

THE BRITISH BEEKEEPERS' ASSOCIATION

Founded in 1874

Registered Charity No. 212025

EXAMINATION FOR PROFICIENCY IN APICULTURE

MODULE 2 HONEYBEE PRODUCTS AND FORAGE

19th March 2016 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 and 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 Name two types of honey extractor.
- Q2 What is the term given to the property of honey to absorb water?
- Q3 What is the maximum permissible amount of sucrose in borage honey?
- Q4 What does the Schade scale measure?
- Q5 Name a substance found in honeydew honey, which is not found in floral honey.
- Q6 What is the temperature at which beeswax may become discoloured?
- Q7 Give one criterium by which floral honey should be labelled as Baker's Honey.
- Q8 To what temperature should liquid honey be heated and for how long, to extend its shelf life?
- Q9 What is Melomel?
- Q10 Give one example of a dioecious plant.

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

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| Q11 | (a) | List the characteristics of honey bees and honey bee colonies which make them good pollinators. | 6 |
| | (b) | Distinguish between pollination and fertilisation. | 2 |
| | (c) | How do each of the flowers of forget-me-not, horse chestnut and clover indicate to bees that, having been successfully pollinated, their visits are no longer required? | 3 |
| | (d) | What are nectar guides and what is the significance of the spectrum of vision of honey bees? | 4 |
| Q12 | | Fermentation spoils honey. | |
| | (a) | What is the process including the chemical equation? | 2 |
| | (b) | List the effects on the honey. | 5 |
| | (c) | List the steps that the small scale beekeeper should take to reduce the risk of fermentation of their honey. | 8 |
| Q13 | (a) | Describe how cut comb is produced and offered for sale. Exclude the management of the bees in your answer. | 8 |
| | (b) | List the points a judge would consider when judging a cut comb class at a honey show. | 7 |
| Q14 | (a) | Other than honey and wax, list four other products which beekeepers can harvest from a hive. | 4 |
| | (b) | Give two uses for each of two of the products mentioned in (a) | 4 |
| | (c) | List the necessary components of a well designed solar wax extractor. | 6 |
| | (d) | What is the main advantage of a solar wax extractor? | 1 |
| Q15 | (a) | What is meant by a thixotropic honey? | 1 |
| | (b) | From which floral source does it come in the UK? | 1 |
| | (c) | Which constituent of the honey gives it this property? | 1 |
| | (d) | List the methods used to extract and jar this honey and the difficulties which may be encountered. | 4 |
| | (e) | In what other form could this honey be sold? | 2 |
| | (f) | List 6 items which must be included on a suitable label for a 454g jar of honey to be sold from a retail outlet. | 6 |

SECTION C (30 marks)

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

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| Q16 | (a) | Discuss the factors which influence nectar secretion, giving examples where appropriate. | 15 |
| | (b) | Outline the process by which honeybees collect nectar, convert it into honey, and ripen and store the honey. Include one chemical equation in your answer. | 15 |
| Q17 | | Discuss the requirements in design, construction, furnishing and equipping, and the use, including legislative requirements, of a honey house for a beekeeper running 10 honey producing colonies. | 30 |