Organic Chemistry: Basic to Advanced

1. Acetic acid reacts with NaHCO3 to form:

A) CO2
B) CH4
C) C2H6
D) H2
■ **Correct Answer:** A
■ **Explanation:** Acetic acid reacts with NaHCO3 to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

2. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6
■ **Correct Answer:** A
■ **Explanation:** Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

3. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion
C) Free radical
D) None
■ **Correct Answer:** A
■ **Explanation:** SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

4. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
■ **Correct Answer:** B
■ **Explanation:** Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

5. Esterification is reaction between:

A) Acid + Alcohol
B) Acid + Base
C) Alcohol + Aldehyde
D) Alcohol + Ether
■ **Correct Answer:** A
■ **Explanation:** Esterification is reaction between: Correct option A follows organic reaction mechanisms or nomenclature rules.

6. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6
■ **Correct Answer:** A

■ **Explanation:** Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

7. Proteins are polymers of:

A) Sugars
B) Amino acids
C) Nucleotides
D) Alcohols
■ **Correct Answer:** B
■ **Explanation:** Proteins are polymers of: Correct option B follows organic reaction mechanisms or nomenclature rules.

8. Basicity of amines depends on:

A) Availability of lone pair
B) Size
C) Aromatic ring
D) Hybridization
■ **Correct Answer:** A
■ **Explanation:** Basicity of amines depends on: Correct option A follows organic reaction mechanisms or nomenclature rules.

9. Tollen's reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters
■ **Correct Answer:** A
■ **Explanation:** Tollen's reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

10. Inductive effect is transmitted through:

A) σ bonds
B) π bonds
C) Both
D) None
■ **Correct Answer:** A
■ **Explanation:** Inductive effect is transmitted through: Correct option A follows organic reaction mechanisms or nomenclature rules.

11. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
■ **Correct Answer:** B
■ **Explanation:** Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

12. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion
C) Free radical
D) None
■ **Correct Answer:** A

■ **Explanation:** SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

13. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4
■ **Correct Answer:** A
■ **Explanation:** When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

14. The IUPAC name of CH3–CH2–CH2–OH is:

A) Methanol
B) Ethanol
C) Propanol
D) Butanol
■ **Correct Answer:** C
■ **Explanation:** The IUPAC name of CH3–CH2–CH2–OH is: Correct option C follows organic reaction mechanisms or nomenclature rules.

15. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
■ **Correct Answer:** D
■ **Explanation:** The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

16. Tollen's reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters
■ **Correct Answer:** A
■ **Explanation:** Tollen's reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

17. Aspirin is used as:

A) Antipyretic
B) Antibiotic
C) Antiseptic
D) Analgesic
■ **Correct Answer:** A
■ **Explanation:** Aspirin is used as: Correct option A follows organic reaction mechanisms or nomenclature rules.

18. Diazotization of primary aromatic amine forms:

A) Diazonium salt
B) Aniline
C) Phenol
D) Nitrobenzene
■ **Correct Answer:** A

■ **Explanation:** Diazotization of primary aromatic amine forms: Correct option A follows organic reaction mechanisms or nomenclature rules.

19. The IUPAC name of CH3–CH2–CH2–OH is:

A) Methanol
B) Ethanol
C) Propanol
D) Butanol

■ **Correct Answer:** C

■ **Explanation:** The IUPAC name of CH3–CH2–CH2–OH is: Correct option C follows organic reaction mechanisms or nomenclature rules.

20. Diazotization of primary aromatic amine forms:

A) Diazonium salt
B) Aniline
C) Phenol
D) Nitrobenzene

■ **Correct Answer:** A

■ **Explanation:** Diazotization of primary aromatic amine forms: Correct option A follows organic reaction mechanisms or nomenclature rules.

21. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
■ **Correct Answer:** D
■ **Explanation:** The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

22. Esterification is reaction between:

A) Acid + Alcohol
B) Acid + Base
C) Alcohol + Aldehyde
D) Alcohol + Ether
■ **Correct Answer:** A
■ **Explanation:** Esterification is reaction between: Correct option A follows organic reaction mechanisms or nomenclature rules.

23. The compound showing resonance is:

A) CH4
B) C6H6
C) CH3OH
D) C2H6
■ **Correct Answer:** B
■ **Explanation:** The compound showing resonance is: Correct option B follows organic reaction mechanisms or nomenclature rules.

24. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6
■ **Correct Answer:** A
■ **Explanation:** Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

25. The nucleic acid containing thymine is:

A) DNA
B) RNA
C) Both
D) None
■ **Correct Answer:** A
■ **Explanation:** The nucleic acid containing thymine is: Correct option A follows organic reaction mechanisms or nomenclature rules.

26. Detergents are sodium salts of:

A) Long-chain alcohols
B) Long-chain sulfonic acids
C) Carboxylic acids
D) Ketones
■ **Correct Answer:** B
■ **Explanation:** Detergents are sodium salts of: Correct option B follows organic reaction mechanisms or nomenclature rules.

27. Reagent used for dehydrohalogenation is:

A) KOH (aq)
B) KOH (alc)
C) NaOH
D) HCl
Correct Answer: B
Explanation: Reagent used for dehydrohalogenation is: Correct option B follows organic reaction mechanisms or nomenclature rules.

28. Aspirin is used as:

A) Antipyretic
B) Antibiotic
C) Antiseptic
D) Analgesic
Correct Answer: A
Explanation: Aspirin is used as: Correct option A follows organic reaction mechanisms or nomenclature rules.

29. Reagent used for dehydrohalogenation is:

A) KOH (aq)
B) KOH (alc)
C) NaOH
D) HCl
Correct Answer: B
Explanation: Reagent used for dehydrohalogenation is: Correct option B follows organic reaction mechanisms or nomenclature rules.

