

Chemistry - X (Paper II)

Final Term Examination 2011

Chemistry X Paper – II

Time allowed: 2 hours 25 minutes

Marks: 45

Student's Full Name: _____ Father's Name: _____

Roll No: _____ Section _____ Invigilator's signature _____

Marks Obtained _____ Examiner's Signature _____

Re-checked by : _____ Date: _____

INSTRUCTIONS

1. Please read the following instructions carefully.
2. Write the information in the above blanks.
3. RUBRIC. There are **EIGHT** questions. Answer ALL **EIGHT** questions.

Questions 6, 7 and 8 each offer two choices. Attempt ONE out of the TWO options in each.

4. When answering the questions:

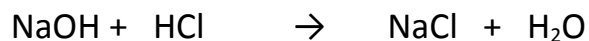
- Read each question carefully.
- Use ONLY black ink.
- You may use a black pencil for diagrams. Do NOT use colored pencils.
- Do not use staples, paper clips, glue or correcting fluid.
- DO NOT write outside the answer box.
- Complete your answer in the allocated space only.

5. The marks for the questions are shown in brackets ().

6. You may use a simple calculator only if you wish.

(Total 5 marks)

Q.1 Aqueous sodium chloride can be prepared by titrating aqueous sodium hydroxide with dilute hydrochloric acid. The equation for the reaction is:



a). Name the apparatus used to measure accurately the volume of the solution in titration:

(2 marks)

i) _____

ii) _____

b). Name a suitable indicator for this titration .Give the expected color change of this indicator:

(2 marks)

Indicator: _____ Color change: _____

In

c). Explain the meaning of aqueous in the equation:

(1 mark)

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(Total 6 marks)

Q.2 During the manufacturing of Iron in blast furnace from haematite Ore, a reaction takes place between Iron & Carbon-monoxide:

a). Write the balanced chemical equation for the reaction:

(1 mark)

b). State the bonding in protein molecule. Write its structural formula:

(2 marks)

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d). Give the composition of nichrome:

(1mark)

e). b). Draw open chain structures of Glucose & fructose:
mark)

(2

(Total 8 marks)
(4 marks)

Q.3 (a) Complete the table for the following Organic compounds:

<u>Structural formula</u>	<u>Name</u>
$\begin{array}{c} \\ \text{H} \\ \text{H} \text{ C } \text{H} \\ \\ \text{H} \end{array}$	
	Alcohol
	Carboxyl

	group
C_2H_3-Cl	

b). Alkenes are prepared from dehydration of alcohols. State dehydration & write the chemical equation representing the same process: (2 marks)

c). Draw the structure of to describe the plane and angles formed in Alkanes: (2 marks)

(Total 5 marks)

Q.4 Carbon monoxide is a pollutant found in the atmosphere. It comes from car exhaust.

a). Explain why carbon monoxide is present in car exhaust. (1 mark)

b). Explain why carbon monoxide is poisonous: (2 marks)

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c) Explain how sulphur dioxide become acidic:

(2 marks)

d). Name another source of air pollutant:

(1 mark)

EITHER

(5 marks)

Q.6 Enzymes are very useful for mankind. Explain.

OR

Q.6 Name the raw materials used in Solvay process. Give the basic chemical reactions (with equation) of Solvay process.
