

15. The main source of polynuclear hydrocarbons are:
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|-----------------------|-------------------------|
| a) Biogas & Petroleum | b) Natural gas |
| c) Petroleum | d) Coal tar & Petroleum |
16. Number of milligram of KOH required to saponify one gram of a fat or oil is called as :
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|--------------------------|------------------|
| a) Saponification number | b) Iodine number |
| c) Acid value | d) Acetyl value |
17. Methylphenol is also known as:
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| a) Cresol | b) Catechol |
| c) Resorcinol | d) Chloramine |
18. Following are the examples of Polynuclear hydrocarbons EXCEPT:
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|----------------|-----------------|
| a) Naphthalene | b) Phenanthrene |
| c) Anthracene | d) Phenol |
19. Aromatic Acids have the acidic property due to :
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|--------------------|-----------------------|
| a) Carboxylate ion | b) Nitrogen lone pair |
| c) Benzene ring | d) Hydrogen ion |
20. The fatty acids which having only single bond in their structure:
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|--------------------|----------------------|
| a) Saturated | b) Unsaturated |
| c) Polyunsaturated | d) None of the above |

Q.2 Long Answers (any 2 out of 3) (10 Mark Each)

(20)

1. Explain Electrophilic aromatic substitution reaction for Friedel-Crafts alkylation with its limitations.
2. Define Cycloalkanes with examples & explain Bayer's theory and its limitations.
3. Define Polynuclear hydrocarbons and write the synthesis with chemical reaction of Naphthalene.

Q.3 Short Answers (any 7 out of 9) (5 Mark Each)

(35)

1. Write down the procedure and significance of Saponification & Acid value.
2. Write down the structure and use of DDT and Resorcinol
3. Discuss Orbital picture and Resonance of benzene.
4. Write down the various preparations for Phenol.
5. Write down the structure and use of Saccharin and Chloramine.
6. Explain Various Criteria for Aromaticity with Huckle rule.
7. Write down the structure & synthesis of Anthracene.
8. Write down the structure and use of Diphenylmethane and BHC.
9. Explain in brief about various Chemical properties of Fats & oils.