NEET ANSWER KEY & SOLUTION

PAPER CODE :- PART TEST-4
CLASS-XII

ANSWER KEY

PHYSICS

1.	(C)	**2.**	(B)	**3.**	(C)	**4.**	(C)	**5.**	(B)	**6.**	(C)	**7.**	(B)
8.	(A)	**9.**	(D)	**10.**	(C)	**11.**	(A)	**12.**	(D)	**13.**	(D)	**14.**	(D)
15.	(C)	**16.**	(C)	**17.**	(C)	**18.**	(A)	**19.**	(D)	**20.**	(B)	**21.**	(C)
22.	(B)	**23.**	(B)	**24.**	(B)	**25.**	(D)	**26.**	(C)	**27.**	(A)	**28.**	(B)
29.	(C)	**30.**	(D)	**31.**	(C)	**32.**	(A)	**33.**	(D)	**34.**	(C)	**35.**	(A)
36.	(A)	**37.**	(A)	**38.**	(A)	**39.**	(D)	**40.**	(C)	**41.**	(B)	**42.**	(C)
43.	(D)	**44.**	(B)	**45.**	(B)	**46.**	(B)	**47.**	(B)	**48.**	(A)	**49.**	(B)
50.	(B)												

CHEMISTRY

51.	(D)	**52.**	(B)	**53.**	(C)	**54.**	(A)	**55.**	(D)	**56.**	(B)	**57.**	(D)
58.	(B)	**59.**	(D)	**60.**	(B)	**61.**	(D)	**62.**	(A)	**63.**	(B)	**64.**	(B)
65.	(C)	**66.**	(C)	**67.**	(D)	**68.**	(D)	**69.**	(B)	**70.**	(B)	**71.**	(B)
72.	(C)	**73.**	(C)	**74.**	(D)	**75.**	(C)	**76.**	(A)	**77.**	(A)	**78.**	(B)
79.	(C)	**80.**	(C)	**81.**	(B)	**82.**	(D)	**83.**	(C)	**84.**	(B)	**85.**	(A)
86.	(A)	**87.**	(C)	**88.**	(C)	**89.**	(C)	**90.**	(A)	**91.**	(B)	**92.**	(B)
93.	(A)	**94.**	(C)	**95.**	(C)	**96.**	(A)	**97.**	(C)	**98.**	(C)	**99.**	(A)
100.	(A)												

BIOLOGY

101.	(B)	**102.**	(D)	**104.**	(B)	**105.**	(D)	**106.**	(B)	**107.**	(C)	**108.**	(D)
109.	(C)	**110.**	(B)	**111.**	(B)	**112.**	(A)	**113.**	(D)	**114.**	(D)	**115.**	(C)
116.	(D)	**117.**	(D)	**118.**	(A)	**119.**	(D)	**120.**	(B)	**121.**	(B)	**122.**	(C)
123.	(B)	**124.**	(B)	**125.**	(B)	**126.**	(C)	**127.**	(A)	**128.**	(C)	**129.**	(C)
130.	(C)	**131.**	(C)	**132.**	(C)	**133.**	(C)	**134.**	(B)	**135.**	(D)	**136.**	(B)
137.	(B)	**138.**	(C)	**139.**	(C)	**140.**	(D)	**141.**	(C)	**142.**	(B)	**143.**	(D)
144.	(B)	**145.**	(A)	**146.**	(C)	**147.**	(C)	**148.**	(D)	**149.**	(A)	**150.**	(D)
151.	(A)	**152.**	(A)	**153.**	(B)	**154.**	(C)	**155.**	(B)	**156.**	(A)	**157.**	(C)
158.	(B)	**159.**	(D)	**160.**	(A)	**161.**	(B)	**162.**	(D)	**163.**	(D)	**164.**	(C)
165.	(C)	**166.**	(B)	**167.**	(B)	**168.**	(B)	**169.**	(A)	**170.**	(B)	**171.**	(B)
172.	(A)	**173.**	(C)	**174.**	(D)	**175.**	(D)	**176.**	(A)	**177.**	(C)	**178.**	(B)
179.	(A)	**180.**	(D)	**181.**	(B)	**182.**	(D)	**183.**	(A)	**184.**	(A)	**185.**	(D)
186.	(C)	**187.**	(B)	**188.**	(D)	**189.**	(D)	**190.**	(A)	**191.**	(A)	**192.**	(A)
193.	(B)	**194.**	(C)	**195.**	(B)	**196.**	(B)	**197.**	(C)	**198.**	(C)	**199.**	(B)
200.	(C)												

