

### **Section 5 Part B Questions**

#### Section 5 Part B Question 1

- a) Describe and explain the essential steps of carrying out a shook swarm (assuming you have all the necessary equipment to hand) (8)
- b) What are the key differences between a Bailey Comb Change and a Bailey Comb Change for a small colony? (3)
- c) Explain advantages and disadvantages of each type of whole wax change process. (4)

#### Section 5 Part B Question 2

- a) When undertaking a shook swarm, explain the precautions which can be taken to ensure the shook will establish effectively and does not cause robbing? (8)
- b) Give three reasons why a beekeeper would perform a shook swarm on a colony? (3)
- c) Explain how a shook swarm can be used as part of integrated pest management (IPM) for varroa control? (4)

#### Section 5 Part B Question 3

- a) List the equipment initially required to undertake a Bailey comb change for a weak colony. (6)
- b) Explain the steps you would take to perform a Bailey comb change for a weak colony (6)
- c) How should the beekeeper manage the dirty hardware and the old brood comb resulting from undertaking a Bailey Frame Change? (3)

#### Section 5 Part B Question 4

- a) What materials do you need to use ethanoic acid (acetic acid) to fumigate comb? (5)
- b) Explain the process of using ethanoic acid (acetic acid) to fumigate comb (6)
- c) What pathogens and pests do we know ethanoic acid will reduce (2) and which pathogens are not known to be reduced using ethanoic acid? (2)

#### Section 5 Part B Question 5

- a) How is chronic bee paralysis virus spread within the colony. (2)
- a) List the symptoms of both types of CBPV (8)
- b) How can beekeepers reduce the severity of CBPV? (5)

**Section 5 Part C Questions**

Section 5 Part C Question 1

What are the signs of acute bee paralysis virus (6)  
and what other conditions(s) is it associated with? (1)

What are the signs of black queen cell virus, (3)  
and what other conditions(s) is it associated with? (1)

What are the signs of sac brood virus, sacbrood (8)  
and what other conditions(s) is it associated with? (1)

What are the signs of deformed wing virus (5)  
and what other conditions(s) is it associated with? (1)

Complete the table of other viruses and their signs in honey bees. (4)

Virus	Associated with	Signs
Slow paralysis virus	Varroa	
Virus Y		No reported symptoms
Filamentous virus		Haemolymph goes milky
Virus X		Shortens life; Colonies die in spring

Section 5 Part C Question 2

Why is it important to periodically change the brood comb for a colony? (5)

Faced with a strong colony which has severely reduced comb capacity due to comb damage in old frames explain:

- What options are open to you in changing the comb (2)
- What considerations would you take into account in choosing a method of comb change, including the safety precautions you would take to protect the colony's health. (8)
- How you would change the comb in this colony. (20)