

HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY
COMMUNITY COLLEGE: Advance Diploma in Agriculture and Soil Science
Semester- IV, End Term Examination, May- 2017
Subject Code: - AS- 403: Organic farming, Green house and Polyhouse technology

Time: 2 hrs

Date: 05/05/2017

Marks: 40

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

[10*1=10]

1. Which microorganisms is example of Symbiotic Nitrogen fixer?
a. *Rhizobium*, b. *Frankia*, c. *Anabaena* d. All of these
2. Which microorganism is used as a P Mobilizing Biofertilizers?
a. *Rhizoctonia solani* b. *Frankia* c. *Bacillus megaterium* d. *Azospirillum*
3. Enlist two biocontrol agent used for weed management.
4. The _____ temperature is a typical and important part of the composting process.
a. Cold b. Warm c. High d. Medium
5. Which is the Green leaf manure crop?
a. *Cassia* b. *Azardirecta* c. *calotropis* d. All of these
6. In which composting phase nutrient is mineralized, humic acid and antibiotics are built-up?
a. Cooling Phase b. Maturing Phase c. Heating Phase d. All of these
7. _____ is a stem nodulating green manure crop.
a. *Crotalaria juncea* b. *Sesbania speciosa* c. *Sesbania aculeate* d. None of these
8. Which microorganisms is example of P solublizing bio-fertilizer?
a. *Bacillus megaterium* b. *Azospirillum* c. *Frankia* d. All of these
9. Which are the benefits of Vermicompost?
a. improves soil structure and texture b. prevents soil erosion
c. Improoves aeration and water holding capacity d. All of these
10. Panchagavya is prepared by mixing _____.
a. cow dung & cow urine b. milk, curd
c. jaggery, ghee, banana, Tender coconut and water d. All of these

Q.2 Answer any 4 questions. Each question carries 05 marks.

[4*5=20]

1. Write a brief note on integrated pest management.
2. Define organic farming and briefly explain how organic farming is helpful in biological nutrient management.
3. What is organic certification? Write down the benefits of organic certification.
4. Write down the role of Bio-fertilizer in soil amendment/integrated nutrient management.
5. Write down Vermicompost production methodology.
6. Write a short note on Biopesticides.

Q.3 Answer any one. Each question carries 10 marks.

[1*10=10]

1. Enlist the phases of composting and explain it in detail.
2. Describe in detail of green manure crops, proper usage and its benefits.
