

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE
B.Sc. (Hons.) Agriculture Examination 2018-19

Semester: 4

Subject Code: 20103251

Subject Name: Manures, Fertilizers and Agro-chemicals

Date: 18/12/2018

Time: 02:00pm to 04:30pm

Total Marks: 60

Instructions

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Do as Directed.**A. Fill in the blanks. (Each of 0.5 marks)****(10)**

1. Acaricides are use to kill _____ and _____.
2. Chemical formula of the Gypsum is _____.
3. Azolla symbiotically can fix _____ kg N /ha
4. Neem seed contains _____ % azadirachtin.
5. Low Si/Mg ratio leads to fixation of _____ nutrient in soil.
6. Boron availability is more in _____ textured soil.
7. Write the full form of HCCP _____
8. Liming reduces the availability of _____, _____, _____ and _____.
9. Low analysis fertilizers having less than _____ % of the primary nutrients.
10. India passed The Fertilizer Control Order [FCO] in _____ year.

B. Multiple choice type questions. (Each of 0.5 marks)**(10)**

1. _____ is used to remove moisture from plants.

a) Desiccants	c) Fumigants
b) Defoliant	d) Amendments
2. Which oil cake is not used as feeding for the livestock

a) Castor cake	c) coconut cake
b) Groundnut cake	d) All of the above
3. The percent of K₂O in KCL is _____.

a) 48	c) 80
b) 58	d) 127
4. Biogas contained _____ % of Nitrogen.

a) 1.5	c) 0.5
b) 2.5	d) 15
5. Which fertilizer improving burning quality of tobacco?

a) Nitrogenous	c) Potassic
b) phosphatic	d) None of the above
6. Poultry manure is _____

a) Bulky organic manure	c) Both a & b
b) Concentrated organic manure	d) None
7. The full form of 2, 4-D

a) 2, 6 – Dichlorophenoxy acetic acid	c) 2, 4 – Dichloroethyl acetic acid
b) 2, 4 – Dichlorophenoxy acetic acid	d) 2, 4 – Dichloroethyl acetic acid
8. _____ fertilizer contains two or three primary plant nutrients.

a) Straight	c) Mixed
b) Complex	d) None
9. Glyphosate is a _____ herbicide

a) Pre emergence	c) Both a & b
b) Post emergence	d) None
10. The full form of NTA

a) Nitrilo Tri Acetic Acid	c) Nitroxy Tri Acetic Acid
b) Nitrilo Tetra Acetic Acid	d) Nitroxy Tetra Acetic

Q.2 Do as Directed.

A. Define the following. (Any five)

(05)

1. Selectivity of herbicides
2. Complex fertilizers
3. Green manure
4. Chelates
5. Agricultural chemicals
6. Straight fertilizers
7. Zococides

B. Answer the following. (Any Five)

(05)

1. Write the sources of following fertilizers
1. Calcium 2. Magnesium
2. Enlist the methods of manufacturing process for Ammonium Sulphate.
3. Write about Glyphosate
4. Enlist the types of Bio-fertilizers
5. Give full form of following abbreviation
EDDHA 2. EDTA
6. Classify sulphur and copper containing fungicides with example.
7. Why we should not use phenoxy butyric acid herbicides in leguminous plants?

Q.3 Write short notes. (Any five)

(15)

1. Classified the nitrogenous fertilizers based on the chemical form of nitrogen with their examples.
2. Advantages of biogas plant
3. Classification of micronutrient fertilizers
4. Write down the regulations of Fertilizer Control Order [FCO]
5. Objectives of quality control of fertilizers.
6. Define the manures and classify the manures with examples.

Q.4 Attempt any Three/Long Questions/Example

(15)

1. Classification of agricultural chemicals based on the purpose with proper example
2. Describe the classification of phosphatic fertilizers based on their availability to crops and solubility.
3. Why the need of micronutrient fertilization has been increase? Give detailed answer.
4. Benefits of bio- fertilizers