



THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Answer the following short questions: (6x5=30)

- I. Explain Reproduction in *Chara* with the help of labeled diagrams.
- II. Draw and describe life cycle of *Ustilago*.
- III. What is meant by Clump formation in *Ectocarpus*? How will you differentiate Plurilocular and Unilocular sporangia in *Ectocarpus*?
- IV. Why *Ephedra* plant is known as connecting link between angiosperms and gymnosperms? Explain.
- V. What are Diatoms? How will you differentiate Centric & Pennate Diatoms?
- VI. What are evolutionary features of *Anthoceros* sporophyte? Draw and describe its structure.

Answer the following questions. (3x10=30)

Q. No. 2: (a). Draw and describe life cycle of *Pinus*.

(b). Write a note on REPRODUCTION IN VIRUSES.

Q. No. 3: *Cycas* is a living fossil. Discuss.

Q. No. 4: (a) What are Cyanobacteria? Write a note on their Economic importance.

(b) Draw and describe triphasic life cycle in *Polysiphonia*.