



ASHFIELD
College

DUNDUM



ASHFIELD COLLEGE

LEAVING CERT NIGHT BEFORE NOTES 2025

DEAR STUDENT



Please find enclosed our 2025 Leaving Cert Night Before Notes. I hope that they make a big impact in your exam preparations.

From all the staff here at Ashfield College, I wish you the very best in your studies and in your examinations.

Please don't hesitate to contact us as you look towards your future studies.

Kind regards,

Philip Curry

Principal at Ashfield College

At Ashfield College we are renowned for our Grinds, Revision Courses and full-time Leaving Certificate Programmes.

At Ashfield College we are renowned for our Grinds, Revision Courses and full-time Leaving Certificate Programmes. For more than 45 years we have been providing successful exam support and this year is no different. After the success of last year's Junior Certificate Night Before Notes and all of the positive feedback received we have decided to continue our Night Before Notes for the students of 2025.

Teachers at our Dundrum campus are recognised as being among the leading educators in Ireland. These Night Before Notes are designed to give Junior Cycle Students an edge in final revision.

Subject content has been concentrated into important exam tips and revision notes

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KEY STEPS TO

① Practice is Key

Don't just sit there reading our notes. Write them, repeat them out loud and subsequently, learn them. Practice writing neatly against the clock. When time is limited some students start to scribble. However, if the examiner can't read it you won't get the marks.

② Start Early

The earlier you start revising, the less stressed you will get. Get through your subject notes before the essential online revision class and our subject experts will help to consolidate instead of the information into your brain.

③ Concentrate when Studying and Reward Yourself

When you need to work online use a browser blocking app that will help you to control your online behaviour. This means that when you are logging on to watch our Essentials class, you won't get distracted by social media sites you have temporarily blocked. Set a block timer for two hours and get to work. After the time is up, reward yourself with a 15 minute break to scroll through whatever feeds you please.

KEY STEPS TO SUCCESS | KEY STEPS TO SUCCESS | KEY STEPS TO SUCCESS | KEY STEPS TO SUCCESS | KEY STEPS TO SUCCESS

⑥

During the Exam Itself

Creating a time plan and choosing questions

Plan which questions you intend on answering and the amount of time you will allot for each one.

It may seem like a waste of time but it is essential to a good grade. Reading through all of the questions before answering is important. The paper will be set to throw you with the first question and some of the later questions will probably be easier to answer. Read each question carefully and highlight the key words. If a question begins with 'Explain' it means you need to go into depth however, if a question says 'Briefly' mention you can save time and get the same marks with bullet points.

Label all questions clearly. However make life easier for the examiner

As it appears on the exam paper ie; Section 1a Q1 Part A

Start every question on a new page

The exam is not the place to conserve paper (examiners don't give extra marks for this).

Leave gaps between mini paragraphs

Leaving gaps makes big blocks of text far easier to read.

Straight to the Point

"Hello examiner, I have decided for this question to choose option A as I feel it....." - Introducing your question in this way will not impress examiners. It is a

Name and Explain

Name your point and explain it to show the examiner your knowledge

SUCCESS

④ Marking Schemes

Make sure you know the marking schemes inside out. This is probably the easiest place to pick up marks at this stage. If you know exactly what the examiner is looking for you are guaranteed to improve your grade. Prioritise your time for questions that award more marks.

⑤ Maintaining a Positive Attitude

A positive attitude will dissuade stress and panic. It may seem obvious, but it's the little things that count. Try your best to stay positive by following the steps below:

- Get a good night's sleep and hydrate well. Your brain needs to be hydrated to perform

- Eat a healthy breakfast to give you energy

- Arrive early so you have time to compose yourself and adjust to your surroundings

- On exam day, avoid people who are likely to make dramatic statements that could cause you stress

TO SUCCESS | KEY STEPS TO SUCCESS | KEY STEPS TO SUCCESS | KEY STEPS TO SUCCESS | KEY STEPS TO SUCCESS



⑦ End of the Exam

If you are running out of time jot down all of the information you have on the topic. Examiners can award marks for showing your knowledge. Overall, remember that an examiner **MUST** give marks for knowledge that is displayed, so make sure you put everything you know on that booklet.

ENGLISH

Overview:

①

This is a 2 hour exam

②

Answer ALL questions

③

There are five past exam papers to look at : 2017, 2018, 2019, 2022 and 2023.

④

There can be any number of sections with different marks awarded per section.

⑤

On the first page of the exam paper there will be a description of the layout of the exam, as well as a suggested amount of time to spend on each section

⑥

Highlight the suggested allocated time!

It may say, '*Spend 45 minutes on Section A*' so after these 45 minutes, move onto the next section.

⑦

Be mindful of the marks allocated to each question also.

Avoid spending too much time on one question over another if it has significantly less marks.

⑧

Use your '*Optional Rough Work*' boxes as they will help you plan your answers

⑨

Underline the key words in every question before you attempt to answer it.

A clear focus on the question is imperative in this exam.

You cannot get marks for answering a question that is not on the paper.

PAPER I**Overview:**

- 200 marks
- 2 hours and 50 minutes
- Composed of Section I – Comprehending and Section II – Composing
- Section I – Comprehending consists of three different texts; you must answer Question A on one text and Question B on another. This means that you will not answer on one text at all. You must not answer Question A and B on the same text
- Section II – Composing consists of seven different essay titles; you must answer one

Section I - Comprehending:

Question:	Part:	Marks:	% of Paper I:	% Overall:	Timing:	Length (minimum):
A	Reading	---	---	---	10 minutes	---
A	(i)	15	7.5	3.75	10 minutes	3 major points; ½ to 1 page
A	(ii)	15	7.5	3.75	10 minutes	3 major points; ½ to 1 page
A	(iii)	20	10	5	15 minutes	4 major points; 1 to 1½ pages
B	---	50	25	12.5	45 minutes	3 to 4 pages

Section II - Composing:

Question:	Part:	Marks:	% of Paper I:	% Overall:	Timing:	Length (minimum):
---	---	100	50	25	1 hour and 20 minutes (80 minutes); 10 minutes planning	7 to 8 pages

PAPER II**Overview:**

- 200 marks
- 3 hours and 20 minutes
- That means it is 200 marks in 200 minutes; that means you are trying to get one mark every single minute!!!
- Composed of Section I – The Single Text, Section II – The Comparative Study and Section III – Poetry
- Section I – The Single Text consists of five different texts with two questions on each; you must answer only one question on whichever text you have studied
- Section II – The Comparative Study consists of three different comparative modes with two questions on each; you must answer only one question on one mode
- Section III – Poetry consists of two parts; Unseen Poetry and Prescribed Poetry. The unseen poem will be accompanied by two different questions; you must answer one. Five poets with one question each will appear in Prescribed Poetry; you must answer on one

Section I - Comprehending:

Question:	Part:	Marks:	% of Paper II:	% Overall:	Timing:	Length (minimum):
---	---	60	30	15	1 hour (60 minutes)	5 to 6 pages

Section II – The Comparative Study:

Question:	Part:	Marks:	% of Paper II:	% Overall:	Timing:	Length (minimum):
---	---	70	35	17.5	1 hour and 10 minutes (70 minutes)	6 to 7 pages

Section III – Poetry:

Question:	Part:	Marks:	% of Paper II:	% Overall:	Timing:	Length (minimum):
Unseen	---	20	10	5	20 minutes	2 pages
Prescribed	---	50	25	12.5	50 minutes	4 to 5 pages

PAPER I – TIPS AND ADVICE

Section I – Comprehending Question A:

- Read the questions before you read the text, underlining any key words and exactly what it is you are being asked to do – this means that you can then read the text with a purpose and it will help to speed you up
- Your introduction does not have to be any more complicated than simply rephrasing the question
- Ensure that you use Point, Quote, Explain (PQE)/Point, Illustrate, Quote (PIE)/State, Explain, Quote (SEQ) in each paragraph in the main body of your answer
- A short one line conclusion will suffice
- Revise the different genres of writing for the 20 mark question, familiarising yourself with the main elements and characteristics of each so that you will be easily able to recognise them

Section I – Comprehending Question B:

- Familiarise yourself with as many types of functional writing as you can, with a particular focus on the formatting of each e.g. informal/personal letters, formal letters, diary entries/blogs, speeches/the texts of talks, articles, etc
- Be comfortable answering on at least three different types – remember, only a small selection appear and you will have no idea what they will be
- Be prepared that some of them may require you to read the text

Section II – Composing:

- Again, familiarise yourself with as many genres as you can – do not put all your eggs in one basket. Remember, if you have only practised one type of essay and the topic/question on that genre ends up being difficult/complex, you are stuck answering on it
- Be comfortable writing on at least two different types – naturally, you will probably have a favourite but it is very important to also have a backup plan
- Always plan your essay before you put pen to paper – this is the biggest question across both papers. Your plan does not necessarily have to be elaborate – it can simply be a series of bullet points, a spider diagram, a list of key words/phrases you want to include, etc. However, once you have drafted up your plan, you should be confident that you will be able to write at least five pages – if not, it would be advisable to reconsider your choice

PAPER II – TIPS AND ADVICE

Section I – The Single Text

- Make sure that you know what your single text is – this may seem basic but it is worth remembering that some of the texts prescribed in this section also appear in the list for the comparative (so you may have studied it for that instead)
- Ensure that you are able to quote accurately from your chosen text – you may, of course, paraphrase if you get stuck but genuine quotes always offer a stronger level of support for the points you make
- Always start by studying the characters in the text – remember, every single theme that you can be examined upon will be portrayed by the actions, reactions and behaviours of a particular character(s). Therefore, if you know your characters well, you should be well poised to tackle any theme question that could appear
- Do not forget to include a short introduction paragraph (where you respond to the question asked) and a conclusion paragraph

Section II – The Comparative Study

- Once more, make sure that you know what your comparative texts are – remember, you cannot reuse the text that you used in your single text answer
- Again, be able to quote accurately from a few key moments in each of your three chosen texts – as before, you may, of course, paraphrase if you get stuck but genuine quotes always offer a stronger level of support for the points you make
- While this is a comparative study, it is just as important to pay attention to the notable differences between your texts – feel free to both compare and contrast
- Due to the Covid 19 assessment changes this year, it is only necessary for you to study one mode from Theme or Issue, Cultural Context and Literary Genre. Choose one and focus on perfecting it
- Take heed of whether your teacher has prepared you for the two 30 mark and 40 mark questions or the single 70 mark question – this should dictate the way you approach your study for this section
- Do not forget to include a short introduction paragraph (where you both respond to the question asked and name your chosen texts along with their author(s)/playwright(s) and/or director(s)) and a conclusion paragraph

Section III – Poetry

Unseen Poetry:

- Treat this as you would the comprehension on Paper I
- Be conscious of the main themes and poetic techniques/devices that the poet uses

Prescribed Poetry:

- This is the most problematic section every year as students tend to focus on just one or two poets and then hope for the best. This is a very risky move. Ideally, you should have a minimum of four poets prepared – anything less than this and you are leaving yourself vulnerable
- This year's eight poets are Eavan Boland, Emily Dickinson, Thomas Stearns Eliot, Gerard Manley Hopkins, Patrick Kavanagh, Derek Mahon, Sylvia Plath and Tracy K. Smith. Emily Dickinson and Sylvia Plath came up in 2024 – however, this does not mean that they cannot appear again this year
- Write on a minimum of four and maximum of five poems in your answer
- Yet again, be able to quote accurately from at least four poems by each poet – as mentioned previously, you may, of course, paraphrase if you get stuck but genuine quotes always offer a stronger level of support for the points you make
- Do not forget to include a short introduction paragraph (where you both respond to the question asked and list your chosen poems) and a conclusion paragraph

GENERAL TIPS AND ADVICE

- It is extremely important to strike a balance between both quality and quantity – while obviously the content of your answers will be of paramount importance, this is Higher Level English and, therefore, the lengths of your answers also need to reflect this
- Keep your language formal at all times (unless in a small number of circumstances where the question allows for an informal register)
- Showcase your vocabulary as often as you can – however, if you are unsure of how to use a big/complicated word/phrase, choose a simple one instead so that your point does not lose its meaning
- Be conscious of your syntax, spelling, grammar, punctuation, capitalisation, etc at all times
- Do not forget to use paragraphs
- At Higher Level, you must answer on a Shakespearean text in Paper II – this can be for either your single text or your comparative study
- Be very disciplined with your timing on both papers but especially Paper II. If you do not finish a question in the time allocated, leave some space and move on to the next one. You can always return to it at the end. However, you are much better off attempting every question as opposed to perfecting one and then leaving out another whole question(s)

GEOGRAPHY

400 marks | 2 hours and 50 minutes

NB: The Geographical Investigation is also worth 100 marks – therefore, you are marked out of 500 in Geography altogether.

Part I: Short-Answer Questions

80 marks | 30 minutes

- Attempt all 12 even though you are only required to do ten – you will then be marked out of your best ten.

