

FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI
SCHOOL OF AGRICULTURE AND AGRICULTURAL TECHNOLOGY
DEPARTMENT OF SOIL SCIENCE AND TECHNOLOGY
~~2018~~ SESSION HARMATTAN SEMESTER EXAMINATION.

2019

COURSE TITLE : SOIL GENESIS AND CLASSIFICATION

CODE: SST 401: TIME : 3 hours

INSTRUCTIONS: ANSWER FIVE QUESTIONS WITH AT LEAST AT
LEAST TWO FROM EACH SECTION.
ALL QUESTIONS CARRY EQUAL MARKS.

SECTION A (SOIL GENESIS)

- ✓ 1 (a) With examples explain the term igneous rocks
(b) Give an example of (i) Basic igneous rock (ii) Acidic igneous rock
(c) How does igneous rock differ from sedimentary rocks
- ✓ 2 (a) Define pedogenesis
(b) Explain the term transformation and any process involving transformation in the soil system
(c) - State the difference between weathering and pedogenesis
- ③ (a) Give the state factor equation
(b) State two active factors of soil formation
(c) How does man influence soil formation

SECTION B. SOIL CLASSIFICATION

✓ QUESTION NO 4

- (a) Distinguish between the epipedon and endopedon giving four examples of each
- (b) State 5 relevance of soil classification in soil studies

✓ Question no 5

- (a) Explain the following (i) Xeric soil moisture regime (ii) Natural classification
(iii) Cryic soil temperature regime
- (b) State the relevance of (i) Soil moisture regime, (ii) Soil Temperature regime in soil classification

- ✓ ⑥ State the formative element and any 4 (four) sub orders of
(i) Andisols, (ii) Vertisol (iii) Alfisols