Organic Farming (HNO-100) Webwww.anilrana13014.weebly.com www.k8449r.weebly.com

ID. No. ...13014.....

 $(0.5 \times 10.0 - 5.0 \text{ Marks})$ 

# SEMESTER FINAL EXAMINATION 2015-16 COLLEGE OF HORTICULTURE VCSG Uttarakhand University of Horticulture & Forestry, Bharsar-246 123 Pauri Garhwal, Uttarakhand

Programme: B.Sc. (Hons.) Horticulture (3 <sup>rd</sup> Year)	Roll No13014
Course Title: Organic Farming (HNO-100)	Date of Examination:
Credit Hours: 2 (1+1)	Time: 09:30am - 12:30pm(3 Hrs.)
Max. Marks: 50.00 Marks	Semester: I <sup>st</sup> 2015-16

Note: (i) All the questions are compulsory, cutting & over writing is not allowed.
(ii) The question paper consists of two parts, Part-I (objective) of 20.00 marks and the Part-II (subjective) of 30.00 marks.

(iii) Write the answer of Part-1 on the question paper itself.

O No 1. Fill in the blanks

#### PART A (Max. Marks: 20.00)

(0.5A10.0 –	S. Wiai KS)	
Sustainable agriculture is also called organic farming asorganic matter	is the main	source for
nutrient management.		
albert howordis often referred as the father of "Organic Farming".		
Nations wealth is measured based on thefertility of its soil.		
IFOAM stands forinternational federation organic ag	riculture	moment
UOCB stands foruttrakhand organic community board		
The symbiotic association of Azolla pinnata and Anabaena azollae is	termed as	azolla
anabrna		
<i>Eisenia foetida</i> is aearthworm		
Activated compost process (method) was developed byridge & fowler		
The organization that looks after/promote organic agriculture at international level is		
)pseudomonas bacteria make available soil phosphorus to plants	5.	
. 2: State whether the following statements True (T) /False (F)? (0.5	x 10.0 = 5.	0 Mark)
Agriculture contributes 28 % to GDP.	(f)	
Uttarakhand stood first in Zn (78 %), Fe (39 %) and Bo (32 %) deficiencies.	(f)	
Green revolution was only concentrated in areas having fertile soil and adequate water supply.	(t)	
National Centre of Organic Farming is situated at Lucknow.	(f)	
Bacillus is a phosphate solubilizing fungi.	( f)	
	Sustainable agriculture is also called organic farming asorganic matter         nutrient management.        albert howordis often referred as the father of "Organic Farming".         Nations wealth is measured based on thefertility of its soil.         IFOAM stands forinternational federation organic agg            UOCB stands foruttrakhand organic community board         The symbiotic association of Azolla pinnata and Anabaena azollae is anabrna         Eisenia foetida is aearthworm         Activated compost process (method) was developed byridge & fowler         )pseudomonasbacteria make available soil phosphorus to plants        pseudomonasbacteria make available soil phosphorus to plants         .2: State whether the following statements True (T) /False (F)?       (0.5         Agriculture contributes 28 % to GDP.         Uttarakhand stood first in Zn (78 %), Fe (39 %) and Bo (32 %) deficiencies.         Green revolution was only concentrated in areas having fertile soil and adequate water supply.	Sustainable agriculture is also called organic farming asorganic matteris the main nutrient management.      is often referred as the father of "Organic Farming".         Nations wealth is measured based on thefertility of its soil.       IFOAM stands forinternational federation organic agriculture         UOCB stands foruttrakhand organic community board          The symbiotic association of Azolla pinnata and Anabaena azollae is termed as anabrna       Eisenia foetida is aearthworm         Activated compost process (method) was developed byridge & fowler

6)	Biofertilizers are not fertilizers.	(t )
7)	Vermiculture refers to management of earthworm to produce compost.	( f)
8)	NCOF stands for National Council of Organic Farming.	(f)
9)	The nitrogen content of vermicompost is 10 per cent.	(f)
10	) Azolla fixes nitrogen in association with fern.	(t)

#### **Q.** No. 3: Tick ( $\sqrt{}$ ) the correct answer of the followings. $(0.5 \times 10.0 = 5.0 \text{ Mark})$ 1) .....is a leguminous green manuring crop. b) Sorghum d) None of these a) Sunhemp c) Barley 2) .....is not an advantage of Azolla. a) Contains higher N b) Release of N easy c) No leaching loss d) Release nutrient quickly 3) .....developed Banglore method of composting. a) Sir Albert Howard b) ND Pandharipande c) Dr. Acharya d) None of these 4) Compost making includes .....important principle(s). a) One b) Two c) Three d) Four a) 124.8 b) 142.8 c) 224.8 d) 242.8 6) The permissible limit of .....in drinking water is 45 mg/ litre by WHO. a) Sodium b) Nitrate c) Phosphate d) Potassium 7) .....is headquarter of IFOAM. a) India b) China c) Pakistan d) None of these 8) .....crops are demand for organic products from India. a) Basmati rice d) All of these b) Spices c) Tea 9) In India which is the accreditation agency authorizing certifying agencies to certify organic products? a) Coffee Board b) Spices Board c) Tea Board d) All of these **10**) ......per cent is proper moisture condition for composting. a) 10-20 b) 20-40 c) 40-60 d) 60-80 **Question No. 4: Define the following with example (Attempt any five).** (1.0 x 5.0=5.0 Marks) **1.** Myco herbicides 2. Mulching 3. Crop rotation **4.** Green manuring 5. Organic residues 6. Certification 7. Biological Nitrogen Fixation PART II, Subjective (Max. Marks: 30.00) (2.50 x 3.0=7.5 Marks) Question No. 5: Differentiate among the following (Attempt any three). 1) Sustainable agriculture and Modern agriculture 2) Bulky organic manure and Concentrated organic manure 3) Debated issues regarding OF and Significance of OF for Indian farmer 4) Green manuring and Composting (Methods of growing Azolla)

5) Phosphate solubulizers and phosphate absorbers biofertilizers

6) Banglore and Coimbatore method of composting

### Question No. 6: Write short notes on any three.

- 1) Certification
- 2) Farm Yard Manure (FYM)
- 3) Pheromone trap
- 4) Phosphate solubilizing microorganisms
- 5) Bird perches
- 6) Blue green algae

## Question No. 7: Long type question (Attempt any three).

- 1) What do you mean by vermitechnology? Describe the vermicompost preparation in detail.
- 2) What do you mean by Organic Farming? Explain the principles of Organic Farming.
- 3) What is composting? Describe the principles of composting and essential requirements for composting.
- 4) Define accreditation. Discuss function of accreditation agencies.
- 5) Describe the NADEP method of composting.
- 6) What is biofertilizers? Describe the Rhizobium inoculants.

## (5.0 x 3.0=15.0 Marks)

### (2.50 x 3.0=7.5 Marks)