Dura	ation: 5 Hours			
N.	B.: 1. All questions are compulsory			
	2. Figures to right indicate full marks			
Q. 1	Choose the appropriate option for following multiple choice-based questions.			
1	BHC is also known as			
a	Lidocain c, Lindane			
b	d. Lasergic acid			
2				
a				
b	Saccharin d. BHC			
\3	Fat is of fatty acid and glycerol			
a	n Ester C. Amide			
b	Anhydride d. Mixture			
4	Benzene, in reaction with phthalic acid in presence of AlCl3, gives anthraquinone, This is			
a	Friedel Craft Alkylation Reaction C. Addition reaction			
b	Friedel Craft Acylation Reaction d. Substitution Reaction			
E.				
5	What is the commercial method of preparation of phenol?			
a	Dows process c. By decarboxylation of salicylic acid			
b	From diazonium salt d. Hock method			
6	Which of the following regents may be used to distinguish between phenol and benzoic acid?			
a	Aqueous NaOH c. Molisch reagent			
b	Tollen's reagent d. Neutral FeCl3			
~				

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Paper / Subject Code: 65211 / Pharmaceutical Organic Chemistry- II Presence of a nitro group in benzoic acid Strongly increases acidity Decreases acidity of benzoic acid drastically b Has no effect on the acidity of benzoic acid Decreases acidity of benzoic acid moderately The test to distinguishing primary, secondary and tertiary aromatic amines is c. Test with nitrous acid Hinsberg Test d. Liberman nitroso test Lucas Test 2-bromo-aniline is less basic than 4-bromoaniline because of Electron withdrawing effect of bromine Ortho effect Electron releasing effect of bromine Inductive effect Which of the following is used for identification of volatile, water-soluble fatty acids? Acid value c. Reichert Meissl value Saponification value d. Iodine value Oxidation-Polymerization reaction of oil is called as Hardening e. Drying Rancidity d. Hydrolysis

Which of the following is angularly fused polynuclear aromatic hydrocarbon?

a Biphenyl

c. Anthracene

b Naphthalene

d. Phenanthrene

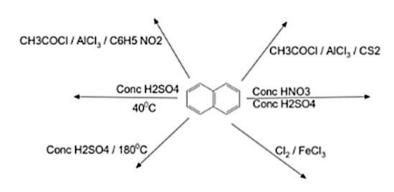
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13	The bond angle between	een carbon atoms in cyclonexane is			
a	120^{0}	c. 109.5 ⁰			
b	60^{0}	d. 90°			
14	Cyclopropane reacts	with bromine in the dark in presence of CCl4 to give			
	·	THE ST ST ST ST			
a	1,2-dibromopropane	c.1,2,3-tribromopropane			
b	1,3-dibromopropane	d. 1,4-dibromopropane			
15	[4+2] Cycloaddition	reaction method can be utilized for the synthesis of			
a	Anthracene	c. Benzene			
b	Naphthalene	d. Phenanthrene			
5	20 m	S. To. To.			
16	Naphthalene shows e	lectrophilic substitution reaction at			
a	Only β position	c. Both α and β position			
b	Only a position	d. Either α or β position			
Z.					
17	The torsional strain in	n cyclobutane is reduced by adopting			
a	Boat conformation	c. Chair conformation			
b	Butterfly conformation	d. Planar conformation			
4					
18	The -COOH group or	n the aromatic nucleus is			
a	Activating and o/p directing				
b	Deactivating and o/p directing				
c	Unreactive towards e	lectrophilic aromatic substitution			
d	Deactivating and meta directing				
2	£ 25 3				
19	Cycloalkanes have th	e same molecular formula as:			
a		c. Alkanes			
a b ₄		d. Cycloalkenes			
5	TIRCHES	d. Cycloairches			

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20	does not undergo Birch reduction				
a	Biphenyl	c. Anthracene	JEN,		
b.	Naphthalene	d.Phenanthrene	¥		
Q. 2	Answer any TWO qu	iestions	20		
a	Benzene.	cture of Benzene with Pi cloud and resonance in I mechanism of aromatic electrophilic substitution	5		
b	1) Explain the Coulso	structure and general uses of DDT and BHC. n-Moffitt theories in detail ing in increasing order of basicity. Justify the order.	5		
2	N(CH ₃) ₂	NH ₂ NHCH ₃			
	What would be the proacid?	oducts of reaction of the above molecules with nitrous	5		
C	a) Explain the mecha suitable examples.	nism and limitations of Friedel-Crafts alkylation with	5		
, O,	b) Define drying of oil reactions of fatty a	ls. Give an example of esterification and halogenation cids.	5		
Q. 3	Answer any SEVEN	questions	35		
b	synthetic uses of aryl of Arrange benzene, nap	es are weaker bases than cyclohexylamine. Give diazonium salts in preparation of aryl halides. hthalene, anthracene and phenanthrene in increasing rards electrophilic aromatic substitution. Justify the			
c	order. Give an accoun	t of the Pschorr synthesis of Phenanthrene s theory and discuss its limitations in brief.			
d.	Draw the structure and Triphenylmethane	I give medicinal uses of Diphenylmethane and			

e Predict the products of following reactions: (Any 5)



- f
 1) Define the following terms: i) Baeyer's strain ii) Torsional strain iii)
 Conformations
 - 2) Discuss the mechanism of Sandmeyer reaction of aromatic amines
- **g** What is acid value? Explain the procedure to determine acid value. Write significance of acid value in analysis of oils.
- h 1) Discuss various tests and reactions used for qualitative analysis of phenols
 - 2) Write the structure and uses of cresols and resorcinol.
- i Identify aromatic compounds from the following and justify with suitable reason