SOLUTIONS

PHYSICS

1. (C)

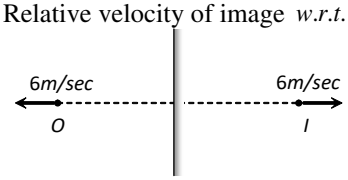
Sol. When light is reflected from denser medium, a phase difference of π always occurs.

2. (B)

Sol. Size of image formed by a plane mirror is same as that of the object. Hence its magnification will be 1.

3. (C)

Sol. Relative velocity of image *w.r.t.* object



$= 6 - (-6) = 12\, m/\sec$

4. (C)

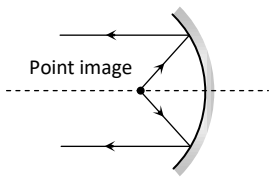
5. (B)

Sol. The wavelength of these wave ranges between 4000Å to 100 Å that is smaller wavelength and higher frequency. They are absorbed by atmosphere and convert oxygen into ozone. They cause skin diseases and they are harmful to eye and cause permanent blindness.

6. (C)

7. (B)

Sol. Object should be placed on focus of concave mirror.



8. (A)

Sol. Virtual image formed is larger in size in case of concave mirror.

9. (D)

Sol. $f = \frac{R}{2} \Rightarrow R = 40\,cm$

10. (C)

Sol. The angle of incidence for which the refracted ray travels along the glass-air boundary
When a ray emerges at the critical angle i_C, the angle of refraction will be equal to 90°. This means that the refracted ray will travel along the the refracting surface which is glass in this case.
Hence, the correct answer is option (C) in this case.

11. (A)

Sol. $\mu_{blue} > \mu_{red}$

12. (D)

Sol. Velocity and wavelength change but frequency remains same.

13. (D)

Sol. In vacuum, the speed of light is independent of wave length. Thus vacuum (or air) is a non dispersive medium in which all colours travel with the same speed.

14. (D)

Sol. $v = \frac{c}{\mu} = \frac{3 \times 10^8}{2} = 1.5 \times 10^8\, m/s = 1.5 \times 10^{10}\, cm/s$

15. (C)

Sol. $\text{time} = \frac{\text{distance}}{\text{speed}} = \frac{t}{c/n} = \frac{nt}{c}$

16. (C)

Sol. Let ν' and λ' represents frequency and wavelength of light in medium respectively.

so $\nu' = \frac{v}{\lambda'} = \frac{c/\mu}{\lambda/\mu} = \frac{c}{\lambda} = \nu$

17. (C)

Sol. $_2\mu_1 \times _3\mu_2 \times _4\mu_3 = \frac{\mu_1}{\mu_2} \times \frac{\mu_2}{\mu_3} \times \frac{\mu_3}{\mu_4} = \frac{\mu_1}{\mu_4} = {}_4\mu_1 = \frac{1}{{}_1\mu_4}$

18. (A)

Sol. $\lambda_m = \frac{\lambda_a}{\mu} = \frac{c}{\nu\mu} = \frac{3 \times 10^8}{5 \times 10^{14} \times 1.5} = 4000\,Å$

19. (D)

Sol. Ray optics is valid when size of the objects is much larger than the order of wavelength of light.

20. (B)

Sol. Frequency does not change with medium but wavelength and velocity decrease with the increase in refractive index.

21. (C)

Sol. Stars twinkle due to variation in *R.I.* of atmosphere.

22. (B)

Sol. As no scattering of light occurs. Space appears black.

23. (B)

Sol. $v \propto \frac{1}{\mu}$, μ is smaller for air than water, glass and diamond.

