

Studyclix Topic Analysis - Leaving Cert Biology Experiments

Exam Question	2024	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) (f)		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) (f)		2.8
Isolate DNA from a plant tissue	Q8			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)	5
Ecology Experiments (combined)		Q8				Q 10 (c)		Q7 (a) & (b)	Q10 (b) (f)			Q7 (b)					Q7 (b)		Q9 (a) & (b)		6.2
Investigate the effect of heat denaturation on the rate of catalase activity				Q9 (b)(f)(iii)							Q8 (b)						Q9 (a) & (b)	Q7 (a) & (b)			3.2
The Scientific Method	Q. 2			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	8.6
Prepare and examine animal & plant cell using the light microscope	Q. 9 (b)		Q8(a)(b)			Q 7 (b)(f)			Q7 (b) (iii)		Q8 (b)	Q9 (b) (iii)			Q9 (b) (f)					Q8 (b)	4
Investigate the effect water, oxygen and temperature on germination								Q9 (b) (f)			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) (f)		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	Q9				Q. 7 (b)				Q7 (b) (iv)							Q9 (a) & (b)				Q7 (a) & (b)	3.4
Investigate the influence of light intensity or carbon dioxide on the rate of photosynthesis			Q9				Q8 (a) & (b)					Q9 (b) (f)			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)(f)		Q 7 (a)	Q7 (b) (iv)		Q7 (b) (f)						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	Q10				Q. 8 (b)				Q9 (a) & (b)				Q7 (b) (iii)						Q7 (b) (ii)		2.6
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
- Osmosis has not been featured on the paper in recent years, therefore it may appear in the 2025 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