30. Soap is prepared by:

A) Saponification
B) Hydrolysis
C) Oxidation
D) Reduction
Correct Answer: A
Explanation: Soap is prepared by: Correct option A follows organic reaction mechanisms or nomenclature rules.

31. Reagent used for dehydrohalogenation is:

A) KOH (aq)
B) KOH (alc)
C) NaOH
D) HCl
Correct Answer: B
Explanation: Reagent used for dehydrohalogenation is: Correct option B follows organic reaction mechanisms or nomenclature rules.

32. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None
Correct Answer: C
Explanation: The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

33. Diazotization of primary aromatic amine forms:

A) Diazonium salt
B) Aniline
C) Phenol
D) Nitrobenzene
■ **Correct Answer:** A
■ **Explanation:** Diazotization of primary aromatic amine forms: Correct option A follows organic reaction mechanisms or nomenclature rules.

34. Glucose is a:

A) Monosaccharide
B) Disaccharide
C) Polysaccharide
D) Lipid
■ **Correct Answer:** A
■ **Explanation:** Glucose is a: Correct option A follows organic reaction mechanisms or nomenclature rules.

35. Proteins are polymers of:

A) Sugars
B) Amino acids
C) Nucleotides
D) Alcohols
■ **Correct Answer:** B
■ **Explanation:** Proteins are polymers of: Correct option B follows organic reaction mechanisms or nomenclature rules.

36. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None
■ **Correct Answer:** C
■ **Explanation:** The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

37. Tollen's reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters
■ **Correct Answer:** A
■ **Explanation:** Tollen's reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

38. The nucleic acid containing thymine is:

A) DNA
B) RNA
C) Both
D) None
■ **Correct Answer:** A
■ **Explanation:** The nucleic acid containing thymine is: Correct option A follows organic reaction mechanisms or nomenclature rules.

39. Proteins are polymers of:

A) Sugars
B) Amino acids

C) Nucleotides
D) Alcohols
■ **Correct Answer:** B
■ **Explanation:** Proteins are polymers of: Correct option B follows organic reaction mechanisms or nomenclature rules.

40. The compound showing resonance is:

A) CH4
B) C6H6
C) CH3OH
D) C2H6
■ **Correct Answer:** B
■ **Explanation:** The compound showing resonance is: Correct option B follows organic reaction mechanisms or nomenclature rules.

41. Dehydration of ethanol gives:

A) Ethene
B) Ethane
C) Ethyne
D) Methane
Correct Answer: A
Explanation: Dehydration of ethanol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

42. Tollen's reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters
Correct Answer: A
Explanation: Tollen's reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

43. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
Correct Answer: D
Explanation: The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

44. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None
Correct Answer: C
Explanation: The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

45. Glucose is a:

A) Monosaccharide
B) Disaccharide
C) Polysaccharide
D) Lipid
Correct Answer: A
Explanation: Glucose is a: Correct option A follows organic reaction mechanisms or nomenclature rules.

46. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4
Correct Answer: A
Explanation: When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

47. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C
■ **Correct Answer:** D
■ **Explanation:** Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

48. Ethanol reacts with HBr to form:

A) C2H5Br
B) C2H4
C) CH3Br
D) CH3CH2OH
■ **Correct Answer:** A
■ **Explanation:** Ethanol reacts with HBr to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

49. Detergents are sodium salts of:

A) Long-chain alcohols
B) Long-chain sulfonic acids
C) Carboxylic acids
D) Ketones
■ **Correct Answer:** B
■ **Explanation:** Detergents are sodium salts of: Correct option B follows organic reaction mechanisms or nomenclature rules.

50. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4
■ **Correct Answer:** A
■ **Explanation:** When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

51. Aspirin is used as:

A) Antipyretic
B) Antibiotic
C) Antiseptic
D) Analgesic
■ **Correct Answer:** A
■ **Explanation:** Aspirin is used as: Correct option A follows organic reaction mechanisms or nomenclature rules.

52. Soap is prepared by:

A) Saponification
B) Hydrolysis
C) Oxidation
D) Reduction
■ **Correct Answer:** A
■ **Explanation:** Soap is prepared by: Correct option A follows organic reaction mechanisms or nomenclature rules.

53. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
■ **Correct Answer:** B
■ **Explanation:** Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

54. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
■ **Correct Answer:** B
■ **Explanation:** Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

55. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
■ **Correct Answer:** B
■ **Explanation:** Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

56. Detergents are sodium salts of:

A) Long-chain alcohols
B) Long-chain sulfonic acids
C) Carboxylic acids
D) Ketones
■ **Correct Answer:** B
■ **Explanation:** Detergents are sodium salts of: Correct option B follows organic reaction mechanisms or nomenclature rules.

57. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
■ **Correct Answer:** B
■ **Explanation:** Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

58. Oxidation of primary alcohol gives:

A) Aldehyde
B) Ketone
C) Acid
D) Ester
■ **Correct Answer:** A
■ **Explanation:** Oxidation of primary alcohol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

59. Proteins are polymers of:

A) Sugars
B) Amino acids
C) Nucleotides
D) Alcohols

■ **Correct Answer:** B

■ **Explanation:** Proteins are polymers of: Correct option B follows organic reaction mechanisms or nomenclature rules.

60. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid

■ **Correct Answer:** D

■ **Explanation:** The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

61. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None
Correct Answer: C
Explanation: The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

62. Detergents are sodium salts of:

A) Long-chain alcohols
B) Long-chain sulfonic acids
C) Carboxylic acids
D) Ketones
Correct Answer: B
Explanation: Detergents are sodium salts of: Correct option B follows organic reaction mechanisms or nomenclature rules.

