

Multiple Choice Answers

Q12: C

Multiple Choice Answers

Q14: B

Q15: C

Q16: D

Multiple Choice Answers

Q16: D

Q17: A

Multiple Choice Answers

Q15: B

1(a)(i)	- states 1%, 0.5%, 0.25% and 0.125% under the appropriate beaker ; - shows transfer of 10cm³ to each beaker from the previous beaker ; - shows 10 cm³ of W added to each beaker ;
1(a)(ii)	(heading for independent variable) concentration of H₂O₂ <u>and</u> % <u>and</u> to the left of the dependent variable ; (heading for dependent variable) time / seconds ; - result for each concentration ; - expected pattern of results (the highest concentration has the shortest time) ; - results recorded to the nearest whole second ;
1(a)(iii)	the times for U1 , U2 and U3 recorded <u>and</u> seconds ;
1(a)(iv)	shows the three times added and divided by 3 ;
1(a)(v)	estimates the concentration of hydrogen peroxide in sample U according to results ;
1(a)(vi)	shows that there are no anomalies ;
1(a)(vii)	states that using smaller intervals between concentrations of hydrogen peroxide around the estimate would allow a more accurate estimate ;
1(b)(i)	- x-axis: time / hours <u>and</u> y-axis: percentage of bacterial cells able to produce hydrogen peroxide ; - scale on x-axis: 40 to 2 cm, labelled at least every 2 cm <u>and</u> y-axis: 4 to 2 cm, labelled at least every 2 cm ; - correct plotting of points using small dots in circles or crosses ; - plots joined with thin line passing through all points ;
1(b)(ii)	- percentage increases as time progresses (for both temperatures) ; - greater increase at lower temperature ;
1(b)(iii)	- value estimated from graph ; - suitable line shown on the graph ;
1(b)(iv)	states one of these variables – species of bacteria / pH / nutrient status / oxygen ;