



## Notice of Assessment Task

### Year 12 *Chemistry*

### Trial Examination

<b>Date of initial notification:</b> Tuesday 18 June 2024 Week 8, Term 2	<b>Date of submission of task:</b> Thursday 4 July 2024 Week 10, Term 2
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<b>Teacher:</b> Mrs Maynard	<b>Task Number:</b> 3
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<b>Time Allowed:</b> 3 hours + 5 minutes reading time	<b>Weighting of task:</b> 30%
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<b>Course Component/Focus area/topic/module:</b> Module 5, Module 6 and Module 7
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<b>Task Description</b> <p>You will be required to complete a Trial Examination covering questions in all four Modules studied in the HSC course: Module 5– Equilibrium and Acid Reactions, Module 6 – Acid/Base Reactions and Module 7 – Organic Chemistry.</p> <p>This task has a total of 100 marks: 20 marks of multiple-choice questions 80 marks of short and extended response questions</p> <p>You will be assessed on how accurately you answer each question by the depth of your answers and addressing each verb correctly. In addition, any calculations need to show ALL working, including the correct equation, substitution and units. Ensure you bring a scientific calculator to the exam.</p> <p>You will have 3 hours to complete the exam with 5 minutes reading time.</p> <p>Please note that answers that are plagiarised will be dealt with in accordance with the Assessment Policy.</p>
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<b>Outcomes/Competencies to be assessed in this task:</b>
CH12-6      Solves scientific problems using primary and secondary data, critical thinking skills and scientific processes
CH12-12    Explains characteristics of equilibrium systems, and the factors that affect these systems
CH12-13    Describes, explains and quantitatively analyses acids and bases using contemporary models
CH12-14    Analyses the structure of, and predicts reactions involving, carbon compounds

<b>Feedback: How will I receive feedback on this task?</b>
<input type="checkbox"/> Whole class
<input type="checkbox"/> Written

<b>Marking Criteria</b>
Marking Criteria will be issued after task has been completed.

- If you are absent on the day that the task is due, you **MUST** see your teacher the next day (not your next lesson) that you are present at school to show your medical certificate or produce a misadventure form (refer to your Assessment Booklet for a copy of the form).
- Exemptions and extensions for any other reason will only be determined at the discretion of the Head Teacher, and only in extenuating circumstances. You must advise the Head Teacher as soon as possible if you know you are unable to submit the task on the due date.
- All appeals must be lodged within 48hrs of receipt of the task. Students who may consider an appeal are not permitted to take their task home. The original task cannot be altered in any way prior to the appeal process. See Assessment booklet for details.

# 2024 HSC Trial Examination

## Mapping Grid

### Section I

Question	Marks	Content	Outcome
1	1	Mod 6 Properties of acids and bases	12-5, 12-13
2	1	Mod 7 Reactions of organic acids and bases	12-4, 12-14
3	1	Mod 7 Nomenclature	12-7, 12-14
4	1	Mod 5 Factors that affect equilibrium	12-6, 12-12
5	1	Mod 7 Nomenclature Mod 7 Reactions of organic acids and bases	12-6, 12-14
6	1	Mod 6 Properties of acids and bases Mod 6 Quantitative analysis	12-4, 12-13 6 1
7	1	Mod 6 Quantitative analysis	12-5, 12-6, 12-13
8	1	Mod 6 Using Brønsted–Lowry/quantitative analysis	12-5, 12-13
9	1	Mod 7 Products of reactions involving hydrocarbons Mod 7 Alcohols	12-6, 12-14
10	1	Mod 6 Quantitative Analysis	12-4, 12-13
11	1	Mod 5 Factors that affect equilibrium	12-6, 12-12
12	1	Mod 6 Using Brønsted–Lowry theory	12-4, 12-5, 12-6, 12-13
13	1	Mod 7 Reactions of organic acids and bases	12-5, 12-6, 12-7, 12-14
14	1	Mod 7 Reactions of organic acids and bases Mod 7 Hydrocarbons Mod 7 Alcohols	12-4, 12-5, 12-6, 12-7, 12-14
15	1	Mod 6 Quantitative Analysis	12-5, 12-13
16	1	Mod 5 Calculating the equilibrium constant	12-4, 12-5, 12-6, 12-12
17	1	Mod 7 Alcohols	12-5, 12-14
18	1	Mod 5 Solution equilibria	12-6, 12-12
19	1	Mod 7 Nomenclature	12-7, 12-14
20	1	Mod 6 Quantitative Analysis Mod 6 Using Brønsted–Lowry Theory	12-6, 12-13

## Section II

Question	Marks	Content	Outcome
21 (a)	2	Mod 7 Nomenclature Mod 7 Alcohols	12-5, 12-7, 12-14
21 (b)	2	Mod 7 Nomenclature	12-5, 12-7, 12-14
21 (c)	3	Mod 7 Alcohols Mod 7 Reactions of organic acids and bases	12-2, 12-3, 12-7, 12-14
22	3	Mod 5 Factors affecting equilibrium	12-6, 12-12
23 (a)	2	Mod 6 Using Brønsted–Lowry, reactions of organic acids and bases	12-6, 12-3
23 (a)	2	Mod 6 Using Brønsted–Lowry, reactions of organic acids and bases	12-6, 12-3
24 (a)	1	Mod 7 Alcohols	12-6, 12-14
24 (b)	3	Mod 7 Products of reactions involving hydrocarbons	12-6, 12-14
24 (c)	2	Mod 7 Alcohols	12-5, 12-14
24 (d)	4	Mod 7 Alcohols	12-5, 12-14
25 (a)	4	Mod 7 Alcohols	12-4, 12-5, 12-6, 12-14
25 (b)	2	Mod 7 Alcohols	12-1, 12-2, 12-5, 12-14
26	7	Mod 6 Properties of acids and bases	12-6, 12-7, 12-13
27 (a)	1	Mod 5 Factors that affect equilibrium	12-6, 12-12
27 (b)	4	Mod 5 Static and dynamic equilibrium	12-4, 12-6, 12-12
28	4	Mod 6 Properties of Acids and Bases	12-7, 12-13
29	2	Mod 6 Using Brønsted–Lowry Theory	12-7, 12-13
30	4	Mod 7 Nomenclature	12-6, 12-7, 12-14
31	4	Mod 7 Alcohols	12-5, 12-6, 12-14
32 (a)	4	Mod 5 Solution equilibria	12-5, 12-6, 12-12
32 (b)	2	Mod 5 Solution equilibria	12-2, 12-12
33	4	Mod 5 Calculating the equilibrium constant	12-5, 12-6, 12-12
34	3	Mod 7 Alcohols	12-5, 12-14
35	4	Mod 6 Using Brønsted–Lowry theory	12-4, 12-5, 12-6, 12-13
36 (a)	4	Mod 5 Factors that affect equilibrium Mod 5 Calculating the Equilibrium Constant Mod 5 Solution Equilibria	12-6, 12-12
36 (b)	3	Mod 5 Solution Equilibria	12-6, 12-12