63. Dehydration of ethanol gives:

A) Ethene
B) Ethane
C) Ethyne
D) Methane
Correct Answer: A
Explanation: Dehydration of ethanol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

64. Oxidation of primary alcohol gives:

A) Aldehyde
B) Ketone
C) Acid
D) Ester
Correct Answer: A
Explanation: Oxidation of primary alcohol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

65. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
Correct Answer: D
Explanation: The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

66. Aniline reacts with HCl to form:

A) C6H5NH3Cl
B) C6H5Cl
C) C6H5NH2Cl
D) C6H5OH
Correct Answer: A
Explanation: Aniline reacts with HCl to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

67. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6

■ **Correct Answer:** A

■ **Explanation:** Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

68. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C

■ **Correct Answer:** D

■ **Explanation:** Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

69. Oxidation of primary alcohol gives:

A) Aldehyde
B) Ketone
C) Acid
D) Ester

■ **Correct Answer:** A

■ **Explanation:** Oxidation of primary alcohol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

70. Acetic acid reacts with NaHCO3 to form:

A) CO2
B) CH4
C) C2H6
D) H2

■ **Correct Answer:** A

■ **Explanation:** Acetic acid reacts with NaHCO3 to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

71. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4

■ **Correct Answer:** A

■ **Explanation:** When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

72. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion
C) Free radical
D) None

■ **Correct Answer:** A

■ **Explanation:** SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

73. Soap is prepared by:

A) Saponification
B) Hydrolysis
C) Oxidation
D) Reduction
■ **Correct Answer:** A
■ **Explanation:** Soap is prepared by: Correct option A follows organic reaction mechanisms or nomenclature rules.

74. Dehydration of ethanol gives:

A) Ethene
B) Ethane
C) Ethyne
D) Methane
■ **Correct Answer:** A
■ **Explanation:** Dehydration of ethanol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

75. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
■ **Correct Answer:** D
■ **Explanation:** The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

76. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
■ **Correct Answer:** D
■ **Explanation:** The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

77. Diazotization of primary aromatic amine forms:

A) Diazonium salt
B) Aniline
C) Phenol
D) Nitrobenzene
■ **Correct Answer:** A
■ **Explanation:** Diazotization of primary aromatic amine forms: Correct option A follows organic reaction mechanisms or nomenclature rules.

78. The IUPAC name of CH3–CH2–CH2–OH is:

A) Methanol
B) Ethanol
C) Propanol
D) Butanol
■ **Correct Answer:** C
■ **Explanation:** The IUPAC name of CH3–CH2–CH2–OH is: Correct option C follows organic reaction mechanisms or nomenclature rules.

79. The compound showing resonance is:

A) CH4
B) C6H6
C) CH3OH
D) C2H6

■ **Correct Answer:** B

■ **Explanation:** The compound showing resonance is: Correct option B follows organic reaction mechanisms or nomenclature rules.

80. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction

■ **Correct Answer:** B

■ **Explanation:** Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

81. The IUPAC name of CH3–CH2–CH2–OH is:

A) Methanol
B) Ethanol
C) Propanol
D) Butanol
■ **Correct Answer:** C
■ **Explanation:** The IUPAC name of CH3–CH2–CH2–OH is: Correct option C follows organic reaction mechanisms or nomenclature rules.

82. Detergents are sodium salts of:

A) Long-chain alcohols
B) Long-chain sulfonic acids
C) Carboxylic acids
D) Ketones
■ **Correct Answer:** B
■ **Explanation:** Detergents are sodium salts of: Correct option B follows organic reaction mechanisms or nomenclature rules.

83. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C
■ **Correct Answer:** D
■ **Explanation:** Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

84. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4
■ **Correct Answer:** A
■ **Explanation:** When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

85. Acetic acid reacts with NaHCO3 to form:

A) CO2
B) CH4
C) C2H6
D) H2
■ **Correct Answer:** A
■ **Explanation:** Acetic acid reacts with NaHCO3 to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

86. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
■ **Correct Answer:** D
■ **Explanation:** The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

87. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None
■ **Correct Answer:** C
■ **Explanation:** The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

88. The nucleic acid containing thymine is:

A) DNA
B) RNA
C) Both
D) None
■ **Correct Answer:** A
■ **Explanation:** The nucleic acid containing thymine is: Correct option A follows organic reaction mechanisms or nomenclature rules.

89. The IUPAC name of CH3–CH2–CH2–OH is:

A) Methanol
B) Ethanol
C) Propanol
D) Butanol
■ **Correct Answer:** C
■ **Explanation:** The IUPAC name of CH3–CH2–CH2–OH is: Correct option C follows organic reaction mechanisms or nomenclature rules.

90. Basicity of amines depends on:

A) Availability of lone pair
B) Size
C) Aromatic ring
D) Hybridization
■ **Correct Answer:** A
■ **Explanation:** Basicity of amines depends on: Correct option A follows organic reaction mechanisms or nomenclature rules.

91. Tollen’s reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters
■ **Correct Answer:** A
■ **Explanation:** Tollen’s reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

92. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6
■ **Correct Answer:** A
■ **Explanation:** Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

93. Aniline reacts with HCl to form:

A) C6H5NH3Cl
B) C6H5Cl
C) C6H5NH2Cl
D) C6H5OH
■ **Correct Answer:** A
■ **Explanation:** Aniline reacts with HCl to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

94. Formaldehyde is represented as:

A) CH3CHO
B) HCHO
C) CH3COCH3
D) CH3COOH
■ **Correct Answer:** B
■ **Explanation:** Formaldehyde is represented as: Correct option B follows organic reaction mechanisms or nomenclature rules.

95. Formaldehyde is represented as:

A) CH3CHO
B) HCHO
C) CH3COCH3
D) CH3COOH
■ **Correct Answer:** B
■ **Explanation:** Formaldehyde is represented as: Correct option B follows organic reaction mechanisms or nomenclature rules.

