

Topic: Morphology and Life history of Obelia

Class: B.Sc Part –I (Hons.)

Paper- I

Group – A

Name : Dr. Kumari Sushma Saroj

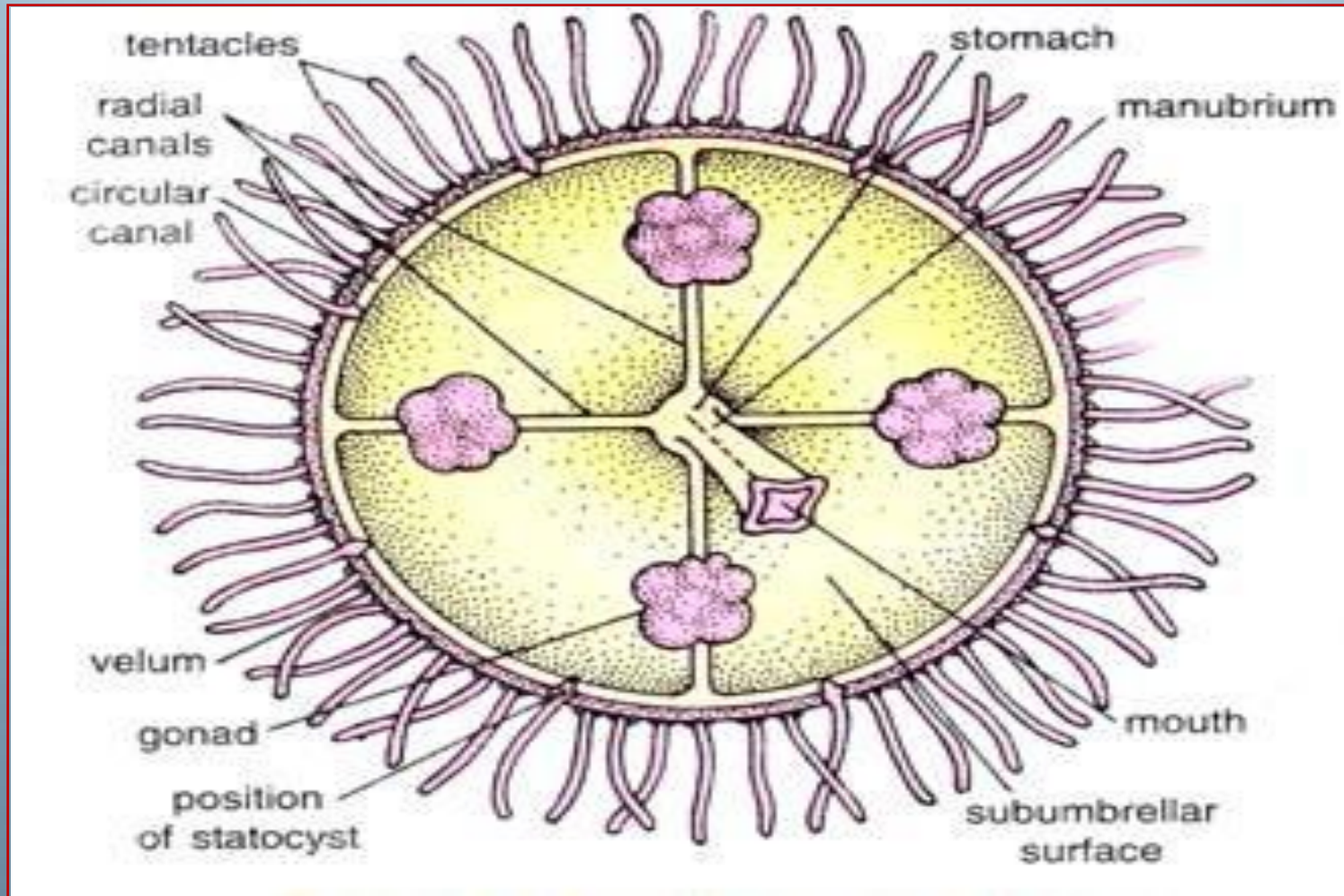
Department: Zoology

College: Dr. L. K. V. D College, Tajpur, Samastipur

Asexual Reproduction

- When the temperature of the water exceeds 20°C,
- The buds which would normally form gonangia in the colony break free from the colony and settle down
- A stolon arises from the lower end of the bud which produces a new colony of *Obelia* asexually.
- This is a special mode of asexual reproduction.

Obelia: Medusa in oral view



Medusa:

- The medusa is a modified zooid produced as a hollow bud from the coenosarc of the blastostyle in spring and summer.
- Medusa swims freely on the surface water.

Structure of Medusa:

- It is saucer-shaped, it is attached by the middle of the convex surface to the blastostyle,
- when fully formed it breaks free and emerges from the mouth of the gonotheca.
- The medusa is circular and tiny umbrella-like in shape.
- The convex outer surface is known as the ex-umbrella and the concave inner surface is the sub-umbrella.
- From the centre of the sub-umbrella arises a short projecting manubrium (L., manus = handle), at its apex is a square mouth surrounded by four oral lobes.

- The mouth leads into an enteric cavity or gastric cavity in the manubrium.
- The enteric cavity, arise four radial canals which are delicate ciliated tubes,
- They run to the margin of the bell to join a ciliated circular canal running near the margin.

- The enteric cavity and the canals represent the enteron which distributes food.
- Projecting from the middle of the radial canals are four gonads,
- Since sexes are separate they are either four testes or four ovaries,
- They are patches of modified sub-umbrellar ectoderm.