Some Basic Principles and Techniques-class test 1 (11 'A' CHEMISTRY)

Hi Sarah, when you submit this form, the owner will be able to see your name and email address.

Required

1

The functional group of aldehydes , carboxylic acid and ketones are :

(1 Point)

-CO-, -CHO ,-COOH

-COOH ,-CO- , -CHO

-CHO , -COOH ,-CO-

-CO- , -COOH , -CHO

2

The IUPAC name of CH3-CH2-CH(CH3)-CH2-CH2-CH2 -CH3 is :

(1 Point)

5-methylheptane

3-methylheptane

octane

1-ethyl-1-methylpentane

3

The structural formula of Ethanamide is :

(1 Point)

CH3COOH

CH3CH2NH2

CH3CONH2

CH3OCH3

4

CH3CH2CH2CH(OH)CH2COOH

(1 Point)

3-hydroxy hexan-1-oic acid

2-hydroxy hexan-1-oic acid

4- hydroxy hexan-6-oic acid

3-hydroxy hexane carboxylic acid

5

The IUPAC name of this compound is

(1 Point)

Benzene-1,6- dioic acid

Phthalic acid

Benzene-1,2- dioic acid

Terephthalic acid

6

m-dichlorobenzene and o-dichlorobenzene are ------------- isomers

(1 Point)

Chain

Position

Functional

Optical

7

Azobenzene shows ---------- ,geometrical isomers:

(1 Point)

Syn&Anti

Cis & Trans

l&d

dl

8

Mesotartaric acid is optically ------,due to -------compensation

(1 Point)

active , internal

inactive , external

active , external

inactive ,internal

9

Optical isomers ,which are not the mirror images of each other are called:

(1 Point)

Enantiomers

Diastereomers

Tautomers

Metamers

10

In the detection of nitrogen,the formation of ----------- colour confirms it.

(1 Point)

blood red

prussian blue

yellow

white

11

V1N1 =V2N2 is the law of :

(1 Point)

volumetric analysis

systematic analysis

both are incorrect

both are correct

12

12 x mass of CO2 x 100 / 44 x mass of organic compound is equal to

(1 Point)

% of hydrogen

% of chlorine

% of carbon

% of carbonate

13

In SN2 mechanism, the rate of the reaction proportional to :

(1 Point)

[substrate] [nucleophile]

[substrate]

both are correct

both are incorrect

14

Homolytic fission results in :

(1 Point)

carbonium ion

carbanion

free radical

none of the above

15

Tertiary butyl bromide reacts with alcoholic KOH to give 2-methyl propene is

(1 Point)

Addition reaction

substitution reaction

elimination reaction

none of the above

16

In Kjeldahl's method K2SO4 is used :

(1 Point)

as a catalyst

to raise the boiling point

as a reactant

none of the above

17

The shifting of sigma electrons towards more electronegative atom or group causing permanent polarity is:

(1 Point)

mesomeric effect

inductive effect

electromeric effect

hyperconjugation

18

0.3780 g of an organic chloro compound gave 0.5740 of silver chloride in carius estimation.Calculate the percentage of chlorine present in the compound . (at.mass of Ag = 108 ,Cl =35.5)

(1 Point)

3.57

37.57

32.01

62.43

19

In the estimation of sulphur by Carius method , 0.468 g of an organic sulphur compound afforded 0.668 g of barium sulphate.Find the percentage of sulphur in the given compound. (at.mass of Ba=137,S = 32 & O= 16 )

(1 Point)

19.60

1.960

0.196

None of the above

20

0.45 g of organic compound on combustion gave 0.792 g CO2 and 0.324 g H2O. Calculate the percentage of carbon and hydrogen . (at.mass of C = 12 , H= 1 & O = 16)

(1 Point)

48 and 8

8 and 48

4.8 and 8

8 and 4.8

21

The order of reactivity of alkyl halides towards SN1 mechanism is :

(1 Point)

Tertiary > secondary > primary

Primary > secondary > tertiary

Secondary > primary > tertiary

Tertiary > primary > secondary

22

Chloroacetic acid is more acidic than acetic acid is due to ----------- effect:

(1 Point)

hyperconjugation

mesomeric

electromeric

inductive

23

In Kjeldahl's method,the gas evolved from 1.325 g sample of a fertilizer is passed into 50 ml of 0.2030 N H2SO4 . 25.32 ml of 0.1980 N NaOH are required for the titration of unused acid.Calculate the percentage of nitrogen in the fertilizer.

(1 Point)

54.3 %

5.43 %

2,27 %

22.7 %

24

Benzene gives nitrobenzene is due to ------------- substitution reaction

(1 Point)

nucleophilic

free radical

electrophilic

none of the above

25

Propene treated with HBr to give 1-bromopropane in presence of peroxide is due to -----

(1 Point)

Markownikoff rule

Anti Markownikoff rule

Saytzeff rule

none of the above