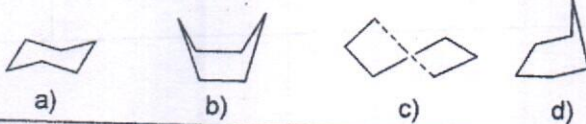
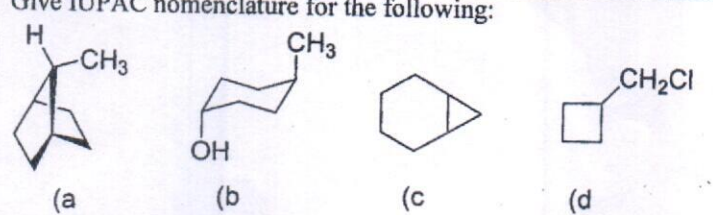




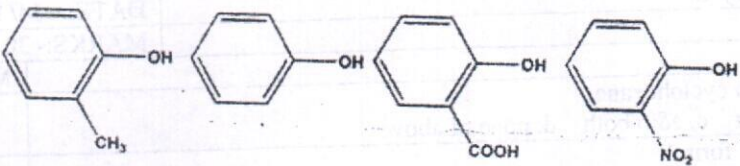
**ANJUMAN-I-ISLAM'S
KALSEKAR TECHNICAL CAMPUS, NEW PANVEL**

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- SCHOOL OF ENGINEERING & TECHNOLOGY
 SCHOOL OF PHARMACY
 SCHOOL OF ARCHITECTURE

REV:00	QUESTION PAPER: Sessional-II Exam	EXM-04(a)
CLASS :- Second Year B. Pharm		SEM:- III
SCHEME:- PCI Syllabus		TIME: 10.30 to 11.30 am
SUBJECT:- Pharmaceutical Organic Chemistry-II		DATE:- 14/ 11/2022
DURATION:- 60 mins		MARKS:- 30
Q.01: Multiple choice questions.		
a) Why is cyclopropane more reactive than cyclohexane. a. Angle strain b. Torsional strain c. a&b both d. none of above		Marks 1 CO 2
b) Which one of the following is half-chair form? 		Marks 1 CO 3
c) Which hybridization state is present in the carbon atom in benzene and why $\square + H_2 \xrightarrow{Ni}$ a. Butane b. cyclobutylene c. No reaction d. Nickel salt of cyclobutane		Marks 1 CO 2
d) When a carbon atom is bonded to two other carbon atoms, the C-C-C bond angle should be? a. 109.5 b. 120 c. 60 d. 108		Marks 1 CO 1
e) Which one is the drawback of bayer's strain theory a. Planar geometry of cycloalkanes b. rings above cyclopentane will be highly strained c. larger rings will have higher combustion energy d. All of the above		Marks 1 CO 3
f) Picric acid is formed when phenol react with which of the following reactant? a) Formaldehyde b) Hydrogen c) Nitric acid d) Hydrochloric acid		Marks 1 CO 2
g) In _____ synthesis for phenanthrene, o-nitro benzaldehyde and sodium phenyl acetate are used as a starting material. a) Haworth b) Pschorr c) Diels Alder d) Elbe		Marks 1 CO 2
h) When Naphthalene reacts with excess of chlorine, _____ is obtained. a) 1-Chloro-naphthalene b) 2-Chloro-naphthalene c) 1,4-dichloro-1,4-dihydronaphthalene d) 1,2,3,4-tetrachloro-1,2,3,4-tetrahydronaphthalene		Marks 1 CO 2
i) Which of the following is angularly fused polynuclear aromatic hydrocarbon? a) Biphenyl b) Naphthalene c) Anthracene d) Phenanthrene		Marks 1 CO 1
j) Phenol reacts with bromine in carbon tetrachloride at low temperature to give which of the following product? a) m-bromophenol b) o-and p-bromophenol c) p-bromophenol d) 2,4,6-tribromophenol		Marks 1 CO 2
Q.02 : Short answers (Any two)		
a) Give IUPAC nomenclature for the following: 		Marks 5 CO 1
b) Write the reactions for Naphthalene with a) CrO ₃ /AcOH b) O ₃ / H ₂ O & Zn c) O ₂ /V ₂ O ₃ d) KMnO ₄ /H ⁺ e) Na/Ethanol		Marks 5 CO 2

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c)	Write the structure & uses of following: a) Phenanthrene b) 1-Naphthol c) Triphenylmethane d) Diphenylmethane e) Triphenylcarbinol	5	1
Q.03 : Long Answers (Any one)			
I)	a) Describe briefly: conformational analysis, chair & boat conformations, 1-3 diaxial interaction and heat of combustion of cyclohexane?	10	3
II)	a) Write qualitative methods for identification of phenols. b) Arrange the following in increasing order of acidity. Justify the order. 	10	2 & 5



