

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2011 - 12)

SUBJECT CODE: 11ZL/MC/SB13

B.Sc. DEGREE EXAMINATION NOVEMBER 2011
BRANCH VIA. – ADVANCED ZOOLOGY & BIOTECHNOLOGY
FIRST SEMESTER

COURSE : MAJOR CORE
PAPER : SOIL BIOLOGY
TIME : 3 HOURS

MAX. MARKS: 100

SECTION-A

Answer **ALL** Questions

(10×3=30)

1. Fill in the blanks

- a) Water logging occurs in _____ soil.
- b) The solid component of Earth comprises _____.
- c) The pH of fertile soil is usually around _____.

2. Distinguish between

- a) Lolsol & Vertisol
- b) Allogenic succession & Autogenic Succession.

3. Draw and label the Soil Profile.

4. Match the following.

- a) Zonal Soil - Calcimorphic
- b) Inter Zonal Soil - Lethosol
- c) Azonal - Humid Region

5. Write a short note on Agricultural Pollutants.

6. Write any two definitions of soil.

7. Give the classification of Soil Organisms.

8. Draw a flow chart showing the Phosphorous Cycle.

9. Name the types of soil found in India.

10. Define a) Pedogenesis b) Soil Erosion.

SECTION-B

Answer **ANY FIVE** Questions.

(5×6=30)

11. Explain the functions of Ecosystem.

12. Write a short note on Vermicomposting.

13. Describe the process of soil formation.
14. Explain briefly the concept of energy flow in an Ecosystem.
15. Describe the Carbon Cycle.
16. Write briefly on Humus.
17. Describe the Physical Properties of Soil.

SECTION-C

Answer **ANY TWO** Questions.

(2×20=40)

18. Discuss the Types and General Processes of Terrestrial and Aquatic Succession.
19. Explain the Nitrogen cycle and its significance.
20. Give a detailed account on the Principle and Methods of Soil Conservation.
21. Discuss the role of Soil Microbes and Soil Fauna in improving soil fertility.