Part II: Structured and Essay Questions

320 marks | 2 hours and 8 minutes

- You must answer three whole questions from three different sections. The fourth question can be from any section – therefore, you must answer four whole questions in total but you may leave out one entire unit if you so wish
- You may answer one whole question from Questions 1, 2 and 3 (Core Unit I – Patterns and Processes in the Physical Environment):

A. 20 marks – Eight minutes

B. 30 marks – 12 minutes

C. 30 marks – 12 minutes

- You may answer one whole question from Questions 4, 5 and 6 (Core Unit II – Regional Geography):

A. 20 marks – Eight minutes

B. 30 marks – 12 minutes

C. 30 marks – 12 minutes

- You may answer one whole question from Questions 7, 8, 9 (Elective Unit IV – Patterns and Processes in Economic Activities), 10, 11 or 12 (Elective Unit V – Patterns and Processes in the Human Environment):

A. 20 marks – Eight minutes

B. 30 marks – 12 minutes

C. 30 marks – 12 minutes

- You may answer one whole question from Questions 13, 14, 15 (Optional Unit VI – Global Interdependence), 16, 17, 18 (Optional Unit VII – Geoecology), 19, 20, 21 (Optional Unit VIII – Culture and Identity), 22, 23 or 24 (Optional Unit IX (The Atmosphere-Ocean Environment):

A. 80 marks – 32 minutes

Final examination – Spend five to six minutes reading back through your answers and filling in any blanks you may have left

Checklist of Geography Essays

Core Unit I – Patterns and Processes in Physical Geography:

1. Theory of Continental Drift
2. How Plate Tectonics Helps Us to Understand the Forces at Work Along Crustal Plate Boundaries
3. How Plate Tectonics Helps Us to Understand the Global Distribution of Volcanoes
4. How Plate Tectonics Helps Us to Understand the Global Distribution of Earthquakes
5. How Plate Tectonics Helps Us to Understand the Global Distribution of Fold Mountains
6. Formation of Intrusive Volcanic Landforms/Plutons e.g. Dykes, Sills and Batholiths
7. Positive Effects of Volcanoes
8. Volcano Case Study e.g. Mount Saint Helens
9. Earthquake Case Study e.g. Japanese Earthquake and Tsunami
10. Formation of Igneous Rocks e.g. Basalt and Granite
11. Formation of Sedimentary Rocks e.g. Sandstone and Limestone
12. Formation of Metamorphic Rocks e.g. Marble, Quartzite and Slate
13. Formation of One Rock Type and How It Produces a Distinctive Landscape e.g. Limestone/Karst Landscape of the Burren or Basalt/Six-Sided/Hexagonal Columns of Basalt in the Giant's Causeway
14. Human Interaction with the Rock Cycle e.g. Oil/Natural Gas Exploration, Quarrying, Mining or Geothermal Energy
15. Two Types of Mechanical/Physical Weathering e.g. Freeze-Thaw Action and Exfoliation
16. Two types of Chemical Weathering e.g. Carbonation and Hydration and Hydrolysis
17. How Chemical Weathering Has Shaped a Limestone Pavement in a Karst Region e.g. Carbonation and Limestone Pavements (Clints and Grikes) in the Burren
18. Formation of Underground Features/Landforms in a Karst Landscape e.g. Stalactites, Stalagmites, Pillars or Curtains
19. Karst Cycle of Erosion
20. Formation of One Feature/Landform of Erosion e.g. Waterfalls
21. Formation of One Feature/Landform of Deposition e.g. Levees
22. Isostatic Processes/Isostatic Movement/Isostasy e.g. Knickpoints and Paired Terraces
23. Human Interaction with Surface Processes e.g. Fluvial – The Three Gorges Dam in China and the River Rhine in Germany

Core Unit II – Regional Geography:

24. Characteristics of One Climatic Region e.g. West European/Cool Temperate Oceanic
25. Characteristics of Administrative Regions in One Country e.g. Local Authority Areas, Regional Authority Areas and Regional Assemblies in Ireland
26. Characteristics of One Cultural Region/Region Associated with Language e.g. Gaeltacht Areas in Ireland
27. Characteristics of One Religious Region/Region Associated with Religion e.g. Northern Ireland
28. Characteristics of One Maladjusted Region/Region of Industrial Decline e.g. Western Europe Post-Industrial Revolution
29. Primary Economic Activities in a Core Irish Region e.g. Agriculture and Fishing in Dublin/Greater Dublin Area (GDA)
30. Secondary Economic Activities in a Core Irish Region e.g. Manufacturing in Dublin/Greater Dublin Area (GDA)

31. Tertiary Economic Activities in a Core Irish Region e.g. Tourism and Transport in Dublin/Greater Dublin Area (GDA)
32. Primary Economic Activities in a Peripheral Irish Region e.g. Agriculture and Fishing in The West/Border, Midlands and West (BMW)
33. Secondary Economic Activities in a Peripheral Irish Region e.g. Manufacturing in the West/Border, Midlands and West (BMW)
34. Tertiary Economic Activities in a Peripheral Irish Region e.g. Tourism and Transport in The West/Border, Midlands and West (BMW)
35. Urban Development/Growth of an Irish City e.g. Dublin
36. Human Processes/Demographics/Population Distribution in a Core Irish Region e.g. Dublin
37. Human Processes/Demographics/Population Distribution in a Peripheral Irish Region e.g. The West/Border, Midlands and West (BMW)
38. Primary Economic Activities in a Core European Region e.g. Agriculture and Fishing in The Paris Basin
39. Secondary Economic Activities in a Core European Region e.g. Manufacturing in The Paris Basin
40. Tertiary Economic Activities in a Core European Region e.g. Tourism and Transport in The Paris Basin
41. Primary Economic Activities in a Peripheral European Region e.g. Agriculture and Fishing in The Mezzogiorno
42. Secondary Economic Activities in a Peripheral European Region e.g. Manufacturing in The Mezzogiorno
43. Tertiary Economic Activities in a Peripheral European Region e.g. Tourism and Transport in the Mezzogiorno
44. Urban Development/Growth of a European City e.g. Paris
45. Human Processes/Demographics/Population Distribution in a Core European Region e.g. The Paris Basin
46. Human Processes/Demographics/Population Distribution in a Peripheral European Region e.g. The Mezzogiorno
47. Primary Economic Activities in a Sub-Continental Region e.g. Agriculture and Fishing/Forestry in Brazil, India or South-West USA
48. Secondary Economic Activities in a Sub-Continental Region e.g. Manufacturing in Brazil, India or South-West USA
49. Tertiary Economic Activities in a Sub-Continental Region e.g. Tourism and Transport in Brazil, India or South-West USA
50. Urban Development/Growth of a Sub-Continental City e.g. Sao Paulo in Brazil, Mumbai in India or Los Angeles in South-West USA
51. Human Processes/Demographics/Population Distribution in a Sub-Continental Region e.g. Brazil, India or South-West USA
52. Economic, Political and Cultural Interaction Between Two Regions e.g. Republic of Ireland and Northern Ireland
53. Development and Expansion of the European Union (EU)
54. Issues Facing the European Union (EU) e.g. Future Expansion, Economic Union and the Eurozone, Political Union and National Sovereignty, Brexit and the Lisbon Treaty, etc
55. Changes in Political Boundaries e.g. Reunification of Germany

Elective Unit IV – Patterns and Processes in Economic Activities:

56. Measuring Economic Development e.g. Gross Domestic Product (GDP), Gross National Product (GNP)/ Gross National Income (GNI) and Human Development Index (HDI)
57. Changing Patterns of Economic Development in a Developed Country e.g. Belgium

58. Changing Patterns of Economic Development in a Developing Country/Effects of Colonisation/Colonialism on the Economy of a Developing Country e.g. Brazil
59. Impact of Globalisation on a Developed Country e.g. Ireland
60. Impact of Globalisation on a Developing Country e.g. Brazil
61. Locational Factors Influencing All Multinational Corporations/Companies (MNCs)
62. A Multinational Corporation/Company (MNC) in Ireland e.g. Dell or Johnson and Johnson
63. Influence of the European Union (EU) on Ireland's Economy
64. Impact of the Common Agricultural Policy (CAP) on Ireland's Economy
65. Impact of the Common Fisheries Policy (CFP) on Ireland's Economy
66. Use of Non-Renewable/Finite Energy in the Irish Economy
67. Use of Renewable/Finite Energy in the Irish Economy
68. Environmental Impact of Burning Fossil Fuels at Local, Regional and Global Levels e.g. Global Warming, Acid Rain and Smog
69. Conflict Between Economic Development and Environmental Protection e.g. The Corrib Gas Field

Optional Unit VII – Geoecology:

70. Soil Composition e.g. Mineral Matter, Air, Water, Humus and Micro-Organisms
71. Soil Characteristics e.g. Colour, Texture, Structure, Humus Content, pH and Water Content and Retention
72. Processes Affecting Both Soil Formation and Soil Characteristics e.g. Humification, Leaching, Podzolisation, Laterisation, Gleying, Salinisation, Calcification and Weathering
73. Factors Affecting Both Soil Formation and Soil Characteristics e.g. Climate, Relief/Topography, Parent Material, Micro-Organisms and Time
74. General Composition and Characteristics of One Soil Type e.g. Brown Earth
75. Human Activities Affecting Soils e.g. Desertification in the Sahel Region in Africa – Overgrazing, Overcropping/Overcultivation and Deforestation
76. Soil Conservation Methods e.g. Replacing and Improving Vegetation Cover and Improving Water Control/Reducing Surface Runoff
77. Characteristics of One Biome e.g. Tropical Rainforest – Location, Climate, Soil Types, Vegetation Types and Animal/Bird/Insect Types
78. Adaptation of Plants, Insects, Animals and Birds to One Biome e.g. Tropical Rainforest
79. Human Activities Affecting a Biome e.g. Deforestation in the Tropical Rainforest

General Tips and Advice

- Be very disciplined with your timing. If you do not finish a question in the time allocated, leave some space and move on to the next one. You can always return to it at the end. However, you are much better off attempting every question as opposed to perfecting one and then leaving out another whole question(s)
- Do not forget to bring a calculator and set of mathematical instruments into the exam with you
- Do not forget to bring colouring pencils into the exam with you – while it is not necessary to colour in every diagram, they can be particularly useful when drawing and identifying certain features on sketch maps
- label/annotate every diagram really well – marks will not be awarded for a piece of art that does not have clear labels

GAEILGE

Páipéar 1

Marcanna: 160 | Am: 140 nóiméad

Cluastuiscint

Marcanna: 60 | Am: 20-25 nóiméad

Leagan Amach – Cuid A: Dhá cheann d'fhógraí raidió (cloistear **faoi dhó** iad)

Cuid B: Dhá cheann de chomhráite (cloistear **faoi dhó** iad)

Cuid C: Dhá cheann de phíosaí nuachta raidió nó teilifíse
(cloistear **faoi dhó** iad)

Revise the **question forms** that you have studied and those from previous exam years. Watch a programme on TG 4, listen to R na G or to an app, etc to keep the Gaeilge in your head. Éist go cúramach leis an téip agus déan iarracht gach ceist a fhreagairt. (Listen carefully on the day of the exam, focus on the question asked and try to answer each question.) **Under line** the key words in the question. Is leor freagraí gearra. (Short answers are sufficient.)

Ceisteanna:

Cé?	Who?
Cé a bhronnfaidh?	Who will present?
Cén data?	What date?
Cé mhéad?	How much?
Céard a tharla?	What happened?
Cén aidhm?	What aim?
Cén bhaint a bheidh?	What will it have to do with?
Cén tairbhe?	What benefit?
Cá háit?	Where?

Cén locht atá ar?	What is wrong with?
Cén deis?	What opportunity?
Cad é?	What is?
Conas atá sé?	How is he?
Conas a mhothaigh sí?	How did she feel?
Cad a sheoladh?	What was sent?
Cad a deir ____ ?	What do ____ say?
Cad a bhí ar siúl?	What was happening/ taking place?
Cá bhfios dúinn?	How do we know?
Cén éagraíocht?	What organisation?
Cén dea-scéal?	What good news?
Luaigh	Mention
Luaigh dhá ghné?	Mention two aspects
Luaigh dhá rud?	Mention two things
Cá fhad?	How long?
Cad as dó?	Where is he from?
Cad ba mhaith le?	What would he like?
Conas is féidir?	How can?
Cad a rinne sí?	What did she do?
Scríobh síos dhá cheann	Write down two
Scríobh síos cúis amháin	Write down one reason
Tabhair	Give
Tabhair dhá chúis	Give two reasons

Ceapadóireacht

Marcanna: 100 | Am: 120 nóiméad

There are 3 sections here: You must answer **one** topic from A,B or C.

Cuid A – Aiste - 5 topics

Cuid B- Scéal – 2 options (One a seanfhocail and a single word eg Misneach)

Cuid C- Díospóireacht /Óráid – 2 options

An Mharcáil: Marking of the Essay:

Stíl chuí sríobnneoireachta = 15 mharc

Ionramháil Ábhair = 5 mharc

Cumas Gaeilge = 80 marc

Roghnaigh an píosa ceapadóireacht is mó **a oireann duit**. Bí cinnte go dtuigeann tú **brí an teidil**. **Read all of** the options and choose carefully **one** of the topics. Make sure that you know the layout for the **Díospóireacht** question and that you write on **one** side of the debate eg, ar son an rúin **nó** ina aghaidh. Tá sé fíor thábhachtach go ndéantar amach plan. It is vital that you write out a **plan** /prepare your essay. Keep in mind that you should have an introductory paragraph, 4-6 main paragraphs in the body of the essay and a closing paragraph.

Déan cleachtach ar conas plan a leagan amach. **Practice planning** in advance, taking a look at random topics. Use the time you have (120 nóiméad) wisely. Stick to the chosen topic, organising your points. Smaointe nó tuairimí **(20 marks)**.

You need to focus on Briathra (correct tenses + Modh Coinníollach, Briathar Saor), Nathanna Cainte, Seanfhocail, prepositions, adjectives, etc, as **(80 marks)** go for Saibhreas and cruinneas na Gaeilge.

Planning is essential in advance of starting your essay. The required length is **500-600 words**, roughly 3/4 foolscap pages. At all stages of writing, read back over what you have written to ensure that you have stuck to the topic, **cloí leis an ábhar** and check your grammar and the structure of sentences. Ní mór cúram a dhéanamh de chruinneas na teanga.

Páipéar 2:

Marcanna: 200 | Am: 185 nóiméad

NB - This is a very long paper so it is essential that you keep a close eye on your timing of each question.

Léamhthuiscint

Marcanna: 100 - Sliocht A (50 m) + Sliocht B (50 m) | Am: 80 nóiméad - 40 nóiméad approx. on each question

Read each comprehension **fully before** looking at the questions so that you can get an overall view of the content of the passage. Each question refers to the section where you can locate the answer so read each section **a few times** carefully. Ní mór duit gach sliocht a léamh **cúpla uair** sula dtugann tú faoi na ceisteanna a fhreagairt. Make sure that you clearly outline your answer to each question asked. Ná bíodh freagraí fada ina mbíonn an iomarca eolais nach dteastaíonn I do fhreagra. Baintear marcanna as **Gaeilge lochtach**.

NB: Dhá phointe eolais – give 2 points!

NB: I d'fhocail féin – in your own words! (This refers to Q 6 B)

Q6 a – grammar question – revise **all** grammar points covered.

Freagair **gach** ceist. Answer all questions, remember that all marks count!

Prós

Marcanna: 30 marc

NB: You have studied the Prós Ainmnithe so do **not** answer the **Prós Roghnach** section.

You have a choice of 2 prose questions here , **answer a or b. (one question)**

Am- (25 - 30 nóiméad) Suggested length : (1 and a half to 2 foolscap pages)

Read carefully the question asked and keep referring back to the question as you answer. Revise the stories, theme, characters, aspects of the short story, traits of folklore and aspects of the film eg, sound, images, effects.

Déan plé ar an ráiteas – means, discuss the statement. Discuss, give your view, analyse, this is very important

Filíocht

Marcanna: 30 marc

NB: You have studied the **Filíocht Ainmnithe** so do **not** answer the **Filíocht Roghnach** section.

You have a choice of 2 poetry questions here, **answer a or b. (one question)**

Am – (25 - 30 nóiméad) Suggested length: (1 and a half to 2 foolscap pages)

Focus on what the question asks. If asked for the plural eg, ‘ íomhanna,’ make sure you mention **at least two** points, otherwise you will be deducted marks. Refer to the poem **and quote from the poem** (which is on the paper) to back up your point. Make sure you revise, téama, mothúcháin, íomhanna, meafair, meadaracht, cúlra. Make sure that you know who wrote the poem and are able to write about the life and work of the poet (saol agus saothar an file) and also about how the poem affects you (Cén chaoi a dtéann an dán seo i bhfeidhm ort? – give one point to support your answer.)

