

Studyclix Topic Analysis - Leaving Cert Biology Experiments

Exam Question	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	FREQUENCY
Investigate the growth of leaf yeast using agar plates	Q 10 (a) (b) (i)		Q10 (b)			Q9 (a) & (b)			Q8 (b)			Q8 (b)		Q9 (b) (iv)			Q8 (a) & (b)		Q9 (a) & (b)	5.6
Investigate the effect of IAA growth regulator on plant tissue	Q10 (b) (iii)	Q10			Q 7 (b)(iii)				Q 8 (c)							Q8 (a) & (b)		Q7 (b) (i)		2.8
Isolate DNA from a plant tissue			Q 8 (b)(ii)		Q 7 (b)(ii)		Q9 (b) (iv)		Q7 (a) & (b)				Q9 (a) & (b)	Q9 (b) (iii)				Q7 (b) (iii)	Q8 (a) & (b)	4
Ecology Experiments (combined)	Q8				Q 10 (c)		Q7 (a) & (b)	Q10 (b) (i)			Q7 (b)					Q7 (b)		Q9 (a) & (b)		6.2
Investigate the effect of heat denaturation on the rate of catalase activity			Q9 (b)(i)(ii)								Q8 (b)					Q9 (a) & (b)	Q7 (a) & (b)			3.2
The Scientific Method			Q8 (a)	Q. 2	Q2	Q7 (a)	Q9 (a)	Q7 (a)	Q9 (a) & (b)	Q9 (a)	Q9 (a)	Q7 (a)	Q7 (a) & (b)	Q8 (a)		Q3			Q2	7.6
Prepare and examine animal & plant cell using the light microscope		Q8(a)(b)			Q 7 (b)(i)			Q7 (b) (iii)		Q8 (b)	Q9 (b) (iii)			Q9 (b) (i)				Q8 (b)		3.8
Investigate the effect water, oxygen and temperature on germination							Q9 (b) (i)			Q7 (a) & (b)	Q9 (b) (iv)	Q7 (b) (v)			Q8 (a) & (b)					2.6
Dissect, display and identify an ox's or sheep's heart	Q10 (b) (ii)			Q. 9 (b)						Q9 (b)		Q7 (b) (i)		Q7 (a) & (b)						2.6
Investigate the effect of pH & temperature on the rate of enzyme activity			Q9 (b)(iii)(iv)				Q8 (a) & (b)		Q7 (c)			Q9 (b)								3.2
Prepare an enzyme immobilisation and examine its application				Q. 7 (b)				Q7 (b) (iv)							Q9 (a) & (b)				Q7 (a) & (b)	2.4
Investigate the influence of light intensity or carbon dioxide on the rate of photosynthesis		Q9				Q8 (a) & (b)					Q9 (b) (i)			Q9 (b) (ii)	Q12 (c)		Q9 (a) & (b)			3.6
Be familiar with and use the light microscope		Q8(b)					Q7 (b) (iii)			Q8 (a)		Q7 (b) (viii)								1.6
Prepare and examine microscopically the transverse section of a dicotyledonous stem (X100, X400)	Q10 (b) (iv)				Q 9		Q9 (b) (ii)						Q8 (b) (iv)		Q7 (a) & (b)				Q14 (c) (iv)	2.8
Conduct any activity to demonstrate osmosis					Q 7 (b)(iv)		Q9 (b) (iii)				Q9 (b) (ii)	Q7 (b) (vi)								0.8
To test for starch, fat, reducing sugars, and protein			Q 7 (b)(i)		Q 7 (a)	Q7 (b) (iv)		Q7 (b) (i)						Q9 (b) (v)				Q7 (a)		1.2
Investigate the effect of exercise on the breathing rate or pulse rate of a human								Q8 (a) & (b)					Q8 (b) (iii)							1.2
Use starch agar or skimmed milk plates to show digestive activity during germination				Q. 8 (b)				Q9 (a) & (b)				Q7 (b) (iii)						Q7 (b) (ii)		1.6
Prepare and show the production of alcohol from yeast	Q9				Q 8	Q7 (b) (ii)														2.2

Insights

- The scientific method is likely to appear as a part of a question-
- All of the ecology experiments are important to learn as they frequently appear in the exam
- Enzymes are likely to appear on this years paper
- Photosynthesis is a possible question that could be asked this year as it regularly appears on the paper throughout the years

KEY :
Long Question = 1
Short Question = 0.2