Unit-22 - Organic Compounds Containing Halogens

MCQ

1. Haloarenes contain halogen atom(s) with carbon atom(s) possessing hybridization.

(A) SP^3 (B) SP (C) SP^2 (D) B & C

2. Who is very effective for typhoid ?

(A) chloroquine (B) chloroform (C) chloramphenicol (D) chlorapetite

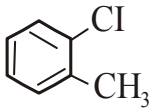
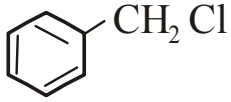
3.

A	B
(i) Goiter	(p) Anaesthetic
(ii) Malaria	(q) Potential blood substitutes
(iii) Typhoid fever	(r) chloroquine
(iv) haloethane	(s) chlor amphenical
(v) fluorinated compounds	(t) Thyroxine
(A) i-t, ii-q, iii- p, iv-r, v-s	(B) i-t, ii-s, iii- p, iv-q, v-r
(C) i-t, ii-q, iii- s, iv-r, v-p	(D) i-t, ii-r, iii- s, iv-p, v-q

4. Which of the following is vinylic halides.

(A)  (B)  (C)  (D) A & C

5.

A	B
(i) 	(p) 2, chloro toluene
(ii) 	(q) 1, Benzyl chloride
	(r) 1, chloro toluene
	(s) chlorophenyl methane
	(t) ortho chloro toluene

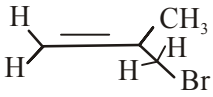
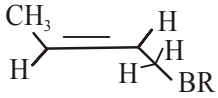
(A) i - t, ii - s (B) i - p, ii - s

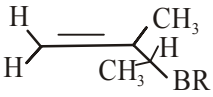
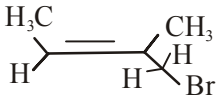
(C) i - r, ii - q (D) i - r, ii - q

6. How many structural isomers are formed from $C_5H_{11}Br$.

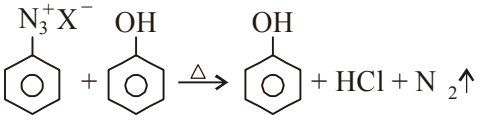
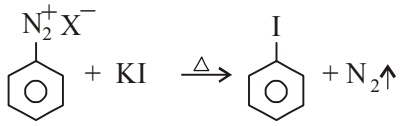
(A) 5 (B) 6 (C) 10 (D) 8

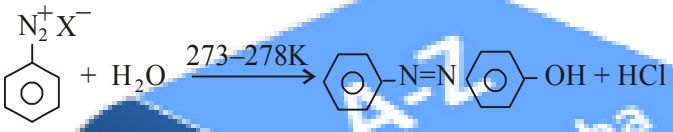
7. Correct structural formula for 3-Bromo 2-methyl But-l-ene

(A)  (B) 

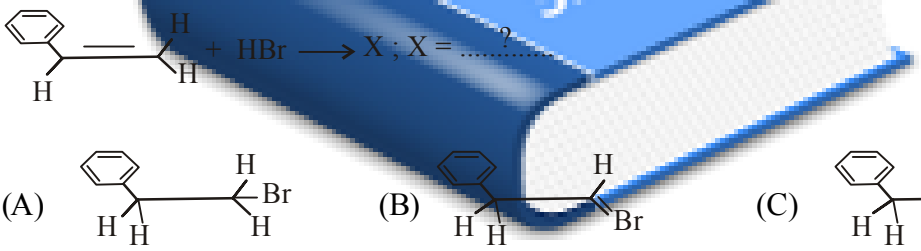
(C)  (D) 

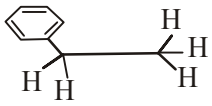
8. Which is sandmeyer's reaction from the following.

