



COLLEGE OF AGRICULTURE, FISHERIES AND FORESTRY

SCHOOL OF AGRICULTURAL SCIENCES & FORESTRY

DEPARTMENT OF CROP PRODUCTION

BACHELOR OF SCIENCE IN AGRICULTURE

AGO 621 (Agronomy of Field Crops)

Semester-1, 2019 Final Examination

DURATION: 3 HOURS

(An extra 10 minutes reading time in which you are not permitted to write)

INSTRUCTIONS TO STUDENTS

1. This paper consists for Six (6) pages. Please check to see that your paper is complete.
2. Answer all the questions in the answer booklet. Number your answers correctly in the answer booklet.
3. Attach all the sheets used as your answer paper in their correct sequence and secure with a string.
4. Use both sides of the answer sheet and write your candidate number on each sheet.

Summary of questions

SECTION	PARTICULARS	TOTAL MARKS
A	Multiple Choices	20
B	Short answers	30
C	Long answers	50
	Total	100

SECTION –A

There are twenty questions 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.

(20×1=20 Marks)

1. Seed rate of Pragati variety of pigeon pea is _____.
 - a. 50 kg/ha
 - b. 20 kg/ha
 - c. 40 kg/ha
 - d. 30 kg/ha

2. Following is a fiber crop _____.
 - a. Cotton
 - b. Green gram
 - c. Pea
 - d. Rice

3. Potato is planted at _____ spacing.
 - a. 75cmx30cm
 - b. 50cmx30cm
 - c. 100cmx30cm
 - d. 25cmx30cm

4. A microbial process in which bast fiber gets loosened for an easy separation from woody stalks of jute is _____.
 - a. winnowing
 - b. retting
 - c. harvesting
 - d. canning

5. Tikka caused by *Cercospora personata* is disease of _____.
 - a. Groundnut
 - b. Cowpea
 - c. Rice
 - d. Groundnut

6. Samoa Hybrid is a variety of _____.
 - a. Cassava
 - b. Dalo
 - c. Bean
 - d. Yam

7. Puddling is a very important operation in _____ crop.

- a. Cotton
- b. Maize
- c. Rice
- d. Potato

8. Scientific name of cotton is _____.

- a. *Corchorus olitorius*
- b. *Gossypium hirsutum*
- c. *Arachis hypogea*
- d. *Vigna radita*

9. Kiran is a variety of _____.

- a. Moong bean
- b. Urad bean
- c. Pigeon pea
- d. Ground nut

10. Propping is related to _____ crop.

- a. Wheat
- b. Mustard
- c. Sugarcane
- d. Sunflower

11. Star is a variety of _____.

- a. Rice
- b. Cowpea
- c. Groundnut
- d. Pigeon pea

12. Seed rate of Urad bean is _____.

- a. 17 kg/ha
- b. 25 kg/ha
- c. 30 kg/ha
- d. 35 kg/ha

13. _____ is a variety of potato.

- a. Sebago
- b. Galoa
- c. Kranti
- d. Hyola

14. Sugarcane flower is known as _____.
- Panicle
 - Arrow
 - Spike
 - Inflorescence
15. Nicotine is found in _____ crop.
- Tobacco
 - Mustard
 - Wheat
 - Sunflower
16. Golden rice is the genetically modified rice rich in _____.
- Vitamin A
 - Vitamin B
 - Vitamin C
 - Vitamin D
17. Seed rate of long bean is _____.
- 2 Kg/ha
 - 5 Kg/ha
 - 7 Kg/ha
 - 10 Kg/ha
18. Process of curing is related to _____ crop.
- Tobacco
 - Mustard
 - Long bean
 - Sunflower
19. Seed rate of sugarcane is _____.
- 3-8 t/ha
 - 15 t/ha
 - 2 t/ha
 - 10 t/ha
20. On fertile soils Pigeon pea is sown at spacing of _____.
- 65cmx20cm
 - 65cmx10cm
 - 65cmx25cm
 - 65cmx30cm

SECTION- B (Short Answers) (30 Marks)

1. Answer only five (5) the questions. Each question carries 4 marks. (5×4= 20 Marks)

1. Compare objectives of puddling in rice.
2. Briefly demonstrate pegging process in ground nut.
3. What is delinting in cotton? Why is it done?
4. Enlist advantages of topping and suckering in tobacco?
5. Enlist major growth stages of sugarcane.
6. What is potato greening? Discuss in brief.
7. Discuss importance of pulses in a crop rotation.
8. What are important considerations while selection of seed cane setts?

2. Evaluate the reason (s) of following. Each question carries 2 marks. (5×2= 10 Marks)

1. Propping operation is very important in sugarcane cultivation.
2. In most of the legume crops a starter dose of Nitrogen is sufficient to meet the “N” requirement.
3. In ground nut farming (40 DAS), there should not be any disturbance near the plant through manual or mechanical weeding.
4. Planting of urad bean during wetter months is not advised.
5. While groundnut sowing soil should be pressed down.

Section-C (Long answers)

(5×10=50 Marks)

Answer only **five** from the following questions. Each question carries 10 marks.

1. Apply agronomy of Potato (*Solanum tuberosum*) cultivation under following heads.
 - (a) Scientific name and family
 - (b) Soils requirements
 - (c) Recommended varieties in Fiji
 - (d) Recommended planting time, seed rate and spacing
 - (e) Nutrient management

2. Discuss agronomy of Sugarcane (*Saccharum officinarum*) cultivation under following heads.
 - (a) Scientific name and family
 - (b) Soils requirements
 - (c) Recommended varieties in Fiji
 - (d) Recommended planting method
 - (e) Earthing Up and propping

3. Apply agronomy of French bean (*Phaseolus vulgaris*) cultivation under following heads.
 - (a) Scientific name and family
 - (b) Soils requirements
 - (c) Recommended varieties in Fiji
 - (d) Recommended sowing time, seed rate and spacing
 - (e) Weed management

4. Apply agronomy of groundnut (*Arachis hypogea*) cultivation under following heads.
 - (a) Scientific name and family
 - (b) Soils requirements
 - (c) Recommended varieties in Fiji
 - (d) Recommended planting time, seed rate and spacing
 - (e) Pegging

5. Apply agronomy of maize (*Zea mays*) cultivation under following heads.
 - (a) Scientific name and family
 - (b) Soils requirements
 - (c) Recommended varieties in Fiji
 - (d) Recommended planting time, seed rate and spacing
 - (e) Nutrient management

6. Apply agronomy of pigeon pea (*Cajanus cajan*) cultivation under following heads.
 - (a) Scientific name and family
 - (b) Soils requirements
 - (c) Recommended varieties in Fiji
 - (d) Recommended planting time, seed rate and spacing
 - (e) Weed management

7. Apply agronomy of rice (*Oryza sativa*) cultivation following heads.
 - (a) Scientific name and family
 - (b) Soils requirements
 - (c) Recommended varieties in Fiji
 - (d) Field preparation
 - (e) Recommended planting time, seed rate and spacing

THE END