96. Acetic acid reacts with NaHCO3 to form:

A) CO2
B) CH4
C) C2H6
D) H2
■ **Correct Answer:** A
■ **Explanation:** Acetic acid reacts with NaHCO3 to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

97. Esterification is reaction between:

A) Acid + Alcohol
B) Acid + Base
C) Alcohol + Aldehyde
D) Alcohol + Ether
■ **Correct Answer:** A
■ **Explanation:** Esterification is reaction between: Correct option A follows organic reaction mechanisms or nomenclature rules.

98. Basicity of amines depends on:

A) Availability of lone pair
B) Size
C) Aromatic ring
D) Hybridization
■ **Correct Answer:** A
■ **Explanation:** Basicity of amines depends on: Correct option A follows organic reaction mechanisms or nomenclature rules.

99. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4

■ **Correct Answer:** A

■ **Explanation:** When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

100. Diazotization of primary aromatic amine forms:

A) Diazonium salt
B) Aniline
C) Phenol
D) Nitrobenzene

■ **Correct Answer:** A

■ **Explanation:** Diazotization of primary aromatic amine forms: Correct option A follows organic reaction mechanisms or nomenclature rules.

101. Acetic acid reacts with NaHCO3 to form:

A) CO2
B) CH4
C) C2H6
D) H2
Correct Answer: A
Explanation: Acetic acid reacts with NaHCO3 to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

102. The compound showing resonance is:

A) CH4
B) C6H6
C) CH3OH
D) C2H6
Correct Answer: B
Explanation: The compound showing resonance is: Correct option B follows organic reaction mechanisms or nomenclature rules.

103. Ethanol reacts with HBr to form:

A) C2H5Br
B) C2H4
C) CH3Br
D) CH3CH2OH
Correct Answer: A
Explanation: Ethanol reacts with HBr to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

104. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6
Correct Answer: A
Explanation: Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

105. Dehydration of ethanol gives:

A) Ethene
B) Ethane
C) Ethyne
D) Methane
Correct Answer: A
Explanation: Dehydration of ethanol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

106. Inductive effect is transmitted through:

A) σ bonds
B) π bonds
C) Both
D) None
Correct Answer: A
Explanation: Inductive effect is transmitted through: Correct option A follows organic reaction mechanisms or nomenclature rules.

107. Basicity of amines depends on:

A) Availability of lone pair
B) Size
C) Aromatic ring
D) Hybridization
■ **Correct Answer:** A
■ **Explanation:** Basicity of amines depends on: Correct option A follows organic reaction mechanisms or nomenclature rules.

108. Formaldehyde is represented as:

A) CH3CHO
B) HCHO
C) CH3COCH3
D) CH3COOH
■ **Correct Answer:** B
■ **Explanation:** Formaldehyde is represented as: Correct option B follows organic reaction mechanisms or nomenclature rules.

109. Proteins are polymers of:

A) Sugars
B) Amino acids
C) Nucleotides
D) Alcohols
■ **Correct Answer:** B
■ **Explanation:** Proteins are polymers of: Correct option B follows organic reaction mechanisms or nomenclature rules.

110. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None
■ **Correct Answer:** C
■ **Explanation:** The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

111. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
■ **Correct Answer:** D
■ **Explanation:** The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

112. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
■ **Correct Answer:** B
■ **Explanation:** Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

113. Diazotization of primary aromatic amine forms:

A) Diazonium salt
B) Aniline
C) Phenol
D) Nitrobenzene
■ **Correct Answer:** A
■ **Explanation:** Diazotization of primary aromatic amine forms: Correct option A follows organic reaction mechanisms or nomenclature rules.

114. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None
■ **Correct Answer:** C
■ **Explanation:** The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

115. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C
■ **Correct Answer:** D
■ **Explanation:** Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

116. Diazotization of primary aromatic amine forms:

A) Diazonium salt
B) Aniline
C) Phenol
D) Nitrobenzene
■ **Correct Answer:** A
■ **Explanation:** Diazotization of primary aromatic amine forms: Correct option A follows organic reaction mechanisms or nomenclature rules.

117. Tollen’s reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters
■ **Correct Answer:** A
■ **Explanation:** Tollen’s reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

118. Detergents are sodium salts of:

A) Long-chain alcohols
B) Long-chain sulfonic acids
C) Carboxylic acids
D) Ketones
■ **Correct Answer:** B
■ **Explanation:** Detergents are sodium salts of: Correct option B follows organic reaction mechanisms or nomenclature rules.

119. Proteins are polymers of:

A) Sugars
B) Amino acids
C) Nucleotides
D) Alcohols

■ **Correct Answer:** B

■ **Explanation:** Proteins are polymers of: Correct option B follows organic reaction mechanisms or nomenclature rules.

120. The nucleic acid containing thymine is:

A) DNA
B) RNA
C) Both
D) None

■ **Correct Answer:** A

■ **Explanation:** The nucleic acid containing thymine is: Correct option A follows organic reaction mechanisms or nomenclature rules.

121. Soap is prepared by:

A) Saponification
B) Hydrolysis
C) Oxidation
D) Reduction
Correct Answer: A
Explanation: Soap is prepared by: Correct option A follows organic reaction mechanisms or nomenclature rules.

122. Basicity of amines depends on:

A) Availability of lone pair
B) Size
C) Aromatic ring
D) Hybridization
Correct Answer: A
Explanation: Basicity of amines depends on: Correct option A follows organic reaction mechanisms or nomenclature rules.

123. Basicity of amines depends on:

A) Availability of lone pair
B) Size
C) Aromatic ring
D) Hybridization
Correct Answer: A
Explanation: Basicity of amines depends on: Correct option A follows organic reaction mechanisms or nomenclature rules.

124. Tollen’s reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters
Correct Answer: A
Explanation: Tollen’s reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

125. Tollen’s reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters
Correct Answer: A
Explanation: Tollen’s reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

126. Aspirin is used as:

A) Antipyretic
B) Antibiotic
C) Antiseptic
D) Analgesic
Correct Answer: A
Explanation: Aspirin is used as: Correct option A follows organic reaction mechanisms or nomenclature rules.

