

**HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN
COMMUNITY COLLEGE**

**Advanced Diploma in Agriculture and Soil Sciences
Semester II End Term Examination, May 2017
Paper AS 201 Soil Fertility and Nutrient Management**

Time: 2 Hours

Date: 01/05/2017

Marks: 40

Q.1 Answer all questions. Each question carries 1 mark.

[10*1=10]

1. Leaf ash method use to estimate _____ content from the plants.
A) Carbon B) Nitrogen C) Phosphorus D) Mineral
2. Major two nutrients which require by plants in largest amount are N and _____.
A) Zinc B) Copper C) Sulphur D) Potassium
3. Nitrogen content in all fertilizers comes from _____.
A) Water B) Gas C) Air D) None of above
4. Balanced fertilizer use is most desirable because it _____.
A) Add all nutrients B) add NPK C) correct all deficiencies D) none of above
5. Give the name of any two chemical modifiers which are help to reduce soil chemical imbalances in soil management.
6. Which one of the following is major nutrient?
A) Potassium B) Molybdenum C) Boron D) zinc
7. What is full form of PSB?
8. What is major difference between inorganic manure and organic manure?
9. Match the following:

a. Rhizobium and Azolla group	1. Phosphorus solubilizers biofertilizers
b. BGA, Azotobacter and azospirillum	2. Non symbiotic nitrogen fixing micro organisms
c. Cellulolyte and lignolyte	3. Symbiotic nitrogen fixing micro organisms
d. Mycorrhizae and Actinomycetes	4. Compost making microorganisms
10. Fertilizers which contain two or more plant nutrient are known as complex fertilizers, true or false?

Q.2 Answer any 4 questions. Each question carries 5 marks.

[4*5=20]

1. Explain green manure with winter cover crops, summer fallow cover crops and season long cover crops in soil management.
2. Define biofertilizers and draw a neat and clean chart for biofertilizers with their examples.
3. Explain potassic fertilizers with detail.
4. Define soil fertility and productivity. Explain crop rotation of soil management in detail.
5. What is CSHT? Differentiate the term between: solid fertilizer and liquid fertilizer.

Q.3 Answer any 1 questions. Each question carries 10 marks.

[1*10=10]

1. Explain organic manure and nitrogenous fertilizers in detail.
2. Classify and explain functions of essential plant nutrients in detail.