

**CAT 2 AHS 2204 SOIL CHEMISTRY TIME 1 HOURS 17/11/2016**

**Answer all the questions**

1(a) Define the following

- i. Base saturation (1 mk)
- ii. Leaching requirement(1 mk)

(b) Calculate the base saturation and exchangeable sodium percentage of a soil given the information below (3 mks)

| Cations          | Me/100g |
|------------------|---------|
| Na <sup>+</sup>  | 16      |
| K <sup>+</sup>   | 8       |
| Mg <sup>2+</sup> | 3       |
| Ca <sup>2+</sup> | 15      |
| H <sup>+</sup>   | 0.5     |
| Al <sup>3+</sup> | 7       |

2. Briefly discuss five factors influencing organic matter decomposition. (10 mks)
3. Illustrate using examples how a sodic soil can be reclaimed. (10 mks)
4. Explain briefly sources of salinity in the soil (5mks)