



Q.1. Give short answers of the following:

(6x5=30)

1. What is stele? Differentiate between Protostele & Siphonostele in plants.
2. Describe different types of stomata with the help of diagrams.
3. Describe methods of reproduction in bacteria.
4. What are different types of lichens on the basis of habitat, thallus organization and fungal partner?
5. Give economic importance of Diatoms.
6. What are auxospores? How their formation occurs in *Pinnularia*?

Give brief answers of the followings.

(3x10=30)

Q. No. 2: Draw and describe life cycle of *Marsilea* (10).

Q. No. 3: What is Tobacco Mosaic Virus? Describe its characteristics and modes of infection?

Q. No. 4: Draw and describe life cycle of rust fungi. (10)