

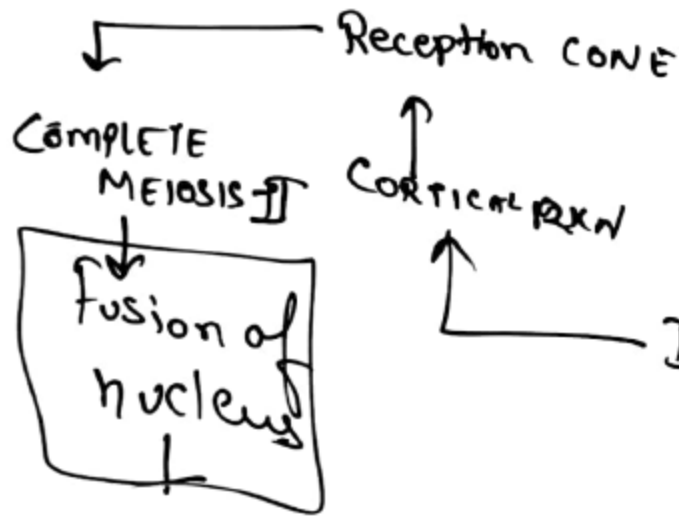
SPERMIOGENESIS → SPERMATION → SEMINATION

SPERMATID - SPERM

EJACULATION

INSEMINATION

CAPACITATION



CORTICAL RXN

Depolarisation

ACROSOMAL

HYALIN
SPERM
LYSIN
C.R.P.E

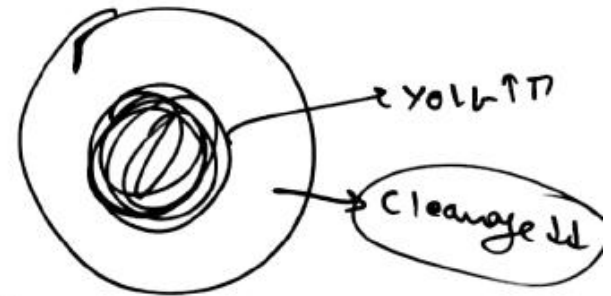
CLEAVAGE \rightarrow RAPID MITOTIC CELL DIVISION



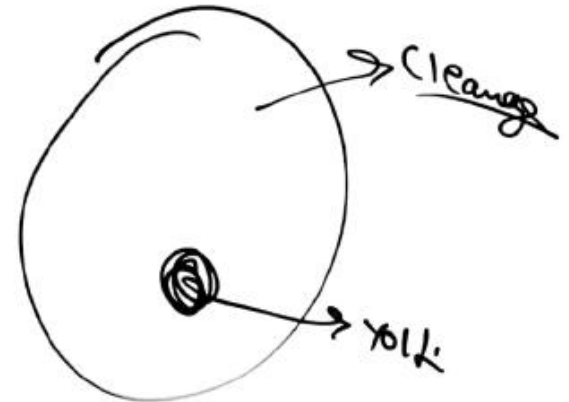
- * Cells produced by cleavage is known as blastomeres
- * Number of blastomere increase & size of blastomere decrease
- * But size of embryo remain same
- * Interphase is short in cleavage only S-Phase is present.
- * G₁ & G₂ Phase not present
- * During cleavage DNA mass inc. \uparrow

BALFOUR'S LAW

$$\text{RATE of cleavage} \propto \frac{1}{\text{YOLK}}$$



* CLEAVAGE IS DEPENDENT ON PERCENTAGE OF YOLK. IF YOLK IS MORE THEN, CLEAVAGE IS LESS.

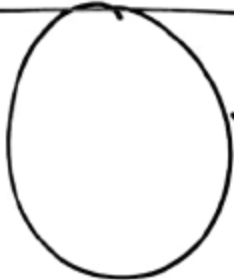


CLEAVAGE

HOLOBLASTIC

* CLEAVAGE OCCUR IN WHOLE EGG.