127. The nucleic acid containing thymine is:

A) DNA
B) RNA
C) Both
D) None

Correct Answer: A

Explanation: The nucleic acid containing thymine is: Correct option A follows organic reaction mechanisms or nomenclature rules.

128. Reagent used for dehydrohalogenation is:

A) KOH (aq)
B) KOH (alc)
C) NaOH
D) HCl

Correct Answer: B

Explanation: Reagent used for dehydrohalogenation is: Correct option B follows organic reaction mechanisms or nomenclature rules.

129. Ethanol reacts with HBr to form:

A) C2H5Br
B) C2H4
C) CH3Br
D) CH3CH2OH

Correct Answer: A

Explanation: Ethanol reacts with HBr to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

130. Reagent used for dehydrohalogenation is:

A) KOH (aq)
B) KOH (alc)
C) NaOH
D) HCl

Correct Answer: B

Explanation: Reagent used for dehydrohalogenation is: Correct option B follows organic reaction mechanisms or nomenclature rules.

131. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4

Correct Answer: A

Explanation: When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

132. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion
C) Free radical
D) None

Correct Answer: A

Explanation: SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

133. Diazotization of primary aromatic amine forms:

A) Diazonium salt
B) Aniline
C) Phenol
D) Nitrobenzene
■ **Correct Answer:** A
■ **Explanation:** Diazotization of primary aromatic amine forms: Correct option A follows organic reaction mechanisms or nomenclature rules.

134. Glucose is a:

A) Monosaccharide
B) Disaccharide
C) Polysaccharide
D) Lipid
■ **Correct Answer:** A
■ **Explanation:** Glucose is a: Correct option A follows organic reaction mechanisms or nomenclature rules.

135. Proteins are polymers of:

A) Sugars
B) Amino acids
C) Nucleotides
D) Alcohols
■ **Correct Answer:** B
■ **Explanation:** Proteins are polymers of: Correct option B follows organic reaction mechanisms or nomenclature rules.

136. Acetic acid reacts with NaHCO3 to form:

A) CO2
B) CH4
C) C2H6
D) H2
■ **Correct Answer:** A
■ **Explanation:** Acetic acid reacts with NaHCO3 to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

137. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4
■ **Correct Answer:** A
■ **Explanation:** When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

138. Detergents are sodium salts of:

A) Long-chain alcohols
B) Long-chain sulfonic acids
C) Carboxylic acids
D) Ketones
■ **Correct Answer:** B
■ **Explanation:** Detergents are sodium salts of: Correct option B follows organic reaction mechanisms or nomenclature rules.

139. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion

C) Free radical
D) None
■ **Correct Answer:** A
■ **Explanation:** SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

140. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
■ **Correct Answer:** D
■ **Explanation:** The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

141. Tollen’s reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters
Correct Answer: A
Explanation: Tollen’s reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

142. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
Correct Answer: D
Explanation: The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

143. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6
Correct Answer: A
Explanation: Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

144. Glucose is a:

A) Monosaccharide
B) Disaccharide
C) Polysaccharide
D) Lipid
Correct Answer: A
Explanation: Glucose is a: Correct option A follows organic reaction mechanisms or nomenclature rules.

145. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
Correct Answer: B
Explanation: Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

146. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
Correct Answer: B
Explanation: Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

147. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None
■ **Correct Answer:** C
■ **Explanation:** The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

148. Aniline reacts with HCl to form:

A) C6H5NH3Cl
B) C6H5Cl
C) C6H5NH2Cl
D) C6H5OH
■ **Correct Answer:** A
■ **Explanation:** Aniline reacts with HCl to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

149. Inductive effect is transmitted through:

A) σ bonds
B) π bonds
C) Both
D) None
■ **Correct Answer:** A
■ **Explanation:** Inductive effect is transmitted through: Correct option A follows organic reaction mechanisms or nomenclature rules.

150. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
■ **Correct Answer:** B
■ **Explanation:** Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

151. Ethanol reacts with HBr to form:

A) C2H5Br
B) C2H4
C) CH3Br
D) CH3CH2OH
■ **Correct Answer:** A
■ **Explanation:** Ethanol reacts with HBr to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

152. Dehydration of ethanol gives:

A) Ethene
B) Ethane
C) Ethyne
D) Methane
■ **Correct Answer:** A
■ **Explanation:** Dehydration of ethanol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

153. Detergents are sodium salts of:

A) Long-chain alcohols
B) Long-chain sulfonic acids
C) Carboxylic acids
D) Ketones
■ **Correct Answer:** B
■ **Explanation:** Detergents are sodium salts of: Correct option B follows organic reaction mechanisms or nomenclature rules.

154. Detergents are sodium salts of:

A) Long-chain alcohols
B) Long-chain sulfonic acids
C) Carboxylic acids
D) Ketones
■ **Correct Answer:** B
■ **Explanation:** Detergents are sodium salts of: Correct option B follows organic reaction mechanisms or nomenclature rules.

155. Basicity of amines depends on:

A) Availability of lone pair
B) Size
C) Aromatic ring
D) Hybridization
■ **Correct Answer:** A
■ **Explanation:** Basicity of amines depends on: Correct option A follows organic reaction mechanisms or nomenclature rules.

156. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6
■ **Correct Answer:** A
■ **Explanation:** Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

157. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C
■ **Correct Answer:** D
■ **Explanation:** Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

158. Tollen’s reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters
■ **Correct Answer:** A
■ **Explanation:** Tollen’s reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

159. Aspirin is used as:

A) Antipyretic
B) Antibiotic
C) Antiseptic
D) Analgesic

■ **Correct Answer:** A

■ **Explanation:** Aspirin is used as: Correct option A follows organic reaction mechanisms or nomenclature rules.

160. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C

■ **Correct Answer:** D

■ **Explanation:** Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

161. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None
Correct Answer: C
Explanation: The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

162. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C
Correct Answer: D
Explanation: Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

163. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion
C) Free radical
D) None
Correct Answer: A
Explanation: SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

164. Reagent used for dehydrohalogenation is:

A) KOH (aq)
B) KOH (alc)
C) NaOH
D) HCl
Correct Answer: B
Explanation: Reagent used for dehydrohalogenation is: Correct option B follows organic reaction mechanisms or nomenclature rules.

165. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion
C) Free radical
D) None
Correct Answer: A
Explanation: SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

166. Glucose is a:

A) Monosaccharide
B) Disaccharide
C) Polysaccharide
D) Lipid
Correct Answer: A
Explanation: Glucose is a: Correct option A follows organic reaction mechanisms or nomenclature rules.

167. The compound showing resonance is:

A) CH4
B) C6H6
C) CH3OH
D) C2H6

■ **Correct Answer:** B

■ **Explanation:** The compound showing resonance is: Correct option B follows organic reaction mechanisms or nomenclature rules.

168. Inductive effect is transmitted through:

A) σ bonds
B) π bonds
C) Both
D) None

■ **Correct Answer:** A

■ **Explanation:** Inductive effect is transmitted through: Correct option A follows organic reaction mechanisms or nomenclature rules.

169. Oxidation of primary alcohol gives:

A) Aldehyde
B) Ketone
C) Acid
D) Ester

■ **Correct Answer:** A

■ **Explanation:** Oxidation of primary alcohol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

170. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C

■ **Correct Answer:** D

■ **Explanation:** Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

171. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6

■ **Correct Answer:** A

■ **Explanation:** Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

172. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid

■ **Correct Answer:** D

■ **Explanation:** The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

173. Diazotization of primary aromatic amine forms:

A) Diazonium salt
B) Aniline
C) Phenol
D) Nitrobenzene
■ **Correct Answer:** A
■ **Explanation:** Diazotization of primary aromatic amine forms: Correct option A follows organic reaction mechanisms or nomenclature rules.

174. The compound showing resonance is:

A) CH4
B) C6H6
C) CH3OH
D) C2H6
■ **Correct Answer:** B
■ **Explanation:** The compound showing resonance is: Correct option B follows organic reaction mechanisms or nomenclature rules.

175. Glucose is a:

A) Monosaccharide
B) Disaccharide
C) Polysaccharide
D) Lipid
■ **Correct Answer:** A
■ **Explanation:** Glucose is a: Correct option A follows organic reaction mechanisms or nomenclature rules.

176. Diazotization of primary aromatic amine forms:

A) Diazonium salt
B) Aniline
C) Phenol
D) Nitrobenzene
■ **Correct Answer:** A
■ **Explanation:** Diazotization of primary aromatic amine forms: Correct option A follows organic reaction mechanisms or nomenclature rules.

177. Inductive effect is transmitted through:

A) σ bonds
B) π bonds
C) Both
D) None
■ **Correct Answer:** A
■ **Explanation:** Inductive effect is transmitted through: Correct option A follows organic reaction mechanisms or nomenclature rules.

178. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
■ **Correct Answer:** B
■ **Explanation:** Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

179. Oxidation of primary alcohol gives:

A) Aldehyde
B) Ketone

C) Acid
D) Ester
■ **Correct Answer:** A
■ **Explanation:** Oxidation of primary alcohol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

180. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C
■ **Correct Answer:** D
■ **Explanation:** Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

181. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
Correct Answer: B
Explanation: Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

182. Basicity of amines depends on:

A) Availability of lone pair
B) Size
C) Aromatic ring
D) Hybridization
Correct Answer: A
Explanation: Basicity of amines depends on: Correct option A follows organic reaction mechanisms or nomenclature rules.

183. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C
Correct Answer: D
Explanation: Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

184. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C
Correct Answer: D
Explanation: Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

185. The IUPAC name of CH3–CH2–CH2–OH is:

A) Methanol
B) Ethanol
C) Propanol
D) Butanol
Correct Answer: C
Explanation: The IUPAC name of CH3–CH2–CH2–OH is: Correct option C follows organic reaction mechanisms or nomenclature rules.

186. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
Correct Answer: D
Explanation: The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

187. The nucleic acid containing thymine is:

A) DNA
B) RNA
C) Both
D) None

■ **Correct Answer:** A

■ **Explanation:** The nucleic acid containing thymine is: Correct option A follows organic reaction mechanisms or nomenclature rules.

188. Inductive effect is transmitted through:

A) σ bonds
B) π bonds
C) Both
D) None

■ **Correct Answer:** A

■ **Explanation:** Inductive effect is transmitted through: Correct option A follows organic reaction mechanisms or nomenclature rules.

189. Soap is prepared by:

A) Saponification
B) Hydrolysis
C) Oxidation
D) Reduction

■ **Correct Answer:** A

■ **Explanation:** Soap is prepared by: Correct option A follows organic reaction mechanisms or nomenclature rules.

190. The compound showing resonance is:

A) CH4
B) C6H6
C) CH3OH
D) C2H6

■ **Correct Answer:** B

■ **Explanation:** The compound showing resonance is: Correct option B follows organic reaction mechanisms or nomenclature rules.

191. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None

■ **Correct Answer:** C

■ **Explanation:** The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

192. Glucose is a:

A) Monosaccharide
B) Disaccharide
C) Polysaccharide
D) Lipid

■ **Correct Answer:** A

■ **Explanation:** Glucose is a: Correct option A follows organic reaction mechanisms or nomenclature rules.

