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Part-1 , Paper-I (Group-A)

Animal Diversity 1

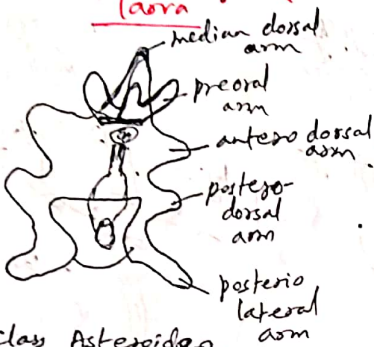
Larval forms of Echinodermata

LARVAL FORMS

In ECHINODERMATA

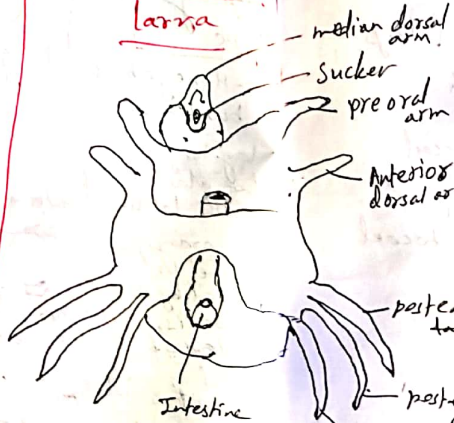
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Bipinnaria larva



- * Class Asterozoa
- * larva with free swimming life
- * feeds on diatoms as alimentary canal is formed.
- * Ciliary band on stomodaeal wall helps in feeding.
- * ciliary band - in front of mouth - preoral loop
- * ciliary band - in front of anus - preanal loop
- * development in 2 to 7 days.

Brachiolaria larva

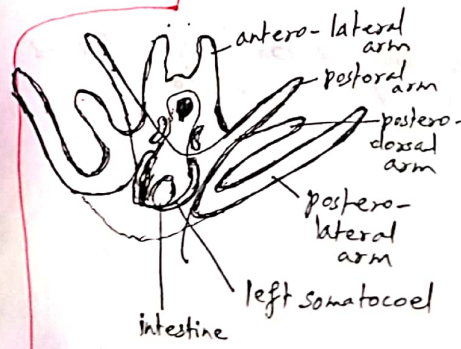


- * Bipinnaria larva transforms into brachiolaria larva which develops 3 short arms at preoral lobe. (1 median & 2 lateral arms)
- * Adhesive glandular area acts as a sucker
- * Metamorphosis into adult within 2-3 months

Ophiopluteus larva

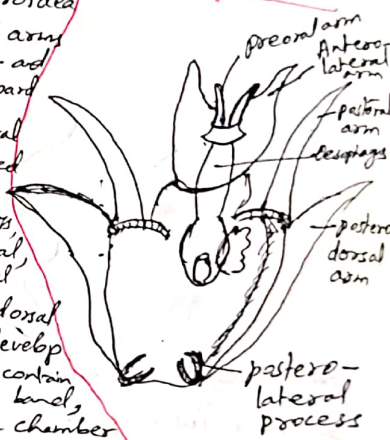
Class: - Ophiurozoa

- * Postero-lateral arms are the longest and directed forward
- * Postero-lateral arms are formed first.
- * 4, 10 and 18 days, anterolateral and postero-dorsal arms develop
- * larva contain ciliated band, Coelomic chamber and archenteron.



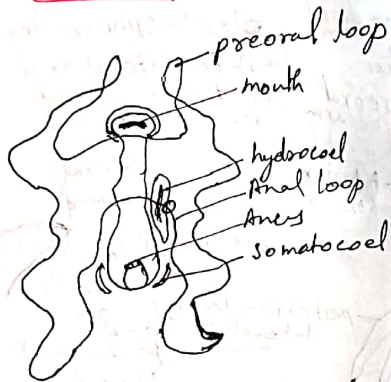
Ophiopluteus larva

Echinopluteus larva



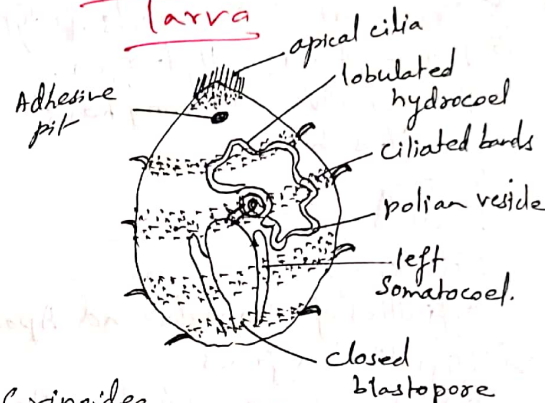
- * Class: Echinozoa
- * Gut differentiated into mouth, oesophagus, stomach & intestine
- * Six arms namely preoral, anterolateral, antero-dorsal, postoral, postero-dorsal and postero-lateral.
- * Arms supported by calcareous skeletal rods.
- * Microscopic, free swimming and develops within 7 to 30 days.

Auricularia Larva



- * Class: Holothuroidea
- * Free swimming larva within 3 days (from embryo)
- * It is transparent, pelagic about 0.5 to 1mm in length.
- * Swim about by ciliated band which forms preoral loop and an anal loop.

Poliolaria Larva



- * Class: Crinoidea
- * ~~Transitional stage from auricularia~~
- * Free swimming larva
- * Continuous ciliated band breaks in 4 to 5 flagellated rings
- * Mouth sited to anterior and anus to posterior pole.
- * Apical sensory plate at anterior with a bunch of cilia.