

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE

B.Sc. (Hons.) Agriculture Winter 2018 - 19 Examination

Semester: 1

Subject Code: 20101103

Subject Name: Fundamentals of Agronomy

Date: 08/12/2018

Time: 10:30 am to 01:00pm

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 marks)****(05)**

1. In the term 'Agronomy' 'Agros' means _____ and 'nomos' means _____.
2. Turning _____ into the soil green leaves and tender twigs collected from outside of the field is known as _____.
3. _____ is an example for straight fertilizer.
4. An example for natural chelating agent is _____.
5. 'One cusec' is equals to _____ litres of water.
6. The average rainfall of India is _____ mm.
7. The rate of growth of crop per unit area (CGR) is expressed in _____(unit)
8. _____ is considered as upper limit of water availability of plants.
9. _____ is an example for complete root parasite.
10. The seeds which require light for inducing germination are called _____.

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

1. Nitrogen is called as _____ element.

a) Quantity	c) Secondary element
b) Quality	d) Micro element
2. Tillage is referred as _____ manipulation of soil.

a) Physical	c) Biological
b) Chemical	d) All of these
3. Bulky organic manures are characterized by _____.

a) Supply of nutrients in small quantity	c) No definite chemical formula
b) Low analytical value	d) All of the above
4. The solid N fertilizer containing highest amount of nitrogen is _____.

a) Anhydrous ammonia	c) Urea
b) MOP	d) SSP
5. Soil moisture held against the gravitational force _____.

a) Maximum water holding capacity	c) Field capacity
b) Permanent wilting point	d) Ultimate wilting point
6. Integrated Nutrient Management includes _____.

a) Recycling of organic manures	c) Green manuring
b) Biological nitrogen fixation	d) All of the above
7. The energy status of water at hygroscopic coefficient is _____.

a) – 10000 Bar	c) – 100 Bar
b) – 1000 Bar	d) – 10 Bar
8. For drought resistant crops scheduling of irrigation at ___ % of depletion of available soil moisture is adequate.

a) 50 %	c) 25 %
b) 75 %	d) 100 %
9. The % nutrient (Nitrogen) present in anhydrous ammonia is _____.

a) 100 %	c) 82 %
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1. 'Criteria of essentiality'
2. Classification of nitrogenous fertilizers with their examples.
3. Water Use Efficiency and its type
4. Water requirement and consumptive use of water
5. Sigmoid growth curve
6. Physical/mechanical weed control

Q.4 Attempt any Three/Long Questions/Example

(15)

1. What are the important roles and deficiency symptoms of N, P and K in plant metabolism?
2. Explain the different soil moisture constants with their energy status.
3. What is 'Weed management'? Mention the 3 principles of weed management and explain the physical / mechanical method of weed control.
4. Explain the 'Growth and Development' analysis parameters