

THE SCOTTISH BEEKEEPERS' ASSOCIATION

Registered Charity No. SC009345

EXAMINATION FOR PROFICIENCY IN APICULTURE

MODULE 1 HONEYBEE MANAGEMENT

19th March 2011

Time Allowed 1½ hours

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.
Adhere strictly to the subject matter of the questions. Unless stated otherwise
Questions apply to Honeybees. Use only **BLACK** pen for text.
Black pencil may only be used for diagrams. **DO NOT USE COLOURS.**

SECTION A (10 marks, 1 for each question)

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

- Q1 What is the source of protein in a bee's diet?
- Q2 Name one type of hive in common usage that uses frames with short lugs.....
- Q3 The foundation used in cut comb production should be unwired and
- Q4 After whom are self-spacing brood frames named?
- Q5 What is the international queen marking colour for 2011?
- Q6 Besides marking, in which other way can newly mated laying queens be treated to aid in swarm management?
- Q7 With what do worker bees polish cells and fill gaps?
- Q8 What is the dimension of a bee space?
- Q9 Which type of hive has ten long-lugged frames and uses a bottom bee space?
- Q10 What is the recommended strength of sugar syrup used in autumn feeding?

PLEASE HAND IN THIS SHEET AT THE END OF THE EXAMINATION

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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) Starting with a block of clean beeswax, how should a sheet of unwired foundation be produced? 9
(b) Outline a simple method of wiring the sheet of foundation that has been produced. 6
- Q12 Explain briefly:
(a) How to set up a queenright five frame national nucleus hive. 9
(b) How this nucleus should be developed into a productive colony. 6
- Q13 In the late summer a beekeeper has a strong colony. The supers have been removed. How should this colony now be managed in preparation for the winter? 15
- Q14 Write short notes on the following pieces of equipment. In your notes mention any variations in design and the benefits of these variants. 5 marks for each
(a) Queen excluder; (b) Castellated spacers; (c) Contact feeders.
- Q15 A colony of bees is situated near to an autumn sown field of oil seed rape. List the stages of early spring management of the colony to make full use of this crop and the management of the colony once the crop is in flower. Do NOT include swarm control. 15

SECTION C (30 marks)

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

- Q16 (a) List five factors which may affect the temperament of a colony. 5
(b) A colony in a suburban apiary has become 'nasty', **describe in detail**:
(i) How the beekeeper should prevent the bees becoming a problem to the neighbours in the short term; 5
(ii) Detail the alternative procedures that could be taken to rectify the situation in the long term. 20
- Q17 During a regular inspection in May, a colony is found to be producing queen cells.
(a) Other than by the removal of queen cells describe the steps to be taken to maximise honey production and to prevent the possible loss of a swarm. 15
(b) If these steps fail and a swarm issues landing on a stout branch at head height nearby, describe how the swarm should be collected and hived. 10
(c) Explain how to care for this swarm for the following month. 5