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for B.Sc. part I, paper I (A)

Question: Q6. Asterias ko classify karke hue chitua
sahit varnan kare -?

Answer: - Asterias is a genus of the
Asteriidae family of sea stars. It includes
several of the best-known species of
sea stars, including the (Atlantic) common
starfish, *Asterias rubens*, and the
northern Pacific seastar, *Asterias amuren-
sis*. The genus contains a total of
eight species in all. All species have
five arms and are native to shallow
oceanic areas (the littoral zone) of
cold to temperate parts of the Holo-
-ctic. These starfish have planktonic
larvae. *Asterias amurensis* is an
invasive species in Australia and
can in some years become a
pest in the Japanese mariculture
industry.

Scientific classification

Kingdom : Animalia

Phylum : Echinodermata

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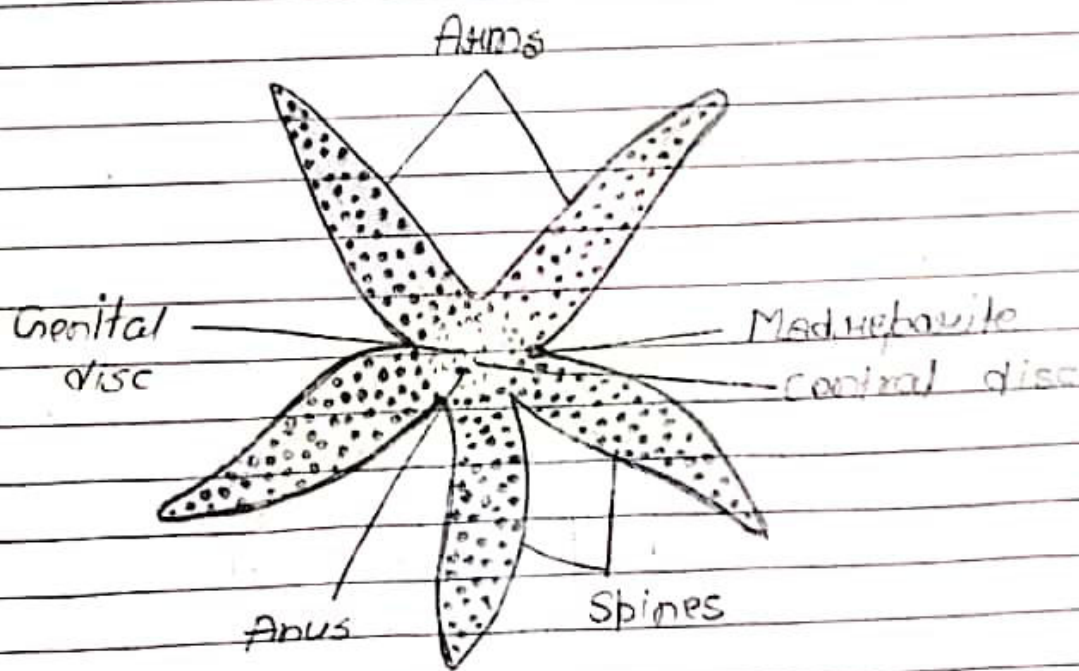
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Class: Asteroidea

Order: Forcipulatida

Family: Asteriidae

Genus: Asterias
Linnaeus, 1758

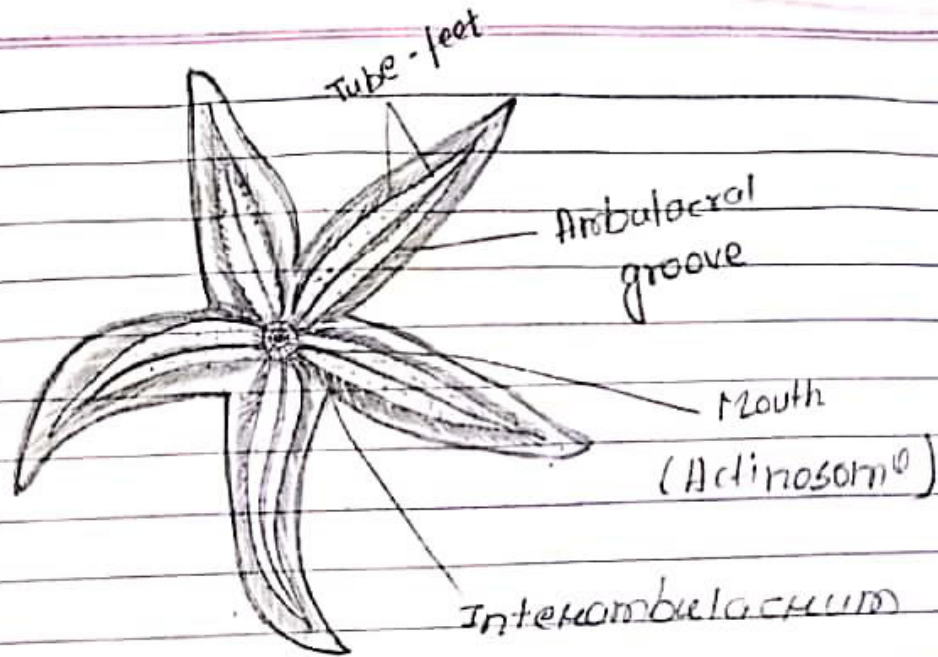


→ History

The genus *Asterias* was first created by Carl Linnaeus in the 10th edition of *Systema Naturae* in 1758 when he published *A. rubens*. It was for a time the only species, but by the early 1800s a few dozen taxa had been described in this genus.

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In 1825 Thomas Say listed six species native to the coasts of the United States (which at the time consisted of the east coast from Maine to Florida, which the US had just formally acquired from Spain a few years earlier). None of these species are accepted or recognised as Asterias today.

Johannes Peter Müller and Franz Hermann Thoschel worked on starfish systematics in 1840, renaming the genus Asteroacanthion and splitting a number of new genera from it.

William Stimpson rejected Müller and Thoschel's Asteroacanthion in a paper presented on 4 December.

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1861, and named 16 new species, none of which are retained or included in *Asterias* at present. In 1875 Edmond Perrier formally reduced *Asteriacanthion* to a synonym.¹¹ Francis Jefferey Bell listed 78 species in the genus in 1881, arranging them in some 16 unranked groupings (see artificial taxonomy).

Description :-

Asterias, like most starfish genera in order Forcipulatida, are recognisable externally by their pedicellariae, many thousands of tiny jaw-like structures on the skin which can snap shut to nip at prey or predators. *Asterias* has two types present the major, also called straight, pedicellaria, which lie scattered across their skin, and the smaller minor, also called crossed, their pedicellaria, which are found in tufts or wreaths around the large dorsal spines - these pedicellariae have tiny, hubbucy stalks known as pedicels. Papulae are also present. All species normally have five arms, internally the exoskeleton also presents some diagnostic characters, such as the dorsal plates bearing only a single spine in their centre.