

Scottish Beekeepers' Association

Education and Examination Committee



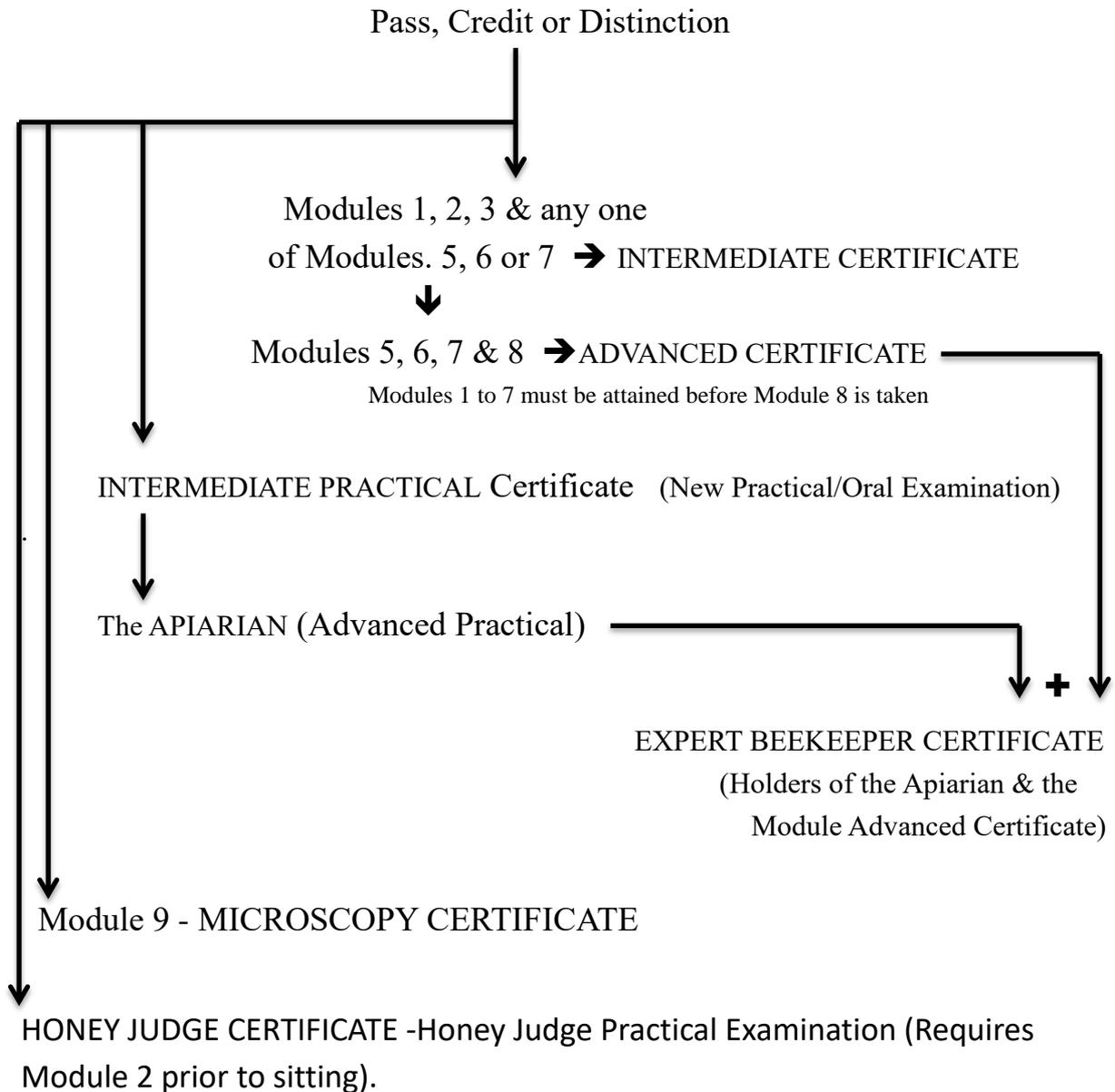
Syllabus

of Examination in Apiculture

SCOTTISH INTERMEDIATE PRACTICAL CERTIFICATE

The SBA Examination System

Entry Point – Basic Beekeeping Certificate or Junior Beekeeper Assessment (Practical/Oral “over the hive” assessments. Awarded at Pass (60%), Credit (70%) or Distinction (80%))



