1. Ross River Virus
2. Viral Diseases of Honeybees
3. Australian Bat Lyssavirus

**BIOLOGY WA ATAR UNITS 3 & 4**

Reading

Chapter 13 page 436 – 440

Questions

Set 13.3, page 450 Q 2

**BIOZONE**

83 Viral Diseases

86 Human Viral Diseases

87 Animal Viral Diseases

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| **Topic Question** | Notes |
| State the name of the disease and the name of the virus |  |
| Label the diagram of the enveloped virus List the structural features of the virus | General structure of a virus |
| Ross river virus is endemic in Australia. Explain what this means |  |
| The mode of transmission is indirect via a vector. Define the term vector |  |
| State the name of the vector of Ross river virus and describe the vector |  |
| Define the term outbreakExplain why Ross river virus outbreaks have coincided with high rainfall |  |
| Label the diagram of the life cycle of Ross River Virus |  |
| 1. State the mode of transmission of the virus
2. Describe how the virus is spread of one host to another
3. How does this mode of transmission influence the spread of RRV
 |  |
| Describe how the virus replicates. You can use a diagram |  |
| State the Incubation period of the virus. Show this on the graphDescribe the implications of this incubation period on the spread of the disease |  |
| List the Symptoms of Infection and the impact of the disease on the host |  |
| State the Treatments used for RRV |  |
| Describe methods of Control for RRV |  |

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| **Topic Question**  | Notes |
| List the common viral diseases of Honeybees in Australia.Of these viruses, which ones are found in WA? |  |
| Name of Disease | **Sacbrood Disease** |
| State the name of the virus and list the structural features of the virus |  |
| Describe the life cycle of the diseaseDescribe the life cycle of the disease |  |
| List the symptoms of infection the disease and the impact of the disease on the host |  |
| Name of Disease | **Deformed Wing virus** |
| State the name of the virus and list the structural features of the virus |  |
| Describe the life cycle of the disease |  |
| List the symptoms of infection the disease and the impact of the disease on the host | **Read page 413 Biology WA ATAR Units 3 & 4** |
| Name of Disease | **Black Queen Cell Virus** |
| State the name of the virus and list the structural features of the virus |  |
| Describe the life cycle of the disease |  |
| List the symptoms of infection the disease and the impact of the disease on the host | **Read page 413 Biology WA ATAR Units 3 & 4** |
| List any treatments available for the three diseases you have described above |  |
| Currently the Varroa mite is common in many countries outside of Australia. Outline measures that can be employed to reduce the mite becoming established in Australia |  |
| Outline the potential impact on the environment and the economy of viral diseases of Honey bees in Australia |  |
| Outline control measures to ensure Australia remains free of many viral diseases of Honey bees |  |

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| **Topic Question** | Notes |
| State the name of the disease virus | Australian Bat Lyssavirus Disease |
| Label the diagram of the virus and list the structural features of the virus | References in Rabies and other lyssavirus diseases - The Lancet |
| Describe symptoms of the disease in humans |  |
| Describe the symptoms of the disease in Bats  | **Read page 440 Biology WA ATAR Units 3 & 4** |
| Why can ABL be described as a zoonotic disease? |  |
| Describe the life cycle of the virus causing ABL |  |
| State the mode of transmission and describe how it is transmitted  |  |
| List the treatments available in Australia for ABL |  |
| Describe the control of this disease in Australia |  |
| Explain why ABL is a risk to human healthThis is the how and why. How is it transmitted and how does it impact the host? |  |