(A)  (B) 

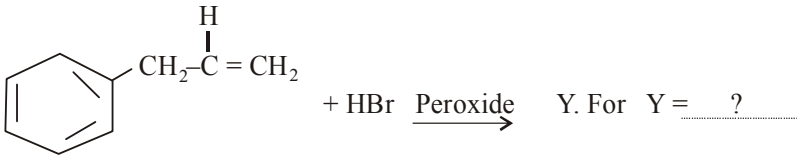
(C) 

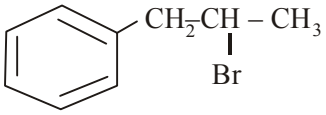
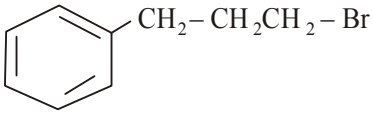
(D) Above all

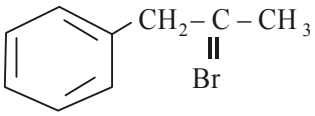
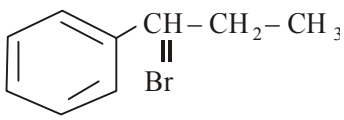
9. 

(A) (B) (C) 

(D) None of these

10. 

(A)  (B) 

(C)  (D) 

11.

A	B
(i) $CH_3Br + NaI \xrightarrow{(CH_3)_2CO} CH_3I + NaBr$	x : Finkel stein
(ii) $2CH_3Br + Hg_2F_2 \longrightarrow 2CH_3F + Hg_2Br_2$	
(iii) $CH_3CH_2Cl + NaI \xrightarrow{(CH_3)_2O} C_2H_5I + NaCl$	y : Swart reaction
(iv) $2C_2H_5Br + COF_2 \longrightarrow 2C_2H_5F + COBr_2$	
(v) $COF_2 + 2CH_3Br \longrightarrow 2CH_3F + COBr_2$	

(A) 1-y, 2-x, 3-x, 4-y, 5-x (B) 1-x, 2-y, 3-y, 4-x, 5-y

(C) 1-x, 2-y, 3-x, 4-y, 5-y (D) 1-x, 2-y, 3-y, 4-x, 5-x

12. $R-OH + PX_3 \longrightarrow R-X + Z$. For Z = ...?

(A) X_2PO_4 (B) HPO_3X_2 (C) H_2PO_3X (D) H_3PO_3

13. Aniline $\xrightarrow[\Delta = Y]{x + HCl}$  For x and y Respectively as

(A) NH_3, 298 – 300K (B) $NaNO_3$, 273 – 278K

(C) $NaNO_2$, 273 – 278K (D) NaNO, 298 K

14. Arrange each set of compounds in order of increasing boiling points.

(A) 1-chloropropane < Isopropyl chloride < 1-chlorobutane

(B) 1-chlorobutane < 1-chloropropane < isopropyl chloride

(C) 1-chlorobutane > 1-chloropropane > isopropyl chloride

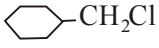
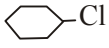
(D) iso propyl chloride > 1-chlorobutane > 1-chloro propane

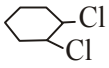
15. For nucleophilic substitution bimolecure SN^2 reaction give the correct order of reactivity.

(A) 2^0 halide < 3^0 halide < 1^0 halide (B) 3^0 halide < 2^0 halide < 1^0 halide

(C) 3^0 halide < 2^0 halide > 1^0 halide (D) 1^0 halide < 3^0 halide < 2^0 halide

16. In the following pairs of halogen compounds which would undergo SN^2 reaction faster ?

(A)  (B) 

(C)  (D) None of these

17. Which would undergo SN^2 reaction slow.

(A) 

(B) 

(C) 

