

AGA KHAN UNIVERSITY EXAMINATION BOARD

SECONDARY SCHOOL CERTIFICATE

CLASS X

ANNUAL EXAMINATIONS (THEORY) 2025

Chemistry Paper II

Time: 1 hour 50 minutes Marks: 25

INSTRUCTIONS

Please read the following instructions carefully.

1. Check your name and school information. Sign if it is accurate.

**I agree that this is my name and school.
Candidate's Signature**

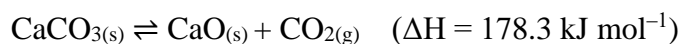
RUBRIC

2. There are SIX questions. Answer ALL questions. Questions 5 & 6 each offer TWO choices. Attempt any ONE choice from each.
3. When answering the questions:

Read each question carefully.
Use a black pointer to write your answers. DO NOT write your answers in pencil.
Use a black pencil for diagrams. DO NOT use coloured pencils.
DO NOT use staples, paper clips, glue correcting fluid, or ink erasers.
Complete your answer in the allocated space only. DO NOT write outside the answer box.
4. The marks for the questions are shown in brackets ().
5. You may use a simple calculator if you wish.

Q.1. (Total 4 Marks)

Consider the given reaction at equilibrium and answer the following questions.



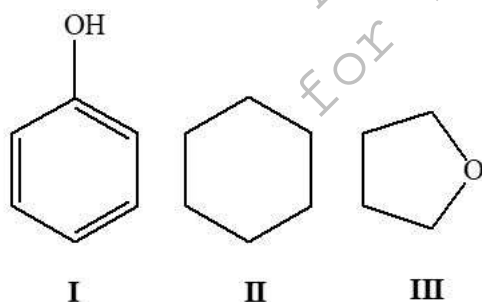
a. What does the symbol \rightleftharpoons mean? (1 Mark)

b. Predict the effect on the given equilibrium if the system experiences the following conditions. (3 Marks)

S. No.	Condition	Effect
i.	Increasing temperature	
ii.	Increasing pressure	
iii.	Decreasing carbon dioxide concentration	

Q.2. (Total 3 Marks)

Consider the following structures of organic compounds.



Classify each compound in the given table based on its structure.

Alicyclic	Heterocyclic	Aromatic

Q.3. (Total 3 Marks)

a. Identify the functional group common in both, fats and oils. (1 Mark)

b. Is the melting point of fats lower than that of oils? Provide a reason for your response. (2 Marks)

Q.4. (Total 3 Marks)

Write the purpose of each of the following processes involved in raw water treatment.

S. No.	Process	Purpose
i.	Passing raw water through the beds of sand and gravel	
ii.	Treatment of raw water with activated charcoal	
iii.	Addition of aluminium sulphate in raw water	

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END OF PAPER

Please use this page for rough work

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