



COLLEGE OF AGRICULTURE, FISHERIES AND FORESTRY
SCHOOL OF AGRICULTURAL SCIENCES
DEPARTMENT OF CROP PRODUCTION
BACHELOR OF EDUCATION (SECONDARY) (AGRICULTURE SCIENCE) YEAR I
AGO-501 (Principles of Agronomy and Agrometerology)

Date of Examination:

Time:

FINAL EXAM TRIMESTER- 1, 2016

DURATION 3 HOURS

INSTRUCTIONS TO STUDENTS

1. This paper consists for 5 pages. Please check to see that your paper is complete.
2. Printed or written material is not allowed in examination hall.
3. Answer all the questions in the answer booklet. Number your answers correctly in the answer booklet.
4. Attach all the sheets used as your answer paper in their correct sequence and secure with a string.
5. Use both sides of the answer sheet and write your candidate number on each sheet.

SECTION	PARTICULARS	TOTAL MARKS	THE ALLOCATIONS
A	Part 1: Multiple Choices Part 2: Fill in the Blanks Part 3: True and False Part 4: Matching	35	30 minutes
B	Short answers	35	60 minutes
C	Long answers	30	90 minutes
	Total	100	

SECTION –A

There are four parts in this section. All the questions are compulsory. In your answer booklet write the question number followed by the answer.

Part 1: Multiple Choices. Pick the correct answer.

(10×1.5=15 Marks)

(1) The inherent capacity of the soil to supply plant nutrients in adequate quantities and in suitable proportions _____

a. Soil productivity

b. Soil fertility

c. Soil quality

d. None of above

(2) _____ is not bulky organic manure.

a. Poultry manure

b. Green manure

c. Compost

d. Fish meal

(3) Physical condition of soil resulting from tillage is _____

a. Structure

b. Texture

c. Tilth

d. None of these

(4) The book “Horse Hoeing Husbandry” was written by _____

a. Tisdale

b. Jethro Tull

c. Prem Singh

d. Arnon and Stout

(5) The cotyledons remain under the soil in _____

a. Epigeal germination

b. Hypogeal germination

c. Late germination

d. None of these

(6) Study of climatic factors in relation to agriculture _____

a. Pomology

b. Agrometeorology

c. Pathology

d. Geology

(7) Combined loss of water vapor from transpiration and evaporation is _____

a. Transpiration

b. Evapotranspiration

c. Evaporation

d. None of these

(8) Nutrients required by plants in larger amounts are known as _____

a. Functional nutrients

b. Macro nutrients

c. Micro nutrients

d. None of these

(9) RSMC-tropical Cyclone Centre is situated at _____ in Fiji.

a. Sigatoka

b. Nadi

c. Suva

d. Nausori

(10) Application of plant nutrient with irrigation water is known as _____

a. Fertilization

b. Nutrition

c. Fertigation

d. Placement

Part 2: Fill in the blanks with appropriate answers give below. (5×1=5 Marks)

(1) The weather averaged over a long period known as **Climate**.

(2) **Eradication** is complete removal of all live plant parts and seeds of the weed from an area.

(3) Fiji enjoys a **Tropical** climate with heavy rain under prevailing conditions.

(4) Removal of weeds either manually or by handy tools is known as **hand weeding**.

(5) Weeds which are introduced from other countries are called as **Alien weeds**.

Part 3: Mark True or False. (10×1 =10 Marks)

(1) Irregular flow of income over the year is an advantage of crop rotation. (True/**False**)

(2) Removal of excess water from the surface or below the surface of the soil to create favorable conditions for plant growth is drainage. (**True**/False)

(3) In a rotation crops with tap roots should be followed by fibrous root system. (**True**/False)

(4) In shifting cultivation farm is not at a permanent location. (**True**/False)

(5) Sprinkler irrigation is also known as overhead irrigation. (**True**/False)

(6) Growing one crop variety in pure stands on a field is referred to as Mono cropping. (**True**/False)

(7) Coconut-Piper-Banana-Pineapple is an example of multi storied cropping system. (**True**/False)

(8) Cyperaceae and Typhaceae family weeds are known as sedges. (**True**/False)

(9) Albedo of cropped field ranges from 12-13. (**True**/False)

(10) The term "Agronomy" has been derived from Latin word. (**True**/False)

Part 4: Match the following. (5×1=5 Marks)

1.	C,H,O,N,P,K	(B)	A	Bio-herbicide
2.	Ca, Mg, S	(C)	B	Primary nutrients
3.	De-vine	(A)	C	Secondary nutrients
4.	Rice	(D)	D	Hypogeal germination
5.	Cowpea	(E)	E	Epigeal germination

SECTION- B (Short Answers) (7×5= 35 Marks)

Answer all the questions. Each question carries 5 marks.

1. Differentiate between broadcasting and top dressing methods of plant nutrient application.
2. Define tillage. What are different objectives of tillage?
3. Differentiate between soil fertility and soil productivity.
4. Enlist five main principles of crop rotation.
5. What is harvesting? Describe different operations of harvesting in brief.
6. What is weather forecasting? How is it important to farmers?
7. Write four differences between manures and fertilizers.

Section-C (Long answers) (3×10=30 Marks)

Answer only **three** from the following questions. Answer in detail. **Each question carries 10 marks.**

1. Discuss significance of study of agricultural meteorology.
2. What are basic principles of weed management? Discuss cultural method of weed management in detail.
3. What is shifting cultivation? Write its common features and enlist its disadvantages.
4. Describe criteria of essentiality of plant nutrients. Enlist different nutrients essential for plant growth with their forms absorbed by plants.
5. What is irrigation? Discuss problems associated with under and over irrigation.

THE END