24. (B)

Sol. Due to high refractive index its critical angle is very small so that most of the light incident on the diamond is total internally reflected repeatedly and diamond sparkles.

25. (D)

Sol. $_a\mu_g = \frac{1}{\sin C} \Rightarrow \sin C = \frac{1}{_a\mu_g}$

As μ for violet colour is maximum, so sin C is minimum and hence critical angle C is minimum for voilet colour.

26. (C)

Sol. From figure given in question $\theta = 2c = 98°$.

27. (A)

Sol. In total internal reflection, 100% of incident light is reflected back into the same medium, and there is no loss of intensity, while in reflection from mirrors and refraction from lenses, there is always some loss of intensity. Therefore images formed by total internal reflection are much brighter than those formed by mirrors or lenses.

28. (B)

29. (C)

Sol. Huygen's wave theory fails to explain the particle nature of light (*i.e.* photoelectric effect)

30. (D)

Sol. Interference is shown by transverse as well as mechanical waves.

31. (C)

32. (A)

Sol. A wave can transmit energy from one place to another.

33. (D)

Sol. $\frac{I_1}{I_2} = \frac{1}{25};\ \therefore \frac{a_1^2}{a_2^2} = \frac{1}{25} \Rightarrow \frac{a_1}{a_2} = \frac{1}{5}$

34. (C)

Sol. Two coherent source must have a constant phase difference otherwise they can not produce interference.

35. (A)

Sol. $\frac{I_{max}}{I_{min}} = \left(\frac{\sqrt{\frac{I_1}{I_2}}+1}{\sqrt{\frac{I_1}{I_2}}-1}\right)^2 = \left(\frac{\sqrt{\frac{4}{1}}+1}{\sqrt{\frac{4}{1}}-1}\right)^2 = \frac{9}{1}$

36. (A)

Sol. Wavefront is the locus of all the particles which vibrates in the same phase.

37. (A)

Sol. $I \propto a^2 \Rightarrow \frac{a_1}{a_2} = \left(\frac{4}{1}\right)^{1/2} = \frac{2}{1}$

38. (A)

39. (D)

Sol. $\beta = \frac{\lambda D}{d} \Rightarrow$ If D becomes twice and d becomes half so β becomes four times.

40. (C)

Sol. $\beta = \frac{\lambda D}{d} = \frac{5000\times10^{-10}\times1}{0.1\times10^{-3}} m = 5\times10^{-3} m = 0.5\ cm.$

41. (B)

Sol. Distance of third maxima from central maxima is $x = \frac{3\lambda D}{d} = \frac{3\times5000\times10^{-10}\times(200\times10^{-2})}{0.2\times10^{-3}}$

$= 1.5\,cm.$

42. (C)

Sol. Distance between consecutive bright fringes or dark fringes = β

$\beta = \frac{\lambda D}{d} = \frac{550\times10^{-9}\times1}{1.1\times10^{-3}} = 500\times60^{-6} = 0.5\,mm$

43. (D)

Sol. Using relation, $d\sin\theta = n\lambda \Rightarrow \sin\theta = \frac{n\lambda}{d}$

For $n = 3$, $\sin\theta = \frac{3\lambda}{d} = \frac{3\times589\times10^{-9}}{0.589}$

$= 3\times10^{-6}$ or $\theta = \sin^{-1}(3\times10^{-6})$

44. (B)

Sol. $B \propto \lambda$

45. (B)

Sol. Distance between n^{th} Bright fringe and m^{th} dark fringe $(n > m)$

$\Delta x = \left(n - m + \frac{1}{2}\right)\beta = \left(5 - 3 + \frac{1}{2}\right)\times\frac{6.5\times10^{-7}\times1}{1\times10^{-3}}$

$= 1.63\,mm$

46. (B)

Sol. Fringe width $(\beta) \propto \frac{1}{\text{prism Angle } (\alpha)}$

47. (B)

48. (A)

Sol. Doppler's shift is given by

$$\Delta\lambda = \frac{v\lambda}{c} = \frac{5000 \times 6000}{3 \times 10^8} = 0.1\text{Å}$$

49. (B)

Sol. Shifting towards ultraviolet region shows that Apparent wavelength decreased. Therefore the source is moving towards the earth.

