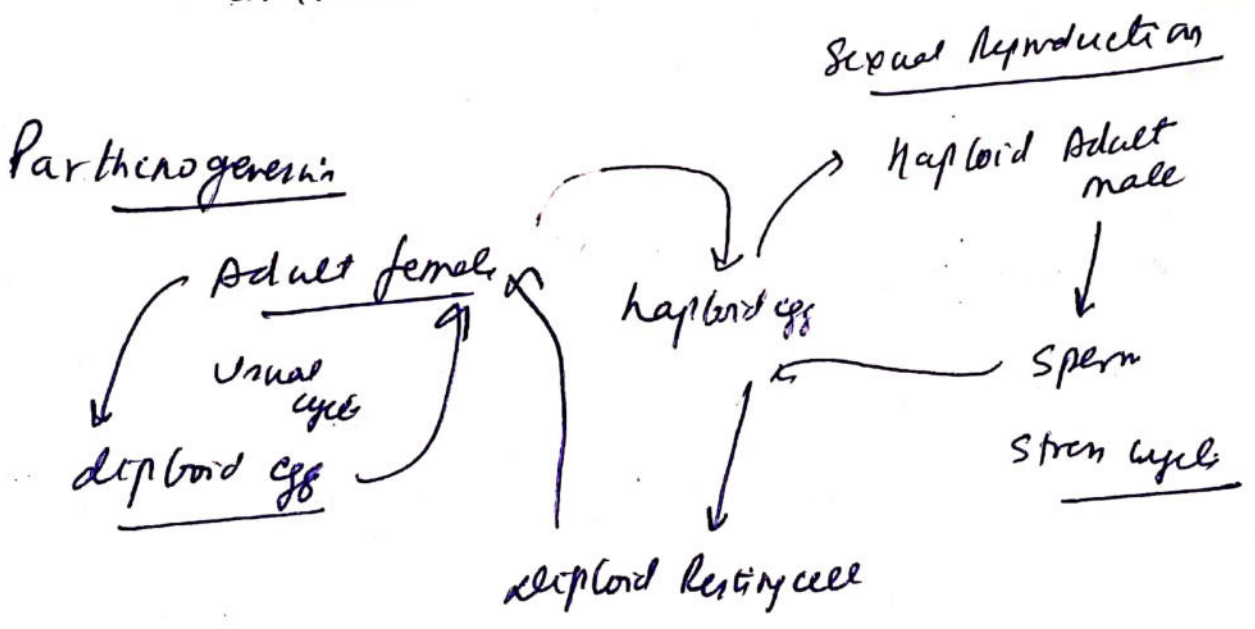
- ① Natural Parthenogenesis
- ② Artificial

① Natural → (i) Complete - $\left\{ \begin{array}{l} \text{Sexual generation} \\ \text{Parthenogenetic-gen's} \end{array} \right.$

- ② Artificial -
- ① Chemical Induce
 - ② Temperature Induce
 - ③ By ultra violet light

Significance -

- ① Helps in - determining - the sex -
- ② support - chromosomal theory of inheritance
- ③ variation - eliminated by - Parthenogenesis
- ④ Include - easy mode of - reproduction
- ⑤ An Adaptive - combination of genes is controlled



The Parthenogenesis - life cycle

Next - RNA - replication