

## SAPMLE QUESTIONS FOR SY B. PHARM CBCS R-2019 OC-II ATKT EXAMS

1. When **formaldehyde** is treated with R-MgX, \_\_\_\_\_ is formed.

- A. 1° alcohol
- B. 2° Alcohol
- C. 3° Alcohol
- D. None of above

2. When **Acetaldehyde** is treated with R-MgX, \_\_\_\_\_ is formed.

- A. 1° alcohol
- B. 2° Alcohol
- C. 3° Alcohol
- D. None of above

3. When **Acetone** is treated with R-MgX, \_\_\_\_\_ is formed.

- A. 1° alcohol
- B. 2° Alcohol
- C. 3° Alcohol
- D. None of above

4. Aromatic amines can be converted into phenols using\_\_\_\_\_.

- A. Conc. HNO<sub>3</sub>
- B. NaNO<sub>2</sub>+ HCl
- C. Conc. H<sub>2</sub>SO<sub>4</sub>
- D. Fuming H<sub>2</sub>SO<sub>4</sub>

5. Oxidation of primary alcohol gives\_\_\_\_\_.

- A. Aldehyde
- B. Ketone
- C. Ether
- D. Ester

6. Methylbenzene can be converted into aldehydes by\_\_.

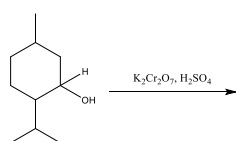
- A. Oxidation
- B. Reduction
- C. Both A & B
- D. None of the above

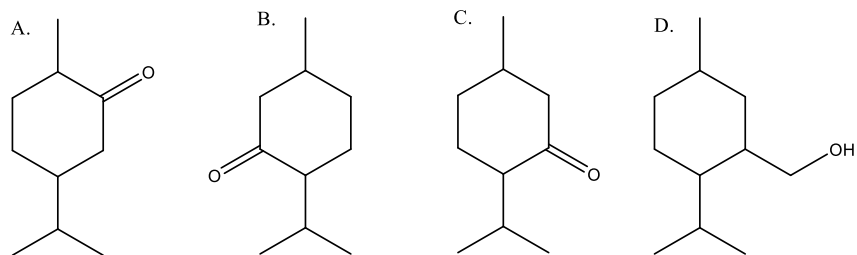
7. Oxidation of secondary alcohol gives\_\_\_\_\_.

- A. Aldehyde
- B. Ketone
- C. Ether
- D. Ester

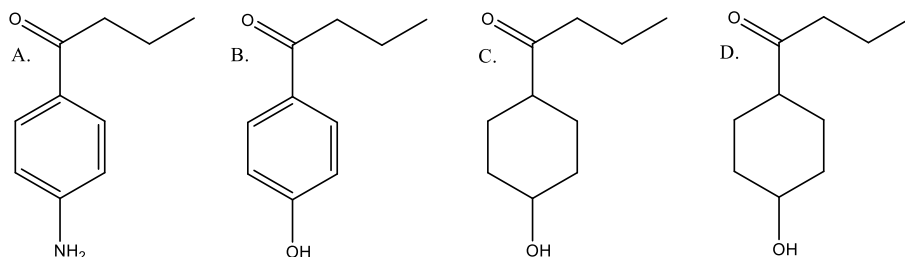
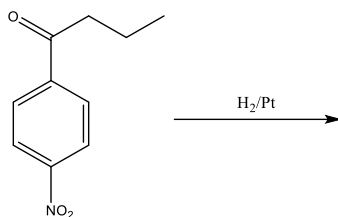
8. Identify the product for the following reaction:

Reaction:





9. Identify the product for following reaction



10. Upon reduction, aromatic nitro compounds undergo \_\_\_\_\_ formation.

- A. Amines  
B. Amides  
C. Emines  
D. Alkoxides

11. Hydrolysis of nitriles gives\_\_\_\_\_.

- A. Hydroxy compounds  
B. Carboxylic acids  
C. Aromatic alcohol  
D. Aromatic amines

12. Addition of R-MgX to an aldehyde is an example of

- A. Electrophilic addition  
B. Electrophilic substitution  
C. Nucleophilic addition  
D. Nucleophilic substitution

13. In case of nucleophilic addition, the geometry of intermediate formed is

- A. Trigonal (co-planer)  
B. Trigonal (anti-planner)  
C. Tetrahedral  
D. Bipyramidal

14. Carbonyl compounds usually undergoes

- A. Electrophilic addition  
B. Electrophilic substitution  
C. Nucleophilic addition  
D. Nucleophilic substitution

15. A mixture of two liquids which has a constant boiling point throughout distillation is said to be

- A. **Azeotropic**
- B. Mesotropic
- C. Isomeric
- D. Polymorphic

16. In the presence of a concentrated alkali, aldehydes containing no alpha hydrogen undergoes

- A. **Cannizzaro reaction**
- B. Crossed Cannizzaro reaction
- C. Claisen reaction
- D. Crossed Claisen reaction

17. An aldehyde containing alpha hydrogen, when treated with concentrated alkali, it undergoes

- A. Cannizzaro reaction
- B. Crossed Cannizzaro reaction
- C. **Aldol condensation**
- D. Claisen reaction

18. Crossed Cannizzaro reaction is a reaction between

- A. Two aldehydes
- B. Two ketones
- C. **An aldehyde and formaldehyde**
- D. An aldehyde and a ketone

19. In case of electrophilic addition, which new bonds are formed?

- A. Covalent bond
- B.  $\pi$ -bond
- C. **Sigma bonds**
- D. Ionic bond

20. In case of electrophilic addition, which specific bond is broken?

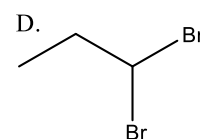
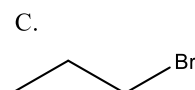
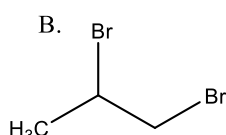
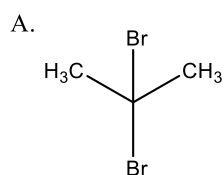
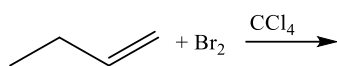
- E. Covalent bond
- F.  **$\pi$ -bond**
- G. Sigma bond
- H. Ionic bond

21. Alkenes usually undergoes \_\_\_\_

- A. **Electrophilic addition**
- B. Electrophilic substitution
- C. Nucleophilic addition
- D. Nucleophilic substitution

22. Identify the product for the following reaction.

Reaction:



23. Markovnikov's rule is applicable for

- A. Symmetrical alkenes
- B. Unsymmetrical alkenes**
- C. Both A and B
- D. None of the above

24. When propene is treated with HBr in presence of a peroxide, the product formed is

- A. Markovnikov's addition product
- B. Anti-Markovnikov's addition product**
- C. Both A and B
- D. None of the above

25. The reaction which converts an alkene into neutral alcohol is

- A. Oxymercuration-demercuration
- B. Hydrolysis
- C. Self-oxidation-reduction
- D. All of above