

# **Level 2 Technical Certificate in Forestry and Arboriculture (0174-21)**

## **Sample External Test**

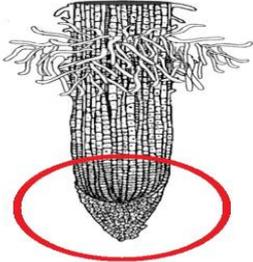
Duration: 1 hour 30 minutes

SAMPLE

No	Test spec ref	Question	Key
1	202.1.2 AO1	Which one of the following is a non-governmental organisation?  (a) National Trust. (b) Highway Agency. (c) Borough Council. (d) Forestry Commission.	A
2	202.1.5 AO1	Who is responsible for providing Personal Protective Equipment (PPE) for staff working in a small company?  (a) Employer. (b) Employee. (c) Local authority. (d) Professional association.	A
3	202.2.1 AO2	Which one of the following tree officer responsibilities relates directly to working with the public?  (a) Managing stock. (b) Inventory recording. (c) Landscape planning. (d) Providing information.	D
4	202.2.2 AO1	What is the accepted format for ending a letter that has begun with <i>Dear Sir/Madam</i> ?  (a) Best Regards. (b) Yours Sincerely. (c) Yours Faithfully. (d) Kind Regards.	C
5	203.1.1 AO1	An arborist applies to the local authority to commence work in a conservation area. What is the length of time that the local authority has to refuse the application?  (a) Two weeks. (b) Four weeks. (c) Six weeks. (d) Eight weeks.	C

No	Test spec ref	Question	Key
6	203.1.1 AO2	<p>A small company has been awarded a contract to extract 5 cubic meters of timber. Which of the following shows the organisation and type of permission that they require for this work?</p> <p>(a) Local Planning Authority, felling licence.  (b) Forestry Commission, felling licence.  (c) Local Planning Authority, consent to work.  (d) Forestry Commission, consent to work.</p>	B
7	203.1.2 AO1	<p>Which one of the following animals is protected under the Wildlife and Countryside Act (1981)?</p> <p>(a) Pipistrelle bat.  (b) Muntjac deer.  (c) Tawny owl.  (d) Grey squirrel.</p>	A
8	203.2.2 AO1	<p>Which method is <b>most</b> effective in reducing the effect of environmental contamination near water courses when using petrol tools?</p> <p>(a) Use of safety features.  (b) Use of specialist fuels.  (c) Use of spill kits.  (d) Use of PPE.</p>	B
9	203.4.1 AO1	<p>Which bio security method is used to minimise risks to native trees from stock waiting to be imported into the UK?</p> <p>(a) Pruning.  (b) Quarantine.  (c) Induced pests.  (d) Population control.</p>	B
10	203.4.2 AO1	<p>Which of the following measures is used to maintain resilient tree stock in a forestry plantation?</p> <p>(a) Fire breaks.  (b) Bat boxes.  (c) Mulching.  (d) Fencing.</p>	A

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11	205.1.1 AO2	<p>What is a characteristic of compacted soil?</p> <p>(a) High pH.            (b) Free draining.            (c) High porosity.            (d) Low porosity.</p>	D
12	205.1.2 AO1	<p>What is the impact of a lack of nutrients on plant growth?</p> <p>(a) Growth accelerated.            (b) Oversize fruit.            (c) Growth impeded.            (d) Oversize leaves.</p>	C
13	205.1.3 AO1	<p>What is the benefit of adding mycorrhizae to the soil when planting a tree?</p> <p>(a) Improves water drainage.            (b) Reduces soil compaction.            (c) Increases nutrient uptake.            (d) Prevents invertebrate pests.</p>	C
14	205.2.1 AO1	<p>What is the function of xylem?</p> <p>(a) Water and nutrient uptake.            (b) Transports photosynthates.            (c) Responsible for respiration.            (d) Production of new cells.</p>	A
15	205.2.1 AO2	<p>What effect does the apical bud have on the development of a tree?</p> <p>(a) Always produces the first flower.            (b) Always produces the first fruit.            (c) Controls incremental growth.            (d) Controls root growth.</p>	C

