

Chemistry X Paper – I MCQ's

Final Term Examination 2011

Chemistry X Paper – I

Time allowed: 35 minutes

Max. Marks: 25

Student's Full Name: _____

Roll No: _____ **Section:** _____ **Invigilator's signature:** _____

Marks Obtained: _____ **Examiner's Signature:** _____

Re-checker's signature: _____ **Date:** _____

INSTRUCTIONS:

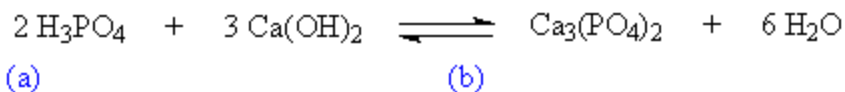
1. Read each question carefully.
2. Answer the questions on the separate answer sheet provided. DO NOT write your answers on the question paper.
3. There are 25 answer numbers on the answer sheet. Use answer numbers 1 to 25 only.
4. In each question there are four choices A, B, C and D. Choose ONE. On the answer grid black out the box for your choice with a pencil as shown below.

Correct Way				Incorrect Way					
1	A	B	C	D	1	A	B	C	D
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
					2	A	B	<input checked="" type="checkbox"/>	D
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					3	A	B	C	D
						<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
					4	A	B	C	D
						<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5. If you want to change your answer, ERASE the first answer completely with a rubber, before blacking out a new box.

6. Do NOT write anything in the answer grid. The computer only records what is in the boxes.

Q.1 Which of the following equations represents the equilibrium constant equation correctly:



Q.2 If in a reaction

(a)
$$K = \frac{[\text{Ca}_3(\text{PO}_4)_2][6 \text{H}_2\text{O}]}{[3 \text{Ca}(\text{OH})_2][2 \text{H}_3\text{PO}_4]}$$

(b)

$$K = \frac{[3 \text{Ca}(\text{OH})_2][2 \text{H}_3\text{PO}_4]}{[\text{Ca}_3(\text{PO}_4)_2][6 \text{H}_2\text{O}]}$$

reversible
the
concentration
reactants is
then
constant will:

of the
doubled
equilibrium

(c)
$$K = \frac{[\text{Ca}(\text{OH})_2]^3 [\text{H}_3\text{PO}_4]^2}{[\text{Ca}_3(\text{PO}_4)_2] [\text{H}_2\text{O}]^6}$$

(d)

$$K = \frac{[\text{Ca}_3(\text{PO}_4)_2] [\text{H}_2\text{O}]^6}{[\text{Ca}(\text{OH})_2]^3 [\text{H}_3\text{PO}_4]^2}$$

a). Also be doubled

b). Becomes half of its actual value

c). Remains the same **(Correct answer)**

d). Becomes one fourth

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Q.3 The pH values in the table are shown. If the pairs of the solutions are mixed, which pair must produce an acidic mixture?

Solution	P	Q	R	S
pH	2	6	8	10

- a). P & Q
- b). P & R
- c). P & S
- d). Q & R

Q.4 Which statement is true of all strong acids in aqueous solution:

- a). They liberate carbon dioxide from carbonates
- b). They liberate ammonia from ammonium salts
- c). They give hydrogen with any metal
- d). They have a pH greater than 7

Q.5 Preparation of Ethene from ethyl Alcohol is an example of:

- a). Dehydration (correct answer)
- b). Hydration
- c). De-halogenation

d). Halogenation

Q. 6 The molecular formula for this hydrocarbon structure is:



(a). C₅H₆

(b). C₅H₉

(c). C₅H₁₀

(d). C₅H₁₂ (correct answer)

Q. 7 Alkanes are also called as:

(a). Olefins

(b). Paraffin's (correct answer)

(c). Acetylene

(d). Alkynes

Q.8 The first member of Alkyne series is:

(a). Acetylene (correct answer)

(b). Ethene

(c). Ethane

(d). Methane

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Q.9 Methane is also known as:

- (a). Oil gas
- (b). Marsh gas (correct answer)
- (c). Water gas
- (d). Gasoline

Q.10 A series of compounds in which each member differs from the preceding one by constant ratio of CH_2 is called:

- (a). Monologues series
- (b). Functional group
- (c). Isomerism
- (d). Homologous series (correct answer)

Q. 11 The process in which octane rating of gasoline can be increased, is called:

- (a). Cracking
- (b). Reforming (correct answer)
- (c). Isomerism
- (d). Refining

Q.12 The number of isomerism of Butane is:

- (a). Three
- (b). Four
- (c). Eight
- (d). Two (correct answer)

Q.13 In blast furnace when carbon dioxide reacts with more carbon and form carbon monoxide this is:

- a). Moderate reaction
- b). Slow reaction
- c). Exothermic reaction
- d). Endothermic reaction

