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SLIATE

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, 2nd Semester Examination – 2015 AG 1203: Vegetable Production

Instructions for Candidates:No. of questions: 07Answer part I and part II on this paper itself andNo. of pages: 05will be collected after 01 hour.Time allowed: Three (03) hours.Two hours for part IIITime allowed: Three (03) hours.

Part I

01. Select the correct answer and circle it on this paper.

- (i) Select the up country vegetable from the following.
 - a) Luffa
 - b) Long beans
 - c) Sweet potato
 - d) Capsicum

(ii) Select the luffa variety from the following.

- a) MI short
- b) Asiri
- c) MC 43
- d) Thinnevely

(iii) Momodica charantia is a botanical name used for;

- a) Snake gourd
- b) Luffa
- c) Bitter gourd
- d) Pumpkin
- (iv) Which of the following crop has 1kg/ha as the seed rate and 1m X 1 m as the spacing for planting?
 - a) Cucumber
 - b) Luffa
 - c) Okra
 - d) Pumpkin
- (v) A vegetable crop needs 90 to 100 days maturation period and it produces a potential yield of 40 to 60 tons/ha. Select the crop from the following;
 - a) Raddish
 - b) Cabbage
 - c) Cauliflower
 - d) Pole bean

- (vi) Select the correct statement about radish and cabbage from the following?
 - a) They can be grown in all the ecological regions in Sri Lanka.
 - b) They require well drain, fertile, loamy soils with the pH range from 6-7.5
 - c) They require a planting hole size of $30 \times 30 \times 30$ cm for field planting.
 - d) Their average yield is around 20-30 tons/ha.
- (vii) What is the recommended spacing for field planting of tomato?
 - a) $90 \times 60 \text{ cm}$ b) $60 \times 60 \text{ cm}$ c) $60 \times 50 \text{ cm}$ d) $40 \times 50 \text{ cm}$
- (viii) Select the correct statement about brinjal from the following?
 - a) It is very sensitive crop for drought.
 - b) Well drained loamy soils with the pH vary from 5.5 to 6.8 are suitable for planting.
 - c) Seed rate is about 750 g/Ha
 - d) Vihara-2 is a suitable variety for dry zone during yala season.
- (ix) Which of the following crop can be successfully grown in up country wet zone and up country intermediate zone in Sri Lanka, whereas low country is not suitable for cultivation this crop
 - a) Carrot b) Radish c) Leek d) Tomato
- (x) Select the correct statement about Okra;
 - a) Botanical name is Abelmoshus vulgaris
 - b) It belongs to the family Leguminaceae.
 - c) Higher yield is recorded during the Maha season.
 - d) Can be harvested within 55-60 days after planting.
- (xi) Select the correct statement about diseases of vegetables.
 - a) White mycelial mat can be detected at the collar region during anthracnose attack.
 - b) Bacterial wilt is temporally wilting similar to water stress
 - c) Soft rot can be avoided by controlling moist and high humidity.
 - d) Sunken brown spots on leaves and fruits can be seen under collar rot infection.

(xii) Select the correct statement about leeks.

- a) Small Short Summer is the only variety recommended and it is very popular among the farmers.
- b) Leeks is susceptible to wet weather and frost
- c) Planting Spacing is $15 \text{ cm} \times 10 \text{ cm}$
- d) It takes about 65-75 days for first harvesting

(xiii) Select the vegetable belong to Family Malvaceae.

- a) Leeks
- b) Okra
- c) Winged bean
- d) Cabbage

| (xiv) Seed rate of cabbage is; | | |
|--------------------------------|--|--|
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a) 250 g/Ha b) 450 g/Ha c) 750 g/Ha d) 1 Kg/Ha

(xv) Select the recommended cucumber variety;

- a) LY 58
- b) ANK Ruhunu
- c) Lanka nill
- d) Padagoda

(xvi) Select the miner Exotic Vegetables from the following;

- a) Seru gova, Green peas, Broccoli
- b) Chinese cabbage, Drumstick, Lotus root
- c) Drumstick, Lotus root, Kohila
- d) Cabbag, Seru gova, Green peas

(Total 16 marks)

<u>Part II</u>

Structured Questions

| 02. | (i) | Name four vegetables which need trellis for their better production. | (04 marks) |
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| | (ii) | Write the seed rates of above four vegetables you mentioned. | (04 marks) |
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| | (iii) | Write four differences between pole bean and bush bean. | (04 marks) |
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Name three vegetables categorized under Family Solanaceae. 03. (i) (03 marks) Give two varieties of above vegetables separately. (ii) (06 marks) Write three exotic vegetables classified under Cruciferae Family. (03 marks) (iii)

Part III-

Essay Questions

| 04. (i) | What are the benefits of vegetable production? | (05 marks) | | | | | |
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| (ii) | Explain land preparation and field planting of cucumber. | (05 marks) | | | | | |
| (iii) | Describe the constraints faced in bitter gourd cultivation? | (05 marks) | | | | | |
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| 05. (i) | What are the important climatic requirements for cultivation of okra? | (04 marks) | | | | | |
| (ii) | Write two recommended varieties and their characters of beet root. | (05 marks) | | | | | |
| (iii) | Describe harvesting and post-harvest practices of Luffa. | (06 marks) | | | | | |
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| 06. Write short notes on the following. | | | | | | | |
| (i) | Social benefits of home garden. | (05 marks) | | | | | |
| (ii) | Seed production of snake gourd. | (05 marks) | | | | | |
| (iii) | Reasons for the popularity of leafy vegetables. | (05 marks) | | | | | |
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| 07. (i) | What are the climatic requirements for cultivation of leeks? | (04 marks) | | | | | |
| (ii) | Describe the important management practices of radish. | (05 marks) | | | | | |
| (iii) | Describe the important cultural and management practices of pumpkin. | (06 marks) | | | | | |
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