



Registration No:

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B.Sc (Ag.) 1ST SEMESTER EXAMINATIONS (REGULAR),NOV/DEC 2019

AG-111

FUNDAMENTALS OF AGRONOMY

Time : 2 Hours

Maximum : 50 Marks

(Answer all questions of Section – A)

SECTION-A

Q.1. Fill in the blanks with suitable words / figures. (10 x 0.5 = 5marks)

- a. _____ is a master nutrient for oil seed crops.
- b. An associated weed of wheat crop field is _____
- c. The unit of measurement of Bulk density is _____
- d. The practice of applying herbicide along with irrigation water is known as _____.
- e. The movement of water from the surface in to the soil is called _____
- f. _____ seed is the progeny of foundation seed and the tag colour is _____
- g. _____ is the attraction of solid surfaces for water molecules.
- h. The phenomenon of one plant having detrimental effect on another through production of chemicals is called _____.
- i. Iron deficiency first appears in _____ leaves.
- j. Dormancy due to hard/impermeable seed coat can be broken by _____ method.

Q.2.Match the column 'A' with column 'B' (6x0.5=3marks)

- | | |
|-----------------|---------------------|
| Column-A | Column-B |
| a.Chickpea | i. Blind hoeing |
| b.Cotton | ii.Oat |
| c.Salt petre | iii.Nipping |
| d.Sugarcane | iv.Glyphosate |
| e.Grey speck | v.Ginning |
| f.Non selective | vi.KNO ₃ |

Q.3. Expand the following- (4x0.5=2marks)

SBI-

CRIDA-

TNAU-

AICRP-



Q.4. Tick the most appropriate answer from the following- (5x0.5=2.5marks)

- i. The father of Agronomy is
 - a. Jethro Tull
 - b. Norman E. Borlaug
 - c. L A Ramdas
 - d. Peter Discrenseni
- ii. Both sides of a canal becomes waterlogged because of-
 - a. Seepage
 - b. Deep percolation
 - c. Infiltration
 - d. Leaching
- iii. When organic matter is applied to soil, the bulk density
 - a. Decreases
 - b. Increases
 - c. maintains a constant value
 - d. increases due to porosity
- iv. Chemicals used to inactivate the applied herbicides are called as
 - a. Safeners
 - b. Antidotes
 - c. Adjuvants
 - d. Surfactants
- v. The concept of PET was first given by
 - a. Thornthwaite
 - b. Penman
 - c. Blaney Criddle
 - d. None of the above

Q.5. Write true or false against each statement- (5x0.5=2.5marks)

- i. Zaid crops are sown after the onset of monsoon
- ii. Average annual precipitation in India is 1500mm.
- iii. ICRISAT is situated at Hyderabad
- iv. Entire quantity of soil water held in micro pore space is available to plants.
- v. Part of the life cycle of second crop overlaps with the cropping cycle of first crop in relay cropping.

SECTION-B

Q.6. Write short notes on the following - (any five) (5x1=5marks)

- i. Criteria of essentiality
- ii. Bioherbicide
- iii. Economic and biological crop yield
- iv. Effective rainfall
- v. Conjunctive use of water
- vi. Zero tillage.

Describe the following (Any five)

(5x5=25marks)

- Q.7. Define tillage and tith. What are the objectives of tillage. Write down the role of tillage on soil physical properties.
- Q.8. Define crop rotation and advantages of crop rotation. State the important points to be considered for planning the efficient crop rotation.
- Q.9. Define agricultural drainage. What are the benefits of agricultural drainage. Discuss about different types of surface drainage systems.
- Q.10. What is biological control of weeds. Write the criteria for selection of suitable bio-agents. Give two examples of successful biological control measures.
- Q.11. What do you mean by scheduling of irrigation. Briefly discuss the climatological approach of scheduling of irrigation to crops.
- Q.12. Classify the weeds according to association, nature of stem, habitat and origin with examples.

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