



तारीख
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SEMESTER... Ist
रोल नं.
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PAPER NO.....

*अतिरिक्त प्रयुक्त उत्तर पुस्तिकाओं की संख्या

No. of continuation books used.....

1) A Amoebocytes :- There is ^{layer} intercellular ~~space~~ between Pinacocytes & choanocytes which is name as Mesenchyme. Mesenchyme are made up of many Amoebocytes cells :-

- L Scleroblast - formation of skeleton
- U Colleroblast - connect to cell (v) chromocytes
- uu thesoytes - food storage - Provide colour to
- W leopocytes - digestion of nutrients sponge

B Choanocytes - Porifera are diploblastic animals. The first layer is - Pinacoderm (origin from ectoderm)

Second layer is

- Choanocytes (origin from endoderm)

Choanocytes is made of collar cells which is lined by the spongocoel.

C Coelom - These are the body cavity which were mesodermally origin. Due to absente of coelom in Porifera. They are acoelomate animals.

The coelom is seen in Annelida, mollusca like phylum.

2. 'Porifera' word is given by Robert Grant.

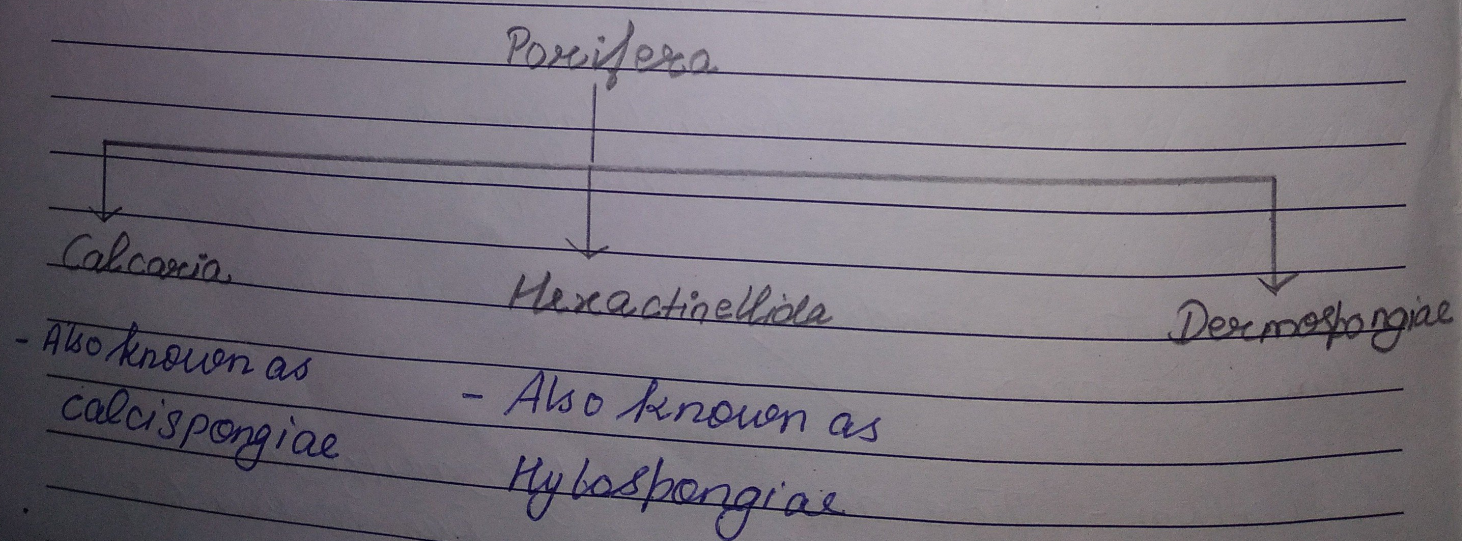
The phylum Porifera implies pore bearing.

Phylum belong to kingdom Animalia. They are acoelomate, mostly marine but some are freshwater. Porifera also known as sponges due to their sponge like appearance.

They are diploblastic, no symmetry is found in Porifera but there is an exception with Leucosolenia which is radially symmetrical.

Porifera classified into four class but :-

- Calcarea
- Hexactinellida
- Demospongiae



GENERAL CHARACTERISTICS

Calcarea	Hexactinellida	Demospongiae
- Their skeleton is made of calcareous spicules i.e., calcium carbonate. - Ascon, sycon & leucon type canal system is present. - Example → Leucosolenia, Geatina, Clathrina	- Their skeleton is made of siliceous spicules made up of silica. - Also known as glass sponge due to their transparent & shiny appearance. - Mostly marine but some fresh water. - Example → Hyalonema, Euplectella	- Their skeleton is made of spongin fibre or spicules. In some cases, the skeleton is made both of spongin fibre or spicules. - In Demospongiae, there is Rhagan type of canal system instead of leucon. - Example - Oscarella, Plakina. - Oscarella - skeleton absent

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3 Water canal system is the characteristic feature of phylum Porifera. There are four types of canal system in Poriferans

