

#### SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

# Higher National Diploma in Technology (Agriculture) First Year, Second Semester Examination – 2015 AG1202- Crop Production Technologies –Other Field Crops

Instructions for Candidates:

Answer all questions

All questions do not carry equal marks

Answer part I & part II on the paper itself (01 hour)

No. of questions : 07 No. of pages : 05 Time : 3 hrs

#### **PART I**

### Q.1. (Total Marks 16)

#### Underline the correct answer

- 01. Select the scientific name of red onion
  - i. Allium esculanta
  - ii. Allium cepa
  - iii. Alliumascalonium
  - iv. Non of above
- 02. What is the ploughing depth of big onion?
  - i. 20-25 cm
  - ii. 25-30 cm
  - iii. 15- 20 cm
  - iv. 30-35 cm
- 03. Select the varieties belong to chilli cultivation.
  - i. MI 1, MI 2, pb1
  - ii. Rampur red, pusa red, nasic red
  - iii. MI 1, MI 3, MI hot
  - iv. MI 1, MI 2, KA 2

- 04. What is the correct moisture level of sun flower seeds for storage?

  i. >10%

  ii. <10%

  iii. <13%
- 05. Select the correct statement on ground nut

>13%

iv.

- i. It contains high amount of protein than carbohydrates
- ii. It contains high amount of protein than fat
- iii. It contains high amount of calcium than fat
- iv. All are incorrect
- 06. What is the correct statement on planting material of ginger?
  - i. 9-10 months old rhizomes are suitable for planting
  - ii. Weight of local ginger variety should be more than 50 g
  - iii. Rhizome section should have 2-3 sprouts
  - iv. Planting material requirement is 1000kg/ha
- 07. What is the correct climatic requirement for cultivation of turmeric?
  - i. Elevation upto 1000m amsl
  - ii. Rain fall 1000mm/year
  - iii. Temperature 20-35<sup>o</sup>c
  - iv. RH 95%
- 08. Select the correct statement on ginger & turmeric
  - i. They require clay soil
  - ii. They belong to family Zingiberaceae
  - iii. Commercially cultivate using suckers
  - iv. They should plant 12cm depth in soil
- 09. What is the recommended variety of innala?
  - i. Mahesha
  - ii. Arunalu
  - iii. Binari
  - iv. Bombay
- 10. What is the seed rate to cultivate PM 25 variety?
  - i. 55kg/ha
  - ii. 60kg/ha
  - iii. 45kg/ha
  - iv. 50kg/ha

11. Select the common disease which spreads due to late planting of black gram					
i.	Yellow mosaic virus				
ii.	Bud blight				
iii.	Bacterial pustule				
iv.	Charcoal rot				

- 12. What is the temperature requirement to cultivate cowpea (°C)
  - i. 25-30
  - ii. 30-35
  - iii. 20-30
  - iv. 20-25
- 13. Select the crop that can be used in ration cropping
  - i. Mung bean
  - ii. Pigeon pea
  - iii. Soy bean
  - iv. Chilli
- 14. What is the scientific name of sweet potato?
  - i. Solanum tuberosum
  - ii. Manioc esculenta
  - iii. Ipomea batatas
  - iv. Coleus rotundifolius
- 15. What is the correct spacing for sunflower?
  - i. 60 x 25 cm
  - ii. 60 x 30 cm
  - iii. 60 x 15 cm
  - iv. 60 x 35 cm
- 16. Select the crop that is not required nursery management
  - i. Chilli
  - ii. Big onion
  - iii. Red onion
  - iv. Manioc

## **PART II**

	(i)	Name three varieties of cowpea	(3 marks)
	•••••		
	(ii)	Give three major growing areas of Black gram	(3 marks)
	•••••		
	•••••		
	(iii)	Name different growth habits of pigeon pea plant	(3 marks)
	(iv)	List three types of underutilized tuber crops in Sri Lanka	(3 marks)
	a)		
	b)		
	c)		
Q 3. (	Total M	Marks 12)	
	(i)	Give three (03) economical importance of Gingerly	(3 marks)
	•••••		
	(ii)	Name three oil crops (annuals) cultivate in Sri Lanka	(3 marks)

(iii)	Write two (02) propagation methods of innala?	(3 marks)
(iv)	Name different planting methods of cassava	(3 marks)

#### **PART III**

## Q .4. (Total Marks 15) i)Briefly explain the method of applying seedling treatment for big onion (5 marks) ii) Explain the field establishment of red onion by using seed bulbs (10 marks) Q.5. (Total Marks 15) i) Describe the land preparation for field planting of chilli (7 marks) ii) Give your suggestions to improve the Turmeric production in Sri Lanka(8 marks) Q.6 (Total Marks 15) i) "Potato cannot be cultivated in all climatic regions of Sri Lanka". Give your comments (5 marks) on above statement ii) Explain the field establishment and management practices of Ground nut in Dry zone (10 marks) Q.7. (Total Marks 15) Write short notes on i) Harvesting and processing of soy bean (5 marks) ii) Economical importance of Ginger (5 marks)

iii) Nutritive value of Sun flower oil

(5 marks)