Why are the vibrations on
a violin string not quantized?

1. Because the vibrations are excited by a bowing action instead of by light.

2. Because only light can be quantized

3. The vibrations are quantized but the quanta are so small that increments of one quanta are not detectable.

The energy of the vibrations on a string increase as

1. The amplitude of the vibrations

2. The square of the amplitude of the vibrations

3. The square root of the amplitude of the vibrations

A resistor is formed from a material which has a positive temperature coefficient of resistance.
When the resistor heats up

1. The resistance decreases

2. The resistance remains constant

3. The resistance increases

When a constant voltage is applied across a semiconductor resistor

1. The current increases as the resistor heats up

2. The current remains constant as the resistor heats up

3. The current decreases as the resistor heats up