Déan plé= Discuss. Cad é do thuairim faoi? Give your viewpoint.

Litríocht Bhreise

Marcanna: 40 marc

There are 5 options here but make sure that you choose the **one** that you have studied, eg **An Triail**.

Am – (40 nóiméad) Suggested length (one and a half to 2 foolscap pages)

Revise the story / play, plot, theme, characters and their qualities etc.

Déan plé ar an ráiteas= Discuss the statement. Make sure that you give your opinion, analysis on the question asked.

Freagair na ceistanna go léir ar an bpáipéar scrúdaithe. Check over your paper at the end of the exam to ensure that you have completed all questions.

Go éirí leat!

GNÁTHLEIBHÉAL

Páipéar 1:

Marcanna: 160 | Am: 110 nóiméad

Cluastuiscint

Marcanna | 60 marc | Am 20- 25 nóiméad

Leagan Amach:

Cuid A: Dhá cheann d'fhógraí raidió (Cloistear **faoi dhó** iad) You will hear each fógra **twice**.

Cuid B: Dhá chomhrá (cloistear **faoi dhó** iad) You will hear each comhrá **twice**, all 4 questions in Comhrá a hAon the first time and then on the second listening, there will be a pause after the first 2 questions (An Chéad Mhír) and then after that, you will hear the last 2 questions (An Dara Mír)

Cuid C: Dhá phíosa nuachta (cloistear **faoi dhó** iad) You will hear each news piece **twice**.

Revise all question forms that you have studied and those from previous exam years. Watch a programme on TG 4, listen to R na G or any app to keep the Gaeilge in your head! Listen carefully on the day of the exam and focus on the question asked. **Underline** the **key words** in the question.

Ceapadóireacht

Marcanna: 100 marc | Am: 85 nóiméad approx.

There are 4 sections on the paper, A, B, C D. You need to answer from 2 sections. (50 marks eac) **Pick one question from each of these 2 sections.** Choose carefully and make sure that you use the correct tense in answering the question, eg, the Scéal is in the Aimsir Caite. The required length is half a foolscap page **(15-20 lines)** It is important that you have that length in each of your answers to ensure that you are marked out of the full marks.

Spend approx. 40 minutes answering **each** question, plan before you start writing what you intend to say / verbs you intend to use etc. **Planning is essential.**

Marcanna: (50 marc) Tasc- 2 mharc

Ábhar – 8 marc (stick to the title of the exercise)

Cumas Gaeilge – 40 marc (revise verbs, nathanna cainte, sentence

Construction, etc)

Read **all** of the options carefully and choose wisely. If you choose to do the **Litir** or **Ríomhphoist**, make sure that you know the correct layout.

Marcanna: (50 marc) Ábhar –

Seoladh / Beannú /Críoch - 2 mharc

Corp na Litreach - 8 marc

Cumas Gaeilge - 40 marc

If you decide to do the **Comhrá** question, it must be laid out in the form of a drama/ conversation, use direct speech.

Whichever option you choose, use the vocabulary that you are familiar with, make sure that your verbs are accurate and that you use your nathanna. Most of the marks here are for your Gaeilge (40m) saibhreas agus cruinneas. Read back over your work.

Páipéar 2

Marcanna: 200 | Am: 140 nóiméad

Léamhthuiscint

Marcanna: 100 marc - 2 léamhthuiscint on the paper (50 marc +50 marc) | Am: 70 nóiméad (35 nóiméad approx. on each question)

Read each comprehension fully before looking at the questions so that you can get an overall idea of what the passage is about, where it is situated, characters etc. Each question refers to the section where you can locate the answer so read each section few times carefully. There are 5 sections, Alt 1, Alt 2, Alt 3, Alt 4, Alt 5, **with 2 questions** (a and b relating to each Alt.)

Freagair gach ceist. Answer all questions, taking note of the vocabulary in the question, which will help you to locate the answer. When asked for **dhá** phíos, or **dhá** rud, you must name **2** things.

The key to getting a good mark on each of the comprehensions is having the patience to read both the question asked and the passage it refers to!

Prós

Marcanna: 50 marc (25marc +25 marc) | Am: 35 nóiméad approx. on the prose section

NB: You have studied the Prós Ainmnithe so do not answer the Prós Roghnach section.

You will see 3 prose questions on the paper, (a, b, c,) you must answer 2 of them. Each question is worth 25 marks.

NB: It is important to know the story, revise the achoimre, (summary) know the names of the characters and the events that happen. Most of the marks here are for your knowledge. (0-4marks deducted for Gaeilge lochtach)

NB: When asked for dhá phointe eolais, make sure you give 2 points!

Filíocht Ainmnithe

Marcanna: 50 marc (25 marc + 25 marc) | Am: 70 nóiméad (35 nóiméad approx. on each question)

NB: You have studied the Prós Ainmnithe so do not answer the Prós Roghnach section.

You will see 3 poetry questions on the paper, (a, b, c,) you must answer 2 of them. Each question is worth 25 marks. The poems are printed on the paper so use this to help you.

Freagair gach ceist. Answer all questions on your chosen poems. I d'fhocail féin means, answer in your own words! You will be deducted marks if you do not do this and take directly from the poem. Where you are asked for dhá phointe eolais, make sure you give 2 points. (4 marc + 4 marc)

NB: Make sure that you know the story of the poem, the téama (theme), mothúcháin (feelings), íomhanna (images), Ar thaithin an dán leat ? / An maith leat an dán? Give 2 reasons why you like / don't like the poem.

Most of the marks are for your knowledge. (0-4 marks deducted for Gaeilge lochtach)

Go néirí leat !

ACCOUNTING

Higher level

400 marks | 2 hours and 50 minutes

Timing

Question 1:

2 Options

Allow 55 minutes.

Long Questions:

First 100 marker 45 minutes

Second 100 marker 45 minutes

Question 8 OR 9:

35 minutes

Exam Advice:

- Show all workings as if figure is incorrect, it is easier for corrector to trace through the given working.
- In Question 5 make sure to write down the formula
- Watch when transcribing from calculator to write down the correct figures.
- Make sure handwriting is legible and number formation is good.
- Stick to the timings above as you always score better in the first 5 minutes of a fresh question than in the last 5 of the previous question.

Question 1

55 Minutes | 30%

Revise the two/three most recent LC questions from the following.

- Manufacturing 2016 and 2018 2021 2022 2024
- **Company Final Accounts 2015 and 2019 2022 2024**
- Sole Trader 2017 and 2020 2021 2023

Remember we do ONE from TWO Final account questions.

For a H1/H2 you would need to scan 1997-2014 for any adjustments that have not appeared in a while.

- The layout must be memorized.
- Workings (Examiners like them done separately)
- Figures (Take care when transcribing them into the question)
- Words written out in full.
- Sole Trader and Company Final accounts are very similar.

Question 5: Interpretation of Accounts

45 Minutes | 25%

- Formulae 19
- 5 calculations 10% (Labels and decimal places)
- Copy the table of past/projected figures and complete fully.
- Usually ROCE, Acid test ratio, Gearing and remaining dividend ratios.
- Do the SPECIFIC analysis for part B; usually the following.
 1. Shareholders Point of view (Do not forget conclusion) P/L/G/DP
 2. Would you buy shares using borrowed money YES/NO?
 3. Would the Bank grant a loan?
 4. Debenture holders' point of view
 5. Need to practise EACH of these types.

Use the PILGRIMSSDD memory technique however the exam order is usually.

1. Profitability /RFRFI/Efficiency
2. Liquidity
3. Gearing /Interest Cover
4. Dividend Policy

Plus, three from

5. Sector
6. Security
7. Market price of a share
8. Investment Policy

DO NOT FORGET THE DECISION

Revise every part (C) question from

1997-2024 **Most will repeat several times.**

THE SECOND QUESTION IS WHERE IT GETS TRICKY YOU NEED THE FOLLOWING TO BE SAFE

- Tabular (Use the specialist stationery and leave plenty of columns for double months like December)
- Do not waste too much time on addition at the end.
- Incomplete Records Method A (Last asked in 100 markers in 2015)
- Incomplete records Method B (2022 type)
- Club or Service
- Published which is very like Question 1 but is heavy on Notes and Theory
- Know the Expenses Box
- Due at 1/1 MINUS refers to LAST YEAR
- Due at 31/12 PLUS as it refers to THIS YEAR
- Prepaid at 1/1 PLUS refers to THIS YEAR
- Prepaid at 31/12 MINUS refers to NEXT YEAR
- Rules of Revaluation appear EVERY YEAR
- Know the Rules of Disposal of Fixed Assets.

Section C

My class always specialise in Costing and Flexible Budgets. There are several little parts of topics that can appear.

Overcook this section as it is wide and **worth 20%**.

Product Cost

- 1998 Q8 is a great starting point as it is an easy question that has appeared several times. See egs.ie (Thanks Michael Galligan)
- It introduces Overhead Absorption rates as a topic and the layout of a product cost.

$$DM + DL + VOH + FOH + GAPH = TC + P = SP$$

First in First Out

- Remember to structure the Purchases into batches. Purchases increase Stock.
- Sales reduce Stock.
- Opening Stock + Purchases less Sales = Closing stock in Units.
- Count back through the most recent batches Purchased.
- Closing stock is the most recently purchased stock.

Job Costing

- Need to share the overheads equitably between the three or four departments. We are given a range of Basis of Apportionment.

Examples:

Basis	Example
Volume	Light and heat
Floor area	Rent and rates. Buildings depreciation
Book Value of equipment	Depreciation of equipment
Machine Hours	Machine maintenance.
Number of employees	Canteen.

- Practise the Highest Common factor method when finding the departmental Ratios.
- Do several of these questions as they are very handy.
- Do 2005 and 2009 for practice.

Reapportionment of Overheads

- Do the 2007 and 2012 questions to cover yourself.
- The reapportionment is usually based on labour hours but in more recent years we are specifically told how to split the service overheads.
- Remember service overheads have to be transferred as they can only be absorbed/ recovered through production.

Under absorption/ Over-absorption

- Do 2010 and 2013 part (c). 2021
- Always use Budgeted absorption rates x Actual Hours

Flexible budget

- Practise the 1999 or 2006 in full. Easy topic if you have covered it. Be familiar with the Hi-Lo method.

$$DM + DL + POH + OOH + ADM = TC + P = SP$$

Do Marginal from 2017/2020 with the HI/LO method.

Finally, be Disciplined with time.

MATHS HIGHER LEVEL

The Leaving Cert Math Exam Layout

The Leaving Certificate Mathematics exam is structured into two papers, each containing two sections.

Paper 1 and Paper 2 both have a 'Concepts and Skills' section with six questions, of which students must answer any four. They also have a 'Contexts and Applications' section with four questions, where students are required to answer any two. Paper 1 covers topics such as Number Systems, Irrational Numbers, Complex Numbers, Induction Limits, Patterns, Sequence and Series, Indices (and Logs), Arithmetic (Financial Maths), Algebra, Functions, and Calculus. Paper 2, on the other hand, delves into Probability & Statistics, Geometry & Trigonometry, and Length, Area and Volume. It's noteworthy that some elements may appear in either paper. For instance, Area and Volume could form part of a question in Paper 1 or a question from calculus which may require you to use concepts from trigonometry, coordinate geometry and algebra. Similarly, a question from statistics may include probability and a question from financial math can include concepts from sequences.

Common Mistakes by Students

In the Leaving Certificate Mathematics exam, students often fall into the trap of misconceptions about the grading system, mistakenly believing that scores below 40% are considered a failure. This is not the case with the updated grading system. Other common errors include omitting necessary supporting work in their solutions, failing to use the correct units of measurement, and not simplifying their answers where required. Algebra is a subject area where errors are frequently seen. Additionally, students often lack awareness of what is expected of them in the exam for topics covered in both papers. To steer clear of these pitfalls, it's crucial for students to understand the structure of the exam, practice problems extensively, always include necessary work and units in their responses, and be mindful of common errors in areas like Algebra.

Study Tips

1. **Create a Study Schedule:** Plan your study time in advance and stick to the schedule. Break down your subjects into topics and allocate time for each topic.
2. **Understand the Exam Format:** Familiarize yourself with the structure of the exam and the marking scheme. This will help you understand what the examiners are looking for.
3. **Practice Past Papers:** Past papers are a great resource for revision. They help you understand the type of questions asked and improve your time management skills.
4. **Take Regular Breaks:** Studying for long hours without breaks can lead to burnout. Take short breaks every hour to relax and refresh your mind.
5. **Stay Healthy:** Eat a balanced diet, get regular exercise, and ensure you get enough sleep. Your physical health has a big impact on your ability to study effectively.
6. **Revise Actively:** Don't just read your notes. Use active revision techniques like flashcards, mind maps, and teaching others.
7. **Seek Help if Needed:** If you're struggling with a topic, don't hesitate to ask for help. You can ask your teachers, classmates, or look for resources online.
8. **Stay Positive:** A positive mindset can improve your productivity and reduce stress. Believe in your abilities and visualize your success. Remember, the key to doing well in exams is consistent effort and effective revision strategies.

Effective Memory Techniques

1. **Chunking:** This involves breaking down complex information into smaller, manageable chunks. It's particularly useful when trying to solve word problems.
2. **Repetition:** This involves reviewing information repeatedly until it's committed to memory. Spaced repetition, where you review information at increasing intervals over time, is particularly effective.
3. **Visualization:** This involves mentally picturing an image or scene related to the information you're trying to remember. The more vivid the image, the more likely you are to remember the information.
5. **Association:** This involves linking the information you're trying to remember with something you already know. The association can be a thought, story, image, sound, or feeling.
6. **Self-Testing:** Regularly testing your knowledge can improve your ability to recall information. You can use flashcards, practice tests, or online quizzes for this purpose.
7. **1-pager:** It is important to create 1 page document for each topic highlighting important concepts, key problem-solving techniques, and examples.

Algebra

This is the checklist for you to excel algebra. You need to pick some example questions related to each of these points to develop your understanding on Algebra. One should know “how to solve”

- Quadratic equation
- Cubic equation
- Two linear equations in two variables
- Three linear equations in three variables
- a Linear with a Quadratic equation
- Equation with a square root
- An inequality [linear, quadratic, compound]
- An equation with indices or logs
- An equation with a modulus
- Word problems and understand graphs

Question 1:

Solve the following equation for $n \in \mathbb{N}$:

$$n - 3 = \sqrt{3n + 1}$$

Question 2:

Write the following expression as a single fraction in terms of t :

$$\frac{4}{2t + 1} - \frac{7}{12t}$$

Question 3:

Solve the following simultaneous equations for $x, y, w \in \mathbb{Z}$:

$$x + 2y = 143$$

$$y + 3w = -74$$

$$4x + 5w = 4$$

Question 4:

- (i) $h(x) = x^2 + bx - 12$, where $x \in \mathbb{R}$ and b is a constant.
Find the value of b for which $x - 4$ is a factor of $h(x)$.
- (ii) $x^2 - px + 1$ is a factor of $x^3 - 2x - 3r$, where $p, r \in \mathbb{R}$ and $p < 0$.
Find the value of p and the value of r .