50. (B)

Sol. With reference to this theory the velocity of the observer is neglected *w.r.t.* the light velocity.

CHEMISTRY

51. (D)

Sol. The aldehydes which do not have α-hydrogen atoms show disproportionation reaction. These aldehyde may be aliphatic aldehyde (formaldehyde) or aromatic aldehyde.

52. (B)

53. (C)

Sol. Methyl Cyanide on reacting with a Grignard's reagent produces a ketone

$$\underset{\text{methyl cyanide}}{CH_3-C\equiv N} \xrightarrow{+CH_3MgI} CH_3-\underset{CH_3}{\underset{|}{C}}=NMgI \xrightarrow[-MgINH_2]{+H_2O} \underset{\text{acetone}}{CH_3-\underset{CH_3}{\underset{|}{C}}=O}$$

54. (A)

Sol. The more reactive substance towards nucleophillic reagents is HCHO because in this case the carbon atom of carbonyl $>C^{+}-\overset{\curvearrowright}{O^{-}}$ group has greatest + charge, so it is more susceptible to attack of nucleophillic reagents. In CH_3CHO and CH_3COCH_3, the positive charge on the carbon atom of >C = O group is decreased due to +I effect of CH_3 groups attached to it.

55. (D)

Sol. Carbonyl compounds reacts with $NaHSO_3$ to form a colorless crystalline product.

$CH_3CHO \xrightarrow{+NaHSO_3} CH_3CH(OH)-SO_3Na$

Acetaldehyde acetaldehyde sodium bisulphate

$$\underset{\text{acetone}}{\underset{CH_3}{\overset{CH_3}{\diagdown}}C=O} \xrightarrow{+NaHSO_3} \underset{\text{acetone sodium bisulphite}}{CH_3-\underset{OH}{\underset{|}{\overset{CH_3}{\overset{|}{C}}}}-SO_3Na}$$

56. (B)

Sol. When acetaldehyde is treated with Aluminium ethoxide in the presence of a little anhydrous Aluminium chloride, it undergoes esterification and forms an ester ethyl acetate. This reaction is known as Tishchenko reaction

$$\underset{\text{acetaldehyde}}{CH_3-\overset{H}{\overset{|}{C}}(=O)} + O=\underset{H}{\underset{|}{C}}-CH_3 \xrightarrow[AlCl_3]{Al(OC_2H_5)_3} \underset{\text{ethyl acetate}}{CH_3-\overset{O}{\overset{\|}{C}}-O-CH_2-CH_3}$$

57. (D)

Sol. All aldehydes, not containing α-Hydrogen atoms, react with cold conc., alkali to form a corresponding alcohol and a salt of the corresponding acid. The aldehyde gets oxidised as well as reduced, hence all the statements given above are true.

$$\underset{\text{methanal}}{HCHO} + \underset{HCHO}{NaOH} \longrightarrow \underset{\text{(sodium methanoate)}}{HCOO^{-}\,Na^{+}} + \underset{\text{(methanol)}}{CH_3OH}$$

58. (B)

Sol. Doctors detect diabetes disease by testing the presence of glucose in urine with fehling's solution. Glucose has an aldehyde group present in its molecule hence it gives a red precipitate on heating with F.S.

$$CuSO_4 + 2NaOH \longrightarrow Cu(OH)_2 + Na_2SO_4$$

$$Cu(OH)_2 \longrightarrow CuO + H_2O$$

$$R-CHO + 2CuO \longrightarrow RCOOH + \underset{\text{Red ppt.}}{Cu_2O(\downarrow)}$$

59. (D)

Sol. Keto-enol tautomerism is shown by $C_6H_5COCH_2COCH_3$ as follows :

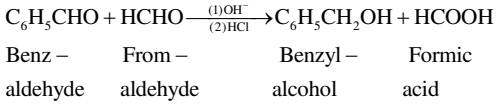
$$\underset{\text{keto}}{C_6H_5-\overset{O}{\overset{\|}{C}}-CH_2-\overset{O}{\overset{\|}{C}}-CH_3} \Leftrightarrow \underset{\text{enol}}{C_6H_5-\overset{OH}{\overset{|}{C}}=CH-\overset{O}{\overset{\|}{C}}-CH_3}$$

60. (B)

Sol.