No	Test spec ref	Question	Key
16	205.2.2 AO1	<p>What is the plant part shown in the image below?</p>  <p>Source: <a href="http://test.classconnection.s3.amazonaws.com">http://test.classconnection.s3.amazonaws.com</a></p> <p>(a) Root tip. (b) Shoot tip. (c) Internode. (d) Terminal bud.</p>	A
17	205.2.2 AO2	<p>What are the immediate effects of root severance on a tree?</p> <p>(a) Reduced water and nutrient uptake, increased photosynthesis. (b) Increased water and nutrient uptake, reduced photosynthesis. (c) Unstable tree, reduced water and nutrient uptake. (d) Stable tree, increased water and nutrient uptake.</p>	C

No	Test spec ref	Question	Key
18	205.3.1 AO1	<p>Which of the images below shows the correct type of protection against rabbit damage for newly planted trees?</p> <p>(a)</p>  <p>Source: <a href="http://www.quazoo.com">www.quazoo.com</a></p> <p>(b)</p>  <p>Source: <a href="http://www.bigga.org.uk">www.bigga.org.uk</a></p> <p>(c)</p>  <p>Source: <a href="http://www.tubex.com">www.tubex.com</a></p> <p>(d)</p>  <p>Source: <a href="http://www.platipus-anchors.com">www.platipus-anchors.com</a></p>	C

No	Test spec ref	Question	Key
19	205.3.2 AO1	<p>Which of the following invertebrate pests create the disorder shown in the image below?</p>  <p>Source: <a href="http://www.forestryimages.org">www.forestryimages.org</a></p> <p>(a) Bee. (b) Wasp. (c) Moth. (d) Beetle.</p>	B
20	205.3.3 AO1	<p>Spraying would be <b>most</b> effective in treating which of the diseases or disorders below?</p> <p>(a) To remove dead wood. (b) To stop cankers bleeding. (c) To accelerate wound closure. (d) To control surface borne pathogens.</p>	D
21	205.3.4 AO1	<p>What is the definition of saprophytic fungi?</p> <p>(a) Fungi that increases sap production. (b) Fungi that feeds on living tissue. (c) Fungi that feeds on dead tissue. (d) Fungi that decreases photosynthesis.</p>	C
22	206.1.1 AO1	<p>Which of the following would most influence the choice of tree species suitable to plant for the forestry industry?</p> <p>(a) Timber stock, seasonal interest. (b) Timber stock, fruit production. (c) Timber stock, urban planting. (d) Timber stock, growth rate.</p>	D
23	206.1.1 AO2	<p>A tree is to be planted on a grass verge 3m wide to the side of a busy highway with a public walkway underneath. Which of the following factors would <b>most</b> influence the selection of tree?</p> <p>(a) Topography, local climate. (b) Species, predicted size/spread. (c) Local climate, aspect. (d) Predicted size/spread, aspect.</p>	B

No	Test spec ref	Question	Key
24	204.2.2, 206.1.1 AO4	<p>A local council is to plant a number of trees within a pavement in a busy residential area. The trees should be able to tolerate pollarding, provide seasonal interest, cause minimal fruit nuisance and must not be poisonous or thorny. Which one of the following would be most suitable for planting?</p> <p>(a) <i>Crataegus monogyna</i>.  (b) <i>Pseudotsuga menziesii</i>.  (c) <i>Castanea sativa</i>.  (d) <i>Platanus x hispanica</i></p> <p><b>Applied knowledge and understanding</b>  The learner needs to apply their understanding of planting conditions and the impact of the environment in which the tree stock is to be planted in order to determine appropriate trees for the site described in the scenario.</p>	D
25	206.1.2 AO1	<p>What is the <b>most</b> suitable type of tree stock for planting within a pavement in a busy residential street?</p> <p>(a) Standard.  (b) Whip.  (c) Feathered.  (d) Cell grown.</p>	A
26	206.1.2 AO1	<p>What are young trees, commonly sold as bare-root plants, generally known as?</p> <p>(a) Whips.  (b) Transplants.  (c) Cuttings.  (d) Standard.</p>	A
27	206.1.2 AO2	<p>A tree is to be planted in an urban environment. The client wants instant impact and the highest possible chance of tree survival, cost is <b>not</b> an issue. Which of the following nursery stock would <b>most</b> suit this?</p> <p>(a) Whip, bare-root.  (b) Standard, root-balled.  (c) Whip, containerised.  (d) Standard, bare-root.</p>	B
28	206.1.2 AO2	<p>Which of the following descriptions would appear on the label of tree seedlings that have been transplanted after growing in the nursery seedbed for <b>two</b> years?</p> <p>(a) 2 + 1.  (b) 1 + 2.  (c) 2 u 1.  (d) 1 u 2.</p>	A
29	206.2.1	<p>What is the <b>most</b> important reason to control weeds for newly planted whips?</p>	A