Question 5:

Find the two values of $m \in \mathbb{R}$ for which $|5 + 3m| = 11$.

Question 6:

Given that $x - \sqrt{32} = \sqrt{128} - 5x$, find the value of x , where $x \in \mathbb{R}$.
Give your answer in the form $a\sqrt{2}$, where $a \in \mathbb{N}$.

Question 7:

t is a positive real number, with:

$$\log_3 t + \log_9 t + \log_{27} t + \log_{81} t = 10$$

Find the value of t . Give your answer in the form 3^r , where $r \in \mathbb{Q}$.

Question 8:

A sequence $u_1, u_2, u_3, \dots$ is defined as follows, for $n \in \mathbb{N}$:

$$u_1 = 2, \quad u_2 = 64, \quad u_{n+1} = \sqrt{\frac{u_n}{u_{n-1}}}$$

Write u_3 in the form 2^p , where $p \in \mathbb{R}$.

Trigonometry

Trigonometry involves mathematical concepts that deal with triangles, angles, and lengths. In the past, it helped us understand the tracking of the stars and navigating the oceans. You would be amazed to know that Trigonometry is broadly used in astronomy, sound waves, navigation, marine biology, aviation, industry of manufacturing, crime investigations, medical imaging and many other fields.

Pythagorean Theorem

In a right-angled triangle,

$$c^2 = a^2 + b^2$$

Where, c is called Hypotenuse.

Note:

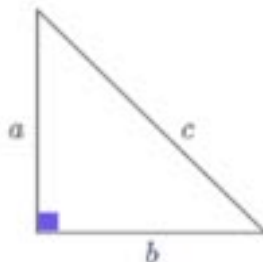
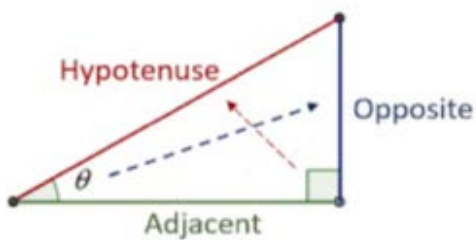
1. Hypotenuse is the longest side and opposite to the right angle.
2. $a + b > c$

Trig Ratios

$$\sin \theta = \frac{\text{Opp}}{\text{Hyp}} [\text{SOH}]$$

$$\cos \theta = \frac{\text{Adj}}{\text{Hyp}} [\text{CAH}]$$

$$\tan \theta = \frac{\text{Opp}}{\text{Adj}} [\text{TOA}]$$



AREA OF A TRIANGLE

If we don't know the perpendicular height, then we can't use the following formula (well-known to find the area of triangle in geometry)

$$\frac{1}{2} \text{base} \times \text{height}$$

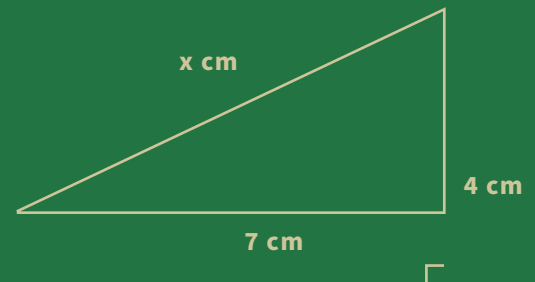
So, we use the following formula instead. $\frac{1}{2}ab \times \sin C$

Golden Rules

1. Pythagorean theorem is applied when you have two sides given and want to find the third side.

2. Trig ratios are applied when you have two sides given and want to find an angle or an angle and side are given and want to find the second side.

3. Please do not apply trig ratios and Pythagorean theorem in a triangle other than right-angled triangle.



$$x^2 = 4^2 + 7^2$$

$$x^2 = 16 + 49$$

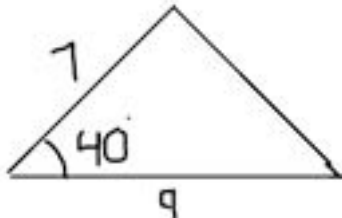
$$x^2 = 65$$

$$x = \sqrt{65} = 8.06 \text{ cm}$$

In general, we can learn this formula as follows -

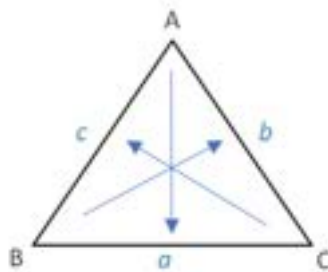
$$\frac{1}{2} \times \text{any two sides multiplied together} \times \sin \text{ of the angle in between}$$

e.g. Find the area of the following triangle.



$$\text{Area} = \frac{1}{2} \times 7 \times 9 \times \sin 40 = 20.2$$

NON-RIGHT-ANGLED TRIANGLES



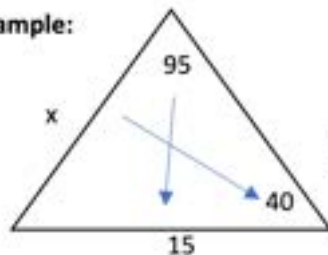
SINE Rule

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$\frac{b}{\sin (\text{Opp to Side } a)} = \frac{b}{\sin (\text{Opp to side } b)} =$$

$$\frac{c}{\sin (\text{Opp to side } c)}$$

Example:

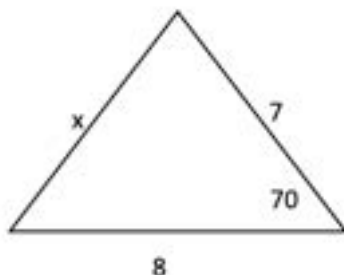


$$\frac{x}{\sin 40} = \frac{15}{\sin 95}$$

$$x = \frac{15 \times \sin 40}{\sin 95} = 9.7$$

- Put the unknown you are trying to find on the top left of your equation.
- Get rid of the fraction by multiplying by the number on the bottom.
- Sine rule requires Two angles and Two opposite sides (AASS) with one unknown and three known parameters.

COSINE Rule

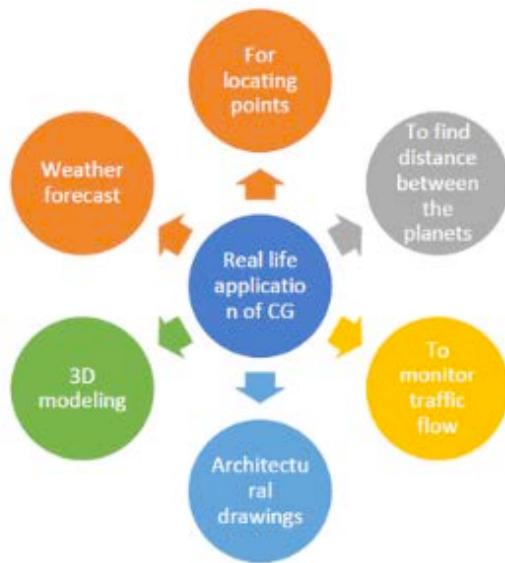


The angle and the corresponding side are at the far ends of the equation.

$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$x^2 = 7^2 + 8^2 - 2(7)(8)\cos 70 \Rightarrow x = 8.6$$

Coordinate Geometry

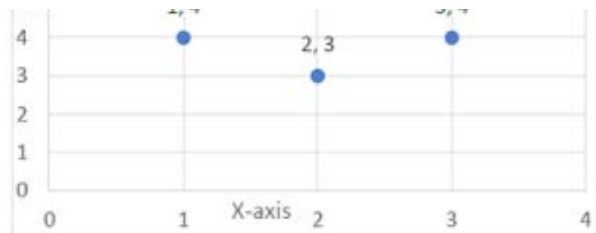


x- coordinate: how far a point is from the y-axis (horizontal distance)

x-coordinate: how far a point is from the x-axis (horizontal distance)

y-coordinate: how far a point is from the x-axis (vertical distance)

[Note that we always write the x-coordinate and then the y-coordinate (x=2, y=5)]



Equation: It is a rule that must be valid for all points that are positioned on a given line/curve.

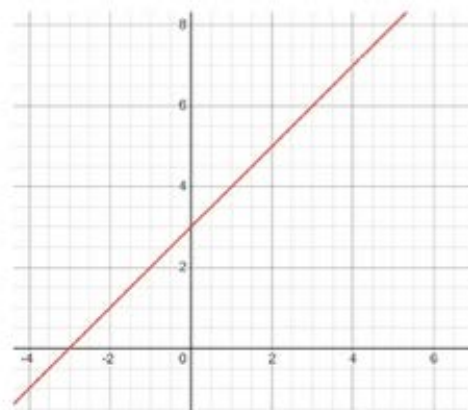
Slope

It measures how steep is the line. It is denoted by m . Slope is positive when the line is going up or in other words when y increases with x and slope is negative when the line is going down or when y decreases with x

Example: $y = x + 3$

x	y	(x,y)
1	$y=1+3 = 4$	(1,4)
2	$y=2+3 = 5$	(2,5)
3	$y = 3+3 = 6$	(3,3)
4	$y = 4+3 = 7$	(4,7)

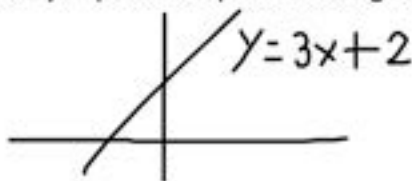
All points above are on the line and satisfy the equation of line. However, if you consider a point say (2,6) then it won't work with the equation. For $x = 2$, $y = 2+3 = 5$ which is not equal to y -coordinate of the point which is $y=6$. Therefore, this point (2,6) does not belong to this line.



Slope of line is a mathematical tool to measure the change in y with respect to the change in x . The formula can be used to determine the slopes between two points (x_1, y_1) and (x_2, y_2)

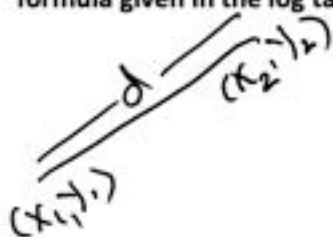
$$\text{Slope of line } (m) = \frac{\text{rise}}{\text{run}} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{\text{vertical change}}{\text{horizontal change}}$$

Coordinate geometry is very important topic. It links algebra [$y = 3x + 2$] and geometry.



Every point on the coordinate diagram has x-coordinate and y-coordinate. This can be written as (x, y) where x always comes first before y.

You might be asked to find the distance between two points provided the coordinates of the points (x_1, y_1) and (x_2, y_2) are given to you. If this is the case then, we can use the distance formula given in the log tables.



$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

Slope: It measures how steep is the line. It is denoted by m . Slope is positive when the line is going up or in other words when y increases with x and slope is negative when the line is going down or when y decreases with x .

There are two special cases:

(1) Parallel Lines (slopes must be equal i.e. $m_1 = m_2$)

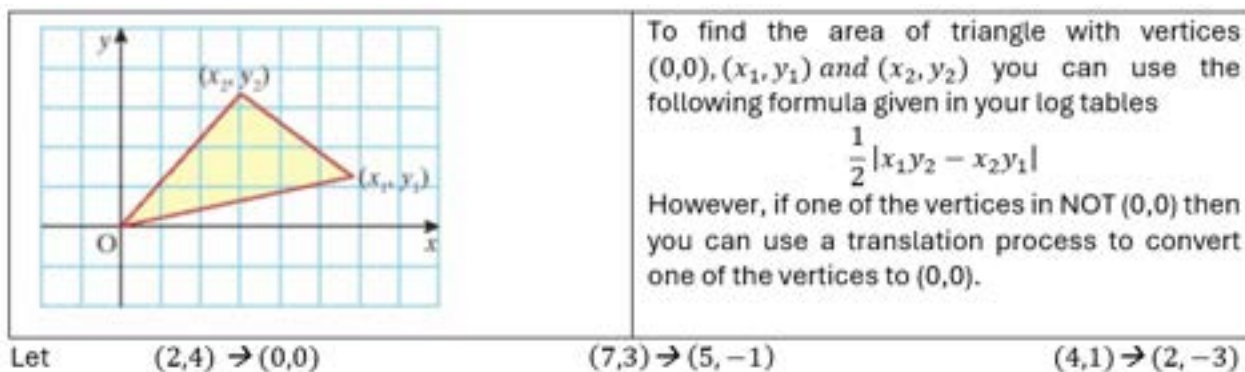
(2) Perpendicular Lines ($m_1 = -\frac{1}{m_2}$)



It measures how steep is the line. It is denoted by m . Slope is positive when the line is going up or in other words when y increases with x and slope is negative when the line is going down or when y decreases with x

Points of intersection between two functions/ graphs/equations

This is one of the most important concepts in math. To find the points of intersection between two lines or one line and circle or one line and one quadratic curve, we solve equations of two functions. This is something you have learned in algebra. For example, to solve two linear equations in two variables x and y we use elimination method. Similarly, to solve one linear and one quadratic we use substitution method. The values of x and y represents the x and y -coordinates of the points of the intersection in coordinate geometry. Furthermore, the same concept and method can be used to find the point of contact between the circle and the tangent provided their equations are given.



The Equation of Circle

Again, there are two formulae representing equation of circle like we discussed in LINE.

$$(x-h)^2 + (y-k)^2 = r^2$$

This formula can be used to find the equation of circle when centre (h,k) and radius is given in the question.

$$x^2 + y^2 + 2gx + 2fy + c = 0$$

This formula can be used to find the equation of circle when centre (h,k) and radius is given in the question.

$$\text{centre } (-g, -f)$$

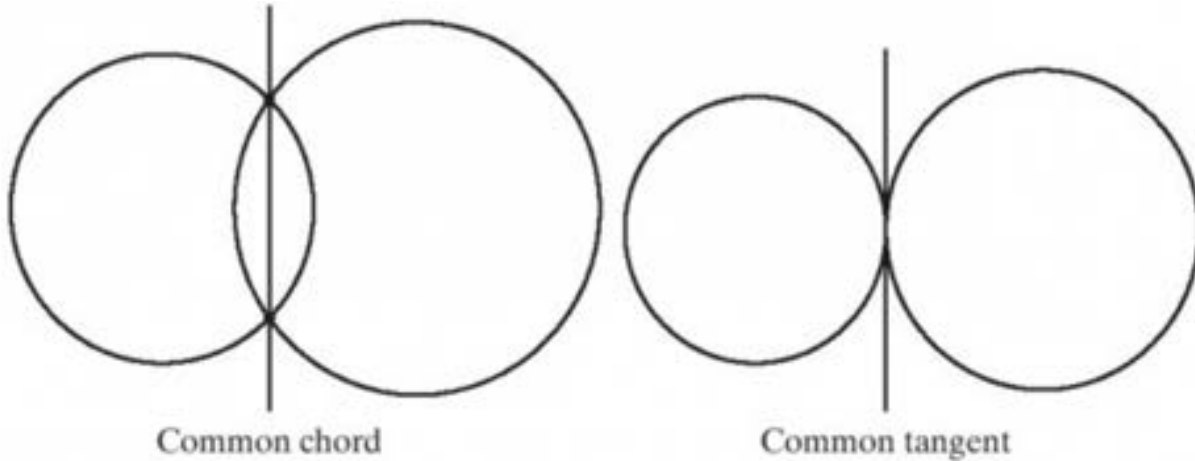
$$\text{radius} = \sqrt{g^2 + f^2 - c}$$

There is an exception when the second formula can be used to find the equation of circle. It is when some points are given on circle. We can use these points to form equations g , f and c . After solving these simultaneous equations, we can get the values of g , f and c and hence the equation of circle.