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REV:00	QUESTION PAPER PERIODIC TEST	EXM-04(a)	
CLASS:- Second Year B.Pharm		SEM:- III	
SCHEME:- PCI Syllabus		DATE:- 15/11/22	
SUBJECT:- Physical pharmacy I		MARKS:- 30	
DURATION:- 60 mins		Marks	CO
Q.01:			
a) Sublimation occurs when a. A solid changes to gas b. A gas changes to a solid c. A solid changes into liquid d. A liquid changes to gas		1	
b) Conversion of liquid to gas at all temperature is called... a. Sublimation b. Evaporation c. Condensation d. Boiling		1	
c) Which are the following properties or example of amorphous solid a. No definite structure b. No definite melting point c. Glassy d. All of the above		1	
d) Adhesive force greater than cohesive force then what occurs... a. Wetting b. Spreading c. Capillary rising d. All of the above		1	
e) Methods for measuring surface and interfacial tensions are a. Capillary rise method b. Du nouys ring tensinometer method c. Drop count method d. All of the above		1	
f) The Phenomenon of concentration of gas or liq. at solid surface called a. Adsorption b. Absorption c. Both d. None of the above		1	
g) The HLB range for lipophilic surfactant is a. 2-9 b. 9-16 c. 16-20 d. Above 20		1	
h) For the wetting of a solid by liquid the contact angle should have a value nearly..... a. 0 b. 90 c. 180 d. 270		1	
i) With rise in temperature surface tension of a liquid..... a. Increases b. Decreases c. remains the same d. None of the above		1	
j) Spreading coefficient is denoted by a. S b. S.Co c. Sp d. Wa		1	
Q.02 : Long answers (Any one)			
a) Enlist the methods to determine the surface tension and explain any one method in detail for determination of Surface tension.		10	
b) Write in brief about HLB scale. A polyhydric fatty acid ester has saponification number 48 and acid number 280. What is HLB value of surfactant?		10	
Q.03: Short Answers (Any two)			
a) What is Phenomenon of adsorption ? Explain Positive and Negative Adsorption.		5	
b) Explain in detail Langmuir's adsorption Isotherm.		5	
c) Explain liquefaction phenomenon and state application of aerosol.		5	



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REV:00	QUESTION PAPER PERIODIC TEST (UT2)	EXM-04(a)
CLASS:-SY B. Pharmacy		SEM:- 3
SCHEME:- CBCS (PCI) R2019		
SUBJECT:- Pharmaceutical Engineering		DATE:- 17 / 11/ 2022
DURATION:- 3.00p;m - 4.00pm		MARKS:- 30 (15 marks)

		Marks	CO
Q.1	MCQs	10	1,3
	<ol style="list-style-type: none">1. Which of the following experiment is used for study of flow of fluid?<ol style="list-style-type: none">a. Bernoulli'sb. Rittingerc. Reynoldsd. Henry's2. Which of the following does not require manometer in the construction of flow meter. -<ol style="list-style-type: none">i. Orifice meter,ii. Pitot tubeiii. Rotameter<ol style="list-style-type: none">a. Only ib. Only iic. i & iid. ii & iii3. Silverson mixer is used for preparation of<ol style="list-style-type: none">a. Elixirsb. Emulsionc. Syrupd. Mouth wash4. Which mixing is not a mechanism of liquid mixing<ol style="list-style-type: none">a. Laminarb. Turbulentc. Sheard. Bulk transport5. Vapors generated in one evaporator is used for heating the feed of second evaporator in-<ol style="list-style-type: none">a. Forced circulation evaporatorb. Multiple effect evaporatorc. Falling film evaporatord. Climbing film evaporator		

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P T O (1)

	<p>6. Calandria consist of a number of _____</p> <ol style="list-style-type: none"> Baffles Condensers Tubular surfaces Heating Plates <p>7. _____ is suitable for the viscous liquor</p> <ol style="list-style-type: none"> Short tube evaporator Forced circulation evaporator Climbing film evaporator Falling film evaporator <p>8. Distillation is defined as the separation of the components of liquid mixture, by a processes involving _____ and subsequent _____</p> <ol style="list-style-type: none"> Centrifugation , condensation Condensation , boiling Vaporization , condensation Boiling , evaporation <p>9. _____ is the mass transfer processes involving counter current diffusion of components at each equilibrium stage</p> <ol style="list-style-type: none"> Simple distillation Steam distillation Fractional distillation Evaporation <p>10. Differential Distillation is also known as</p> <ol style="list-style-type: none"> Simple Distillation Fractional Distillation Molecular Distillation Steam Distillation 		
Q.2	<p>Long Answers (Answer any ONE out of TWO)</p> <p>A) Enlist factors affecting evaporation. Explain multiple effect evaporator in detail.</p> <p>B) Explain molecular distillation with emphasis on wiped film molecular still.</p>	10	1,3
Q.3	<p>Short Answers (Answer any TWO out of THREE)</p> <p>A) Explain simple manometer in detail.</p> <p>B) Explain ribbon blender in detail.</p> <p>C) Explain orifice metre in detail.</p>	10	1,3

Note: Draw well labelled diagram wherever necessary