



0173-509 MARCH 2018

Level 3 Technicals in Land and Wildlife

Level 3 Land and Wildlife Management – Theory Exam (2)

If provided, stick your candidate barcode label here.

Thursday 15 March 2018
13:30 – 15:30

Candidate name (first, last)

First

Last

Candidate enrolment number

Date of birth (DDMMYYYY)

Gender (M/F)

Assessment date (DDMMYYYY)

Centre number

Candidate signature and declaration*

• If any additional answer sheets are used, enter the additional number of pages in this box.

• Please ensure that you **staple** additional answer sheets to the **back** of this answer booklet, clearly labelling them with your full name, enrolment number, centre number and qualification number in BLOCK CAPITALS.

• 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, and will be shredded. **Do not** write on the source documents.

***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 examination

- a pen with blue or black ink

General instructions

- Use black or blue ball-point pen.
- The marks for questions are shown in brackets.
- This examination contains 13 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.



1 a) Identify the **three** elements within the formula for photosynthesis. (3 marks)

b) Name the plant pigment involved in photosynthesis. (1 mark)

2 Precipitation is one of the processes in the hydrological cycle.
a) Name **two** examples of precipitation in the hydrological cycle. (2 marks)

b) Name **two other** processes involved in the hydrological cycle. (2 marks)

3 Describe the differences between anaerobic respiration and aerobic respiration. (4 marks)

- 4 The nitrogen cycle and the carbon cycle are two important biogeochemical cycles.
a) Explain how carbon enters and leaves the atmosphere. (4 marks)

- b) Name **two** natural agents that fix atmospheric nitrogen. (2 marks)

- 5 Name **one** from **each** of the following. A type of
a) soil comprising varying amounts of sand, silt and clay (1 mark)

- b) rock that is formed due to transformation of original rock by high heat and pressure. (1 mark)

- 6 Explain why atmospheric pressure changes with altitude. (4 marks)

7 Define **each** of the following mating systems.

a) Polygamous.

(1 mark)

b) Monogamous.

(1 mark)

8 a) Describe how source populations are different to sink populations as part of a meta-population.

(3 marks)

b) Describe how isolation affects a wildlife population.

(3 marks)

9 Identify **one** factor that can result in habitat fragmentation.

(1 mark)

10 a) Identify **four** historic features that could be found in a woodland that would indicate long-standing, continuous woodland cover. (4 marks)

b) Give **two** reasons why deadwood should be retained within a woodland. (2 marks)

11 Describe the differences in vertical structure between an active wood pasture and a coppice with standard woodland. (6 marks)

12 Explain how ecotones in a woodland benefit wildlife.

(3 marks)