* Ex → MICROLECITHEAL



⊕
MESOLECITHEAL

MEROBLASTIC

↓
CLEAVAGE OCCURS IN SOME PART OF EGG

↓
Ex → MACROLECITHEAL



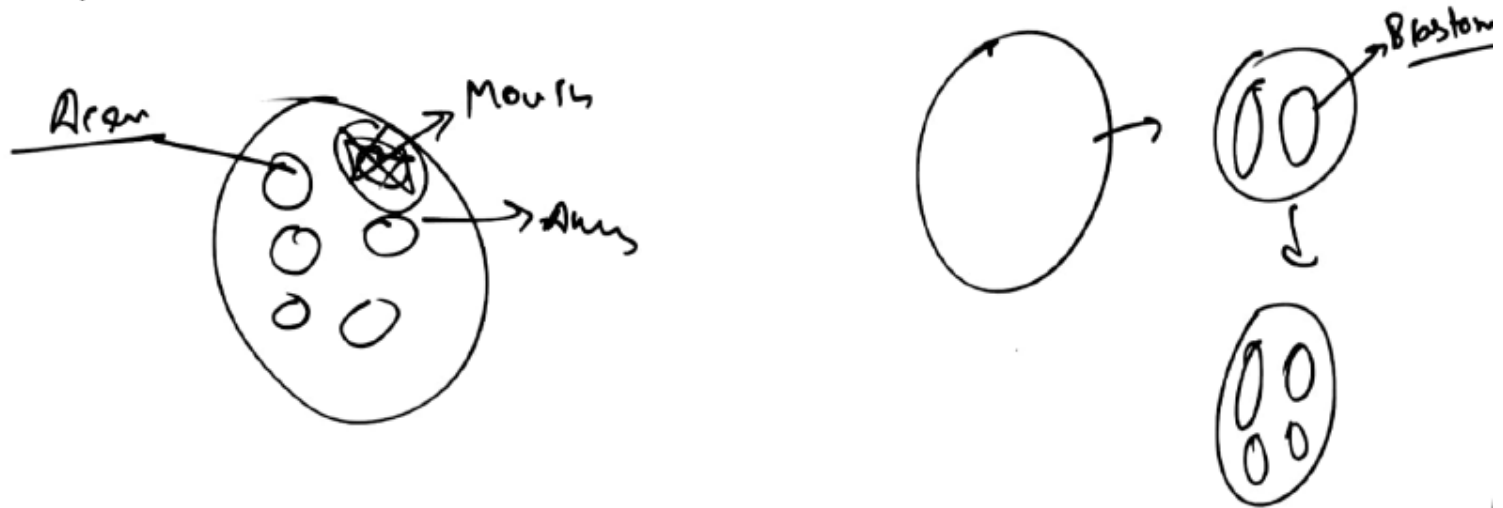
CLEAVAGE $\left\{ \begin{array}{l} \text{DETERMINATE} \\ \text{INDETERMINATE} \end{array} \right.$

(A) DETERMINATE CLEAVAGE: FATE OF BLASTOMERE IS FIXED.

↳ EACH BLASTOMERE FORMS PARTICULAR POSITION OF EMBRYO.

↳ IF ANY BLASTOMERE IS DAMAGED THEN THAT PART OF BODY WILL BE ABSENT.

↳ Nematoda, Annelida, Mollusca

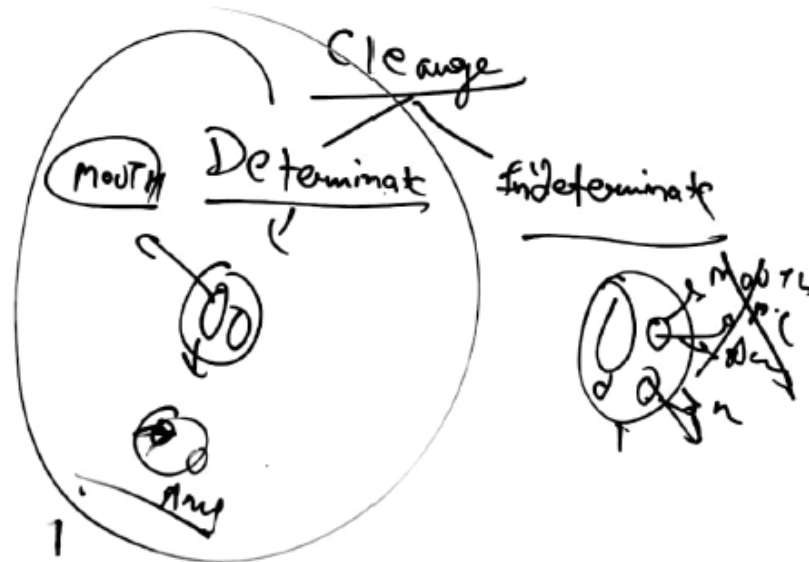


CLEAVAGE $\left\{ \begin{array}{l} \text{DETERMINATE} \\ \text{INDETERMINATE} \end{array} \right.$

INDETERMINATE :- FATE OF BLASTOMERE IS NOT DEFINE.

- ↳ ALL BLASTOMERE FORMS ALL PARTS OF EMBRYO
- ↳ If any BLASTOMERE IS LOST, THEN THERE IS NO LOSS OF ORGAN IN EMBRYO.

EX \rightarrow Human



HUMAN Embryonic Development

