

# THE BRITISH BEEKEEPERS' ASSOCIATION

Founded in 1874

Registered Charity No. 212025

## EXAMINATION FOR PROFICIENCY IN APICULTURE MODULE 2 HONEYBEE PRODUCTS AND FORAGE

24<sup>th</sup> March 2012      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.**

Please start each question on a new side of paper.

### 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.

- Q1 Name two plants found in the UK that have extra-floral nectaries. ....
- Q2 What is sucrase (invertase)? .....
- Q3 What does HMF stand for? .....
- Q4 What is thin unwired foundation used for? .....
- Q5 What is an entomophilous plant or flower? .....
- Q6 What is the major difference between bell heather honey and ling honey? .....
- Q7 What is meant by the term hygroscopic? .....
- Q8 Is it mandatory to label honey 'should not be given to infants under 12 months of age'? .....
- Q9 What does the Schade scale measure? .....
- Q10 Name 2 plants found in the UK that can produce unpalatable honey. ....

**PLEASE HAND IN THIS SHEET AT THE END OF THE EXAMINATION**

# MODULE 2 HONEYBEE PRODUCTS AND FORAGE

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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 advantages and disadvantages of self-pollination and cross pollination.   | 8  |
|     | (b) | What are the characteristics of honeybees that make them good pollinators?   | 7  |
| Q12 | (a) | List FIVE types of honey as given in schedule 1 of the Honey Regulations 2003.   | 5  |
|     | (b) | Write short notes on each of the honey types selected.   | 10 |
| Q13 | (a) | Name five major nectar sources in the UK.  | 5  |
|     | (b) | Name three other UK plants (garden or wild) of value for bees in the Spring and two for the Autumn. State whether they produce predominantly nectar or pollen or both. | 10 |
| Q14 | (a) | Describe how to treat the cappings after extracting honey to recover as much honey and wax as possible.  | 10 |
|     | (b) | List FIVE ways in which the wax could be used by the beekeeper.  | 5  |
| Q15 | (a) | What are the ideal storage conditions for honey?   | 7  |
|     | (b) | How may the storage conditions affect the possibility of fermentation occurring?   | 3  |
|     | (c) | What happens when honey ferments and what are the end products?  | 5  |

## SECTION C (30 marks)

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

- |     |     |  |    |
|-----|-----|--|----|
| Q16 | (a) | Give a detailed account of how bees collect nectar, convert it into honey and store it.  | 22 |
|     | (b) | List the constituents in average sample of UK floral honey.<br>Include the approximate percentage of each.   | 8  |
| Q17 | (a) | What governs the crystallisation of honey? Include examples of types of honey that may crystallise rapidly and those that do not. Comment on why it is not advisable to bottle into glass jars, honey that sets rapidly. | 10 |
|     | (b) | Starting with a 14kg bucket of coarse grained honey, describe in detail the process of producing soft set honey for sale in 454g jars. Use additional honey as a seed to produce a fine grained product.                 | 20 |