Important properties of circle to solve harder problems:

- The radius of circle is equal to the perpendicular distance between the centre of the circle and the tangent. Hence, you can use perpendicular distance formula given in the log tables.
- Distance between the radius of circle and the point of contact is equal to the radius of the circle. Hence, you can apply distance formula between two points.
- Radius of circle is perpendicular to the tangent at the point of contact. Hence, you can apply perpendicular slopes condition $m_1 \times m_2 = -1$.
- If circle is touching the x -axis, then we can equate radius and the y -coordinate of the centre
- If circle is touching the y -axis, then we can equate radius and the x -coordinate of the centre
- If circle is touching both the axes then we can equate all radius, the x -coordinate, and the y -coordinate of the centre
- Two circles touching internally or externally. If they touch internally then distance between their centres $|c_1 c_2| = |r_1 - r_2|$ and if they touch externally $|c_1 c_2| = |r_1 + r_2|$

Equation of the Common Chord/Tangent



When two circles intersect each other, it results in two points of intersection. The line connecting these points is called the common chord. If two circles touch at one point, then it is called the common tangent. To get the equation of the common chord or tangent you can subtract the equations of the circle i.e. $S_1 - S_2 = 0$

Find the equation of the common chord of the two circles

$$x^2 + y^2 - 6x + 2y + 4 = 0 \quad \text{and} \quad x^2 + y^2 + 2x - 4y - 6 = 0.$$

The equation of the common chord is

$$\begin{aligned} x^2 + y^2 - 6x + 2y + 4 - (x^2 + y^2 + 2x - 4y - 6) &= 0 \\ \Rightarrow x^2 + y^2 - 6x + 2y + 4 - x^2 - y^2 - 2x + 4y + 6 &= 0 \\ \Rightarrow -8x + 6y + 10 &= 0 \end{aligned}$$

Complex Numbers

- How to add, subtract, multiply and divide two complex numbers
- How to find the conjugate and modulus of complex numbers
- How to solve a quadratic equation with complex roots
- How to plot a complex number on Argand diagram
- What is a conjugate root theorem
- How to apply DeMoivre's theorem
- How to write a general solution of complex number to find multiple solutions
- How complex number rotates on argand diagram if you multiple by i, i^2, i^3, i^4

MATHS

ORDINARY LEVEL

The Leaving Cert Math Exam Layout

The Leaving Certificate Mathematics exam is structured into two papers, each containing two sections. Paper 1 and Paper 2 both have a 'Concepts and Skills' section with six questions, of which students must answer any four. They also have a 'Contexts and Applications' section with four questions, where students are required to answer any two. Paper 1 covers topics such as Number Systems, Irrational Numbers, Complex Numbers, Induction Limits, Patterns, Sequence and Series, Indices (and Logs), Arithmetic (Financial Maths), Algebra, Functions, and Calculus. Paper 2, on the other hand, delves into Probability & Statistics, Geometry & Trigonometry, and Length, Area and Volume. It's noteworthy that some elements may appear in either paper. For instance, Area and Volume could form part of a question in Paper 1 or a question from calculus which may require you to use concepts from trigonometry, coordinate geometry and algebra. Similarly, a question from statistics may include probability and a question from financial math can include concepts from sequences.

Common Mistakes by Students

In the Leaving Certificate Mathematics exam, students often fall into the trap of misconceptions about the grading system, mistakenly believing that scores below 40% are considered a failure. This is not the case with the updated grading system. Other common errors include omitting necessary supporting work in their solutions, failing to use the correct units of measurement, and not simplifying their answers where required. Algebra is a subject area where errors are frequently seen. Additionally, students often lack awareness of what is expected of them in the exam for topics covered in both papers. To steer clear of these pitfalls, it's crucial for students to understand the structure of the exam, practice problems extensively, always include necessary work and units in their responses, and be mindful of common errors in areas like Algebra.

Study Tips

1. Create a Study Schedule: Plan your study time in advance and stick to the schedule. Break down your subjects into topics and allocate time for each topic.
2. Understand the Exam Format: Familiarize yourself with the structure of the exam and the marking scheme. This will help you understand what the examiners are looking for.
3. Practice Past Papers: Past papers are a great resource for revision. They help you understand the type of questions asked and improve your time management skills.
4. Take Regular Breaks: Studying for long hours without breaks can lead to burnout. Take short breaks every hour to relax and refresh your mind.
5. Stay Healthy: Eat a balanced diet, get regular exercise, and ensure you get enough sleep. Your physical health has a big impact on your ability to study effectively.

6. **Revise Actively:** Don't just read your notes. Use active revision techniques like flashcards, mind maps, and teaching others.

7. **Seek Help if Needed:** If you're struggling with a topic, don't hesitate to ask for help. You can ask your teachers, classmates, or look for resources online.

8. **Stay Positive:** A positive mindset can improve your productivity and reduce stress. Believe in your abilities and visualize your success. Remember, the key to doing well in exams is consistent effort and effective revision strategies.

Effective Memory Techniques

1. **Chunking:** This involves breaking down complex information into smaller, manageable chunks. It's particularly useful when trying to solve word problems.

2. **Repetition:** This involves reviewing information repeatedly until it's committed to memory. Spaced repetition, where you review information at increasing intervals over time, is particularly effective.

3. **Visualization:** This involves mentally picturing an image or scene related to the information you're trying to remember. The more vivid the image, the more likely you are to remember the information.

5. **Association:** This involves linking the information you're trying to remember with something you already know. The association can be a thought, story, image, sound, or feeling.

6. **Self-Testing:** Regularly testing your knowledge can improve your ability to recall information. You can use flashcards, practice tests, or online quizzes for this purpose.

7. **1-pager:** It is important to create 1 page document for each topic highlighting important concepts, key problem-solving techniques, and examples.

Algebra

What is Algebra?

Algebra is a study of unknown values and variables (that is not constant). On the other hand, algebraic equations help us determine these unknown values in any mathematical problem.

Why do we study Algebra and where it is applied in real-life?

Life is full of randomness. We cannot control the world around us, but we can manage it with better decisions. This requires a problem-solving mindset. There are many real-life examples where we need to analyse unknown values and variables such as creating a budget, planning for holidays, shopping, managing time, constructing house, fuel prices, applying for loan, or planning for retirement. These are some notable

How to solve a linear Equation in one variable?

Step-1: Simplify i.e., remove any brackets, get rid of fractions, or add like terms.

Step-2: Get x on one side (usually left).

Step-3: Get numbers onto other side.

Step-4: Divide by number (if any) in front of x to solve.

Example:

$$2(2x - 4) = 12 - 3(2x - 1)$$

$$4x - 8 = 12 - 6x + 3 \text{ [Step 3]}$$

$$4x + 6x = 12 + 3 + 8 \text{ [Step - 2]}$$

$$10x = 23 \text{ [Step - 3]}$$

[Note: "10x" means 10 times x (multiplication) because there is no sign between 10 and x. Thus, it is multiplication by default.]

$$x = \frac{23}{10} \text{ [Step 4]}$$

$$x = 2.3 \text{ [Solution]}$$

FRENCH

Timing and tips:

- **Successful candidates** remain very aware of time and timing throughout an exam paper.
- Aim to arrive at 9am to give yourself time to relax, get organised and concentrate ahead of the start.
- Every exam is a performance, and you must try to be at your best and maintain a positive attitude.
- Remember that this is your opportunity to showcase what you know.
- Take 2 minutes to look through the whole paper.
- Immediately write down the times at which you expect to be finished with each task.
- **Be strategic** and complete each section of the exam with as much precision as possible, rather than rush it and go back to look for mistakes which you could have avoided. H1 students make very few mistakes.
- Should you decide to write the Opinion Piece ahead of attempting the second Reading Comprehension, adjust your plan accordingly.
- If you need a little more time for your Opinion Piece, take it and deduct it from the Reading Comprehensions or the shorter piece of writing.
- Under no circumstances leave the exam early - the Listening is to follow in any case, so use every minute to your advantage, checking and rechecking your answers, and examine your grammar, if you finish early. Try to look at it with fresh eyes and objectively.

First Reading Comprehension

12 x 5 Marks (60)

How to approach the First Reading Comprehension:

Step 1

- Read the title and subtitle carefully and translate it.
- Do not panic if you cannot translate every word, look for key words.

Step 2

- Read Question 6, which should inform you largely what the text is about.

Step 3

- Look at the 2 options (Q1 a or b) you have for Opinion Piece and decide which one you prefer.
- Do not treat the creative writing option (Q1 c) as an Opinion Piece.
- The Opinion Piece is linked to the First Reading Comprehension and so you will be reading about an issue or debate or situation you are going to write about. Use that to your advantage.

Step 4

- Translate Q1-Q5 accurately, especially using the correct tense when you do.
- Answer the questions.

Tips for the First Reading Comprehension:

- Be aware that the First Reading Comprehension is journalistic, i.e. produced by a journalist.
- Look at the reference, bottom right hand corner, e.g. 'Adapté de Aujourd'hui en France, le 14 août 2022' as it may inform you.
- When answering the questions, do not jump to conclusions, i.e. you see the same word in the text as in the question and assume that must be the answer.
- When you find the answer, ask yourself the question again and read your answer, checking that they are the perfect match. This is key.
- The space given to write your answer will suffice, so think again if you need more space!
- Manipulate your answer, so that it makes sense, for example if the question asks, 'What did Pierre do?', do not answer, «Je suis descendu en bas», but «Il est descendu en bas».
- Be aware that the questions are challenging in terms of word order or wordiness and are deliberately complex, for example, «Qu'est-ce que, Pierre, a-t-il fait?» which just means 'What did Pierre do?'
- If you are struggling to unravel a question, identify the subject of the verb, which may be repeated as in the example above, «Pierre, a-t-il» or «Camille, a-t-elle» or «Pierre et Camille, ont-ils».
- Do not be put off by proper names or places e.g. La Citadelle à Arras - there is no need to translate a proper name, which can be easily identified because it uses capital letters regardless of its position in a sentence.
- Whereas you can scan the text for the answers to the other questions, you should read the whole section for the multiple choice question, so be prepared to do that.
- Q6 is an easy 10 marks but requires you to have understood the gist of the text. Write clearly and eloquently in good English in whole sentences, using the space provided for each of your 2 points.
- Do not give two answers when the question asks for one, which is often the case, e.g. 'describe one problem adolescents encounter when looking for student accommodation'.
- Use French guillemets « » when you are asked to quote an expression; 'une expression' or a sentence; 'une phrase'.
- Revise your grammar terms, and the formation of tenses carefully.
- Adverbs can be tricky to spot, examples of adverbs of frequency below:

toujours, souvent, bientôt, de temps en temps, généralement, quelquefois, parfois, jamais, rarement, tous les jours, encore, d'habitude, une fois, à la fois

Presentation is important, so be sure you have the answer before you start writing.

Opinion Piece

2 x 30 marks (60)

How to approach the Opinion Piece:

- Never lose sight of the question.
- Go back and reread the question each time you complete a paragraph.
- Like the Reading Comprehension, your answer must address the question.
- 30 marks for communication, i.e. addressing the question with a high level of textual coherence.
- 30 marks for language, i.e. making zero grammatical errors and using a high level of expression.

How to structure your Opinion Piece in paragraphs:

1. Your introduction.
2. Your main point.
3. Your counter point or supporting point.
4. Your personal point of view.
5. Your conclusion.

On average, this will occupy a whole page of your exam booklet - draft an outline at the back of your exam booklet if this works best for you.

Possible phrases to include at each step to produce an impressive Opinion Piece:

Introduction

Je suis tout à fait d'accord avec cette déclaration/les idées exprimées ici

Je suis totalement/complètement en désaccord avec cette déclaration/les idées exprimées ici

Je suis ni pour ni contre cette déclaration/les idées exprimées ici

C'est un sujet qui suscite de vifs débats

De quoi s'agit-il en effet?/La question qu'il faut alors se poser est de savoir si...

- Asking a question (and answering it) is an excellent way to progress your Opinion Piece at any stage.

Your main point

En premier lieu/Tout d'abord/Premièrement...

Nous vivons dans un monde où, qu'on le veuille (subjunctive of vouloir) ou non,...

C'est un thème brûlant de l'actualité/on ne peut pas nier que...

C'est choquant que cela puisse (subjunctive of pouvoir) arriver de nos jours

Personne n'a réussi à trouver une solution miracle

- Correct use of the subjunctive will contribute to a high mark.

Your counter or supporting point

De plus/deuxièmement/en outre or En revanche/néanmoins/d'autre part..

Un autre aspect du problème est que..

Il est aussi à noter que..

Comment inverser cette tendance?

Il incombe au gouvernement de...

Your personal point

Personnellement, je pense que/j'estime que.../De ma part, ce qui compte d'après moi, c'est que + subjonctif

Conclusion

Tout bien considéré,...

Je dirai donc pour conclure, qu'il faut avoir un équilibre entre...

Pour conclure/résumer/en fin de compte...

Presentation is important, as is accuracy and tone.

- The register for the Opinion Piece is formal, so do not adopt a chatty tone.
- Treat each individual sentence as a test of your knowledge and grammar. Check each sentence!
- Do not forget to use adverbs! ('Bring' at least 5 with you.)

Second Reading Comprehension

12 x 5 marks (60)**How to approach the Second Reading Comprehension:**

- Apply the same method as for the First Reading Comprehension
- Be aware that this is a literary extract and that the vocabulary and style of writing will be very different from the journalistic extract. Expect the unexpected.
- Look at the title in the bottom right corner of the text, as it may inform you

Journal Intime

2 x 20 marks (40) | 20 for Communication & 20 for Expression**How to approach Journal Intime:**

- The register for the Diary Entry is informal and it should entertain.
- Express outrage or joy in the first paragraph.
- Explain what has happened in the second paragraph.
- Sign off in the third paragraph.
- It should be around 3/4 or less of a page in your exam booklet.
- Use the following layout:

le 12 juin (no capital letter for June)

Cher journal,

...

Il faut que j'aille (subjonctif of aller) maintenant. Je suis totalement crevé(e).

Je vais dormir comme une souche!

Bonne nuit!/À demain!

Expressions to use:**If something terrible has happened:**

J'en ai vraiment marre!