SCOTTISH INTERMEDIATE PRACTICAL CERTIFICATE

AIMS

January 2014

1. To improve the standard of beekeeping in Scotland.
2. To give beekeepers who have gained the SCOTTISH BASIC BEEKEEPING CERTIFICATE or the JUNIOR BEEKEEPER CERTIFICATE, and have owned and managed at least two colonies continuously for at least five years the opportunity to sit the practical and oral examination to obtain the SCOTTISH INTERMEDIATE PRACTICAL CERTIFICATE.

CONDITIONS OF ENTRY

1. The Candidate shall have gained the SCOTTISH BASIC BEEKEEPING CERTIFICATE or the SCOTTISH JUNIOR BEEKEEPER CERTIFICATE, or an equivalent qualification approved by the SBA Education Committee. The date when this certificate was obtained shall be entered on the application form.
2. The Candidate shall have owned and managed continuously bees for at least five seasons.
3. The appropriate application form and fees shall have been received by the Education Officer prior to the deadlines published in the Scottish Beekeeper Magazine and on the SBA Website.

AWARD OF CERTIFICATE

The SCOTTISH INTERMEDIATE PRACTICAL CERTIFICATE will be awarded at three levels:

Pass	60-69%
Credit	70-79%
Distinction	80%+

SYLLABUS

1.0

General

- 1.1 The Practical Beekeeping section has been written to reflect the year's work, commencing with winter preparations.
- 1.2 The assessment will take place in the Candidate's apiary during the active months of either May, June or July.
- 1.3 Since the examination will take place in the months stated in 1.2, operations performed outwith these months will require a descriptive or simulative answer.
- 1.4 The Candidate will be expected to provide all equipment for opening and handling colonies and demonstrate proficiency in lighting and using the smoker and performing manipulations at the request of the Examiner.

- 1.5 The Candidate's honey and wax processing equipment, queen rearing equipment and storage facilities for supers, brood boxes not in use and honey should be available for inspection.
- 1.6 Extraction and honey-handling equipment must comply with the current legal requirements for food processing and packing; to include facilities for cleaning, weighing and storing.
- 1.7 The Candidate should have samples from their own apiary of clear, set and comb honey, also a wax product available for inspection.
- 1.8 If possible, at least two colonies and a nucleus should be available for the examination.
- 1.9 The assessment will be arranged to the mutual convenience of the Candidate and the Examiner, depending on the weather.
- 1.10 The examination may take one to two hours in total but individual hives will only be open for a short time.
- 1.11 An Examiner approved by the SBA Education Committee will conduct the examination. Normally only the Examiner and the Candidate will be present. Should the Education Committee wish a Trainee Examiner or a member of the Education Committee to be Present as an observer, prior approval of the Candidate will be obtained.

2.0 **Practical Beekeeping**

The Candidate will be able to:

- 2.1 describe how to prepare a colony for the winter, after removal of the honey crop (queenright, varroa/disease, food, weather/vermin proof hive);
- 2.2 demonstrate how extracted supers can be stored free of insect and animal predators;
- 2.3 discuss autumn, winter and spring feeding, monitoring, methods of preparing syrup and range of feeder types;
- 2.4 demonstrate their method(s) of varroa monitoring and treatment throughout the year, also discuss the possibility of reinfestation;
- 2.5 discuss the treatment and possible severe effects of bee stings;
- 2.6 discuss optimum apiary location, layout to minimise drifting and methods of preventing bees being a nuisance to neighbours and to the public;
- 2.7 explain what to look for during the first spring inspection of a colony;
- 2.8 demonstrate their method of record keeping, including medicinal records;
- 2.9 discuss the need for good personal and apiary hygiene;
- 2.10 demonstrate the clipping and marking of a queen (use a drone) and explain the reasons for doing so;
- 2.11 read a colony, pointing out the various stages in worker and drone brood development, honey and pollen stores, and comment on the age and condition of the brood combs;
- 2.12 discuss the frequency and method of comb renewal;

