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City & Guilds

0173-511 JUNE 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.

Monday 11 June 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 14 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 a) Describe the origin of sedimentary rock. (2 marks)

b) Name **one** sedimentary rock. (1 mark)

2 The diagram shown in Figure 1 depicts the hydrological cycle.

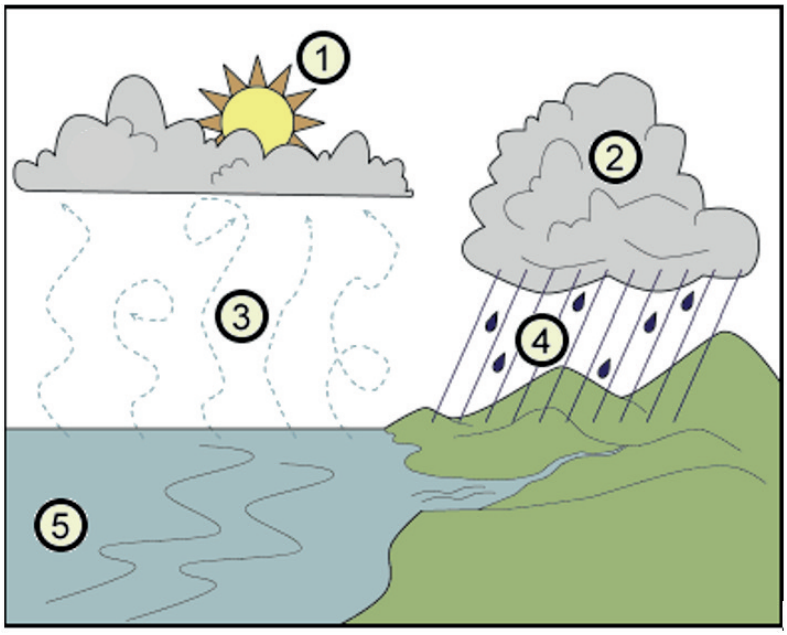
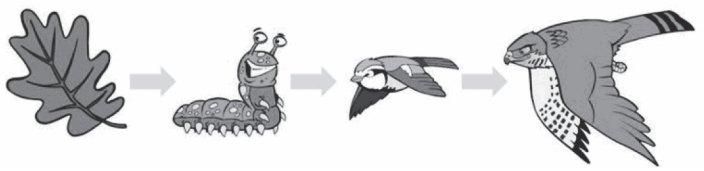


Figure 1

Name the processes involved at points 2, 3, and 4 in Figure 1 above. (3 marks)



Source: https://www.rspb.org.uk/birds-and-wildlife/read-and-learn/fun-facts-and-articles/foodchains/catchingfood.aspx

Figure 2

3 With reference to the food chain in Figure 2 above, and the different forms that energy can take, explain how:

a) energy enters the food chain (2 marks)

b) energy is lost at each stage of the food chain. (2 marks)

4 Explain what would probably happen to a grassland habitat if it was not cut/grazed for a number of years. (2 marks)

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5 a) If only checking fox snares once a day, state the best time to do this. (1 mark)

b) Explain why most second generation anti-coagulant rodenticides (SGAR) are chronic poisons. (3 marks)

6 Diversionary feeding is one non-lethal method that has been suggested for protecting gamebirds from raptors. Describe **one** example of how this could be used. (4 marks)

7 a) State what is meant by asynchronous hatching. (1 mark)

b) State the level of legal protection given to the Polecat in the UK. (2 marks)

8 a) Name the parts of the rifle labelled a) and b) in Figure 3 below. (2 marks)

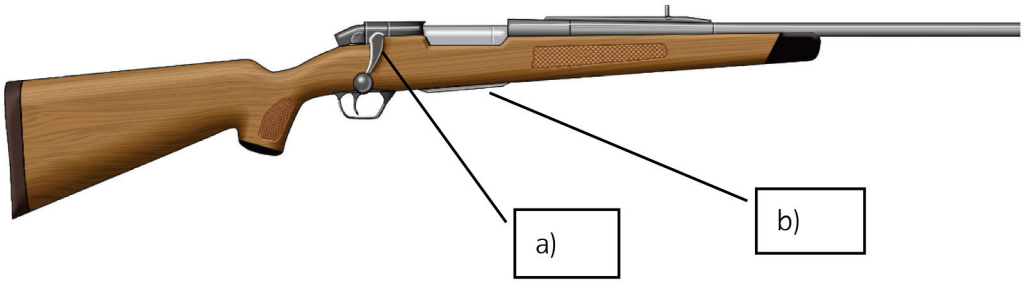

Figure 3

b) State the **two** dimensions that must be checked on a shotgun cartridge before loading it into a shotgun. (2 marks)

c) State the minimum age a person can be granted a Shotgun Certificate in the UK. (1 mark)

9 a) Explain how the shot size in a shotgun cartridge, affects the pattern of shot and therefore effective killing range of a shotgun. (4 marks)

b) The table below shows some ballistic data for two centre fire bullet types. Explain how the trajectory of the two bullets will differ. (4 marks)

Calibre	Bullet weight	Muzzle velocity	Ballistic Coefficient
6.5 x 55	140 grains	2550 fps	0.45
0.243	55 grains	3910 fps	0.276

10 a) Place the following species in order of clutch size, largest first.
Woodcock, Grey Partridge, Pheasant (1 mark)

b) State which month pheasants normally start to lay eggs in the wild. (1 mark)

c) State the date when the pheasant shooting season ends. (1 mark)

11 a) Describe how the habitat requirements of the pheasant differ from those of the grey partridge. (2 marks)

b) State **one** piece of equipment that could be used in a wild game survey. (1 mark)

12 Explain how young grouse can be distinguished from old ones, when sorting birds in the game larder at the end of a shootday. (2 marks)

See next page

13 Disease in wild gamebirds tends to be a density dependent mortality factor.
Explain what this means and how disease outbreaks can be managed without the use of medication. (4 marks)

14 Compare and contrast the methods and reasons for predator control between a wild bird shoot and one which releases pheasants. (12 marks)

End of examination