Dear Parents,

Session 2018-2019 is progressing quite well. We just had our 'Orientation Session' with Primary, Middle and Secondary schoolers parents and it was heartening to see your approach, co-operation and support. APS family extends gratitude for it.

A warm welcome to students who have joined our school this session. We stand committed to providing quality education to our children. The teachers follow a detailed plan of instruction that is guided by CBSE and AWES. SAMC is our pillar of strength as our teachers focus on holistic development of our students. We shall certainly continue to implement our 'Systems Approach' to support all students by using interventions to help each child make academic progress. Progress is best assured when student, parents and school are working towards same goal. It's like when every player is an active member, the team is sure to be the best and everyone is a winner. So let's strive to be all winners!

For Summer Break Assignments, practice sheets are devised to ensure revisions for coming assessment. Kindly go to the website: www.apsbinnaguri.org and follow these steps for the same

Steps to download:

i. Browse the website→ Home page (first page of the website)
ii. Then check the Bulletin Board→ link will be available.

OR

Home Page→ Click on 'APS News' option→ Choose Holiday Homework option from the dropdown menu.

We would also seek your co-operation to help lift up academics. We would welcome parents to offer their names for substitute facilitators/ teachers, judges for events round the year. Kindly e-mail at apsbinnaguri1@gmail.com or give your details at Front Desk.

We truly believe that an entire community is needed to empower our students to become successful citizens. I look forward to a great year and working with such an amazing community.

Awaiting your constructive suggestions.

**ARMY PUBLIC SCHOOL BINNAGURI**
**PRACTICE SHEET**
***CHEMISTRY***
***CLASS – XII***

## Alcohols Phenols and Ether

**2 Marks or 3 Marks type:**

1. Write the equations involved in the following reactions:
   (I) Hydroboration oxidation
   (II) Friedel craft alkylation of anisole.
2. Give two reactions to show the acidic nature of phenol. Compare acidity of phenol with that of ethanol.
3. Explain the following giving one example for each:

a) Kolbe's reaction b)Reimer Tiemann reaction

4. Write the reactions of ethyl alcohol with sulphuric acid under different conditions.
5. Give reason for the following:
   (i) o-nitrophenol is more acidic than o-methoxy phenol.
   (ii) Butan-1-ol has a higher boiling point than diethylether.
6. Give reasons for the following
   (i) Anisole reacts with HI to give phenol and methyl iodide and not indo benzene and methyl alcohol.
   (ii) o-nitrophenol is less soluble in water than p-nitrophenol.
7. What happens when
   (i) ethanol is treated with Cu at 573 K,
   (ii) phenol is treated with CH3COCl/Anhydrous AlCl3,
   (iii) ethyl chloride is treated with NaOCH3 .
8. How do you convert the following:
   A . isopropyl alcohol to tert-butyl alcohol
   B. n-propyl alcohol to isopropyl alcohol
   C. Isopropyl alcohol to n-propyl alcohol
9. How will you bring about the NK following conversions:
   A. Phenol to p-bromophenol
   B. Ethyl iodide to diethylether
   C. Ethyl alcohol to Isopropyl alcohol
10. How will you bring about following conversions:
    (i) Phenols to aspirin.
    (ii) Aniline to phenol.
    (iii) phenol to anisole.

**Long Answer Type:5marks type questions**

11. A compound 'A' having molecular formula C4H10O, on oxidation gives compound British. The compound 'B 'gives positive test for iodo form .Compound British on treatment with CH3MgBr followed by hydrolysis gives 'C'. Deduce the structure of A,B, and C and explain all the reactions.

12. An aromatic compound A on treatment with CHCl3/KOH gives two compounds 'B' and 'C'. Both B and C give the same product 'D' when distilled with Zn dust. Oxidation of D gives E having molecular formula C7H6O2. The sodium salt of E on heating with sodalime gives F which may also be obtained by distilling A with Zn dust .Identify A to F. Give concerned equations also.

**Very Short Answer Type:1Mark Type**

1. What is denatured alcohol ?
2. While separating a mixture of ortho and para nitro Phenols by steam distillation, name the isomer which will be steam volatile. Give reasons.
3. Draw the structure of resorcinol and give its IUPAC name.
4. Phenol is acidic but does not reacts with sodium bicarbonate solution. Why?
5. Write structural formula and IUPAC name of methyl tertbutyl ether.
6. How is that alcohol and water are miscible in all proportions?
7. Give IUPAC name of the following compound :

   CH3-C=C-CH2OH
   I I
   CH3 Br
8. Predict the product of the reaction (CH3)3C-O-C2H5 + HI-----

**CHAPTER Haloalkanes And Haloarenes**

**Very Short Answer Type:1 Mark Type**

1. Write the IUPAC name of CH3CH(Cl )CH2-CH=CH2.
2. Give the structural formula and IUPAC name of DDT.
3. Why is ionisation of benzene difficult?
4. neopentylbromide undergoes nucleophilic substitution reaction very slowly .Why?
5. How will you convert ethanol to ethanal.? Write equation.

**CHAPTER ALDEHYDES, KETONES AND CARBOXYLIC ACIDS**

**2 or 3 Marks Type**

1. How would you obtain:
   (i) But-2-enal from ethanal.
   (ii) Butanoic acid from Butanol.
   (iii) Benzoic acid from ethylbenzene?
2. Give simple test to distinguish between the following pairs of compounds:
   (i) Pentan-2-one and Pentane-3-one
   (ii) Benzaldehyde and acetophenone
3. Convert :
   a) Ethanal to 3-Hydroxybutanal
   b) Benzoic acid to m-Nitrobenzyl alcohol.
   c) Benzaldehyde to Benzophenone

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