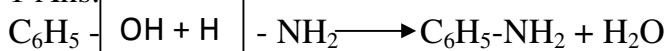


1) 1. Ans.

Due to intermolecular hydrogen bonding in p-nitro phenol its B.P. is more, but in case of o. nitro phenol intramolecular hydrogen bonding takes place.

2) 1 Ans.



3) 2 Ans.

In case of Clemenson's reduction –  $\overset{|}{\text{C=O}}$  group is directly reduced to –  $\text{CH}_2$  group

4) 4 Ans.

Aldelyde having no  $\alpha$  - hydrogen undergoes Cannizzalo's reaction. Both aromatic and facmeldorf does not contain  $\alpha$  - hydrogen

5) 1 Ans.

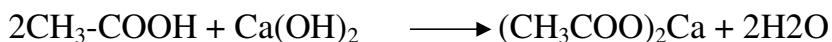
Aldelyde & acids differs by one oxygen.



6) 3 Ans.

Primary alcohol on dehydrogenation with copper gives aldehydes whereas secondary alcohol gives ketone

7) 4 Ans.



8) 4 Ans.

It forms condensation product with remaining three.

9) 1 Ans.

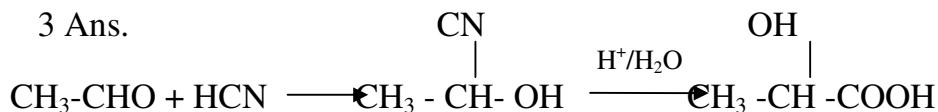
Phenoquinone has red colour formed by partial oxidation of phenol.

10) 4 Ans.

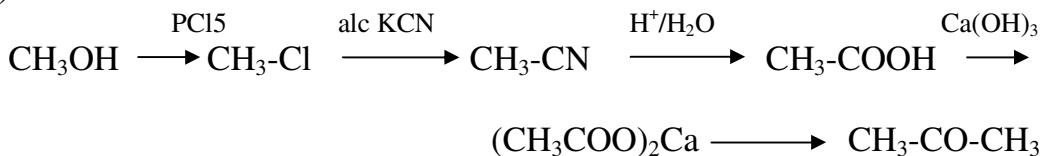
$\text{Cl}_2$  gas can be used to substitute chlorine only for Hydrocarbons.

11) 3 Ans.

12) 3 Ans.



13) 3 Ans.



14) 2 Ans.

15) 4 Ans.

16) 4 Ans.

Phenol is acidic which is insoluble in dil HCl

17) 1 Ans.

Bakelite is a polymer of phenol and formaldehyde

18) 1 Ans.

Rosenmunds reduction gives aldehydes for acid chloride.

19) 1 Ans.



20) 3 Ans.

Aldehydes reduces schift's reagent where as Ketones do not reduce schift's reagents

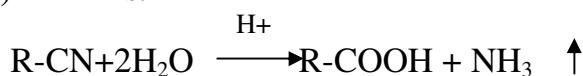
21) 3 Ans.

Aromatic aldehydes do not react as the F.S. to give red ppt.

22) 1 Ans.

It contain 1 alpha hydrogen

23) 4 Ans.



24) 3 Ans.

$\text{CH}_3\text{-COOH}$  is weakest

-I effect of  $\text{NO}_2 > -\text{Cl}$

25) 1 Ans.

Kolbe's electrolysis

26) 1 Ans.

2,4,6-trinitrophenol is picric acid

27) 3 Ans.

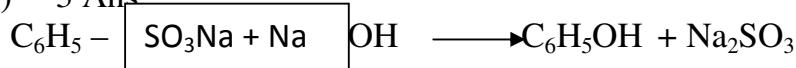
28) 3 Ans.

$\text{C}_6\text{H}_5\text{-CH}_2\text{-Cl}$  cannot give benzoic acid as hydrolysis product.

29) 3 Ans.

Salicylic acid on decarboxylation forms benzoic acid.

30) 3 Ans.



31) 2 Ans.

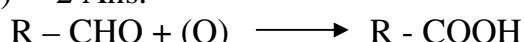
Metallic sodium and sodium hydroxide can be used to substitute sodium atom

32) 1 Ans.

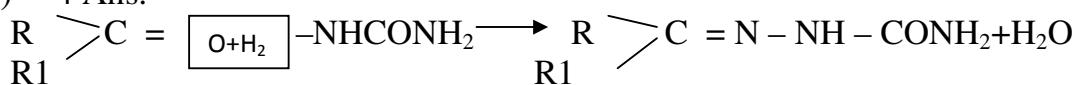
-OH group in phenol is a highly activating group. It activates O & P positions

33) 4 Ans.

34) 2 Ans.



35) 4 Ans.



36) 2 Ans.

Formaldehyde forms Urotropene with ammonia but acetaldehyde gives addition product

37) 2 Ans.



38) 1 Ans.

39) 3 Ans.

40) 3 Ans. An amine

41) 1 Ans.

42) 2 Ans. R-X + KCN  $\longrightarrow$  R-CN + KX

43) 2 Ans.

Degradation occurs

44) 4 Ans.

45) 4 Ans.

It undergoes diazotisation

46) 1 Ans.

47) 2 Ans.

-I effect of -Cl is less than -NO<sub>2</sub>

48) 3 Ans.

49) 1 Ans.

It contain alpha hydrogen

50) 2 Ans.

Formic acid is a reducing acid.