

Date of Examination:**Time:****FINAL EXAM TRIMESTER- 1, 2014****DURATION 3 HOURS****INSTRUCTIONS TO STUDENTS**

1. You are allowed 10 minutes extra reading time in which you are NOT permitted to write.
2. Attach all the sheets used as your answer paper in their correct sequence and secure with a string.
3. Use both sides of the answer sheet and write your candidate number on each sheet.
4. Write clearly the number(s) of the question(s) attempted on the top of 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.

(1.5×10=15 Marks)

(1) Sugarcane flower is known as.....

- a. Panicle
- b. Arrow
- c. Spike
- d. Inflorescence

(2) Propping is related tocrop.

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

(3) Diurnal motion or seasonal motion of plant parts (flowers or leaves) in response to the direction of the sun is found in

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

(4) The mustard fruit is known as _____

- a. Caryopsis
- b. Siliqua
- c. Pod
- d. None of these

(5) Green colour of potato is due to _____

- a. Solanine
- b. Lycopene
- c. Chlorophyll
- d. None of these

(6) Sunflower is a _____crop

- a. Photo sensitive crop
- b. Photo insensitive crop
- c. Photo reflecting crop
- d. None of these

(7) Nicotine is found in_____ crop.

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

(8) Aphid is a serious insect of _____ crop

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

(9) Sunflower head is known as _____

- a. Capitulum
- b. Panicle
- c. Arrow
- d. None of these

(10) _____ is a variety of sugarcane.

- a. Mana
- b. Red rascal
- c. Kranti
- d. Hyola

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

- (1) Stem cuttings or sections of the stalks of sugarcane are called.....
- (2) Hyola is a variety of.....crop.
- (3) Red rot is a disease ofcrop.
- (4) Contender is a variety of.....crop.
- (5)is used to assess the maturity of standing sugarcane crop by Brix reading.

(Mustard, Sunflower, Setts, 30-50 grams, 40-50 grams, French bean, Cowpea, Red rot, Blight, Sugar beet, Sugarcane, Hand Refractometer)

Part 3: TRUE OR FALSE (1×10 =10 Marks)

- (1) *Colletotrichum falcatum* is causal organism of red rot of sugarcane. (True/False)
- (2) Sugarcane is a short day plant. (True/False)
- (3) Soil analysis should be done after fertilizer application. (True/False)
- (4) Chickpea has a indeterminate growth habit. (True/False)
- (5) Liming is the most important practice in the acid soils to improve productions. (True/False)

- (6) Cereals can be harvested at physiological maturity stage. (True/False)
- (7) Canola varieties of sunflower are suitable for edible purpose. (True/False)
- (8) The oil content varies from 48-53% in sunflower. (True/False)
- (9) Bacterial wilt of potato is also known as wing disease. (True/False)
- (10) TPS is related to potato. (True/False)

Part 4: Match the following crops to their scientific names. (1×5=5 Marks)

- | | | |
|--------------|----------|------------------------------|
| 1. Potato | A | <i>Saccharum officinarum</i> |
| 2. Sunflower | B | <i>Nicotiana tabacum</i> |
| 3. Tobacco | C | <i>Helianthus annuus</i> |
| 4. Sugarcane | D | <i>Solanum tuberosum</i> |
| 5. Chickpea | E | <i>Cicer arietinum</i> |

SECTION- B (Short Answers)

(7×5= 35 Marks)

Answer all the questions. Each question carries 5 marks.

1. Most of the potato is imported in Fiji. Why?
2. Describe uses of sugarcane in brief.
3. What is potato greening? Discuss in brief.
4. Enlist advantages of topping and suckering in tobacco.
5. Enlist major growth stages of sunflower.
6. Discuss importance of pulses in a crop rotation.
7. What are important considerations while selection of sugarcane planting material?

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

Answer only **three** from the following questions. Answer each in 300 words. **Each question carries 10 marks.**

1. Discuss French bean cultivation under following heads.
 - (a) Botanical name and family
 - (b) Soils requirements
 - (c) Recommended varieties in Fiji
 - (d) Recommended planting method
 - (e) Earthing Up and propping

2. Discuss Potato cultivation under following heads.
 - (a) Botanical name and family
 - (b) Soils requirements
 - (c) Recommended varieties in Fiji
 - (d) Recommended planting time, seed rate and spacing
 - (e) Nutrient management

3. Discuss agronomic constraints of pulse production in Fiji.

4. Give the reasons of following.
 - (A) P and K uptake by crops grown under zero tillage is greater than those grown by conventional methods. Why?
 - (B) Soil analysis should be done before fertilizer application. Why?
 - (C) Sunflower seeds cannot be used as seed, immediately after harvest of crop. Why?
 - (D) Sunflower can be grown irrespective of the season. Why?
 - (E) Tying leaves together using the bottom dry and green leaves important in sugarcane. Why?

5. Discuss Sugarcane cultivation under following heads.
 - (a) Botanical name an family
 - (b) Soils requirements
 - (c) Recommended varieties in Fiji
 - (d) Recommended sowing time, seed rate and spacing
 - (e) Weed management

THE END