



KERALA AGRICULTURAL UNIVERSITY
B.Sc.(Hons) Forestry 2018 Admission
II Semester Final Examination-August 2019

Bass.1207

Geology and Soils (1+1)

Marks: 50

Time: 2 hours

(10x1=10)

I Fill in the Blanks

- 1 _____ phase is composed of organic and inorganic constituents.
- 2 The example for primary mineral is _____.
- 3 The chemical composition of Hematite is _____.
- 4 _____ is the study of origin and nature of rocks.
- 5 Marble is formed from _____.

State TRUE or FALSE

- 6 Soil is a storehouse of essential plant nutrients.
- 7 The metamorphic rocks are formed by the solidification of molten material.
- 8 Igneous rocks are classified as acidic and basic rocks based on iron content.
- 9 Carbon dioxide combines with water to form carbonic acid.
- 10 Granite rock is composed of single mineral.

II Write Short notes on any FIVE of the following

(5x2=10)

- 1 Particle density.
- 2 Soil structure.
- 3 Types of soil pores.
- 4 Composition of soil air.
- 5 Soil temperature.
- 6 Soil consistency .
- 7 Weathering.

III Answer any FIVE of the following.

(5x4=20)

- 1 Classify the igneous rocks based on their silica content. Give example for each group.
- 2 What are the factors influencing for bulk density of soil and explain.
- 3 What are the conditions essential for soil structure development and explain.
- 4 Types of soil structure.
- 5 Define soil texture and write the classification of soil texture according to ISSS and USDA.
- 6 Give the soil moisture classification and explain them in brief.
- 7 Explain about classification of minerals based on origin.

IV Answer any ONE of the following

(1x10=10)

- 1 Chemical weathering. Explain with different processes involved in chemical weathering.
- 2 What are soil forming factors and explain all the soil forming factors in detail.
