

**UNIVERSITY OF FORT HARE**

**SOIL TAXONOMY  
AGS 322**

**NOVEMBER EXAMINATIONS**

**2018**

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**TIME : 3 HOURS**

**SUBJECT : AGS 322**

**MARKS : 100**

**This paper consists of 3 pages including the cover page**

**Internal Examiners**

**DR A. MANYEVERE**

**INSTRUCTIONS**

1. Answer ALL questions.
2. It is in your best interest to write clearly and legibly.

### QUESTION 1 [30]

- (a) Outline FIVE (5) reasons for soil classification. [5]
- (b) Discuss the procedure for soil identification using the South African Soil Classification. [6]
- (c) Giving examples of soil forms, discuss the 2 diagnostic subsurface horizons of soils showing movement of particles (clay, humus, organic matter etc). [10]
- (d) Discuss three (3) soil groups showing young soils with an orthic topsoil but weakly developed subsoil. [9]

### QUESTION 2 [25]

- (a) The WRB classification system comprises two levels of categorical detail. Discuss the two levels. [4]
- (b) Describe giving an example of a reference soil group the **3 major properties of an ARGIC HORIZON** in the WRB classification system. [6]
- (c) Differentiate between ferrallic and ferric diagnostic horizons as used in the WRB (2014) classification system. [5]
- (d) Discuss two orders of USDA system that represent young soils. [5]
- (e) Describe the 5 diagnostic subsurface horizons recognized in United States Soil Taxonomy system and in each case indicate the major criteria used to distinguish the horizons. [10]

### QUESTION 3 [40]

- (a) Describe in detail the processes involved in a soil survey. [25]
- (b) Discuss the principles of land evaluation. [15]