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	AO1	<p>(a) To prevent competition.</p> <p>(b) For aesthetic reasons.</p> <p>(c) To protect from rabbits.</p> <p>(d) For soil amelioration.</p>	
30	206.3.1 AO1	<p>Which one of the following methods would be <b>most</b> suitable for planting whips?</p> <p>(a) Pit.</p> <p>(b) Notch.</p> <p>(c) Air spade.</p> <p>(d) Tree spade.</p>	B
31	206.3.2 AO1	<p>Trees planted in planted in a busy residential street require support. Which of the following methods would ensure public safety and protect trees from damage?</p> <p>(a) Single stake and stock fencing.</p> <p>(b) Angled stake and mulch mat.</p> <p>(c) Underground stake and tree cage.</p> <p>(d) Double stake and spiral guard.</p>	C
32	206.4.2 AO1	<p>Which of the following should <b>not</b> be recorded when monitoring the health and establishment of trees?</p> <p>(a) Weather conditions.</p> <p>(b) Pests and diseases.</p> <p>(c) Mortality rates.</p> <p>(d) Date and time.</p>	A
33	206.4.3 AO2	<p>Which of the following actions would provide the <b>most</b> long-term benefits for a newly planted site that is in prime growing condition?</p> <p>(a) Watering.</p> <p>(b) Soil amelioration.</p> <p>(c) Pruning to crown raise.</p> <p>(d) Scheduled aftercare and re-surveying.</p>	D
34	203.1.1 207.3.1, 4.1, 4.2 208.1.4 AO4	<p>A customer owns an area of coniferous woodland which has been grown for timber. The customer wishes to remove 4m<sup>3</sup> of timber in the first quarter of the year and will employ two operatives using chainsaws to complete this work.</p> <p>Based on the scenario above what are the critical aspects that must be considered in the planning stage of this work and explain the importance of these considerations?</p> <p>(a) Completion of a survey, production of a risk assessment and allocation of designated parking. The importance of these plans relate to the impact on the</p>	B

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		<p>surrounding environment, the application of health and safety regulations for working on site and access and egress to the site.</p> <p>(b) Completion of a survey, production of a risk assessment and an emergency action plan. The importance of these plans relate to the impact on the surrounding environment, the application of health and safety regulations for working on site and contain details of contingency planning to cover emergency situations.</p> <p>(c) Obtaining a felling licence, completion of a survey and method statement. The importance of these plans take into consideration the felling regulations, the impact on the surrounding environment and production of work specific plans.</p> <p>(d) Obtaining a felling licence, completion of a survey and production of an emergency action plan. The importance of these plans take into consideration the felling regulations, the impact on the surrounding environment and details of contingency planning to cover emergency situations.</p>	
		<p><b>Applied knowledge and understanding</b></p> <p>The learner needs to consider the critical elements in the planning process and their importance on subsequent timber felling work. They need to know that a licence is not needed because less than 5m<sup>3</sup> is being felled in a calendar year. They need to be aware of environmental issues when planning woodland management operations and take into account the presence of protected species in order to prevent an adverse impact on local populations. They must also consider the importance of health and safety legislation on this work</p>	
35	203.1.1 207.3.1 208.1.4 AO4	<p>A landowner wishes to remove woodland timber from his land. He does <b>not</b> wish to apply for a felling licence. What is the maximum amount of timber that can be felled and sold within a year in order to comply with the Forestry Act 1967?</p> <p>(a) The maximum amount of timber that can be felled is 5m<sup>3</sup> providing that no more than 2m<sup>3</sup> is sold.</p> <p>(b) The maximum amount of timber that can be felled is 10m<sup>3</sup> providing that no more than 4m<sup>3</sup> is sold.</p> <p>(c) The maximum amount of timber that can be felled is 15m<sup>3</sup> providing that no more than 2m<sup>3</sup> is sold.</p> <p>(d) The maximum amount of timber that can be felled is 20m<sup>3</sup> providing that no more than 4m<sup>3</sup> is sold.</p>	A
		<p><b>Applied knowledge and understanding</b></p> <p>The learner needs to understand felling licences and the Forestry Act and should recognise that some felling operations can be carried out without the requirement to obtain a licence. They must understand that unlicensed operations set specific limitations on the amount to be felled and sold.</p>	