Tous mes projets sont tombés à l'eau!

Quelle malchance!

Quel cauchemar!

Qu'est-ce c'est embêtant/énervant/pénible.

C'était la pire journée de ma vie!

Qui a dit que la vie est juste?

J'étais complètement affolé(e)/contrarié(e)/déçu(e)

Je n'en peux plus!

Quelle journée je viens de passer.

If something wonderful has happened:

Je suis aux anges!

Quelle bénédiction!

La vie me sourit.

Qu'est-ce que je suis content(e).

J'attends avec impatience que + subjonctif...

Quelle chance!

C'est/c'était la plus belle journée de ma vie!

Tu ne vas pas croire ce qui s'est passé!

Oh là là!

Imagine!

- You must address your Diary as 'tu'. Use plenty of exclamation marks!
- Show some flair but be disciplined about checking every sentence for grammatical error.

Essential Opinion Piece Phrases:

À mon avis - In my opinion

Il est évident que... - It is obvious that...

Je suis d'accord avec cette déclaration - I agree with this statement

Il faut reconnaître que... - It must be acknowledged that...

Cela me met en colère - That makes me angry

Useful Vocabulary:

L'environnement - The environment

Le chômage - Unemployment

Les sans-abris - Homeless people

L'égalité - Equality

La santé mentale - Mental health

L'intimidation - Bullying

3. Grammar Reminders

Subjunctive triggers: bien que, il faut que, pour que

Common irregular verbs: être, avoir, faire, aller

Si clauses:

- Si + présent -> futur

- Si + imparfait -> conditionnel

4. Sample Essay Connectors

Premièrement, deuxièmement - First, second

Cependant - However

En conclusion - In conclusion

Malgré cela - Despite that

Par conséquent - Therefore

6. Cultural Topics (if needed)

La laïcité - Secularism in France

Le système scolaire français - French school system

Les grèves en France - Strikes and protests

Les banlieues - Suburbs and social issues

Listening Paper

HL 80 marks OL 100 marks

How to approach the Listening Paper:

- You will have been concentrating on French for 2.5 hours when you do this paper.
- A combination of total focus whilst being relaxed is ideal when listening to the French.
- Do not write down answers immediately, unless you are 100% certain and can be quick.
- In the first play through, read the questions carefully, whilst listening, as they represent your best clues. If you are struggling with a question, try writing down the French words you hear, as this may help.
- The second play through is gapped, so that is the best time to write your answers.
- Use the third play through to confirm that your answer is correct and check that your answer makes
- Listen for tone and key words
- Don't panic on unknown words - get the gist
- Skim the questions before reading the text
- Check for "pièges" (traps) like false friends.

SPANISH

Higher Level - Written Paper Layout

Booklets (Marks/Time)	Sections	Sub-Sections			Marks	Time
Booklet (Pink) (English & Spanish) 220 marks 150 minutes	Reading Comprehension	A	Q.1. Long Passage (Choice)	(a) Prescribed Literature: <i>Diario de un naufrago</i>	50	30 minutes
				(b) Journalistic Text 1. Contents Q's – 2. Synonyms – 3. Translation – 4. Rewording		
		A	Q.2. (Answer both)	(a) Shorter Text	20	15 minutes
				(b) Shorter Text		
	Writing Production	B Longer Article	1. Synonyms – 2. Translation – 3. Synonyms – 4. Contents Q's			50 30 minutes
			5. Opinion Text ('Link Question')			50 35 minutes
		C	Q.1. (Choice)	(a) Dialogue construction	30	20 minutes
				(b) Formal Letter		
		C	Q.2. (Choice)	(a) Diary Entry	20	15 minutes
				(b) Note		

Higher Level - Aural/Listening Comprehension Paper Layout

Booklet (Pink) (English) 80 Marks 40 minutes	1.	Anuncio (Announcement)	it varies	40 minutes
	2.	Diálogo (dialogue)	it varies	
	3.	Diálogo (dialogue)	it varies	
	4.	Diálogo (dialogue) / Descriptivo (descriptive)	it varies	
	5.	Descriptivo (descriptive)	it varies	
	6.	El tiempo (weather)	it varies	
	7.	Una noticia (a piece of news)	it varies	

General pieces of advice:

- Always make your handwriting clearly readable.
- Even if unsure about your answers, all necessary questions must be attempted, as there is no negative marking.
- Write within the boxes provided, as their scanned version will be the only material available to the examiner.
- Just cross with a single line your undesired replies; if correct, their corresponding marks will be awarded to you.
- Revise the vocab and structures in the 5 Role Plays: they are usually reused in the other papers of the exam.

Topics: Most of them are generally originated in the Spanish-speaking world (more often in Spain) and can relate the same to Ireland or the English-speaking world at large; less commonly they are Irish topics expressed in Spanish: biographies/interviews, famous or controversial events, animals and the natural world, the world of work or business...

Recurrent Topics: the Way of St. James and the Spanish Festivals (the Wise Men parade, Carnival, las Fallas, Holy Week, April's Fair, Patios Festival, St. John's Bonfires, Moors & Christians Festivals, San Fermín –Bull Runs–, Tomato Fight...)

Common General Topics the exam as a whole uses: physical & personality description, family, daily routine, free time, college-studies, travelling-holidays, country-city, accommodation, furniture, household chores, food & healthy lifestyle, weather.

Basic Vocabulary used across all comprehension & production activities in the exam: countries, nationalities, languages, dates & times, days-months-seasons-festivities, buildings, professionals, feelings, human body, clothes, animals.

1. Contents Questions

(55 marks –out of 120– in the Reading C. Paper + all 80 marks in the Aural C. Paper.)

These questions are always presented following the order held in the text by the contents asked about.

They all inquire in English (to be answered in English) about what the written or aural text says (paragraph provided in the Journalistic Text only). Right answers should, then, mirror the actual message conveyed by the text; as, no matter how logical an answer may be, it'll be deemed wrong, if it does not reflect what the text says.

These questions may, and usually, have specifications in bold as to how many details you should provide to be awarded full marks. At times, the tag Give full details features as a way of alerting you that only the one detail will not be awarded full marks. In this case, just write as many relevant details as you may find in the text. To successfully reply to these questions, you should first identify in them the material that acts as the clue that will allow you to find the answer in the text.

These clues are worded as a translation into English –as literal as possible– of the actual Spanish wording used in the text. So, if you can translate the clue in the English question back into Spanish, you will likely recognize where the answer to that question features in the Spanish text. Hence, as a general answering technique, never read the full text; rather work your way from the questions to just the relevant material in the comprehension text.

1.1. Reading Comprehension Paper

Sections in the Reading C. Paper where content questions feature, plus their specific characteristics & instructions:

- Section A / Question 1b: Journalistic Text / Q. 1 (20 marks; usually 5 Q's; paragraph to find the answer provided): Answer the following questions in ENGLISH.
- Section A / Question 2: Short Passages (20 marks; 2-3 Q's per text; no paragraphs provided): Read the items (a) and (b) and answer in ENGLISH the accompanying questions.
- Section B / Q. 4 (15 marks; usually 3 Q's; no paragraphs provided): As a partial summary of the content of the article, write in ENGLISH (in the appropriate spaces) the information requested.

To answer these questions, you can always rely on the images accompanying the relevant text; given that what they represent is always faithful to the contents of the text they support. Also, any time you are asked what a specific person says or tells, the answer will likely be found in a passage next to their name, following one colon [:] and framed between inverted commas [“”] indicating direct speech; a literal quote of that person's declarations.

1.2. Aural Comprehension Paper

Every one of the 7 tracks offers its title in Spanish with an English translation. Also, it contains clear instructions as to how it will be played every one of the three times they all are played. Hence, do not rush to write your answers, rather use the first time just to try to understand as much as possible about the items you are asked about; you will have enough time during the second and third times to write your answers.

2. Reading Comprehension

Spanish Synonyms (32 –out of the 120 marks– in the Reading C. Paper)

The following are the sections where synonyms feature, plus their specific characteristics & instructions:

- Section A / Journalistic Text / Q. 2 (3 items; 12 marks; paragraph to find the synonym provided): Escribe en ESPAÑOL en los espacios correspondientes las palabras o frases del texto que tengan el mismo sentido (más o menos) que las siguientes:
- Section B / Longer Article / Q. 1 (5 items; 15 marks; paragraph to find the synonym provided): Escribe las palabras o frases del texto que sean equivalentes (más o menos) a las siguientes:
- Section B / Longer Article / Q. 3 (5 items; 5 marks; paragraph to find the synonym provided): Busca en el texto una palabra o frase que tenga el mismo sentido (más o menos) que las siguientes:

In all three instances you will be provided with a list of words/phrases having a similar meaning to other expressions used in the text you are reading, and that you are expected to identify (their paragraph always provided).

Successful identification –for which only full marks are awarded– should lead to the identified word or phrase in the text being perfectly replaced by the one provided in the comprehension question, without their swapping affecting the meaning and the accuracy of the relevant sentence in the text.

Obviously, it is important to know the meaning of the words/phrases you are provided with in the question. However, even if you know their meanings, isolated words sometimes do not give you complete information, as the same actual word may be used as different parts of speech, viz. as a noun or as a verb. For that reason, it is important to think not only 'meaning', but also 'form': can this word be more than just one part of speech? viz. can this word, for instance, be a noun apart from being a verb? The actual word used in the text (the one you are looking for) can be either an equivalent noun or an equivalent verb. So, if you can identify not only the meaning of the word provided, but you also can work out what part (or parts) of speech it may be, you can apply the following techniques to your search:

• **A noun** requires you to find another noun:

- o Synonymous nouns usually share the same number (singular or plural: los números = las cifras),
- o But not necessarily the same gender (masculine or feminine: el piso = la planta).
- o Also, there are nouns whose meaning is plural, but which have a singular form (i.e. la gente). In this case, the synonym you are looking for may not be only plural in meaning, but also in form (i.e. las personas).

• **An adjective** requires you to find another adjective:

- o In the same gender (masculine or feminine: bonita = bella) and number (singular or plural: ricos = sabrosos).
- o Please, remember that not all adjectives show agreement in their form: adjectives ending in -e, and many ending in a consonant, keep the same form for both genders. So, the synonym of a clearly masculine or feminine adjective may not show any gender agreement or vice versa (i.e. amplia = grande).

• **A verb** requires you to find another verb in the same form as the one you are provided with, but not necessarily belonging to the same conjugation (-ar, -er, -ir). This can be:

- o A non-conjugated form of the verb: infinitive (-ar, -er, -ir) or gerund (-ando, -iendo) or
- o A conjugated form, in whose case you will have to find another verb: in the same tense (Present, Past – Preterit, Present Perfect or Imperfect– Future, Conditional or Present Subjunctive) and grammatical person (I, you, s/he-it, we, you plural or they).

• **An adverb** requires you to find another adverb. However, adverbs may or may not be easily identified, as they present a variety of forms:

- o They can be in one single word (i.e. despacio, temprano...) or in an alternative phrase (i.e. pronto = con prontitud...).
 - o Modal Adverbs typically end in -mente, but also, their meaning can usually be expressed with these phrases: de manera/forma + (feminine) adjective or de modo + (masculine) adjective.
- Then, you may be presented with a one-word adverb, whereas the synonym in the text is a phrase, or viceversa (i.e. de manera/forma/modo sorprendente = sorprendentemente; por desgracia = desgraciadamente)

2.2 Translation into English

(27 –out of the 120 marks– in the Reading C. Paper)

The following are the sections where translations feature and their specific instructions:

- Section A / Journalistic Text / Q. 3 (3 items; 12 marks; paragraph to find the sentence provided): Explain in ENGLISH the meaning of the following in their context:
- Section B / Longer Article / Q. 2 (3 items; 15 marks; paragraph to find the sentence provided): Write in ENGLISH the meaning (in the context) of the following phrases:

In both sections, you will be presented with Spanish sentences/phrases extracted from the relevant text that you will be required to translate into English. However, the reference to in their / the context is intended to alert you about the following aspects:

When a word is polysemic (it has different, but related meanings) in order to translate that word into English you'll have to identify the intended meaning for that word in its specific text. In other words, even if for your translation you use an English word that appears in the dictionary for the relevant Spanish word, it will not be considered valid if it does not put across the sense of that word in the text being read. E.g. mañana must be translated either as tomorrow or as morning depending on the intention of the text.

- In many instances, Spanish verbs appear without any corresponding Subject Pronoun (yo, tú/usted, él/ella, nosotros/as, vosotros/as, ustedes & ellos/as) that you will need to add to your English translation (I, you, it, s/he, we & they). However, as the ending of the Spanish verbs will always indicate the required Subject Pronoun, the only cases when it may not be fully clear are:

- o When the verb provided is in the Third Person. In this case, you will have to refer to the wider text to find out if the Subject Pronoun should be s/he, it or you (for usted) in the singular, they or you (for ustedes) in the plural.

- o When the Third Person Subject is a **Collective Noun** (plural in meaning, but singular in form, like population). In that case, the Spanish verb will agree in the Third Person Singular, but usually the most common English translation would render the verb in plural. E.g. Si (la población laboral) no trabaja en el lugar en que ha nacido, lo hace en un pueblo o una ciudad cercana. [If (the working population) they don't work in the place where they were born, they do so –it in the Spanish text– in a nearby town or city.]

- Similar to the exception above, sometimes in Spanish the whole of the individuals making up a category maybe referred to in the singular, as that category is considered a single unit. In English, however, the equivalent expression usually takes the plural form. E.g. ... mejora la autoestima y la empatía con el otro... [... it improves self-esteem and empathy towards others...]

- Finally, **Spanish Possessives in the Third Person** (su or sus) do not reveal if the possessor is a man (his) or a woman (her) or not a person (its), or even if there are more than just one possessor (their). Again, you will have to refer to the wider text to find out who or what the possessor or possessors are.

So, please remember in all cases to refer to the wider text (paragraph numbers are always provided with the relevant phrase/sentence) to ensure that you take into consideration all the information available, not just the one present in the specific phrase/sentence that you are required to translate.

2.3. Rewording or Rephrasing in Spanish

(6 –out of the 120 marks– in the Reading C. Paper)

The following is the section where the rewording features and its specific instructions: Section A / Journalistic Text / Q. 4 (choice of 1 out of 2 phrases; paragraph to find the phrase provided): Explica (o expresa de otro modo) en ESPAÑOL una de las frases siguientes:

As an overall strategy, first you should try to produce an alternative wording in your own language that you can then translate into Spanish. In any case, these are two general approaches to achieve rewording/rephrasing:

- Say it the other way around: rephrase as a negation what is said as a statement or vice versa: los momentos difíciles = las situaciones que no son fáciles.

- Explain the key word: try to produce a phrase (or a full sentence) that explains the meaning of the main word in the expression to be reworded: expertos en nutrición = personas con conocimiento sobre alimentación.

