

SEM	SET	PAPER CODE	TITLE OF THE PAPER
II	2014	14PCH2107	ORGANIC CHEMISTRY – II

SECTION - A**Answer all the questions:****30 × 1 = 30****Choose the correct answer:**

- Which mechanism is shown by Aromatic electrophilic substitution reactions?
a) Arenium-ion mechanism b) SEI mechanism
c) Addition-Elimination d) All the three A,B & C
- What is the intermediate formed in Arenium-ion mechanism?
a) Arenium-ion b) Wheland intermediate
c) σ -complex d) All the three A,B & C
- What kind of special attack is found in the nitration of chlorobenzene?
a) ortho-para attack b) meta-attack
c) Ipso attack d) none
- What is the kind of reactive intermediate formed in Reimer-Tiemann reaction?
a) carbocation b) chlorocarbene
c) chlorocarbanion d) trichloromethyl free-radical
- Identify the most reactive acylating agents in the Friedel-Crafts acylation of benzene.
a) RCOCl b) $(\text{RCO})_2\text{O}$
c) RCOOH d) $\text{RCOOSO}_2\text{CF}_3$

15. Robinson (1917) synthesized the alkaloid tropinone from succindialdehyde, methylamine and acetone. What type of reaction it is?
- a) Mannich reaction b) acyl-amino-de-oxo-bisubstitution
c) aldol condensation d) both A & B
16. What is the product formed when 2-methyl piperidine undergoes Hofmann exhaustive methylation with MeI and Ag₂O?
- a) alkyne b) diene
c) alkene d) none
17. When xanthates undergo pyrolytic reaction to give olefines. What is this reaction called?
- a) Cope reaction b) Shapiro reaction
c) Chugaev reaction d) none
18. Which is the rule says that the elimination reaction prefers to have the double bond with the carbon having least highly substituted?
- a) Zaitsev's rule b) Hofmann rule
c) Markovnikov's rule d) none
19. What is true about the stereochemistry of E2 elimination?
- a) syn-elimination b) cis-elimination
c) anti-elimination d) none
20. Which rule says that the more branched alkene is more preferentially formed?
- a) Zaitsev's rule b) Hofmann rule
c) Markovnikov's rule d) none
21. What is the oxidation state of carbon in acetylene?
- a) -4 b) -2
c) 0 d) +2
22. What do you understand by the conversion of a functional group in a molecule to a lower category in oxidation state?
- a) oxidation b) reduction
c) deduction d) none

