

WORKSHEET 4

QUESTION 1

a) State **one** reason why rice is Fiji's highest imported agricultural commodity. **(1 mark)**

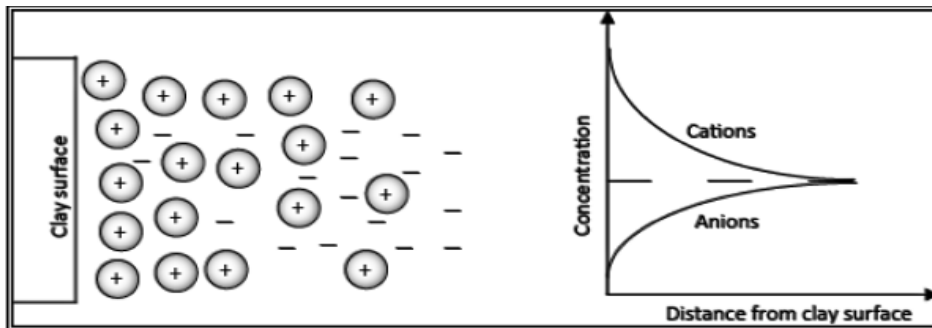
b) A farmer purchased a tractor which had useful life of 10 years for \$75,000.00. The residual value is \$5,000.00 and the rate of depreciation is 10%. Using the **Reducing Balance Method** calculate the depreciation for the tractor for the **2nd year** and the **3rd year**.

	Net Value \$	Residual Value \$	Rate %	Depreciation \$
Year 1	75,000.00	5,000.00	10	7,000.00
Year 2	68,000.00	5,000.00	10	(i)
Year 3	(ii)	5,000.00	10	(iii)

(3 marks)

c) Describe **one** cause of depreciation of farm implements. **(1 mark)**

d) The illustration below shows the relationship of cations and anions on the clay surface.



i. Describe **one** feature of the relationship between cations and clay micelles as represented in the illustration above. **(2 marks)**

e) List **one** way in which ions are supplied to the ion pool in the soil solution. **(1 mark)**

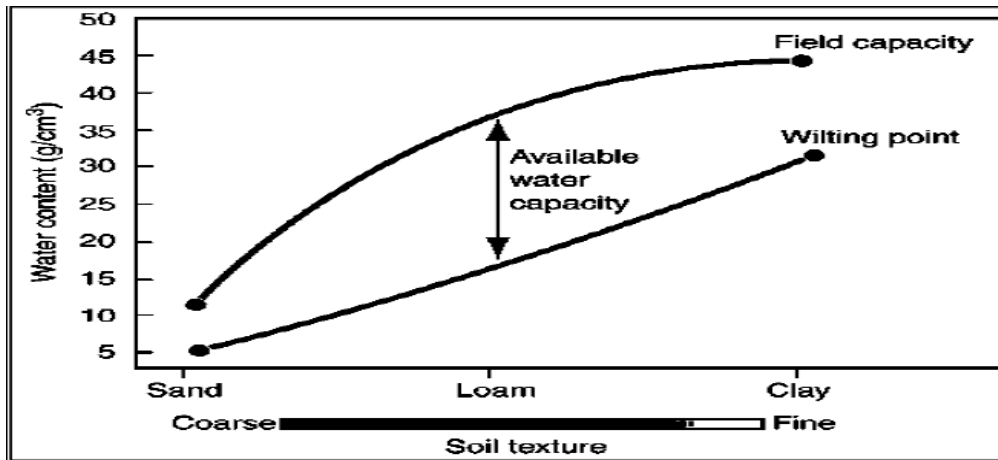
f) State **one** importance of Cation Exchange Capacity (CEC) in soil management. **(1 mark)**

g) Describe **one** symptom of nitrogen deficiency in plants. **(1 mark)**

QUESTION 2

a) Distinguish between **nutrient deficiency** and **nutrient toxicity** in relation to availability of nutrients. (2 marks)

(b) The illustration below shows soil moisture potential.

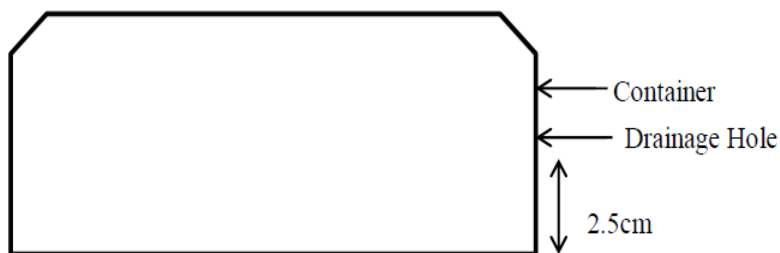


i. Study the graph and explain why sandy soil will be the first to require irrigation in a short drought. (2 marks)

c) Explain **one** reason why **outbreeding** results in an increase in the number of **heterozygous** offspring produced. (2 marks)

d) Explain **one** advantage of permaculture. (2 marks)

e) A student decides to use a container to plant lettuce in. The student was advised to construct drainage holes 2.5cm from the bottom of the container as illustrated in the diagram below.



i. Explain the purpose of constructing the drainage hole 2.5cm from the bottom of the container. (2 marks)

THE END