61. (D)

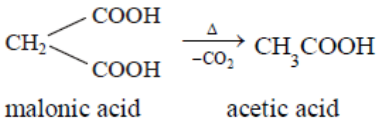
Sol. In the reaction between benzaldehyde and formaldehyde the wrong statement is that the reaction is known as crossed aldol condensation. Actually the reaction is called Crossed Cannizzaro reaction.



Benz – aldehyde	From – aldehyde	Benzyl – alcohol	Formic acid

62. (A)

Sol. Malonic acid on heating produces acetic acid. It is called decarboxylation reaction.



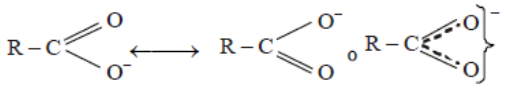
malonic acid acetic acid

63. (B)

Sol. The main reason for the fact that carboxylic acids undergo ionization is resonance stabilization of the carboxylate ion to give equivalent resonating structures. The ionization takes place as follows :

$R - COOH + H_2O \longrightarrow R - COO^- + H_3O^+$

The carboxylate ions are stabilized by resonance.

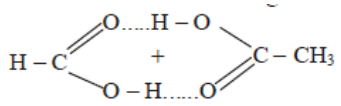


64. (B)

Sol. H-Bonding in acetamide & acetic acid

65. (C)

Sol. The pair which forms strongest hydrogen bonding is HCOOH and CH_3COOH. They form intermolecular H-bonding



intermolecular H – bonding

66. (C)

Sol. High molecular weight of acetic acid coupled with polar nature due to resonance as well as presence of H – bonding accounts for its high boiling point.

67. (D)

Sol. Ferric chloride gives violet colour with phenol.

68. (D)

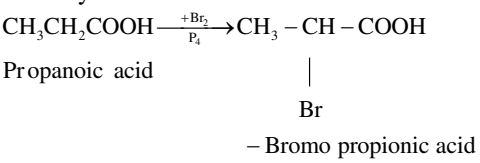
Sol. Acids are directly reduced to the corresponding primary alcohols with powerful reducing agents like $LiAlH_4$.

$CH_3COOH + 4H \xrightarrow{LiAlH_4} CH_3CH_2OH + H_2O$

Acetic acid Ethanol

69. (B)

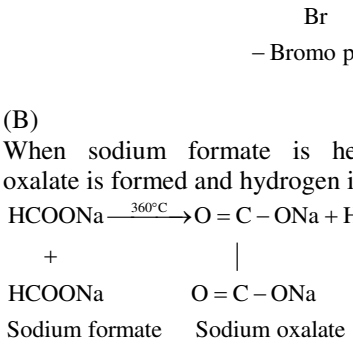
Sol. Propionic acid when reacted with Br_2 in the presence of phosphorous in sunlight gives $CH_3CHBrCOOH$. It is known as Hell Volhard Zelinsky reaction.



– Bromo propionic acid

70. (B)

Sol. When sodium formate is heated, sodium oxalate is formed and hydrogen is evolved.

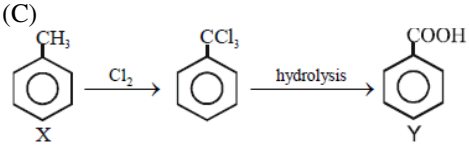


71. (B)

Sol. All the above reactions except the reaction given below takes place.

72. (C)

Sol.



