

PARUL UNIVERSITY
FACULTY OF AGRICULTURE

B.Sc.(Hons.)Agriculture Winter 2018 - 19 Examination

Semester: 1

Date: 05/12/2018

Subject Code: 20103102

Time: 10:30am to 1:00pm

Subject Name: Fundamentals of Soil Science

Total Marks: 50

Instructions

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Do as Directed.**A. Fill in the blanks. (Each of 0.5 mark)****(05)**

1. _____ is 1:1 type clay mineral.
2. Branch of soil science dealing with the genesis, survey and classification of soil is called as _____.
3. Accumulation of _____ in soil profile is more in calcification process.
4. The CO₂ contain of the cultivated soil is _____ percentage.
5. The solid zone of earth's sphere is known as _____.
6. The cation exchange capacity of kaolinite is _____ meq/100gm.
7. The attraction between clay and water molecule is known as _____.
8. Natural aggregates are called _____ whereas _____ is an artificially formed soil mass.
9. Water remains around the cation as a very thin film, which is called _____.
10. The two metallic elements occurring in greatest abundance in the earth crust are _____.

B. Multiple choice type questions. (Each of 0.5 mark)**(10)**

- 1 The scientific study of soil is -

a)Earth Study	c)Soil Chemistry
b)Soil Science	d)Pedology
- 2 Soil is a _____ dimensional body.

a) One	c) Three
b) Two	d) Four
- 3 Water play important role in the formation of rock _____.

a)Igneous rock	c)Sedimentary rock
b)Metamorphic rock	d)Primary rock
- 4 When igneous rock are become metamorphic rock due to water called _____.

a)Hydro metamorphosis	c)Thermo metamorphosis
b) Dynamo metamorphosis	d)Hydrothermal
- 5 Marble formed from which rock during metamorphosis _____.

a)Sand stone	c)Lime stone
b)Shale/ Basalt	d)Granite
- 6 Which is example of 1:1 type clay mineral _____.

a) Illite	c) kaolinite
b)Montmorilonite	d)Biotite
- 7 The cation exchange capacity of Montmorilonite is _____meq/100gm.

a) 3-15	c) 20- 40
b)80 – 100	d) 50-70
- 8 B₁ Horizon in the soil profile is also known as _____.

a)Allivial	c)Illuvial
b)Eluvial	d)Colluvial
- 9 Which of the following is *not* a characteristic of a mineral?

a)Crystal structure	c)Naturally occurring
b)Solid	d)Organic
- 10 The size of silt particle is _____mm.

a)0.02-0.002	c)< 0.002
b)2.0-0.02	d)< 002.0
- 11 Total porosity is more in :

a)Sandy soil	c)Loamy soil
b)Clay soil	d)None of A, B, C

