

## S.2 BIOLOGY

### SOIL

**ATTEMPT ALL THESE QUESTIONS.**

1. What is soil?
2. What is weathering?
3. Name the different types of weathering.
4. How does each type of weathering lead to soil formation?
5. What is the importance of soil?
6. List the components of a fertile soil.
7. Outline the importance of each component in (6) above.
8. Name the main agents of soil formation.
9. Define the term soil profile.
10. Draw and label a soil profile.
11. What are the factors that affect the thickness and composition of a soil profile?
12. Name the types of soil.
13. What are the characteristics of each soil type?
14. What is flocculation?
15. How can clay and sandy soil be improved?
16. Describe an experiment to show that soil contains living organisms.
17. What is;
  - (a) Soil water retention?
  - (b) Soil drainage?
18. Describe an experiment to compare the water retaining and drainage capacity of sandy, clay and loam soils.
19. Describe an experiment to determine the percentage of water in a soil sample.
20. What is capillarity?
21. Describe an experiment to determine the rate of capillarity in sandy, loam and clay soil samples.
22. What is leaching?
23. What is soil exhaustion?
24. State the features of a fertile soil.

25. List the ways through which soil fertility can be lost.
26. What is soil erosion?
27. Name the different types of soil erosion.
28. What are the factors that affect soil erosion?
29. What are the effects of soil erosion?
30. What is soil conservation?
31. Name the different methods that can be used to conserve soil.
32. What is crop rotation?
33. What are the advantages of crop rotation?
34. What is mulching?
35. What are the advantages and disadvantages of mulching?
36. Distinguish between natural and artificial fertilisers.
37. What are the advantages of natural fertilisers?
38. Draw and describe the nitrogen cycle.
39. Explain the role of bacteria in soil fertility.
40. Draw and describe the carbon cycle.
41. Describe the water cycle.