

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD
SEMESTER END EXAMINATION

B.Sc. (Hort.)

Semester	: I (New)	Term	: I	Academic Year	: 2013-14
Course No.	: H/SSAC 111	Title	: Fundamentals of Soil Science		
Credits	: 2(1+1)				
Day & Date	: Monday, 18.11.2013	Time	: 10.00 to 12.00	Total Marks	: 40

- Note :
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

SECTION "A"

- Q.1 Define Edaphology. Give the composition of earth crust.
- Q.2 Explain the factors affecting composition of soil air.
- Q.3 Explain in detail the importance of soil texture.
- Q.4 Write in brief about the land capability classes.
- Q.5 Quote the sources of soil organic matter and explain the chemical composition of soil organic matter.
- Q.6 Differentiate between the bulk density and particle density.
- Q.7 Explain the factors affecting soil water.
- Q.8 Define soil colloids and write the general properties of soil colloids.
- Q.9 Describe the procedure for reclamation of acidic and saline soils.
- Q.10 Describe the factors affecting soil temperature.

SECTION "B"

- Q.11 Match the pairs.

"A"

- 1) Soil reaction
- 2) Sandy soil
- 3) Montmorillonite
- 4) Histosols

"B"

- a) Organic soils
- b) Low water holding capacity
- c) Acidic or alkaline soil
- d) 2:1 Clay mineral

- Q.12 Define the following terms.

- 1) Field capacity
- 2) Soil taxonomy
- 3) CEC
- 4) Pedology

