Board – ICSE	Class – 9	Topic – SEED: Structure and Germination

1. Why deeply sowed seeds failed to germinate?
2. What is seedling?
3. Give the significance of water during germination.
4. Give the functions of Micropyle in seed germination.
5. Fill in the blanks
   (a) Embryo consists of a single cotyledon called as _____.
   (b) _____ is a period of rest in seed.
   (c) Pollen tube enters into ovule through _____ pore.
   (d) When the cotyledons remain underground the germination is _____ type.
6. Explain the conditions essential for seed germination.
7. Give reason for following sentences.
   (a) At low temperature seed will not germinate
   (b) Seed cannot germinate in deep water.
   (c) The seed in vessel containing pyrogallic acid will not germinate.
   (d) Seedling does not occur in refrigerator.
8. Mark the following sentence with true and false, and also give correct reason for false statement.
   (a) Scutellum is the endosperm present in monocot plant
   (b) Plumule is enclosed with coleorhiza
   (c) Aleurone is the outermost layer of endosperm
   (d) Micropyle is the distinct whitish oval scar on seed.
   (e) Pea seed germination is of epigeal type.
9. Define the following terms:
   (a) Exalbuminous Seed
   (b) Hypogeal germination
   (c) Viviparous germination
   (d) Testa
   (e) Grain
10. Why fresh seeds fail to germinate?
11. Why in early stage of seed germination the plumule is arched?
12. Why germination in rhizopora or sonnertia is called as viviparous?

13. Germinating grams are considered as highly nutritive. What is the reason for this belief?

14. Give the difference between following terms:

(a) Hypogeal and epigeal

(b) Monocot and Dicot

(c) Coleorhiza and coleoptile

(d) Seed and grain

15. Classify the seed type into albuminous and exalbuminous seed from the following:

Poppy, Orchids, Vallisneria, Millets, Mango, Custard, gram

16. Explain the structure of Bean seed.

17. Explain the process of seed germination.

18. Describe an experiment to show that oxygen is essential for seed germination.

19. Match the following column.

Column A	Column B
Bean Seed	Seed coat
Seutellum	Entry of pollen
Micropyle	Epigeal
Dormancy	Monocot
Testa	A period of rest