193. Tollen’s reagent is used to test:

A) Aldehydes
B) Ketones

C) Alcohols
D) Esters
■ **Correct Answer:** A
■ **Explanation:** Tollen's reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

194. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6
■ **Correct Answer:** A
■ **Explanation:** Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

195. Tollen's reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters
■ **Correct Answer:** A
■ **Explanation:** Tollen's reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

196. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4
■ **Correct Answer:** A
■ **Explanation:** When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

197. The IUPAC name of HCOOH is:

A) Formic acid
B) Acetic acid
C) Propanoic acid
D) Methanoic acid
■ **Correct Answer:** D
■ **Explanation:** The IUPAC name of HCOOH is: Correct option D follows organic reaction mechanisms or nomenclature rules.

198. Reagent used for dehydrohalogenation is:

A) KOH (aq)
B) KOH (alc)
C) NaOH
D) HCl
■ **Correct Answer:** B
■ **Explanation:** Reagent used for dehydrohalogenation is: Correct option B follows organic reaction mechanisms or nomenclature rules.

199. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2

C) sp
D) None
■ **Correct Answer:** C
■ **Explanation:** The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

200. Inductive effect is transmitted through:

A) σ bonds
B) π bonds
C) Both
D) None
■ **Correct Answer:** A
■ **Explanation:** Inductive effect is transmitted through: Correct option A follows organic reaction mechanisms or nomenclature rules.

201. Esterification is reaction between:

A) Acid + Alcohol
B) Acid + Base
C) Alcohol + Aldehyde
D) Alcohol + Ether
Correct Answer: A
Explanation: Esterification is reaction between: Correct option A follows organic reaction mechanisms or nomenclature rules.

202. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4
Correct Answer: A
Explanation: When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

203. Esterification is reaction between:

A) Acid + Alcohol
B) Acid + Base
C) Alcohol + Aldehyde
D) Alcohol + Ether
Correct Answer: A
Explanation: Esterification is reaction between: Correct option A follows organic reaction mechanisms or nomenclature rules.

204. Soap is prepared by:

A) Saponification
B) Hydrolysis
C) Oxidation
D) Reduction
Correct Answer: A
Explanation: Soap is prepared by: Correct option A follows organic reaction mechanisms or nomenclature rules.

205. Soap is prepared by:

A) Saponification
B) Hydrolysis
C) Oxidation
D) Reduction
Correct Answer: A
Explanation: Soap is prepared by: Correct option A follows organic reaction mechanisms or nomenclature rules.

206. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4
Correct Answer: A
Explanation: When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

207. Proteins are polymers of:

A) Sugars
B) Amino acids
C) Nucleotides
D) Alcohols

■ **Correct Answer:** B

■ **Explanation:** Proteins are polymers of: Correct option B follows organic reaction mechanisms or nomenclature rules.

208. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion
C) Free radical
D) None

■ **Correct Answer:** A

■ **Explanation:** SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

209. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion
C) Free radical
D) None

■ **Correct Answer:** A

■ **Explanation:** SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

210. Aspirin is used as:

A) Antipyretic
B) Antibiotic
C) Antiseptic
D) Analgesic

■ **Correct Answer:** A

■ **Explanation:** Aspirin is used as: Correct option A follows organic reaction mechanisms or nomenclature rules.

211. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion
C) Free radical
D) None

■ **Correct Answer:** A

■ **Explanation:** SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

212. Acetic acid reacts with NaHCO3 to form:

A) CO2
B) CH4
C) C2H6
D) H2

■ **Correct Answer:** A

■ **Explanation:** Acetic acid reacts with NaHCO3 to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

213. Dehydration of ethanol gives:

A) Ethene
B) Ethane
C) Ethyne
D) Methane
■ **Correct Answer:** A
■ **Explanation:** Dehydration of ethanol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

214. Proteins are polymers of:

A) Sugars
B) Amino acids
C) Nucleotides
D) Alcohols
■ **Correct Answer:** B
■ **Explanation:** Proteins are polymers of: Correct option B follows organic reaction mechanisms or nomenclature rules.

215. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion
C) Free radical
D) None
■ **Correct Answer:** A
■ **Explanation:** SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

216. Detergents are sodium salts of:

A) Long-chain alcohols
B) Long-chain sulfonic acids
C) Carboxylic acids
D) Ketones
■ **Correct Answer:** B
■ **Explanation:** Detergents are sodium salts of: Correct option B follows organic reaction mechanisms or nomenclature rules.

217. Esterification is reaction between:

A) Acid + Alcohol
B) Acid + Base
C) Alcohol + Aldehyde
D) Alcohol + Ether
■ **Correct Answer:** A
■ **Explanation:** Esterification is reaction between: Correct option A follows organic reaction mechanisms or nomenclature rules.

218. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None
■ **Correct Answer:** C
■ **Explanation:** The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

219. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C

■ **Correct Answer:** D

■ **Explanation:** Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

220. Inductive effect is transmitted through:

A) σ bonds
B) π bonds
C) Both
D) None

■ **Correct Answer:** A

■ **Explanation:** Inductive effect is transmitted through: Correct option A follows organic reaction mechanisms or nomenclature rules.

221. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4
Correct Answer: A
Explanation: When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

222. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C
Correct Answer: D
Explanation: Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

223. Basicity of amines depends on:

A) Availability of lone pair
B) Size
C) Aromatic ring
D) Hybridization
Correct Answer: A
Explanation: Basicity of amines depends on: Correct option A follows organic reaction mechanisms or nomenclature rules.

224. Aspirin is used as:

A) Antipyretic
B) Antibiotic
C) Antiseptic
D) Analgesic
Correct Answer: A
Explanation: Aspirin is used as: Correct option A follows organic reaction mechanisms or nomenclature rules.

225. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction
Correct Answer: B
Explanation: Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

226. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None
Correct Answer: C
Explanation: The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

227. Benzene undergoes:

A) Addition
B) Substitution
C) Oxidation
D) Reduction

■ **Correct Answer:** B

■ **Explanation:** Benzene undergoes: Correct option B follows organic reaction mechanisms or nomenclature rules.

228. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6

■ **Correct Answer:** A

■ **Explanation:** Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

229. Oxidation of primary alcohol gives:

A) Aldehyde
B) Ketone
C) Acid
D) Ester

■ **Correct Answer:** A

■ **Explanation:** Oxidation of primary alcohol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

230. Proteins are polymers of:

A) Sugars
B) Amino acids
C) Nucleotides
D) Alcohols

■ **Correct Answer:** B

■ **Explanation:** Proteins are polymers of: Correct option B follows organic reaction mechanisms or nomenclature rules.

231. Tollen’s reagent is used to test:

A) Aldehydes
B) Ketones
C) Alcohols
D) Esters

■ **Correct Answer:** A

■ **Explanation:** Tollen’s reagent is used to test: Correct option A follows organic reaction mechanisms or nomenclature rules.

232. Proteins are polymers of:

A) Sugars
B) Amino acids
C) Nucleotides
D) Alcohols

■ **Correct Answer:** B

■ **Explanation:** Proteins are polymers of: Correct option B follows organic reaction mechanisms or nomenclature rules.

233. Diazotization of primary aromatic amine forms:

A) Diazonium salt
B) Aniline
C) Phenol
D) Nitrobenzene

■ **Correct Answer:** A

■ **Explanation:** Diazotization of primary aromatic amine forms: Correct option A follows organic reaction mechanisms or nomenclature rules.

234. The IUPAC name of CH3–CH2–CH2–OH is:

A) Methanol
B) Ethanol
C) Propanol
D) Butanol

■ **Correct Answer:** C

■ **Explanation:** The IUPAC name of CH3–CH2–CH2–OH is: Correct option C follows organic reaction mechanisms or nomenclature rules.

235. The hybridization of carbon in ethyne (C2H2) is:

A) sp3
B) sp2
C) sp
D) None

■ **Correct Answer:** C

■ **Explanation:** The hybridization of carbon in ethyne (C2H2) is: Correct option C follows organic reaction mechanisms or nomenclature rules.

236. When CH4 is chlorinated in presence of sunlight, main product is:

A) CH3Cl
B) CH2Cl2
C) CHCl3
D) CCl4

■ **Correct Answer:** A

■ **Explanation:** When CH4 is chlorinated in presence of sunlight, main product is: Correct option A follows organic reaction mechanisms or nomenclature rules.

237. The compound showing resonance is:

A) CH4
B) C6H6
C) CH3OH
D) C2H6

■ **Correct Answer:** B

■ **Explanation:** The compound showing resonance is: Correct option B follows organic reaction mechanisms or nomenclature rules.

238. Soap is prepared by:

A) Saponification
B) Hydrolysis
C) Oxidation
D) Reduction

■ **Correct Answer:** A

■ **Explanation:** Soap is prepared by: Correct option A follows organic reaction mechanisms or nomenclature rules.

239. Inductive effect is transmitted through:

A) σ bonds
B) π bonds
C) Both
D) None
■ **Correct Answer:** A
■ **Explanation:** Inductive effect is transmitted through: Correct option A follows organic reaction mechanisms or nomenclature rules.

240. Aldol condensation occurs between:

A) Two aldehydes
B) Two ketones
C) Aldehyde and ketone
D) Both A and C
■ **Correct Answer:** D
■ **Explanation:** Aldol condensation occurs between: Correct option D follows organic reaction mechanisms or nomenclature rules.

241. Esterification is reaction between:

A) Acid + Alcohol
B) Acid + Base
C) Alcohol + Aldehyde
D) Alcohol + Ether
Correct Answer: A
Explanation: Esterification is reaction between: Correct option A follows organic reaction mechanisms or nomenclature rules.

242. Acetic acid reacts with NaHCO3 to form:

A) CO2
B) CH4
C) C2H6
D) H2
Correct Answer: A
Explanation: Acetic acid reacts with NaHCO3 to form: Correct option A follows organic reaction mechanisms or nomenclature rules.

243. Oxidation of primary alcohol gives:

A) Aldehyde
B) Ketone
C) Acid
D) Ester
Correct Answer: A
Explanation: Oxidation of primary alcohol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

244. Oxidation of primary alcohol gives:

A) Aldehyde
B) Ketone
C) Acid
D) Ester
Correct Answer: A
Explanation: Oxidation of primary alcohol gives: Correct option A follows organic reaction mechanisms or nomenclature rules.

245. The IUPAC name of CH3–CH2–CH2–OH is:

A) Methanol
B) Ethanol
C) Propanol
D) Butanol
Correct Answer: C
Explanation: The IUPAC name of CH3–CH2–CH2–OH is: Correct option C follows organic reaction mechanisms or nomenclature rules.

246. Inductive effect is transmitted through:

A) σ bonds
B) π bonds
C) Both
D) None
Correct Answer: A
Explanation: Inductive effect is transmitted through: Correct option A follows organic reaction mechanisms or nomenclature rules.

247. Ethene reacts with bromine to give:

A) C2H4Br2
B) C2H6
C) C2H2
D) C2Br6

■ **Correct Answer:** A

■ **Explanation:** Ethene reacts with bromine to give: Correct option A follows organic reaction mechanisms or nomenclature rules.

248. SN1 mechanism proceeds through:

A) Carbocation
B) Carbanion
C) Free radical
D) None

■ **Correct Answer:** A

■ **Explanation:** SN1 mechanism proceeds through: Correct option A follows organic reaction mechanisms or nomenclature rules.

249. The nucleic acid containing thymine is:

A) DNA
B) RNA
C) Both
D) None

■ **Correct Answer:** A

■ **Explanation:** The nucleic acid containing thymine is: Correct option A follows organic reaction mechanisms or nomenclature rules.

250. Glucose is a:

A) Monosaccharide
B) Disaccharide
C) Polysaccharide
D) Lipid

■ **Correct Answer:** A

■ **Explanation:** Glucose is a: Correct option A follows organic reaction mechanisms or nomenclature rules.