(D) a & b

18. In suibstitution nucleophilic unimolecular SN^1 reaction give the order of reactivitly.

(A) 1^0 halide < 3^0 halide < 2^0 halide

(B) 3^0 halide < 2^0 halide < 1^0 halide

(C) 3^0 halide > 2^0 halide > 1^0 halide

(D) 2^0 halide 3^0 halide < 1^0 halide

19. Predict the order of reactivity of the following compounds in SN^1 reaction.

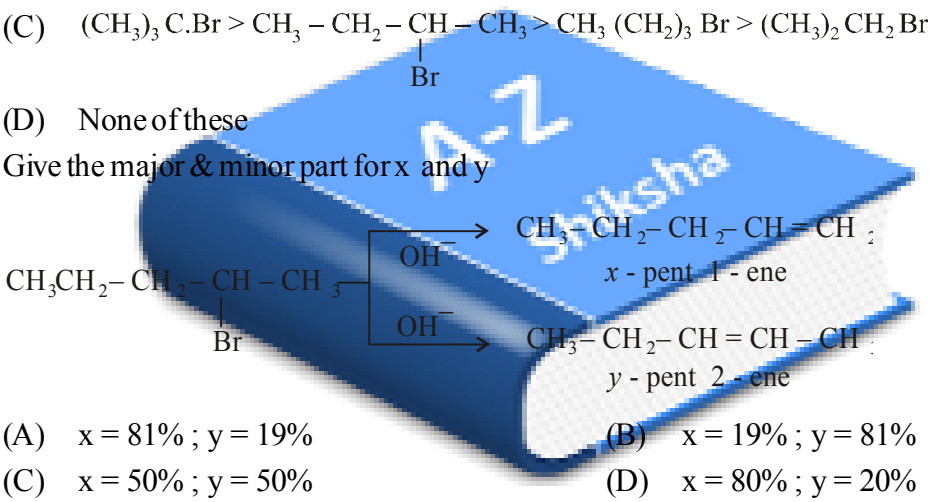
(A) $CH_3\ CH_2CH_2CH_2Br > (CH_3)_2\ CHCH_2Br < CH_3CH_2\underset{\underset{Br}{|}}{CH}CH_3 < (CH_3)_3\ C.Br$

(B) $(CH_3)_2\ CHCH_2.Br > CH_3CH_2\underset{\underset{Br}{|}}{CH} - CH_3 > CH_3(CH_2)_2\ Br > (CH_3)_3\ C.Br$

(C) $(CH_3)_3\ C.Br > CH_3 - CH_2 - \underset{\underset{Br}{|}}{CH} - CH_3 > CH_3\ (CH_2)_3\ Br > (CH_3)_2\ CH_2\ Br$

(D) None of these

20. Give the major & minor part for x and y



(A) x = 81% ; y = 19%

(B) x = 19% ; y = 81%

(C) x = 50% ; y = 50%

(D) x = 80% ; y = 20%

21. Predict the order of reactivity of the following compounds in SN^2 reactions.

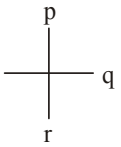
(A) $C_6H_5CH_2Br > C_6H_5CH.(CH_3).Br > C_6H_5C(CH_3)(C_6H_5)\ Br > C_6H_5CH(C_6H_5)\ Br$

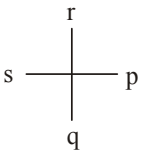
(B) $C_6H_5CH_2Br > C_6H_5CH.(CH_3).Br > C_6H_5CH(C_6H_5)\ Br > C_6H_5C\quad CH_3\ .\ (C_6H_5)\ Br$

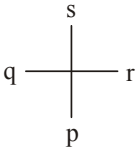
(C) $C_6H_5CH_2Br < C_6H_5CH(CH_3)Br < C_6H_5CH(C_6H_5)Br < C_6H_5C(CH_3)(C_6H_5)Br$

(D) b & C

22. Predict the true R or S for the following structres

(i) 

(ii) 

(iii) 

P = I; Q = Br, S = Cl; r = H

(A) i - S ii - R, iii - R

(B) i - R ii - R, iii - S

(C) i - S ii - R, iii - S

(D) i - S ii - S, iii - R

23. $C_2H_4Cl_2$ contains how many isomers.

(A) 0 (B) 5 (C) 8 (D) 2

24. Reactivity order for HX in Lucas test.

(A) HBr > HCl < HI (B) HCl < HBr < HI

(C) HBr > HCl > HI (D) HCl > HBr > HI

25. Chloroform + O_2 $\underline{\text{light}}$ $\underline{X}$ + HCl, for X = ... ?

(A) CH_2OCl (B) CH_2Cl_2

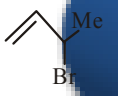
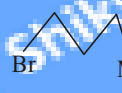
(C) $COCl$ (D) $COCl_2$

26. $CH_3CH_2CH_2I \xrightarrow[KOH]{Alkoholic} A \xrightarrow[Alkoholic\ KOH]{Br_2} B \xrightarrow[-NH_3\ -NaBr]{NaNH_2} C$ For ; C___= ?

