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City & Guilds

0173-513 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. ➡ 0 0
- 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 11 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.

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1 Temperature affects the earth's climate and weather.
List **four** other factors that influence the earth's climate and weather. (4 marks)

2 Describe **four** processes of the hydrological cycle. (8 marks)

3 Explain **two** biological properties of water. (6 marks)

4 Define Lithification. (2 marks)

5 Name the **four** main components of fish nutrition. (4 marks)

6 Your cyprinid fish farm is currently using an indoor recirculation system to produce common carp. Production is hampered by high larval and juvenile mortality, whilst surviving stock display skeletal, spinal, operculum, fin and eye deformities. On dissection, the carcasses display high levels of visceral fat.

Discuss the possible causes and effective management for these problems. (12 marks)

7 a) State how fish feed efficiency is measured in the fish farming industry. (1 mark)

b) Name **two** common physical types of fish feed. (2 marks)

8 Explain the process of osmoregulation in fish. (5 marks)

9 A fish is seen to be flashing. Describe the reason for this behaviour in fish. (2 marks)

See next page

10 a) Name **two** fungal infections seen in fish. (2 marks)

b) For **one** of the infections identified in part 10a), describe the important stages of the lifecycle of the fungus. (6 marks)

c) Name **two** treatment methods for fungal infections in fish. (2 marks)

11 Name **four** classifications of fish parasites. (4 marks)

End of examination