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For B.Sc Part 1, Paper 1 (A)

Question 54:- Echinodermata ko classify karke  
hue sachitra dikhaon karke?

Answer:- Echinoderm is the common  
name given to any member of  
the phylum Echinodermata (From Ancient  
Greek, *éxinos*, echinos - "hedgehog"  
and *derma*, derma - "skin") of  
marine animals. The adults are  
recognizable by their (usually five-pointed)  
radial symmetry, and include starfish,  
sea urchins, and dollars, and sea  
cucumbers, as well as the sea  
lilies or "stone lilies".<sup>[3]</sup> Echinoderms  
are found at every ocean depth,  
from the intertidal zone to the  
abyssal zone. The phylum contains  
about 7000 living species,<sup>[4]</sup> making  
it the second-largest grouping  
of deuterostomes (a superphylum),  
after the chordates (which include  
the vertebrates, such as birds,  
fishes, mammals, and reptiles).  
Echinoderms are also the largest  
phylum that has no freshwater  
or terrestrial (land-based) represen-  
-tatives.

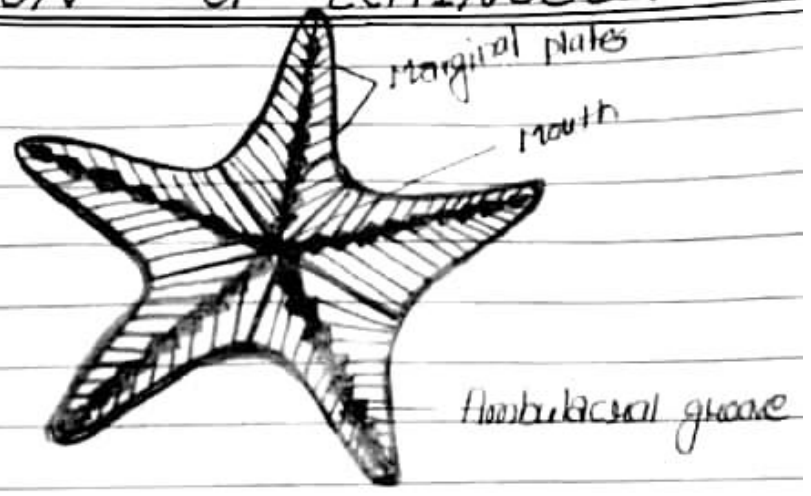
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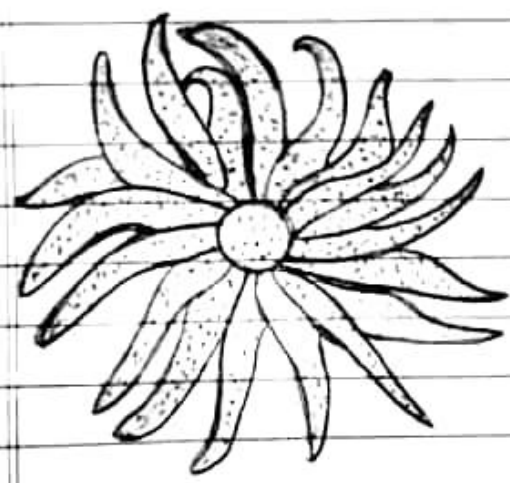
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# CLASSIFICATION OF ECHINODERMATA

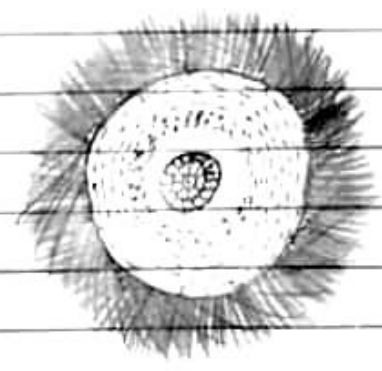
- Class Asterozoidea
- Class Ophiurozoidea
- Class Echinozoidea
- Class Holothurozoidea
- Class Crinozoidea



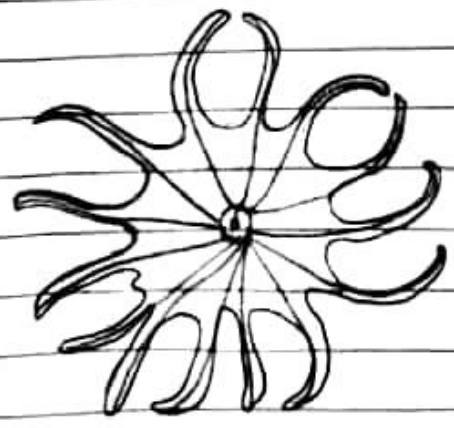
[B]



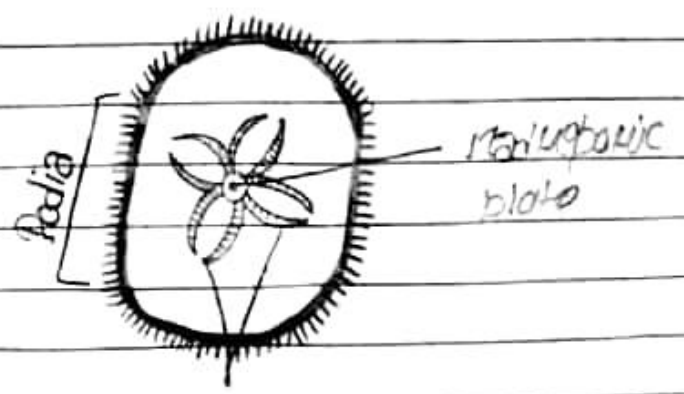
[A]



[C]



[D]



Petaloid ambulacrum

[E]



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## Scientific Classification

Kingdom	Animalia
Clade	Bilateria
Clade	Nephrozoa
Superphylum	Deuterostomia
Clade	Ambulacraria
Phylum	Echinodermata Bridgman, 1791 (ex Klein, 1734)

## subphyla and classes

Hemalozoa † Gill & Costen, 1960

Hemostelea †

Hemistelea †

Stylophora †

Ctenocystoidea † Robison & Sprinkle, 1969

Cnidozoa

Cnidoida

Edrioasteroidea †

Hydrozoa †

Scyphozoa †

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Rhombifera †

Asterozoa

Ophiuroidea  
Asteroidea

Echinozoa

Echinoidea  
Holothuroidea  
Ophiocystioides †  
Helicoplacoides †

Blastozoa †

Blastoidea †  
Cystoidea † von Buch, 1846  
Echinidea † Jaekel, 1899  
Rhinocleinoidea † Regnell, 1945

Aside from the hard-to-classify *Aurora* (a Precambrian animal with echinoderm-like pentamerous radial symmetry), the first definitive members of the phylum appeared near the start of the Cambrian. (Hemalzoa), which are close to the base of the echinoderm origin, have been found to possess external gills used for filter feeding, similar to those possessed by chordates and hemichordates.