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36	203.1.1 207.3.1, 4.1, 4.2 208.1.4 AO4	<p>When planning selective thinning operations in a coniferous woodland, which tree characteristics are the ones that should be prioritised for retention?</p> <p>(a) Single stem. (b) Twin leaders. (c) Basal cavity. (d) Asymmetrical.</p>	A
		<p><b>Applied knowledge and understanding</b></p> <p>Learners will need to apply their knowledge of woodland management. This will include processes and logistics of timber harvesting and extraction and the impact that thinning operations can have on the habitat both at canopy and ground level. They must recognise how this will influence the trees to be retained</p>	
37	203.1.1 207.3.1, 4.1, 4.2 208.1.4 AO4	<p>An area of timber is to be removed from a coniferous woodland. The volume to be removed requires two operatives using chainsaws. Which of the PUWER regulations below is <b>not</b> correct when using a chainsaw?</p> <p>(a) All operators must be competent. (b) Pre-start checks must be carried out once a week. (c) Defective machinery must be clearly labelled. (d) Signs and guarding must be present and functional.</p>	B
		<p><b>Applied knowledge and understanding</b></p> <p>Learners must understand the health and safety regulations relating to chainsaw use and apply this to a situation involving operatives within a specific work site.</p>	
38	203.4.1, 3.2 205.3.1 206.1.1 AO4	<p>You are working as part of a team that has been asked by a landowner to increase the proportion of hedgerows and trees on their land. There is a requirement to remove a small section of damaged hedgerow, however the long term objectives include increasing the wildlife habitat. You must take into account protection of the existing environment and habitat within your proposals.</p> <p>Which type of hedgerow species would be <b>most</b> suitable to increase the proportion of wildlife?</p> <p>(a) Mixed native conifer. (b) Monoculture conifer. (c) Mixed native broadleaf. (d) Monoculture broadleaf.</p>	C
		<p><b>Applied knowledge and understanding</b></p> <p>Learners will need to analyse the current situation and consider the impact of damaged hedgerows. They need to understand longer term conservation</p>	

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		issues to be able to recommend future land use requirements to increase wildlife.	
39	203.4.1, 3.2 205.3.1 206.1.1 A04	<p>Whilst increasing the proportion of hedgerows and trees on his land a landowner has discovered a small section of diseased hedgerow.</p> <p>What would be the best action to take in order to minimise the spread of pests and diseases when working in this environment?</p> <p>(a) Introduce wildlife to the area to destroy any existing pests.  (b) Use sanitising footwear to prevent the spread of infection from one area to another.  (c) Only use new chainsaws on the diseased area.  (d) Remove all damaged hedgerow and existing hedgerow on either side of it.</p> <p><b>Applied knowledge and understanding</b>  Learners will need to make the link between environmental issues and bio security issues in order to consider the most balanced course of action in this situation.</p>	B
40	203.4.1, 3.2 205.3.1 206.1.1 A04	<p>There is a requirement to remove a small section of damaged hedgerow from a broader area of hedgerows and trees. You must consider the effect on the habitat of species living in the hedgerows.</p> <p>What species would be <b>most</b> affected by removal of the hedgerow?</p> <p>(a) Birds.  (b) Newts.  (c) Bats.  (d) Deer.</p> <p><b>Applied knowledge and understanding</b>  Learners will need to understand the types of species and their habitats and consider the implications of loss of habitat on specific species.</p>	A