

# THE BRITISH BEEKEEPERS' ASSOCIATION

Founded in 1874 Registered Charity No. 212025

## EXAMINATION FOR PROFICIENCY IN APICULTURE

### MODULE 3 HONEYBEE DISEASES, PESTS AND POISONING

19<sup>th</sup> 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 the causative organism of stone brood. ....
- Q2 What do the initials BQCV stand for? .....
- Q3 Name the approved oxalic acid treatment. ....
- Q4 What is the common name of *Aethina tumida*? .....
- Q5 Where would a beekeeper find Small Hive Beetle pupa? .....
- Q6 What piece of equipment is necessary for the diagnosis of *Acarine*? .....
- Q7 Which pest or disease is notifiable in the UK but not generally in the EU? .....
- Q8 What action should be taken on warning of pesticide spraying close to an apiary? .....
- Q9 What magnification is used to look at *Nosema sp.* Spores? .....
- Q10 Where in a bee might amoeba be found? .....

**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 | Describe the actions of a bee inspector in an apiary, after diagnosing AFB.   | 15                    |
| Q12 | Some diseases leave scales within brood cells. Identify these diseases and the action to be taken in each case.   | 15                    |
| Q13 | Describe in a step by step manner how a shook swarm is carried out when a mild case of EFB is discovered.   | 15                    |
| Q14 | (a) Briefly describe methods of storing combs for winter.<br>(b) Give methods for treating diseases and pests in stored comb stating the pest or disease as well as the method.   | 3<br>12               |
| Q15 | (a) Varroa has become resistant to treatments with hard chemicals:<br>(i) Name 3 hard chemicals(product names) which have been commonly used;<br>(ii) How has beekeeper use of the chemicals contributed to this resistance?<br>(iii) How can the resistance be measured?<br>(b) List the bio-technical treatments to which varroa cannot become resistant.<br>(c) State the limitations of 4 approved varroa treatments. | 3<br>2<br>1<br>5<br>4 |

## SECTION C (30 marks)

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

- |     |  |              |
|-----|--|--------------|
| Q16 | There are several winged pests, current and potential, for honey bee colonies. Name six and <b>in each case</b> describe how to recognise, the effect they have on the colony and measures that can be taken to minimise the problems. | 30           |
| Q17 | (a) Compare the signs of poisoning and CBPV.<br>(b) Describe the actions that should be taken by the beekeeper in each case.<br>(c) What is the normal follow up action in a reported case of poisoning?                               | 7<br>14<br>9 |