

### **Discussion Point 1, Chapter 3**

According to traditional music theory, what is a major scale and what is its tonic?

### **Discussion Point 2, Chapter 3**

According to traditional music theory, what is a minor harmonic scale and what is its tonic?

### **Discussion Point 3, Chapter 3**

What is a pitch class representation of a musical scale?

### **Discussion Point 4, Chapter 3**

What is the general structure of the scale tonic perceptron? What is the logic of its input units and its output units?

### **Discussion Point 5, Chapter 3**

How does one go about training the scale tonic perceptron? How would this change if output value units were replaced with output integration devices?

### **Discussion Point 6, Chapter 3**

What is the logic of examining Table 3-2 in order to interpret the internal structure of the scale tonic perceptron?

### **Discussion Point 7, Chapter 3**

What is the logic behind converting Table 3-2 into Table 3-3? Why does this conversion make sense with regards to interpreting the internal structure of the scale tonic perceptron?

### **Discussion Point 8, Chapter 3**

What is the logic that permits the Figure 3-4 connection weights to identify the tonic of a major scale?

### **Discussion Point 9, Chapter 3**

What is the logic that permits the Figure 3-4 connection weights to identify the tonic of a harmonic minor scale?

### **Discussion Point 10, Chapter 3**

Why does the scale tonic perceptron not turn an incorrect tonic output unit on (hint: what is the logic of Figure 3-7)?