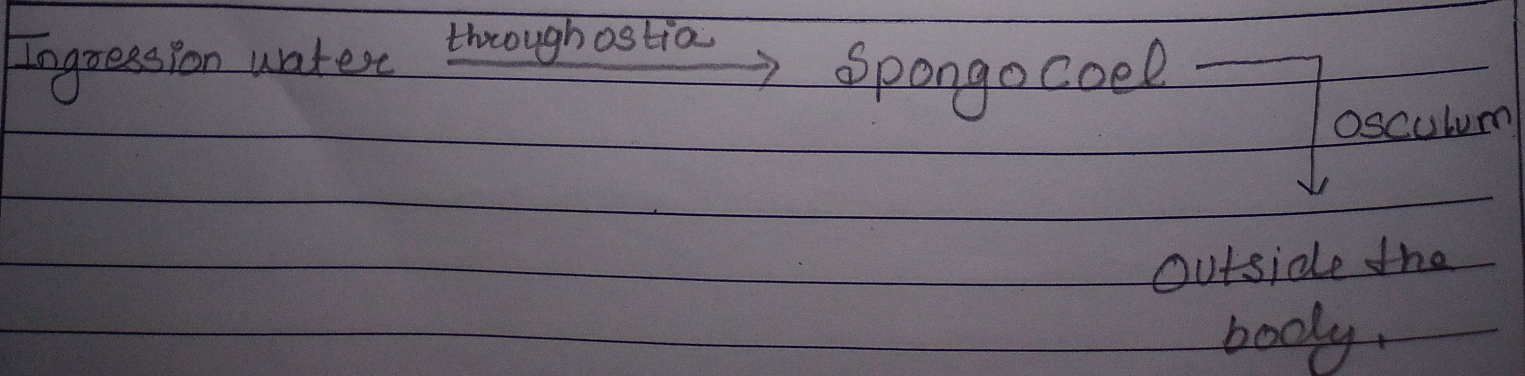
- Ascon
- Sycon
- Leucon
- Rhagon (only in Demospongiae)

ASCON -

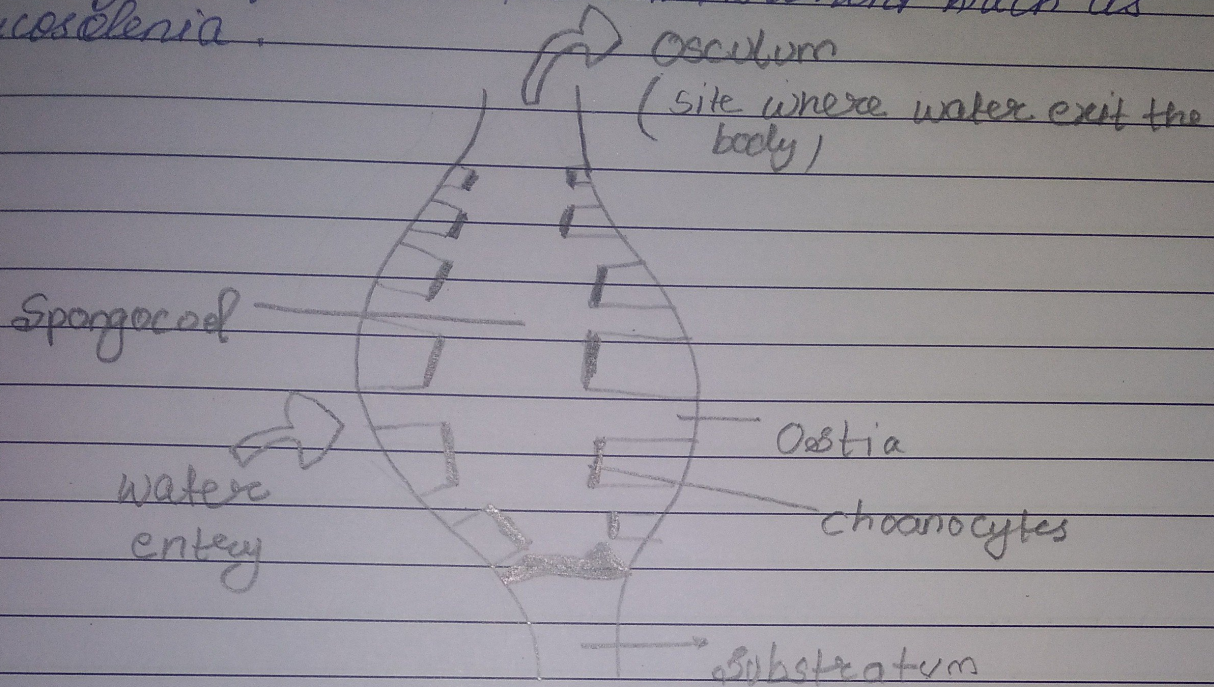
It is the simplest water canal system as compared to others.

Body of sponges is perforated by a large aperture through a minute pore & for entry of water, water flow from different canal & form the canal system.

In Ascon, Body of sponges is perforated by a large aperture through a minute pore called incurrent pore or ostia. Ostia are intracellular space within the tube. Ostia are directly open into the spongocoel (cavity in the poriferans) which is lined by choanocytes. With the help of osculum, water exit throughout the body.



Ascon type of canal seen in Asconoid such as *Leucosolenia*.



✓ ASCONOID CANAL SYSTEM

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