

THE BRITISH BEEKEEPERS' ASSOCIATION

Founded in 1874

Registered Charity No. 212025

EXAMINATION FOR PROFICIENCY IN APICULTURE MODULE 8 HONEYBEE MANAGEMENT, HEALTH AND HISTORY

21st March 2015

Time Allowed 1½ hours

Candidate Number:

Instructions to Candidates

Read the questions carefully. Answer All Sections. It is recommended not to spend more than 10 minutes on Section A, 50 minutes on Section B or 30 minutes on Section C.

Unless stated otherwise questions apply to Honeybees.

Use **BLACK** pen for text. **Black** pencil may only be used for diagrams. **DO NOT USE COLOURS.**

Examiner Use Only

Question	Sec A	B11	B12	B13	B14	B15	C16	C17	Total
Mark									
Moderated									

SECTION A (10 marks, 1 for each question)

Answer **ALL** the questions in this section. Use one or two word or short phrase answers

Please write your answers on the question paper.

- Q1 What is melissopalynology?
- Q2 What hive is associated with Simmins?
- Q3 At what temperature can clear honey be heated, for approximately 45 minutes, to extend the shelf life?
- Q4 What is the area enclosed by the intine of a pollen grain called?
- Q5 Nosema is classified as what type of organism?
- Q6 What is the specific gravity of honey with 18% water content at 20°C
- Q7 At what temperature will molten bees wax solidify?
- Q8 Apart from Oil Seed Rape, name a plant with honey that granulates rapidly?
- Q9 What area of beekeeping did Dorothy Hodges specialise in?
- Q10 What did W.C.Cotton introduce into the UK in 1870?

PLEASE HAND IN THIS SHEET AT THE END OF THE EXAMINATION

MODULE 8 HONEYBEE MANAGEMENT AND HISTORY

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SECTION B (60 marks, 15 for each question)

Answer any **FOUR** questions from this section. Write short notes for your answers.

Marks

- Q11 (a) List the contributions made to beekeeping by the following:
- (i) William Broughton Carr; 3
 - (ii) Rev. L.L. Langstroth. 2
- (b) Name the people attributed to developing each of the following pieces of beekeeping equipment:
- (i) queen excluder; 1
 - (ii) smoker; 2
 - (iii) frame spacing; 3
 - (iv) wax foundation; 2
 - (v) honey extractor. 2
- Q12 (a) Define the following and list their contents:
- (i) pollen supplement; 5
 - (ii) pollen substitute. 4
- (b) Briefly describe how these products are produced, applied to the hive and the reasoning for their application. 6
- Q13 (a) List the distinctive characteristics of pure ling heather honey. 6
- (b) Describe briefly **three** methods of extracting heather honey, so that the honey can be bottled. 9
- Q14 List **five** exocrine glands in the queen, giving the location and **one** function of each gland. 15
- Q15 Name and describe the life cycle of a social wasp. 15

SECTION C (30 marks)

Answer **ONE** question from this section. Give *labelled* diagrams where applicable.

- Q16 (a) Describe in detail **one** method to prepare a slide from a sample of honey in order to determine the pollen content. 15
- (b) Give 7 features that can be used to identify the floral source from the slide obtained in the above method. 7
- (c) What other factors could be used to identify the honey? 2
- (d) How do pollens from insect and wind pollinated flowers vary? 6
- Q17 Two colonies are checked in early spring and are found to have nosema; one colony being strong and the other weak.
- (a) Describe how the diagnosis of Nosema is carried out. 10
- (b) Describe in detail the methods applied to manage the colonies to rectify the situation, the aim being to save both colonies. 20