

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE

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

Semester: 1

Date: 15/04/2019

Subject Code: 20101103

Time: 02:00pm To 04:30pm

Subject Name: Fundamentals of Agronomy

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 complex fertilizer.
4. An example for natural chelating agent is _____.
5. 'One cusec' is equals to _____ litres of water.
6. The average rainfall of world 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 stem parasite.
10. The seeds which require light for inducing germination are called _____.

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

1. Potassium is called as _____ element.
 - a) Quantity
 - b) Quality
 - c) Secondary element
 - d) Micro element
2. Tillage is referred as _____ manipulation of soil.
 - a) Physical
 - b) Chemical
 - c) Biological
 - d) All of these
3. Bulky organic manures are characterized by _____.
 - a) Supply of nutrients in small quantity
 - b) Low analytical value
 - c) No definite chemical formula
 - d) All of the above
4. The N fertilizer containing highest amount of nitrogen is _____.
 - a) Ammonium sulphate
 - b) MOP
 - c) Urea
 - d) SSP
5. Soil moisture held against the gravitational force _____.
 - a) Maximum water holding capacity
 - b) Permanent wilting point
 - c) Field capacity
 - d) Ultimate wilting point
6. Integrated Nutrient Management includes _____.
 - a) Recycling of organic manures
 - b) Biological nitrogen fixation
 - c) Green manuring
 - d) All of the above
7. The energy status of water at hygroscopic coefficient is _____.
 - a) - 10000 Bar
 - b) - 1000 Bar
 - c) - 100 Bar
 - d) - 10 Bar
8. For drought resistant crops scheduling of irrigation at ____ % of depletion of available soil moisture is adequate.
 - a) 50 %
 - b) 75 %
 - c) 25 %
 - d) 100 %
9. The % nutrient (Nitrogen) present in urea is _____.
 - a) 100 %
 - b) 46 %
 - c) 82 %
 - d) 18 %
10. The fertilizer which is/are organic in nature _____.
 - a) Urea
 - b) Calcium cyanamide
 - c) Both A and B
 - d) None of the above

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