



KERALA AGRICULTURAL UNIVERSITY
B.Sc (Hons.) Agriculture 2015 & Previous Admissions
IV Semester Final Examination-August-2017

Ssac.2204

Fertilizers and Agro-chemicals (1+1)

Marks: 50
Time: 2 hours
(10x1=10)

I Answer all Questions

- 1 Amount of urea required to apply 100 kg of N to rice field is -----
a) 220 b) 460 c) 22 d) 46
- 2 Rock phosphate is converted to single superphosphate by adding -----
a) HCl b) H₂SO₄ c) HNO₃ d) H₃PO₃
- 3 Sulphate of potash contains----- % of K
a) 50 b) 40 c) 55 d) 45
- 4 Molybdenum availability is plenty in ----- pH
a) Alkaline b) Neutral c) Acidic d) Highly acidic
- 5 Apatites are rich source of -----
a) Calcium b) Iron c) Zinc d) Phosphorous
- 6 Feldspars and Micas provide ----- to soil
a) Nitrogen b) Phosphorous c) Potassium d) Zinc
- 7 Glyphosate is recommended only for controlling grass weeds. (T/F)
- 8 Atrazine is a broad spectrum herbicide. (T/F)
- 9 Constituents in Bordeaux mixture are ----- and -----
- 10 Toxic principle present in neem based pesticide is -----

II Write short notes on any FIVE

(5x2=10)

- 1 Reactions involved in manufacture of urea and ammonium sulphate.
- 2 Define straight and complex fertilizers with suitable examples.
- 3 Regulations of Fertilizer Control Order.
- 4 Botanical pesticides (explain any three).
- 5 Secondary nutrient supplying fertilizers with suitable examples.
- 6 Residual toxicities of agro-chemicals.
- 7 Micronutrient mixtures.

III Answer any FIVE

(5x4=20)

- 1 How can N use efficiency be improved in wetlands?
- 2 Phosphatic fertilizers and their characteristics.
- 3 Use of plant growth regulators in agriculture.
- 4 Synthesis of sulphur fungicides and its mode of action.
- 5 Management strategies to alleviate entry of agrochemicals in food chain.
- 6 Role of organic manures in nutrient management.
- 7 Liming materials used in acid soils.

IV Write essay on any ONE

(1x10=10)

- 1 Fertilizer application is indispensable to sustain agricultural productivity. Justify with suitable examples.
- 2 What are insecticides? Classification of insecticides with suitable example and their chemical structure.
