

Question 24 (5 marks)

Design an experiment that tests the effect of opening a window on the blood oxygen saturation level of the people in a room.

5

Independent variableOpen.....or.....closed.....window.....(O ₂).....
Controla.....person.....in.....a.....room.....with.....no.....windo.....
Variables to be kept constant and justification for keeping each constant.	<p>Variable 1:position.....of.....each.....person.....</p> <p>Justification:the.....position.....in.....the.....room.....of.....each.....person.....affects.....the.....amount.....of.....O₂.....from.....the.....open.....window.....are.....receiving.....,....all.....must.....be.....in.....the.....same.....position.....to.....increase.....validity.....</p>
	<p>Variable 2:how.....far.....the.....window.....is.....open.....</p> <p>Justification:the.....amount.....of.....O₂.....entering.....the.....room.....via.....a.....window.....will.....be.....affected.....by.....the.....size.....of.....the.....gap.....the.....window.....will.....make.....the.....window.....must.....remain.....a.....certain.....amount.....open.....</p>
Technology used to measure oxygen saturation in bloodblood.....samples.....recording.....O ₂levels.....in.....haemoglobin.....