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University Examinations 2013/2014

THIRD YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN HORTICULTURE

AHS 2310 – FLORICULTURE 11

DATE: DECEMBER 2013

TIME: 2HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE – 30 MARKS

- (a) (i) What is a cut-flower? (2Marks)
(ii) Bud-harvesting is the most common harvesting technique used by many farms. Explain any three reasons as to why this method is the most popular. (3Marks)
- (b) A given commercial flower farm wants to recruit you as a farm supervisor. Explain the various cultural methods you wish to be employed by workers at harvesting stage in order to improve the quality and vase-life of the harvested cut flower for fresh market use. (5Marks)
- (c) Explain how the following causes of deterioration of cut-flowers can be controlled.
(i) Food depletion (3Marks)
(ii) Ethylene gas (3Marks)
- (d) (i) What is a biocide as used in cut-flower production? (1Mark)
(iii) Name any two types of biocides commonly used in most cut-flower farms. (2Marks)
- (e) Briefly explain the procedure for post-harvest handling of fresh cut-flowers (8Marks)
- (f) Statice is one of the common fresh flowers produced for export market in Kenya. Explain its procedure of fertilizer application. (3Marks)

QUESTION TWO – 20 MARKS

- (a) Most of the cut flowers require well drained soils (media). Explain how you can improve soil drainage in the cut-flower beds. (5Marks)

- (b) Give the botanical name and family name of Gladiolus flower
- (i) Botanical Name (2Marks)
 - (ii) Family Name (1Mark)
- (c) How does the following environmental factors affect gladiolus plants in the farm.
- (i) Photoperiod (2Marks)
 - (ii) Temperature (3Marks)
 - (iii) Water (2Marks)
- (d) Explain the harvesting procedure and storage of corms in gladiolus. (5Marks)

QUESTION THREE – 20 MARKS

- (a) Explain the various methods used for sterilizing soils in the green-house before planting the flowers. (5Marks)
- (b) Gypsophila is one of the most popular cut-flower in the world.
- (i) Give its family name (1Mark)
 - (ii) State any two used of it (2Marks)
 - (iii) Explain how the various environmental factors affect gypsophila production.(12Marks)

QUESTION FOUR – 20 MARKS

- (a) Differentiate disbudding from pinching as practiced in cut-flower production. (2Marks)
- (b) Name any three commonly used propagating media. (3Marks)
- (c) State any four purposes of using rooting media (4Marks)
- (d) Lisianthus of one of cut-flower most loved by customers.
- (i) Give its scientific name (2Marks)
 - (ii) Briefly explain its two growth phases. (6Marks)
 - (iii) Explain how the temperature and light intensity affects its performance. (3Marks)

QUESTION FIVE – 20 MARKS

- (a) An investor wants to venture into fresh cut-flower production. Give professional advice in the choice of cut-flower production site he needs to choose. (5Marks)
- (b) Give two differences which can be used to differentiate Asiatic and oriental hybrids of lily. (4Marks)
- (c) Explain the procedure of treatment of lily bulbs before planting. (1Mark)
- (d) Explain how the following environmental conditions affects lily production during the growth period:
- (i) Temperature (2Marks)
 - (ii) Light intensity (2Marks)
- (e) (i) Name any two diseases which attack lilies. (2Marks)
- (ii) State one confirmatory sign of each disease. (2Marks)
 - (ii) State one method of controlling each disease. (2Marks)