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.

Candidate name (first, last)  Thursday 15 March 2018
First  13:30 – 15:30
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 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.
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.

5 Name the four main components of fish nutrition.
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)
10  a) Name **two** fungal infections seen in fish.  

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

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

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11  Name **four** classifications of fish parasites.  

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