23. An inflated balloon was attached to a wooden block and placed in a container  
of water at 26 °C. as shown in the diagram. below.

===] inflated balloon  
wa water at 26 °C  
wooden block -

Which one of the following shows the most likely observation and  
corresponding explanation when. the water in the container was heated to  
65 °C? : .

| Observation(s} . Explanation  
(4) The. balloon remained the | Heat did not cause any visible change in the |  
same size. | set-up. |  
(2) The balloon became Some air had escaped from the balloon causing  
smaller. it to reduce in size.  
(3) The balloon became bigger. | Some air from the water had entered the  
: balloon causing it to expand.  
The. balloon became bigger | Both the air in the balloon and the water in the  
(4) | and the water level in the | container gained heat and expanded.  
cohtainer increased.