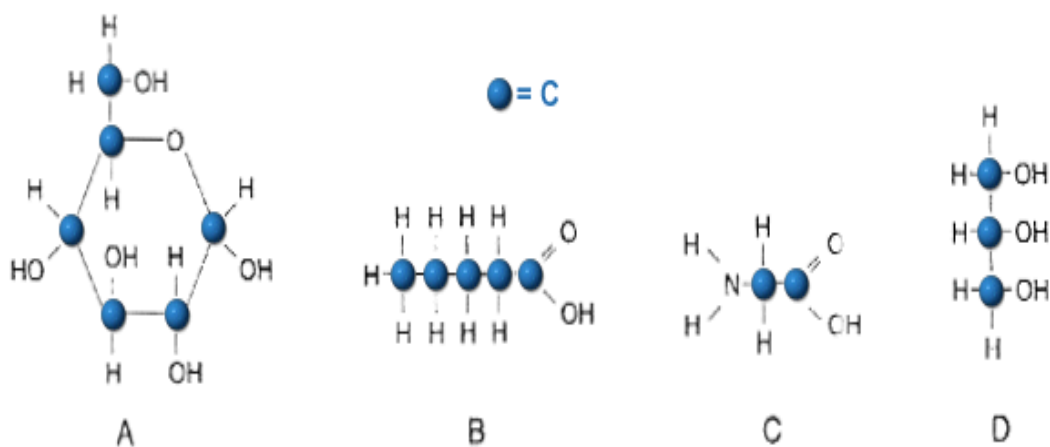
Q.14 Which one of the following reactions is the reduction reaction used in the manufacturing of blister copper:

- a). $2 \text{Cu}_2\text{S} + 3 \text{O}_2 \rightarrow 2 \text{Cu}_2\text{O} + 2 \text{SO}_2$
- b). $\text{FeO} + \text{SiO}_2 \rightarrow \text{FeSiO}_3$
- c). $2 \text{Cu}_2\text{O} + \text{Cu}_2\text{S} \rightarrow 6 \text{Cu} + \text{SO}_2$
- d). $4 \text{CuFeS}_2 + 5 \text{O}_2 \rightarrow 2 \text{Cu}_2\text{S} + 2 \text{FeO} + 2 \text{FeS} + 4 \text{SO}_2$

Q.15 Kaolin is an ore of:

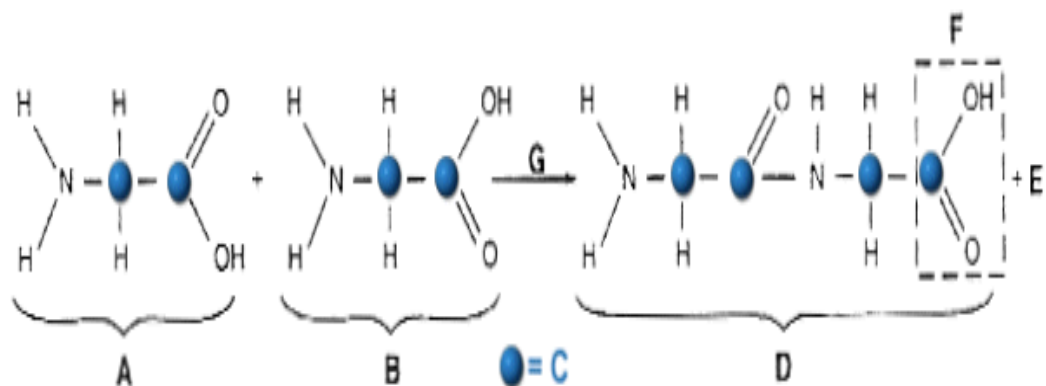
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- a). Copper
- b). Aluminium
- c). Iron
- d). Chromium



Q.16 Which of the following two diagrams represent the building blocks of lipids:

- a). A and B
- b). B and D
- c). C and D
- d). A and C



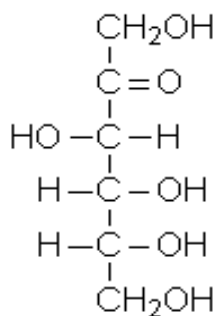
Q.17 Amino acids are indicated by letters:

- A and B
- G and D
- A and G
- B and D

Q. 18 Vegetable Oils are:

- Unsaturated fatty acids
- Glycerides of unsaturated fatty acids
- Glycerides of saturated fatty acids
- Essential Oils obtained from plants

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Q.19 The structure of compound represents:

- a). D-fructose
- b). D-glucose
- c). L-glucose
- d). D-galactose

Q.20 Permanent hard water contains compounds of:

- a). MgCl_2 & CaCO_3
- b). Hydrogen Carbonates of Ca & Mg
- c). Sulphates & Chlorides of Ca & Mg
- d). Carbonates of Ca & Mg

Q.21 In ion exchange method, the substance used is:

- a). Sodium hydroxide
- b). Sodium Carbonate
- c). Sodium Sulphate
- d). Sodium Zeolite

Q.22 Water is an excellent solvent due to its:

- a). Large dielectric constant & Polar nature
- b). Density
- c). Non - Polarity
- d). Linear Structure

Q.23 The main pollutant of leather tanneries in the waste water is due to the salt of:

- a). Lead
- b). chromium (VI)
- c). Copper
- d). Chromium (III)

Q.24 In purification of potable water the coagulant used is:

- a). Nickel sulphate
- b). Copper sulphate
- c). Barium sulphate
- d). Alum

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Q.25 Which statement about water is correct:

- a). Water helps in regulating the temperature of environment
- b). Water in oceans, seas, rivers and lakes is responsible for making clouds
- c). Water is used for raising crops
- d). All statements are correct about water