

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE

B.Sc.(Hons.) Agriculture Winter 2019 - 20 Examination

Semester: 4

Date: 06/12/2019

Subject Code: 20103251

Time: 2:00 pm to 4:30 pm

Subject Name: Manures, Fertilizers and Agrochemicals

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 1.00 marks)****(10)**

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

B. Multiple choice type questions. (Each of 1.00 mark)**(10)**

1. The percent of K₂O in KCL is _____

a) 48	c) 80
b) 58	d) 127
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. Which fertilizer improving burning quality of tobacco?

a) Nitrogenous	c) Potassic
b) phosphatic	d) None of the above
4. Write 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
5. Glyphosate is a _____ herbicide

a) Pre emergence	c) Both a & b
b) Post emergence	d) None
6. Poultry manure is _____

a) Bulky organic manure	c) Both a & b
b) Concentrated organic manure	d) None
7. Biogas contained _____ % of Nitrogen.

a) 1.5	c) 0.5
b) 2.5	d) 15
8. _____ fertilizer contains two or three primary plant nutrients.

a) Straight	c) Mixed
b) Complex	d) None
9. Write the full form of NTA

a) Nitrilo Tri Acetic Acid	c) Nitroxy Tri Acetic Acid
b) Nitrilo Tetra Acetic Acid	d) Nitroxy Tetra Acetic Acid
10. _____ is used to remove moisture from plants

a) Desiccants	c) Fumigants
b) Defoliant	d) Amendments

Q.2 Do as Directed.**A. Define the following. (Any five)****(05)**

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

B. Answer the following. (Any Five)

(05)

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

Q.3 Write short notes. (Any five)

(15)

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

Q.4 Attempt any Three/Long Questions/Example

(15)

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