



Final Exam. of General chemistry ( CH) for 1<sup>st</sup> level (faculty of veterinary medicine students)

**PART A ( Organic chemistry) : Model Answer**  
**- Select the correct Answer ( 24 x 1 = 24 marks)**

- The most basic compound from the following is .....
  - RCI
  - RH
  - RNH<sub>2</sub>
  - RNHR**
- The chlorination of methane in the presence of light gave methyl chloride and .....
  - CHCl<sub>3</sub>
  - CCl<sub>4</sub>
  - CH<sub>2</sub>Cl<sub>2</sub>
  - All of these**
- Reaction of RNHR with HNO<sub>2</sub> gives .....
  - Alkane
  - Alcohol
  - Nitroso compound**
  - None of these
- The name of  $\text{CH}_3\overset{\text{CH}_3}{\text{CH}}\text{CH}_2\text{CH}_2\text{Br}$  is .....
  - 2-Methyl-4-bromobutane
  - 1-Bromo-3-methylbutane**
  - 2-Methyl-3-bromobutane
  - None of these
- Reaction of propene with HBr in the presence of peroxide gives .....
  - $\text{CH}_3\underset{\text{Br}}{\text{CH}}\text{CH}_3$
  - BrCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Br
  - CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>Br**
  - All of these
- Compound with the highest boiling point in the following is .....
  - RNH<sub>2</sub>
  - R<sub>3</sub>N
  - RNHR**
  - RH
- Hydrolysis of ethyl chloride with aqueous NaOH gives .....
  - Ethylene
  - Acetone
  - Ethanol**
  - None of these
- Reaction of propanol with thionyl chloride gives .....
  - Propyl bromide
  - Butyl bromide
  - Butyl chloride
  - Propyl chloride**
- Reaction of RMgX with acetone gives .....
  - Primary alcohol
  - Tertiary alcohol**
  - Secondary alcohol
  - All of these
- The most soluble compound among the following is .....
  - Ethyl bromide
  - Methane
  - Hexanol
  - Ethanol**
- Oxidation of secondary alcohol gives .....

a- 1°ry alcohol      **b- Acetone**      c- Acetaldehyde      d- All of these

12- Reaction of RNH<sub>2</sub> with RCOCl gives .....

a- 1°ry amide      b- 3°ry amide      **c- 2°ry amide**      d- None of these

13- Reaction of tertiary amine with PhSO<sub>2</sub>Cl gives .....

a- Soluble compd.      **b- No reaction**      c- Insoluble compd.      d- None of these

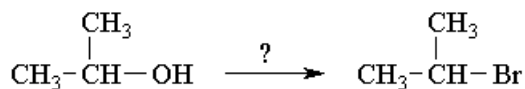
14- Which of the following compounds can not react with sodium metal?

a- CH<sub>3</sub>-CH<sub>2</sub>-OH      b- CH<sub>3</sub>-CH<sub>2</sub>-Br      c- CH<sub>3</sub>-CH<sub>3</sub>      **d- CH<sub>3</sub>-CH<sub>2</sub>-O-CH<sub>3</sub>**

15- Which of the following alcohols would be oxidized to propan-2-one(acetone)?

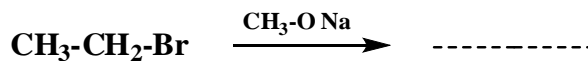
a- Ethanal      b-n-propanol      c-Propanal      **d-Propan-2-ol**

16- What is the best reagent to convert isopropyl alcohol to isopropyl bromide?



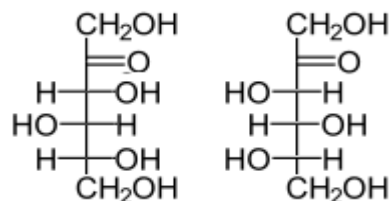
**a-HBr**      b-SOCl<sub>2</sub>      c-Br<sub>2</sub>      d-RMgBr

17- What is the major product obtained from the following reaction?



