

SEAT No. \_\_\_\_\_



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SARDAR PATEL UNIVERSITY

[38]

S.Y. B.Sc. Industrial Chemistry SEMESTER – III  
EXAMINATION -2022  
Organic Chemistry  
SUB CODE: US03CICH52

DATE: 16/11/2022  
DAY: Wednesday

TIME: 10.00 AM TO 01.00 PM  
TOTAL MARKS: 70


Q. 1 Choose the correct answer.

[10]

- (1) Use of Phenol is \_\_\_\_\_  
(A) The Alcoholic beverages (C) As Anesthetist  
(B) In Antiseptic (D) As Mosquitos Repellent.
- (2) Which of the Following compound in Aspirin.  
(A) Methyl Salicylate (C) Phenyl Salicylate  
(B) Salicylic Acid (D) Acetyl salicylic Acid
- (3) Resorcinol on distillation with zinc dust gives.  
(A) Benzene (C) Cyclohexane  
(B) Toluene (D) m-Xylene
- (4) The Carbonyl Group is \_\_\_\_\_  
(A)  $sp$ Hybridised (C)  $sp^2$ Hybridised  
(B)  $sp^3$ Hybridised (D) None of these
- (5) Which of the following has highest boiling point.  
(A) Methanal (C) Propanal  
(B) Ethanal (D) Butanal
- (6) Canizaro reaction is not given by  
(A) Formaldehyde (C) Acetaldehyde  
(B) Benzaldehyde (D) None of above
- (7) All Carbon atom in Naphthalene are \_\_\_\_\_  
(A)  $sp$  Hybridised (C)  $sp^2$ Hybridised  
(B)  $sp^3$  Hybridised (D) None of these
- (8) Pyridine has a de localized  $\pi$  molecular orbital contain \_\_\_\_\_  
(A) 5e (C) 6e  
(B) 9e (D) 7e
- (9) Catalytic hydrogenation of pyridine is  
(A) Pyrrole (C) piperidine  
(B) pyrrolidine (D) Pyrimidine
- (10) Naphthalene Reduction undergo with  $Pt/4H_2$  From.  
(A) Tetralin (C) 1,2-Dialin  
(B) Decalin (D) 1,4- Dialin

P.T.O.

(1)

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- Q.2 Answer the following.(attempt ten) [20]**
- (1) Give any two preparation of Alcohol
  - (2) Write a reaction of Alcohol
  - (3) Write willamson Synthesis for ether.
  - (4) Write down Fridal-Craft reaction of Ketone.
  - (5) Write Cross-Cannizzaro reaction.
  - (6) Write down any two preparation of Carboxylic acid.
  - (7) Write down reaction of acid Anhydride.
  - (8) Write a structure Pyridine.
  - (9) Write a source of pyridine.
  - (10) Give the resonating structure of Naphthalene.
  - (11) Give the resonating structure of Anthracene.
  - (12) Write down oxidization reaction of Naphthalene.
- Q.3 (A) Write a note on an Alcohol as acid and bases. [05]**  
**(B) Write a reaction of Ether Cleavage in detail. [05]**
- OR**
- Q.3 (A) Write a note on ring substitution of phenol. [05]**  
**(B) Write down Structure of basicity of Amines. [05]**
- Q.4 (A) Write Nucleophilic addition to Aldehyde and Ketone can be catalyzed by acid. [05]**  
**(B) Give Addition of Alcohol in Aldehyde and Ketone. [05]**
- OR**
- Q.4 (A) Write a note on Dicarboxylic acid [05]**  
**(B) Write down Grignard reaction for Aldehyde and Ketone. [05]**
- Q.5 (A) Write down electrophilic Substitution reaction in Pyrrole and Furan. [05]**  
**(B) Write a note on Basicity of Pyridine. [05]**
- OR**
- Q. 5 (A) Write down electrophilic Substitution reaction Pyridine. [05]**  
**(B) Nucleophilic Substitution reaction in pyridine. [05]**
- Q. 6 (A) Write down Haworth's synthesis for Naphthalene. [05]**  
**(B) Write a note on Naphthalene derivatives. [05]**
- OR**
- Q. 6 (A) Discuss the structure of naphthalene on basis of Chemical reaction. [05]**  
**(B) Write the mechanism of electrophilic addition and substitution reaction of Anthracene. [05]**

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