



0174-512 APRIL 2017

Technicals in Forestry and Arboriculture

Level 3 Forestry and Arboriculture – Theory Exam (1)

If provided, stick your candidate barcode label here.

Wednesday 26 April 2017
13:30 – 15:30

Candidate name (first, last)

First [grid of boxes]

Last [grid of boxes]

Candidate enrolment number

[grid of boxes]

Date of birth (DDMMYYYY)

[grid of boxes]

Gender (M/F)

[grid of boxes]

Assessment date (DDMMYYYY)

[grid of boxes]

Centre number

[grid of boxes]

Candidate signature and declaration\*

[signature line]

If any additional answer sheets are used, enter the additional number of pages in this box. [grid of boxes]

- Please ensure that you staple additional answer sheets to the back of this answer booklet...
• All candidates need to use a black/blue pen. Do not use a pencil or gel pen.
• If provided with source documents, these documents will not be returned to City & Guilds...

\*I declare that I had no prior knowledge of the questions in this assessment and that I will not divulge to any person any information about the questions.

You should have the following for this assessment

- a pen with blue or black ink

General instructions

- Use black or blue ballpoint pen.
• The marks for questions are shown in brackets.
• This examination contains 16 questions. Answer all questions.
• Answer the questions in the spaces provided. Answers written in margins or on blank pages will not be marked.
• Cross through any work you do not want to be marked.

See the latest qualification handbook for the 2018 exams have changed. The content sampled will vary from this paper. for the updated test specification.

- 1 Name **two** pieces of legislation that are relevant to the use and operation of land based machinery. (2 marks)

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- 2 Describe **two** ways environmental damage can be minimised when operating land based machinery. (2 marks)

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- 3 Explain **three** factors that affect the rate of photosynthesis. (3 marks)

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- 4 Describe **three** features of a good soil **and** how they impact physiological processes. (6 marks)

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Past paper

5 Describe **three** methods of improving poor soils conditions. (3 marks)

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6 Explain **two** reasons for using the correct bar and chain combination on a chainsaw. (2 marks)

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7 The tree you are going to fell has decay in the base. State **two** ways you could alter your felling method **and** explain how they would improve the operation. (2 marks)

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Past paper

8 For the following abiotic disorders and human influences, explain **two** impacts on tree health for each.

a) Road salt. (2 marks)

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b) Lighting. (2 marks)

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c) Mechanical damage. (2 marks)

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d) Frost. (2 marks)

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9 State the common name of **each** of the following in the UK.

a) Invertebrate pest. (1 mark)

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b) Tree decay fungus. (1 mark)

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c) Bacteria that affects trees. (1 mark)

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10 State **three** types of environmental impact that might occur during chainsaw use. (3 marks)

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11 Name **four** methods of pest and disease control **and** give an example for each. (4 marks)

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12 Describe **one** way **each** of the following methods promote tree health and help prevent attack from pathogens. (1 mark)

a) Irrigation. (1 mark)

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b) Feeding. (1 mark)

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c) Tree shelters. (1 mark)

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14 Name **three** meristematic regions in a tree. (3 marks)

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15 A two-stroke machine will turn over but not start. Explain **two** reasons why this might happen. (2 marks)

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16 State **one** pathogen and describe **two** impacts it has on the host. (2 marks)

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Past paper