73. (C)

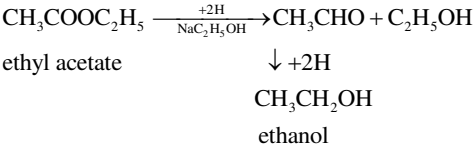
Sol. $C_6H_5COOH + SOCl_2 \longrightarrow C_6H_5COCl + SO_2 + HCl$

74. (D)

Sol. In the given compounds C_6H_5OH is not an alcohol. It is a phenol in which a –OH group is attached to a benzene ring. Alcohols are regarded as monoalkyl derivatives of water or hydroxy derivative of hydrocarbons. Rest of the alcohol shown above are primary alcohols.

75. (C)

Sol. The reductants used in Bouveault Blanc reduction are $Na+C_2H_5OH$. The reduction takes place as follows



The reduction of an ester with Na and C_2H_5OH is known as Bouveault Blanc reduction.

76. (A)

Sol. There is a great branching in 3º alcohol and it causes a reduction in intermolecular forces (H-bonding). Hence the solubility in water increases in the order 3º > 2º > 1º as H-bond with water is formed more easily.

77. (A)

Sol. The name of the compound B in the given sequence is propene. The reaction takes place as follows :

$$CH_3CHOH.CH_3 \xrightarrow{PCl_5} \underset{\text{isopropyl chloride}}{CH_3-\overset{Cl}{\overset{|}{CH}}-CH_3} \xrightarrow[-KCl/H_2O]{\text{alc KOH}} \underset{\text{Propene}}{CH_3-CH=CH_2}$$

isopropyl alcohol

Alc. KOH is used in elimination reaction for dehydrohalogenation of an alkyl halide.

78. (B)

Sol. The stability of carbonium ions follows the order 3º > 2º > 1º. The tertiary butyl alcohol give tertiary butyl carbonium ion,

$(CH_3)_3COH \rightarrow (CH_3)_3C^+ + OH^-$

79. (C)

Sol. Pyroligneous acid is the brown aqueous upper layer of the liquid distillation and contains about (i) 5% methanol (ii) 0.5% acetone (iii) 10% acetic acid and rest water, hence it is a source of acetone, methanol and acetic acid.

80. (C)

Sol. Phenol is weakly acidic in nature while alcohol is neutral. Phenol and ethanol are distinguished by the reaction with $FeCl_3$. Phenol gives a green or red colour with $FeCl_3$, while ethanol does not give it.

81. (B)

Sol. The primary alcohol 1-Butanol is least reactive towards Lucas reagent $ZnCl_2$ and Con.HCl. It gives a white turbidity in half an hour or above. This test is used for the distinction between primary, secondary and tertiary alcohols and konwn as Lucas test.

82. (D)

Sol. C_2H_5OH (A) reacts with Na to give C_2H_5ONa (B). C_2H_5OH (A) also reacts with conc. H_2SO_4 to form diethyl ether because of dehydration.

83. (C)

Sol. $ROH + HOR \xrightarrow[-H_2O]{\text{Acid}} ROR$

84. (B)

Sol. $CH_3CH_2OCH_2CH \xrightarrow[-H_2O]{[O]} 2CH3CHO.$

The oxidation may be carried out with $K_2Cr_2O_7$ +conc. H_2SO_4 or alkaline $KMnO_4$ at elevated temperature.

85. (A)

Sol. Sodalime, benzene, potassium phenoxide are the A, B and C compounds respectively.

86. (A)

Sol. $2C_2H_5-OH + 2Na \rightarrow 2C_2H_5ONa + H_2$

(A) (B)

$C_2H_5-OH + PCl_5 \rightarrow C_2H_5\text{-}Cl + POCl_3 + HCl$

(A) (C)

$C_2H_5-ONa + C_2H_5-Cl \rightarrow C_2H_5-O-C_2H_5 + NaCl$

(B) (C) diethyl ether

87. (C)

Sol. $ROH + SOCl_2 \xrightarrow{\text{Pyridine}} RCl + SO_2 + HCl$

It is evident that products other than RCl, are both

gases (SO_2, HCl)

88. (C)

Sol. In Hunsdiecker reaction a silver salt of an acid reacts with bromine in the presence of CCl_4.