- 2.13 demonstrate the method of checking for brood diseases;
- 2.14 demonstrate taking a sample of bees for the diagnosis of adult diseases;
- 2.15 explain the criteria used to determine when to add honey supers to a colony;
- 2.16 describe how a colony could be prepared for transporting to another site outwith their flying distance and the method of transport;
- 2.17 discuss the problems and possible method of moving a colony for a short distance within an apiary;
- 2.18 explain their methods of swarm prevention;
- 2.19 demonstrate their method of checking for swarm preparations;
- 2.20 describe the appearance of natural, emergency and supersedure queen cells, also discuss the relative merits of each;
- 2.21 discuss the merits/demerits of removing spring honey, including oilseed rape;
- 2.22 demonstrate their method of swarm control;
- 2.23 demonstrate their method of queen rearing and show an awareness of the possibility of in-breeding;
- 2.24 demonstrate their method of producing nuclei which (i) will remain in the apiary,
(ii) will be moved to an apiary over 5km away;
- 2.25 discuss the possible uses of nuclei;
- 2.26 discuss their frequency and method of queen replacement;
- 2.27 describe the signs in a colony of a drone laying queen or laying workers and explain how they may be dealt with;
- 2.28 discuss timing and methods of removal of honey from a colony;
- 2.29 discuss the preparation of a colony prior to removal to the oilseed rape or heather;
- 2.30 describe their method of honey extraction & preparation of cut comb or sections;
- 2.31 describe their method of uniting colonies, including precautions to be taken;
- 2.32 describe the actions required to deal with a vicious stock of bees;
- 2.33 describe conditions which may induce robbing and explain how to deal with it once started;
- 2.34 describe the extraction, filtering and storage of honey;
- 2.35 describe their treatment of beeswax cappings and old combs;
- 2.36 describe how to prepare clear, set and comb honey for the market, to include a method of seeding honey, suggesting recommended temperatures to obtain optimum results;
- 2.37 show, using a honey jar/cut comb container/section box, the honey labelling regulations.

3.0

Oral

The Candidate will be able to:

- 3.1 explain the statutory regulations regarding certain notifiable bee diseases and infestations;

- 3.2 describe how diseases and pests can be spread between colonies and precautions which can be taken to reduce the chances of that occurring;
- 3.3 describe the signs of AFB and EFB and the action to take if either are suspected;
- 3.4 distinguish between Varroa and Braula;
- 3.5 discuss the implications of viruses, especially those associated with Varroa;
- 3.6 describe the detection and control of Acarine and Nosema diseases;
- 3.7 describe the recognition and control of Chalk Brood and Sac Brood;
- 3.8 explain what action to take if spray poisoning is suspected;
- 3.9 name the main nectar and pollen producing plants in their area, including the expected flowering times;
- 3.10 name the possible sources of honeydew in their area;
- 3.11 name any sources of undesirable nectar in their area.
- 3.12 discuss the effects of weather conditions on a colony at different times of the year;
- 3.13 explain the different roles that a worker bee performs during her life and differentiate between summer and winter bees.

Reading List

Guide to Bees & Honey	Ted Hooper	Northern Bee Books, ISBN 978-1-904846-51-2
Plants & Honeybees	Aston & Bucknall	Northern Bee Books, ISBN 0-393-30879-0
The Buzz about Bees	Tautz	Springer, ISBN 978-3-540-78727-3
A Practical Manual of Beekeeping	David Cramp	Spring Hill, ISBN 978-1-90586-223-8
Practical Beekeeping	Clive de Bruyn	Crowood Press, ISBN-10: 1861260490 & ISBN-13: 978-1861260499
Plants for Bees (2012)	Kirk and Howes	IBRA, ISBN 10:0-86098-271-8 ISBN 13:978-0-86098-271-5
Booklets on Bee Pests and Diseases	FERA	www.fera.defra.gov.uk

abr Nov 2016