

KERALA AGRICULTURAL UNIVERSITY
B.Sc (Hons.) Ag. 2012 Admission
IVth Semester Final Examination- August-2014

Cat. No: Ssac.2204

Marks: 80

Title: Fertilizers & Agro-chemicals (1+1)

Time: 3 hours

I A. State true or false

(5 x1=5)

1. Urea is the organic chemical fertilizer.
2. Rock phosphate is recommended to acid soils.
3. MOP is readily soluble in water.
4. Rotenone is extracted from roots of *Derris elliptica*
5. Gypsum is used for reclamation of acid soils.

I B. Match the following

(5x1=5)

A	B
1) 2,4-D	a) Growth regulator
2) Methyl parathion	b) Fungicide
3) Bordeaux mixture	c) Insecticide
4) Glyphosate	d) Post emergent herbicide
5) Indole Acetic Acid	e) Pre-emergent herbicide

II. Write short note/answers on ANY TEN

(10x3=30)

1. Rock phosphate
2. Difference between Complex fertilizers and Straight fertilizers.
3. Difference between pre-emergent V/s post-emergent herbicides.
4. Soil conditioners
5. The essential nutrients present in single super phosphate and their percent content.
6. Write two fertilizers each containing only ammonical – N; only nitrate- N and both ammonical & nitrate nitrogen.
7. Sulfonyl urea herbicides
8. Acid formers
9. Plant growth regulators
10. Role of FCO.
11. Basic slag
12. Pyrethrum and its insecticidal activity.

III. Write short essays on ANY SIX of the following

(6x5=30)

1. Give classification of nitrogenous fertilizers with one example for each
2. Write the principle involved in manufacturing process of single super phosphate and their properties.

3. Write the principle involved in the manufacturing process of sulphate of potash by decantation process.
4. What is lime requirement? Discuss about different liming materials
5. What are botanical insecticides? Explain the advantages and disadvantages of using them.
6. Explain the bio-degradation process of pesticides in soil.
7. What are fungicides? Give their classification based on chemical nature. With example
8. List the secondary and micronutrient containing fertilizers with percent nutrient content.

IV. Write essay on ANY ONE

(1x10=10)

1. Give the classification of phosphatic fertilizers and discuss in detail the behaviour of phosphatic fertilizers in different soil types.
2. What are insecticides? Give the classification of insecticides with examples.