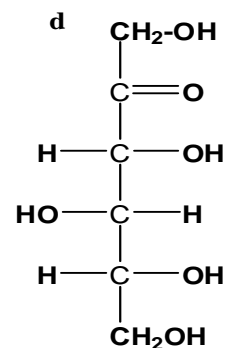
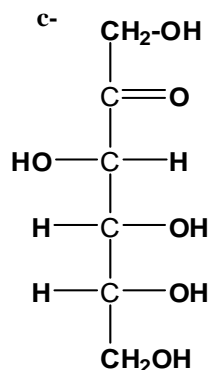
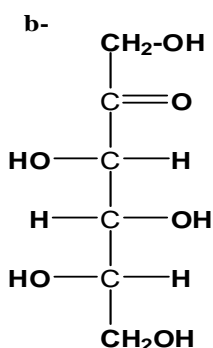
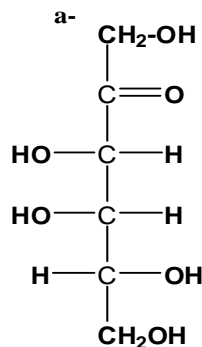
a-CH<sub>3</sub>-O-CH<sub>3</sub>      b- **CH<sub>3</sub>-CH<sub>2</sub>-O-CH<sub>3</sub>**      c- CH<sub>3</sub>-CH<sub>2</sub>-CH<sub>2</sub>-O  
Na      d-CH<sub>3</sub>-CH<sub>2</sub>-CH<sub>3</sub>

18- The following stereoisomers are related as:



a- **Enantiomers**      b- Anomers      c- Epimers      d-None of the at

19- The structural formula of D- Fructose is

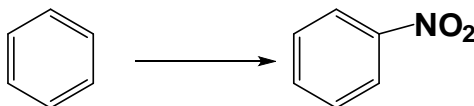


ملحوظة هامة: عزيزي الطالب عزيزتي الطالبة إنتبئة ( Part A organic chemistry )

والمكون من ثلاث ورقات ٢٤ فقرة ( ٢٤ = 1x 24 درجة ) والخاص بـ ا د / وجدى النجدج و

ا د / علي عبدالمعبود

20- The reagent required to convert



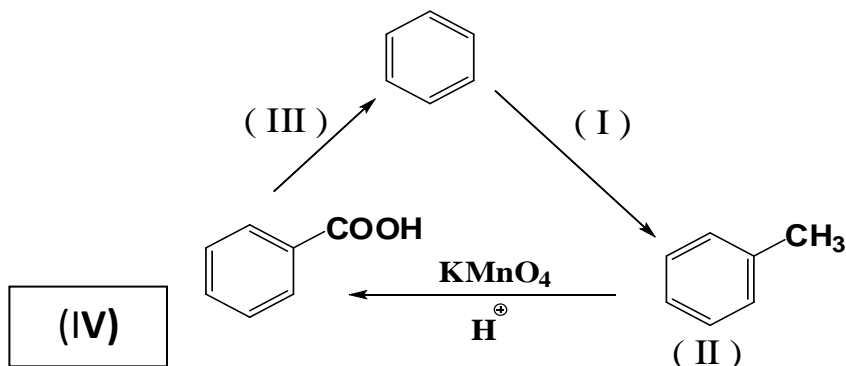
a-  $\text{HNO}_2$  (dil)

b-  $\text{H}_2\text{SO}_4$

c-  $\text{HNO}_3$  (conc.)

**d-  $\text{HNO}_3/\text{H}_2\text{SO}_4$  (conc.)**

From the following systematic diagram answer questions numbers 21, 22 23 and 24



21- The reagent ( I ) in the above diagram is.....

a-  $\text{CH}_3\text{COCl} / \text{AlCl}_3$  (anh.)

**b-  $\text{CH}_3\text{Cl} / \text{AlCl}_3$  (anh.)**

c-  $\text{CH}_3\text{CH}_2\text{Cl} / \text{AlCl}_3$  (anh.)

d-  $\text{Cl}_2 / \text{FeCl}_3$

22- Systematic name of compound ( II ) is.....

a- Ethylbenzene

b- Benzomethane

**c- Toluene**

d- Methylbenzene

23- The reagent (III) is .....

**a-  $\text{NaOH} / \text{CaO}$**

b-  $\text{NaOH}$

c-  $\text{Ca}(\text{OH})_2$

d-  $\text{KMnO}_4/\text{H}^+$

24- The correct name of compound ( IV ) is

a- Benzene sulphonic

b- Carboxy benzene

**c- Benzoic acid**

d- None of these

GOODLUCK. Prof. Dr. Wagdy El-Dougdoug & Prof. Dr. A. h. Abdalrhmanoude