Alternatively, you can try one (or several) of the following more specific techniques to be applied to different elements of the expression to rephrase:

- Use synonyms: keep the same structure for your phrase and just replace every word with a synonym:
expertos en nutrición = especialistas=profesionales en alimentación.
- Rewrite an impersonal expression into another one of the equivalent interchangeable constructions:
 - o The passive voice: fueron obligados [they were forced]
 - o The impersonal third person plural: los obligaron [they forced them]
 - o The impersonal se: se los obligó [One forced them]
- Rewrite adverbs into phrases and vice versa (see 1.2. Synonyms): preferiblemente no embotellada = de modo=manera=forma preferible no en botella.
- Rewrite adjectives into relative clauses and vice versa: the meaning of many adjectives can also be expressed in a clause (containing a conjugated verb) that explains it. In English those clauses usually start with one of these pronouns: which/that/who/where/when, whereas in Spanish most relative clauses just revolve around que/donde/cuando: preferiblemente no embotellada [non-bottled] = es preferible (agua) que no esté/venga en botella. This technique is especially appropriate for rephrasing -ante/-(i) ente adjectives: un avión procedente [coming from] de los Países Bajos = un vuelo que procede/viene de Holanda.
- Rewrite a noun as lo + (masculine singular) adjective, which translates into English as what is + adjective: expertos en salud [health] = especialistas en lo sano ['what is healthy'].

3. Writing Production (in Spanish)

Opinion Text (1 text –out of 3 statements derived from the longer article in Section B–; wordcount 80-150; 50 marks, half allocated to language, half to content.)

- **Topic:** Address the title/issue; be sure you include every aspect of the title in your text; It is OK to expand on each point / develop your ideas, but they must relate to the topic (don't go off the point).
- **Content-Coherence-Accuracy:** Good planning before writing (in your language if necessary) will help write a good text (and avoid waffling): brainstorm vocabulary & ideas and organise them logically. You may: refer to the title after each paragraph (i.e., consolidate your point) but avoid repeating it; give examples as to why you are taking your stance or use personal experience (but stay on topic). Don't copy out any of the text from the paper (although you may borrow its vocab for your own sentences). Use: link-up words/phrases (to help flow of ideas); synonyms (to avoid repetition); idioms (if appropriate). Watch that quantity does not take away from quality. Better to use correct simpler language than misuse of more complex language/tenses.
- **Layout:** Aim to have 5 paragraphs (do not amalgamate the first point & the introduction).
 - o Introductory Paragraph: Say whether you agree/disagree with the statement given (estoy de acuerdo / en desacuerdo con la afirmación propuesta) or whether there is not a single valid answer (no hay una sola respuesta válida); also include one sentence on what you will talk about or justifying your stance.
 - o Paragraphs 2-4: Each paragraph should have a separate argument/idea. You may present an idea as your opinion (pienso/creo que...), a hypothesis (es posible que...) or universally true (es cierto/verdad/fácil ver que...). Also, you may attack or criticise an idea (es lamentable que + subjunctive = it's regrettable that...).
 - o Conclusion Paragraph: no new points, but you could include a solution if the title was a problem. Sum up the ideas you made or rephrase your original sentence justifying your stance (como /a modo de conclusión y resumen de lo dicho... = as a conclusion / way of concluding and as a summary of what was said...).

• **Link-up words/phrases:**

o Showing the logic connecting sentences: pero (but), sin embargo (however); además (in addition), tanto... como... (both, ... & ...); para (in order to); aunque (although); porque (because), como (as), debido a que (due to); por eso (that is why), así que (so), por (lo) tanto (therefore), como resultado (as a result).

o Signposting the different contents in the text: para empezar/concluir (to start/conclude); primero/segundo (firstly/secondly), en último lugar (finally); en cuanto a (regarding); por un lado/otro lado (on the one hand/other hand); es decir (that is to say); de hecho (in fact).

3.2. Dialogue Construction or Formal Letter/Email

(5 points to make out x 6 marks = 30 marks)

- Most of the time you are told exactly what to say. Hence, it is almost a translation exercise, and it is very important to be accurate, particularly with your tenses (Present, Past, Future, Conditional, Subjunctive & Imperative) and grammar (but also with your vocabulary).
- Common situations: you have either just arrived or you are already working/studying in Spain.
- Common tasks: introducing yourself, greeting/thanking, locating, expressing what you are feeling or feel like doing, suggesting actions, requesting information, describing what you do or are going to do, explaining what you've been doing or would like to do, establishing conditions for something to happen.
- Recurrent Expressions: (not) to get on with somebody, to have a good/bad time, to really want to do something, (not) to realize something, to spend or have spent time doing something, to have done something so long ago.

Formal Letter/Email (Do any 5 out of the 8 possible points.)

This is not just a translation exercise; you are expected to develop the points.

- The use of formal language (usted/ustedes) is necessary. E.g. En su artículo, dice(n) usted(es) que... = In your article, you say that...; Le(s) informo que... = I inform you that...
- Include a date, your address & your addressee's. Your greeting (closed with a colon) must be formal (Muy Sr. mío / Sra. mía or Estimado/a Sr./Sra.). Finally, say goodbye (Le saluda atentamente,) and sign* your text.

Diary Entry or Note (Complete any 4 –out of 5 points– x 5 marks = 20 marks)

To get full marks it is essential to complete all four points & to accurately use the tenses required: Present, Past, Future, Conditional, Subjunctive (& Imperative for the Note). The first (I, we) and the third persons (s/he, they) are the most common ones; just in the Note you will find the second person (you) required too.

- Include at least a date (but also a time for the Note). Your greeting (closed with a colon) will always be for the Diary Entry: Querido/Hola diario; and for the Note: Hola + the name or position (parent, colleague, boss...) of the person or people you are writing to. Finally, say goodbye and sign* your text.
 - Specific tasks required in the Note: locating people/things; inviting/proposing; requesting or telling somebody to perform an action (Subjunctive or Imperative).
- * Always be mindful of keeping the gender agreement between the name used to sign your letters and any adjectives used in those texts to qualify their writer (signer). E.g. me siento obligado/a (John/Mary).

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CHEMISTRY

Exam Details:

- The exam consists of 11 questions of which you must answer 8.
- Each question is worth 50 marks giving a total of 400 marks.
- Each point of information is worth 3 marks so 16 to 17 points of information will be required.
- For a full question $16 \times 3 = 48$ and $17 \times 3 = 51$ so some points will be given 4 marks, or some will be given 2 marks to make the total add up to 50. Work on the assumption that each point of information is worth 3 marks and you will not go wrong.
- If you are asked to describe a process e.g., how to use a burette you will need to look at the marks given and divide by three to get the number of points required. You will usually need just over half the points given in your notes to get full marks.

Drawing Graphs:

Students throw marks away hand over fist when drawing graphs. Make sure you do the following:

- Use graph paper (unless you are asked to sketch a graph e.g., reaction profile diagram) or you may have marks removed.
- Label each axis clearly with what it is measuring, and the units used e.g., Concentration (M) or time (s) or Temperature o C.
- Scale your graph to be as big as possible this will make it more accurate. There is usually a range of acceptable answers to allow for variations in drawing skills.
- Put the variable that you control on the x-axis (usually Time, pH, Temperature or concentration).
- Use a pencil for everything on the graph. It is easy to correct mistakes. HB is best.
- Mark points accurately with a dot (not a blob) or a cross.
- Draw the line of best fit. If it is a curve, do it freehand do not draw from point to point using a ruler but if it is a straight line use a ruler.
- Do not extrapolate (go beyond the information given) unless you are justified.

E.g., when drawing a graph if the concentration of the reactant is 0 then the rate of the reaction will be zero, even though you were not given this. The graph should start at 0,0.

If you don't put in this point, you will lose marks.

However, if it is temperature on the x-axis then you cannot go beyond the data given as the reaction will be continuing at a slower rate, but you do not know what it is.

- Practice drawing tangents and calculating the slope of the line using past paper questions.

There are two Sections: A and B

Section A: consists of questions 1,2 and 3 dealing with mandatory practical experiments.

You can do all three and this can be a good strategy. Practical work can make up 38% or more as the other questions also contain practical work.

Section B: consists of eight questions from question 4 to question 11.

Each question and the topic(s) covered are listed below.

Question 1

- Deals with **Titration also called Volumetric Analysis.**
- There are three areas covered each worth about 1/3 of the marks.

A. How to use the equipment involved. This is common to all titrations so only needs to be learned once. Burette, pipette, conical flask and volumetric flask. When you talk about water **always say deionised water.**

B. The indicator used and its colour change. You should always mention the starting colour and the final colour. Do not use the word clear for colourless. Whiskey is clear but not colourless water is both clear and colourless. Colourless is always the word to use. You will always be asked about **any special conditions** in this part. E.g. Read KMnO_4 from the top of the meniscus or why when is sulphuric acid added.

C. The final part of the question is the calculation. Practice is the key here.

- Look out for dilution of the solution at the start and don't forget to multiply your answer by the dilution factor.

- You will be asked to change the **molarity to concentration in g l⁻¹**. This easy just **multiply the molarity by the relative molecular mass**.
- You will also be asked to **express the concentration as a % (w/v)**. This is also easy as you simply **divide the molarity by 10**.
- To **calculate the number of moles in a volume of solution**. **Moles = volume/1000 x molarity**

Question 2

Deals with the **organic experiments**.

- Nowadays questions frequently deal with more than one experiment. E.g., you will be asked about ethene and ethyne. Once again practice is the key. Diagrams will probably be required so practice them. Only use two-dimension drawings.

Question 3

- Deals with all the other experiments not covered in questions 1 and 2.
- **Identifying anions and cations**
- **Rates of reactions. There are 3. This will probably involve drawing a graph.**
- **Thermochemistry – Calculate delta H and possibly heat of reaction**
- **Redox reactions - Halogens and electrolysis**
- **Recrystallisation and purity**
- **Water**

Question 4

- This is made up of 11 short questions and you are required to answer eight parts.
- You should **attempt all parts**, (even if it is just a guess) as the best eight marks will be taken.
- This is the only question where you can answer some parts of the question wrongly and still score full marks.
- Topics come from any part of the syllabus. Common examples that come up regularly:

Famous scientists; shapes of molecules; number of protons, neutrons and electrons in atoms or ions; s, p, d, f configuration of atoms and ions; conjugate acid-base pairs; identifying anions or cations; definitions; name or give the formula of an organic compound.

- The way to prepare for this is to do question 4 and mark them yourself

Question 5

- Deals with **periodic table, atomic structure and bonding**.
- Make sure you know about **ionisation energies, atomic radius and electronegativities** and their **trends across periods and down groups and the reasons for the trends**. These are asked frequently as they are quite similar and so are easily confused by students who have not learned them properly. Asked a lot because people get confused due to not learning them fully.

Question 6

- Deals with **Fuels (alkanes, alkenes and alkynes) and thermochemistry**

- Fuels includes **fractional distillation** and factors that influence **octane number** and how to improve octane number.
- The final part of the question deals with **Hess's Law**, usually a **calculation** where you are given the heats of combustion or formation and asked to calculate the heat of another reaction. You must be able to write the equations for heats of combustion and formation.

You might also be asked about the heat change when NaOH reacts with HCl.

- If this is asked the **number of moles used = volume/1000 x molarity of the solution.**
- The **mass of the solution = the total volume written as grams.**

The numbers of the next three questions may vary from those I am giving.

Question 7

- Deals with **Environmental chemistry (water and sewage treatment, hardness in water, its causes and removal, Acids and bases and pH.)**
- There will be a **pH calculation** and possibly a graph of a titration curve.

Question 8

- Deals with **Organic Theory**
- You will frequently be given a flow chart and asked what reagents and conditions are used to convert one compound to another or name the type of reaction. You can be asked to name compounds, what homologous series they belong to and draw their structures. Isomers are often asked as well. **Aldehydes and ketones are isomers of each other.**
- You will be asked to **give a reaction mechanism and proofs.**

Question 9

- Deals with **Le Chatelier's principle and Equilibrium**

You will be asked:

- definitions** and about the **effect changing a condition** will result in.
- to write the **equilibrium constant expression** for a given reaction.
- to **calculate the equilibrium constant** given amounts of one or more compounds
- to **calculate the amounts of compounds given the equilibrium constant**
- use the **quadratic equation. Watch out for the double negative** when calculating the value.

Questions 10 and 11

- Each has several parts from which **you must do two**. Each part is worth 25 marks. You can do more, and you will be given the two best marks.

Topics here are drawn from all parts of the syllabus and common topics include:

- Stoichiometry**
- Radioactivity**
- Mass spectrometer**
- Organic chemistry**

- The final part of question 11 deals with the **Options – Industrial and atmospheric chemistry**
- Make sure you **know the equations dealing with ozone layer.**

Calculations

Make sure your calculator is in good condition and that you can use it. Even bring a spare one.

Always show how you calculate every molecular mass Mr.

$$\text{E.g., } \text{CaCO}_3 = 40 + 12 + (16 \times 3) = 100.$$

If you use an incorrect value without showing how you worked it out, you will lose 3 marks.

if you show your calculation and get the wrong answer you will only lose 1 mark.

Sequential marking applies i.e. rest of your calculation will be marked correct if you use the correct method using your incorrectly value.

There are usually quite a few molecular masses to be calculated each year.

- **Give calculation answers to either two places of decimals or two significant figures whichever is thmore accurate. Each time you use incorrect rounding off you will lose a mark.**

Other Points of Note

- If you are to get an H1 then you can essentially only make one mistake per question or omit one part of the question.
- **RTFQ (Read The Full Question)** carefully and answer the question asked (not the one you would like to have been asked).
- The **language used** in the questions is purposely convoluted so read it very slowly and carefully.
- **Do not rewrite the question** in your answer. This wastes valuable time.
- **If you are asked to name a compound but write the formula, you may not get the (full) marks** for your answer.
- **Not all parts of a question are numbered** so my advice is to draw a vertical line after each part of the question and wherever there is an 'and' in the question. Then tick it once you have answered.
- **Length of answer.** Each point of information is worth 3 marks so if a question is worth 12 marks it requires 4 points of information. If a question is worth 3 marks don't write an essay.
- **Compare** means say something about both things.
- **Chemical equations** are usually worth 6 marks, with 3 marks for the correct symbols and 3 for correct balancing. Remember if a symbol has two letters the first is capital and the second is small.

Getting the marker on your side.

- Start each new question on a fresh page.
- Number your answers clearly and carefully.
- Write neatly and legibly.
- There will always one or two places on the answer script where the marker is finding it difficult to decide if your answer is correct or wrong. If the marker is frustrated by a messy paper, they are more likely to come down on the wrong side (as far as you are concerned).

Should I do an Extra Question?

- **The inspector advises against it, suggesting it is better to spend time checking your answers.**

My advice is, if you have answered your eight questions:

- **Go back over the questions and check your answers carefully** making sure you have,
- **not missed out any parts of the question.**
- **answered the question asked.**
- If you have done this and still have time left, you should attempt to answer another question. Remember the marks for your best eight answers will be taken.

