

# THE SCOTTISH BEEKEEPERS' ASSOCIATION

Registered Charity No. SC009345

## EXAMINATION FOR PROFICIENCY IN APICULTURE

### MODULE 2 HONEYBEE PRODUCTS AND FORAGE

19<sup>th</sup> 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 maximum permitted percentage of water in heather (ling) honey for retail sale in the UK? .....
- Q2 What is the recommended temperature for long term storage of honey? .....
- Q3 What is the maximum legally permitted level of HMF in floral honey for retail sale in the UK? .....
- Q4 Name the enzyme which bees introduce into nectar to change complex sugars into simple sugars. ....
- Q5 Give one disadvantage of using a tangential honey extractor. ....
- Q6 Which component of ling honey causes the honey to gel? .....
- Q7 What is the melting point of beeswax? .....
- Q8 What is the term used to describe the tendency of honey to absorb water? .....
- Q9 Where are the extra floral nectaries found on a field bean? .....
- Q10 What is metheglin? .....

**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) Complete the labels **A to G** on the diagram provided. 7  
(b) Describe briefly the role or function of items **F** and **G** from the above labelled parts. 4  
(c) Outline some of the methods plants favour for cross-pollination. 4
- Q12 (a) List the main features of a solar wax extractor. 5  
(b) What adjustments can be made to this type of extractor for it to melt wax as quickly as possible? 2  
(c) Describe what further process is necessary, to the wax block taken from the solar extractor, in order to produce 28g (1oz) blocks of wax suitable for sale. 8
- Q13 (a) What are the signs that a jar of honey is fermenting? 4  
(b) Explain what is happening in the jar. 3  
(c) What conditions favour fermentation? 4  
(d) What simple steps can a beekeeper take to avoid this problem? 4
- Q14 (a) List, with a short explanation, the statutory labelling requirements for a 454g jar of honey sold through a retail outlet. A sketch may be useful to illustrate your answer. 12  
(b) Other than in the 454g jar, how else can honey be marketed for sale? 3
- Q15 (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

## SECTION C (30 marks)

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

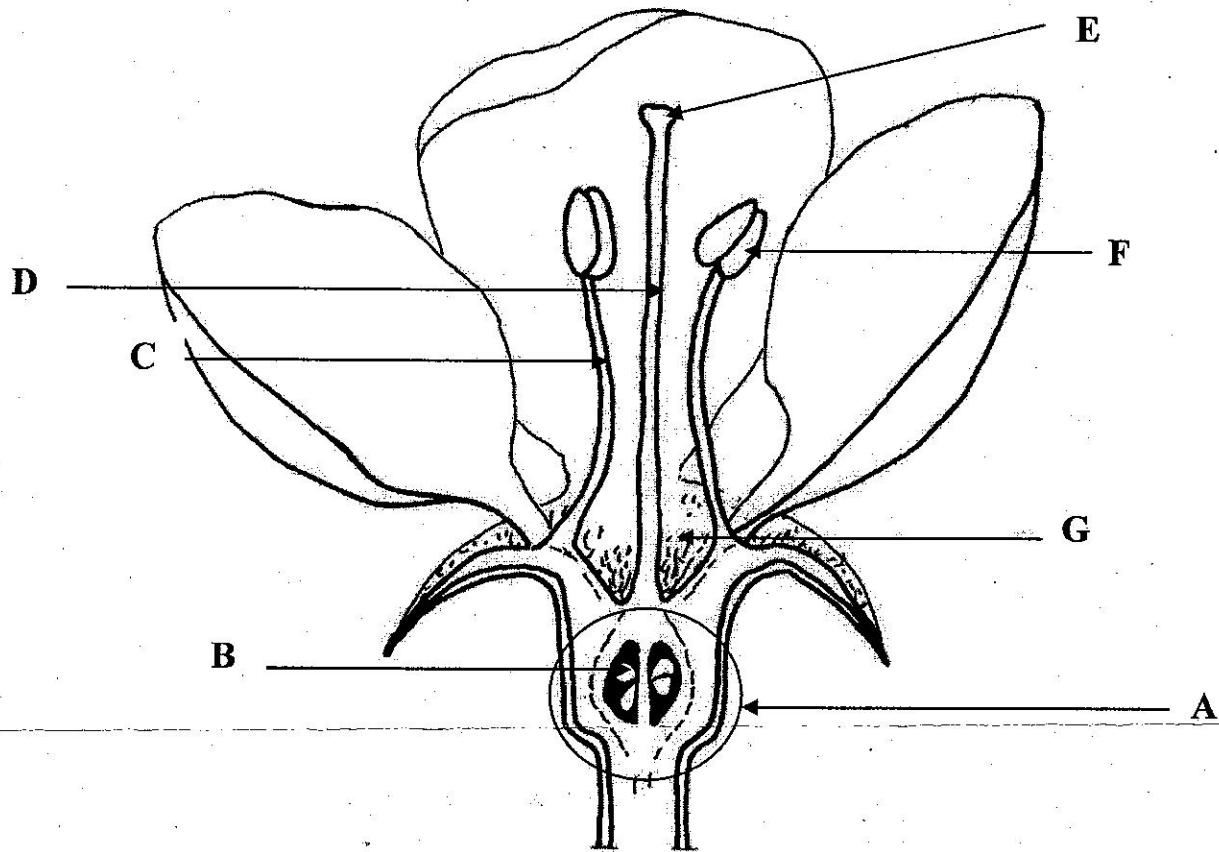
- Q16 Advise a beekeeper on taking bees to the heather to obtain the maximum amount of honey for sale in bulk. In your advice use the following headings: 7  
Preparation of colonies in the month prior to the move to the moors; 6  
Choice and preparation of site; 9  
Preparation for the 60 mile journey and the move; 8  
Removing and extracting the honey and bedding down for the winter.
- Q17 (a) Describe how to blend a 15kg tub of set oilseed rape honey with a 15kg tub of set honey predominantly from blackberries, to produce 30kg of soft set honey in jars. 20  
(b) A beekeeper has a super of honey from oilseed rape which has granulated. Describe how to separate the honey from the wax, including precautions to be taken to avoid excessive increase in HMF. 10

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Q11 (a) Complete the labels A-G for the diagram below.

7



A ..... B.....

C ..... D .....

E ..... F .....

G .....

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