$CH_3COOAg + Br_2 \xrightarrow{CCl_4} CH_3Br + CO_2 + AgBr$

silver ethanoate bromomethane

It is an important method of preparing an alkyl halide from a silver salt of an alkanoic acid.

89. (C)

Sol. $R-COOAg + Br_2 \xrightarrow{CCl_4} R-Br + CO_2 + AgBr$

The yield of alkyl bromide has the following order–

$$R-CH_2-Br < \underset{\displaystyle R}{\overset{\displaystyle |}{R-CH-Br}} < \underset{\displaystyle R}{\overset{\displaystyle |}{\overset{\displaystyle R}{\overset{\displaystyle |}{R-C-Br}}}}$$

Since the mechanism of this reaction involves formation of free radicals.

90. (A)

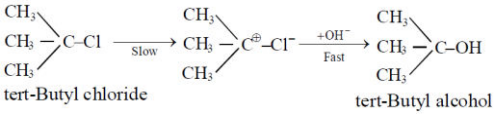
Sol. Density of a given alkyl group increases with increase in atomic weight of halogen atom. Also for a given halogen, density decreases with increase in size of alkyl group.

91. (B)

Sol. Both Vinyl chloride and Chlorobenzene give no precipitate with alcoholic $AgNO_3$ because both have chlorine atoms which are not reactive.

92. (B)

Sol. Tertiary butyl halide on boiling with water gives tertiary butyl alcohol. The reaction follows S_N1 mechanism.



tert-Butyl chloride — tert-Butyl alcohol

The slow step is the formation of a carbonium ion,

hence the reaction takes place via S_N1 mechanism.

93. (A)

Sol. With alcoholic $AgNO_3$, ethyl bromide gives a light yellow and isopropyl chloride gives white ppt.

94. (C)

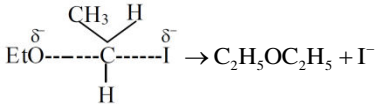
Sol. Action of sodium ethoxide on an alkyl iodide is a nucleophilic substitution.

$C_2H_5I + NaOC_2H_5 \rightarrow C_2H_5OC_2H_5 + NaI$

$C_2H_5I + EtO^- \rightarrow C_2H_5OC_2H_5 + I^-$

The reaction takes place by S_N2 mechanism

$C_2H_5O^- + C_2H_5I \rightarrow$



$\rightarrow C_2H_5OC_2H_5 + I^-$

transition state

95. (C)

Sol. $C_2H_5 - Br + 4Pb / Na \xrightarrow[\Delta]{\text{High pressure}}$

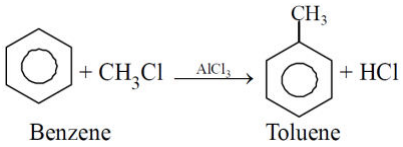
$(C_2H_5)_4 Pb + 4\ NaBr + 3Pb$

Tetraethyl lead

T.E.L. is used as antiknocking agent.

96. (A)

Sol. The name of the reaction of an alkyl halide with an arene in the presence of anhydrous $AlCl_3$ is Friedel Craft's reaction.



Benzene — Toluene

It is an electrophilic substitution reaction.

97. (C)

Sol. In chlorobenzene the electron lone pair of chlorine atom is in conjugation with benzene ring and hence chlorine atoms takes part in resonance and chlorobenzene does not show removal of chloride ion readily therefore it does not give white precipitate with alcoholic silver nitrate.

98. (C)

Sol. Chloroform is tested by silver nitrate solution if chloroform is oxidised to phosgene then HCl will also be present which reacts with $AgNO_3$ to form white precipitate (AgCl). If this reaction occur then chloroform is not used for anaesthesia.

99. (A)

Sol. $CH_2{=}CH \rightleftharpoons CH_2{-}CH$ (better nucleophile)

100. (A)

Sol. $CH_3{-}C(OH){-}C(=O){-}CH_3 \xrightarrow{[Ag(NH_3)_2]^+}$

$CH_3{-}C(=O){-}C(=O){-}CH_3 + Ag\downarrow + H_2O + 2NH_3$

white ppt.