How long should my answer be?

- Each point of information is worth 3 marks.
- If a question is worth 12 marks, then it will require four points of information.
- Do not write a paragraph for 3 marks.

What is the best way to Study and Learn?

- **Pick one topic** so that you can see progress.
- **Definitions** start by learning these, as they are important. Learn them from the list you have been given. In chemistry the markers are very particular about the wording so be precise in your learning. Use the ones on the list I have given in your manual.
- **Use flashcards.** You can learn these at odd times such as on your way to school. There are Apps such as Quizlet that you can put on your smartphone. Worth at least 15% in the exam.
- **Study buddy.** Learn with a friend and teach a topic to each other. When you teach your brain works differently and things are easier to remember.
- Write notes as this creates neural pathways in your brain and makes recall easier.
- **Do questions from past papers.** Pick a question and write your answers. Then correct it using the marking scheme. Cross out any wrong answer and replace it with the correct one. Many studies have shown **this is by far the best way to revise and prepare for the exam.**

BIOLOGY

Exam Tips:

- Knowing and understanding the exam layout can greatly improve your performance in the exam compared to those who just learn the material.
- **Spelling is generally not important** provided it is clear what you are trying to say.
- **Exceptions** are **ureter and urethra; adenine and adenosine; log and lag as well as the names of chemicals e.g., hypochlorite.**
- Certain topics carry more weight in the exam. Knowing what these topics are means you can concentrate your efforts to achieve maximum results.
- There is a huge choice in the exam so the advice on topics in these notes should ensure you get a good grade provide you follow it.

Syllabus has 3 Units:

Unit 1	Unit 2	Unit 3
Characteristic of Life	Cell Structure, Function & Division	Microbiology
Scientific Method	Photosynthesis	Human Reproductive System
Food and Biomolecules	Respiration	Excretion and Homeostasis
Ecology	Enzymes	Blood and Defence Systems
	DNA, Genetics, Evolution	Breathing System
	Osmosis	Musculoskeletal System
		Digestive System
		Nervous, Endocrine system & Sense Organs
		Plant structure and function
		Plant Responses
		Plant Reproduction

Unit one:

Two questions in section A (40 marks) + one question in Section B (30 marks) + one question from section C (60 Marks). The 60-mark question is on ecology.

This gives a total of **130 marks or 33%** of the marks in the exam.

If you add the second question in section B (30 Marks), this gives a total of **160 marks or 40%**. (This is generally regarded as 'a pass'.)

Unit Two:

- There is always a full question on biochemistry which is often a combination of two out of photosynthesis, respiration and enzymes.
- There is always a full question on DNA, genetics and evolution.

Unit Three:

- Microbiology is frequently a full question. There can also be a question on microbiology in Section A and in Section B, so this topic can account for up to 110 marks in an exam (28%). It is a relatively short topic so well worth learning.
- Excretion and homeostasis or a combination of both are frequently a full question (15%)

When you have received your paper

- Answer Section A and Section B following the guidelines below and then read through the questions in Section C. As you read through each question write beside it what fraction of it you think you can answer i.e. 1, $\frac{3}{4}$, $\frac{1}{2}$, or $\frac{1}{4}$. Then start answering those with 1 beside them followed by those with $\frac{3}{4}$ etc.
- Read the question again carefully and slowly and draw a vertical line at the end of each question within the question. Remember an 'and' means this is two questions within one, so put a vertical line through the 'and'. When you have answered each part mark it with a tick.
- Be as neat and tidy as possible. This will make the examiners job easier and put them in a good mood. If they are in a good mood, so they will be more likely to give you a mark when it is difficult to decide if your wording of the answer is correct.
- Begin each new question on a fresh page.
- Leave a gap between each part of the question.
- Number your parts carefully and clearly.
- It is best to draw diagrams on the lined pages.
 - These should be simple line diagrams.
 - There are no marks for artistic merit. Drawing artistic diagrams wastes valuable time.
 - Diagrams are given 6,3 or 0 marks. If all major parts are there then it gets 6 marks. If one major part is missing it gets 3 marks and if two major parts are missing it gets 0 marks.
 - Label the diagram as fully as possible. Incorrect labels are ignored.

Time is valuable so knowing how much time to allocate to each question will improve your result.

Section A: Answer any five questions out of seven

This section must have two questions from Unit 1 of the syllabus, two questions from Unit two and two questions from Unit 3.

Time allocation: 30 mins

The instruction says answer five questions out of seven. **Ignore this instruction.**

Answer all parts of all questions even if your answer is only a guess.

The space allocated for the answer is sufficient for a person with 'normal size' writing to answer it.

Because of the way the marks are allocated in the marking schemes, sometimes it means that getting two answers correct in a question can get you 85% of the marks for that question. A blank automatically gets 0, if you make a guess and it is correct then you get the mark. In a section A questions one correct guess can add 2.25% to your final mark.

N.B. in Section A questions if you give an extra answer and it is incorrect then it will cancel a correct answer, only give the required number of answers to each part of the questions. This does not generally apply to the other sections unless it is a one-word answer.

Section B: Answer any two questions out of three

Time allocation: 30 mins (maximum of 15 minutes per question)

Learn the experiments covered in 2 questions at least.

Attempt all 3 questions if you have time as you will get the best two marks from your answers.

Below is a list of topics covered in each of questions 8, 9 and 10.

Question 8

Unit 1: Food and biomolecules, Ecology, Scientific Method plus units 2.1 and 2.5

- A. Food tests: for the presence of starch, reducing sugar, protein, and lipid (fat or oil)
- B. Measuring three abiotic factors.
- C. Adaptations of plants and animals.
- D. Identify 5 plants and animals using a key.
- E. Construct food chain and food web (from your habitat). Also pyramids of numbers.
- F. Estimating plant or sessile (non-moving) animal population (using a quadrat).
- G. Measuring a motile (moving) animal population (mark and recapture)
- H. Use the light microscope. Prepare and examine one animal cell and one plant cell (E.g., cheek cells, onion cells, unstained and stained, using the light microscope (x100, x400))
- I. Isolate DNA from a plant tissue.

Question 9

Sub-unit 2.2 Enzymes, Photosynthesis, Ethanol production and Osmosis

- A. Investigate the effect of pH on the rate of one of the following: catalase activity. in enzyme experiments make sure you know the enzyme, its substrate and its product, catalase, hydrogen peroxide and oxygen respectively.
- B. Investigate the effect of temperature on the rate of one of the following: catalase activity.
- C. Prepare one enzyme immobilisation and examine its application (show it working).
- D. Investigate the influence of light intensity (or carbon dioxide) on the rate of photosynthesis.
- E. Prepare and show the production of alcohol by yeast.

- F. Investigate the effect of heat denaturation on the activity of one enzyme.
- G. Conduct any activity to demonstrate osmosis.

Question 10

Questions on Unit 3: Microbiology, Human and Plant Biology

- A. Investigate the growth of leaf yeast using agar plates and control.
- B. Prepare and examine microscopically the transverse section of a dicot stem (x100, x400).
- C. Dissect, display, and identify a heart.
- D. Investigate the effect of exercise on the breathing rate or pulse of a human.
- E. Investigate the effect of I.A.A. growth regulator on plant tissue.
- F. Investigate the effect of water, oxygen, and temperature on germination.
- G. Use starch agar (or skimmed milk) plates to show digestive activity during germination.

Section C. Answer any four questions

Time allocation: 2 hours (Maximum of 30 minutes per question)

Do any 4 questions from 11 to 17.

Questions 15, 16 and 17 have three or four parts of which you must answer two.

You can answer more parts as extra questions, and you will be given the marks for the best two answers.

Each part (a), (b), (c) etc is worth 30 marks.

Each correct point of information is worth 3 marks.

If you are describing a process, then you will only have to give just over half of the points to get full marks.

Should you do an extra question?

YES. Provided you have:

- Read over all questions to check you have
 - not missed any part of the question.
 - given the answer you intended.
- Answered **all parts of all questions** in section A and in section B. (even if only a guess)
- Then and only then you should answer another question
- **If time is short, you should do an extra part of questions 15, 16 or 17.**

Regularly Full Questions

Below is a list of the topics that are normally full questions in section C of the paper with the most common topics in each.

1. **Ecology:** definitions, prepare a food chain, a food web, a normal and an inverted pyramid of numbers from your chosen ecosystem (I suggest an open grassland). Learn 5 animals and 5 plants, and an adaptation of each. Read passages of texts given in past questions and extract answers from them. Nitrogen cycle and carbon cycle and make sure to put in plant and animal carbohydrates (in C cycle) and plant and animal proteins (N cycle).
2. **Microbiology:** Virus structure, prokaryote and eukaryote structure, viral, bacterial and protist reproduction. Asexual and sexual reproduction in Rhizopus. Population graph. Two examples of pathogenic organisms from each group.
3. **Biochemistry:** (Photosynthesis, Respiration, and Enzymes) (Any one or a combination, will be asked), balanced chemical equations for photosynthesis, aerobic and anaerobic respiration as at

least one, but often more will be asked. Products of the light and dark stages and what happens to each. Location of the stages in aerobic respiration.

4. **Genetics:** Definitions and Mendel's Laws, crosses (monohybrid, dihybrid, sex determination, linkage and sex-linkage) and sometimes evolution as well (observations, deductions and example of each).
5. **Excretion and homeostasis:** Definitions, gross and microstructure of kidney and nephron, urine formation, ADH and its effects. Temperature regulation.
6. **Plant reproduction** (pollen formation, egg formation, double fertilisation, pollination types and examples, dispersal mechanisms)
Human reproduction. Diagrams of male and female organs. Functions of main parts including ovary and pituitary. Locations of major events; ovulation, fertilisation and implantation. Hormones, functions and feedback. Stages of birth.

Other points to note:

- Put the question number in the heavily lined black box in the top left-hand corner of the page.
- Keep your writing inside the heavy black border around the page. Number the other parts carefully.
- Do not obliterate any answer you think is wrong, just cross it out with a single line.
- In sections A and B of the exam. If you answer on the paper and you want to change your answer but do not have room, then cross it out and write see page 1 in answer booklet. If you don't do this then your new answer may not be marked.

What is the best way to Study and Learn?

- **Pick one topic** so that you can see progress.
- **Definitions** start by learning these, as they are important. Learn them from the list you have been given. In chemistry the markers are very particular about the wording so be precise in your learning not quite so much in biology.
- **Use flashcards.** You can learn these at odd times such as on your way to school. There are Apps such as Quizlet that you can put on your smartphone.
- **Study buddy.** Learn with a friend and teach a topic to each other. When you teach your brain works differently and things are easier to remember.
- **Write notes** when studying as this creates neural pathways in your brain and makes recall easier.
- **Do questions from past papers.**
 - Pick a question and write your answers as bullet points. This makes it easier for the examiner to mark. Avoid prose as this is difficult to mark.
 - Correct it using the marking scheme.
 - Cross out any wrong answer and replace it with the correct one.
 - Many studies have shown this is by far the best way to revise and prepare for the exam.
 - By doing this you will see that the same questions are asked regularly in different words, the briefest way to answer questions such as describe how an enzyme works.
- **Diagrams**
 - These are a very useful tool for learning. A diagram says a thousand words.
 - Keep them simple. Look at the ones in Topic by Topic on Moodle to see just how simple they are. There are no marks for artistic skills. Practice drawing them.
 - Don't colour them in as this wastes time.
 - They are great for learning biochemistry.

**Good luck in the exams.
Try and stay calm.**

ASHFIELD COLLEGE PROGRAMMES

Two Year Full-Time Leaving Certificate Programme

Sometimes a change is needed to help you to reach your potential. At Ashfield College, we offer an exceptional two-year Leaving Certificate programme to make the most of 5th and 6th year for our students.

A solid foundation of preparation is a key factor in Leaving Certificate exam success. We help our students to secure this foundation from the moment they commence our 5th Year programme.

Our students benefit from exceptional tuition from our top teachers, access to additional lesson time and personalised academic attention. We offer a wide and varied range of subjects and timetable options, as well as, supervised revision and study time throughout the day. Our flexible approach allows students the option to fulfil all homework and study requirements on campus before returning home in the evening. This provides students with the skills to create a work-life balance during those stressful exam years and enables a more fulfilling family and social life beyond the classroom during these vital formative years.

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Call us now to discuss joining Ashfield College for our two-year Leaving Certificate programme at 01 490-4050.

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The final year of second-level education has an enormous impact on the direction of a person's life. At Ashfield College, we've guided many of Ireland's most academically gifted students to success and have enabled thousands of others to achieve results beyond their expectations. Students at Ashfield College tell us that our unique school environment is responsible for their success.

Whether you're aiming for maximum points, seeking to improve your overall grades or study a subject not available in your current school, Ashfield College will equip you with the tools to achieve the best possible performance in your state exams. Both our first time and repeat 6th year students enjoy access to one of Ireland's top teaching teams. Our teachers include state examiners, textbook authors and teacher trainers that are vastly experienced and respected in their subject fields.

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At Ashfield College we have a long and proud tradition of providing evening and weekend Grinds classes in a range of subjects. Our famous revision notes are offered exclusively to Grinds students and are updated each year. They are highly prized and synonymous with success. Grinds begin in early September each year and run throughout the school year, mirroring normal school term- time. Students can join at any time in the academic year to maximise their chances of exam success.

Extra Subjects

Ashfield College offers a popular programme of extra subjects on weekday evenings which enables external students to participate in classes not available in their own schools. Studying an extra subject can make an enormous difference to final points in the Leaving Certificate and could be the difference in achieving a third level course of choice.

These subject classes run twice weekly to accommodate school timetables. Subject offerings are based on availability and choices include: Arabic, Agricultural Science, Applied Maths; Business Studies (a single two-hour class); Classical Studies; Design & Communication Graphics and Music.

Revision Course & Oral Preparation

Revision Courses take place at Christmas and Easter holiday time. In addition there are other occasional supplemental classes throughout the year.

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The Ashfield College 12-week HPAT Preparation Course is one of the most popular course choices for those wishing to pursue a degree in a medical field. We offer students a truly immersive preparatory and arguably the best experience. Our experienced lecturer imparts exam techniques, pattern recognition techniques and provides continuous practice experience to participating students. With an online delivery option, students can attend from home and review and revise classes throughout the course period.

Our classes start in early November each year to prepare students for a February HPAT exam date. This course books out fast so call us at 01 490- 4050 or visit our website to enrol at www.ashfieldcollege.ie





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These notes, written by some of
Ireland's Best Teachers will help you
through the final stages of preparation
for your Leaving Cert

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HOW TO APPLY	Step 1: Application Form	Step 2: Career Consultation
	 Scan the QR code	After submitting the application form, a team member will contact you to schedule a one-on-one consultation with our Principal, Philip Curry, at a convenient time. This meeting provides an opportunity for the student and their parents to ask any questions, and gain a deeper understanding of what to expect at Ashfield College.

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