

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE
B.Sc.(Hons.) Agriculture Winter 2019 - 20 Examination

Semester:5

Subject Code: 20103301

Subject Name: Manures, fertilizers and Soil fertility Management

Date:19/11/2019

Time:10:30 to 01:00 pm

Total Marks: 50

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 mark)****(05)**

1. Bone meal have% N,
2. Compost rural contain% N,
3. Secondary source of organic manures.....
4. Primary sources of organic manures.....
5. Chemical composition of carbohydrates in un-decomposed organic matter is
6. C/N ratio of saw dust is.....
7. Horns meal have% N
8. Elemental composition of carbon in undecomposed organic matter.....
9. Green manure crop can be a substitute to kg fertilizer N/ha⁻¹
10. Green manure burn growing plant because its contentper cent of N.

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

1. Ammonium phosphate
a) 20 % P₂O₅ c) 12% P₂O₅
b) 15% P₂O₅ d) 10% P₂O₅
2. The most suitable green manure crop for problematic soil is
a) Dhaincha c) Guar
b) Cowpea d) Sannhemp
3. Ammonium phosphate % N
a) 16 c) 26
b) 61 d) 62
4. Blood meal have% N,
a) 10-12 c) 20-22
b) 12-14 d) 18-20
5. Single Super Phosphate are% P₂O₅
a) 16 c) 48
b) 32 d) 20
6. Rock Phosphate% P₂O₅
a) 20-22 c) 20-30
b) 10-12 d) 50-55
7. Calcium ammonium nitrate is%N
a) 26 c) 10
b) 20 d) 15
8.is the third largest producer of fertilizers in the world.
a) India c) Japan
b) China d) Pakistan
9. Fish meal have% N

- a)0.4 - 10.0
b)4.5-5.5
- c) 4.5
d) 5.4
- 10 Cotton cake are % N
a) 7.3
b) 10.2
- c) 4.5
d) 5.4
- 11 Give the nutrient composition of poultry meal.....% N
a)3.0
b) 1.5
- c)4.5
d)5.5
- 12 C/N ratio of Indian soil
a) 10:1 to 12:1
b) 40:1 to 42:1
- c) 20:1 to 22:1
d) 30:1 to 32:1
- 13 Give the nutrient composition of poultry meal% P₂O₅
a)2.63
b)1.55
- c)4.55
d)5.55
- 14 Night soil have..... % N
a)5.5
b)3.5
- c)2.5
d)1.5
- 15 F.Y.M. have% N.,
a) 1.5
b) 4.5
- c) 0.5
d) 0.2
- 16 If available Nitrogen in soil is 112-124 Kg/ ha⁻¹, then rangein soil.
A) Low
B) Medium
C) High
D) Very high
- 17 Sewage have% N
a)3.5-4.5
b) 1.2 -2.4
- c) 6.5-7.5
d)1.5-2.5
- 18 Sludge have% N
a)1.5 – 3.5
b) 4.5- 5.5
- c) 6.5-7.5
d)1.5-2.5
- 19 Neem cake have% N
a) 5.2
b) 4.5
- c) 2.5
d) 3.5
- 20 Anhydrous ammonia -% N
a) 82
b)28
- c) 52
d) 25

Q.2 Do as Directed.

A. Define the following. (Any five out of seven)

(05)

1. Soil Amendment?
2. Fertilizers?
- 3 Bulky organic manures?
4. high analysis fertilizer
5. Straight fertilizer?
6. Fertilizer Use efficiency
7. Organic manure

B. Answer the following. (Any five out of seven)

(05)

1. Give two example of Soil Amedment
2. Give two example of Bio Fertilizer
3. Give two example of concentrated organic manures
4. Give two example of Amide fertilizers
5. Give two example of Micronutrient fertilizer
6. Give two example of Secondary nutrient
7. Give two example of Macronutrients

Q.3 Write short notes. (Any five out of six)

(10)

1. Night soil
2. Soil drainage and aeration
3. Concentrated organic manures
4. Handling and storage of fertilizers
5. Explain gobar gas compost plant
6. Discuss vermicomposting.

Q.4 Long Questions/Example (Attempt any three out of four)

(15)

1. Explain the difference between bulky organic and concentrated organic manures
2. Define Green Manuring? Explain its disadvantage.
3. Define Manures? Importance of Manures in crop productivity and soil fertility.
4. Define Fertilizers? Enlist the type of fertilizers and enlist Nitrogenous fertilizers