(A) Alkenol (B) Alkene

(C) Alkaiene (D) Alkele amine

27. For given compounds gives proper reactivity order for SN^1 reaction.

(x)  (y)  (z) 

(A) Z > X > Y (B) X > Y > Z

(C) Y > Z > X (D) X > Z > Y

28. Which compound gives inversion isomer during SN^2 reaction.

(A) $(C_2H_5)_2$ CHCl (B) $(CH_3)_3$ CCl

(C) CH_3Cl (D) $(CH_3)_3$ C.Cl

29. CH_3CH_2Cl + Ag CN $\underline{Ethenol}$ x + $Agcl$ for x = ...?

(A) CH_3CH_2CN (B) $CH_3CH_2N = C$

(C) $CH_3CH_2N = C$ (D) a & b

30. Give the monomar of PVC.

(A) Propine (B) I-chloro ethene

(C) ethene (D) 1-chloro propane

31. Predict non chiral compound.

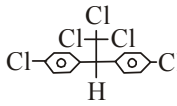
(A) 2, chloropanten (B) 1-chloropanten

(C) 1-chloro 2-methyl panten (D) 3, chloro 2-methyl panten

32. 1^0 amine react with ethenolic KOH in presence of $CHCl_3$ gives.....

(A) iso saynide (B) Aldehide

(C) cynide (D) Alcohol

33.  Give IUPAC Name

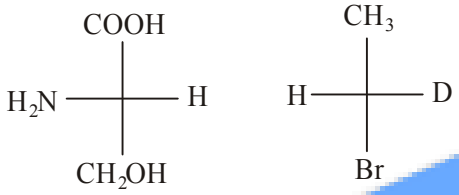
(A) Diphenyldichlorop propare (B) P-Pdichloro diphenyl Trichloro ethane

(C) 1, 1, dichloro diphenyl ethyl chloride (D) none of these

34. Predict the true R/S for the following structures

(A) i - S, ii - R, iii- R, iv - S (B) i - R, ii - S, iii- R, iv - R

(C) i - R, ii - R, iii- R, iv - S (D) i - R, ii - S, iii- S, iv - S

35. 

(A) R and R (B) R and S

(C) S and S (D) S and R

36. Predict the order of reactivity in R-X for SN^2 reaction.

(A) R-F >>R-Cl > R-Br > R-I (B) R-I > R-F > R-Cl > R-Br

(C) R-F < R-Br < R-F < R-Cl (D) R-F << R-Cl < R-Br < R-I

37. Freons which is use in industry

(A) $6-(CCl_2F_2)$ (B) $4-CCl_2F_3$

(C) 10,– CCl_2F_2 (D) 12,– CCl_2F_2

38.

A	B
(i) D.D.T	(a) Dry cleaning
(ii) Iodo form	(b) Freon refrigerant R-22
(iii) Carbon tetra chloride	(c) For air conditioning
(iv) Freon	(d) antiseptic
(v) $CHCl_3$	(e) an insecticide

(A) i-e, ii-d, iii-a, iv-c, v-b (B) i-b, ii-a, iii-e, iv-c, v-d

(C) i-d, ii-e, iii-a, iv-c, v-b (D) i-b, ii-d, iii-b, iv-a, v-c

39. Give the increassing order or reactivity for SN^2 reaction.

(A) $RCH_2X < R_2CHX < R_3CX$ (B) $R_3CX < R_2CHX < RCH_2X$

(C) $RCH_2X > R_3CX > R_2CHX$ (D) $R_2CH2X < RH_2X > R_3CX$

40. $_{CH_3}Br + Nu^- \rightarrow CH_3Nu + Br^-$ for this reaction arrange given Nu^- in increasing order of reactivities.

(1) Pho^- (2) OH^- (3) CH_3O^- (4) AcO^-

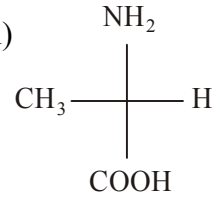
(A) $2 > 4 > 3 > 1$ (B) $4 > 3 > 1 > 2$ (C) $4 > 3 > 2 > 1$ (D) $1 > 2 > 3 > 4$

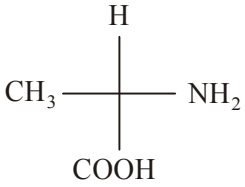
41. Predict the decreasing order for neucleo philicity.

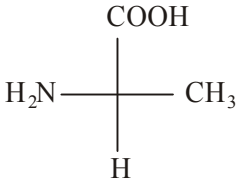
(A) $I^- < Cl^- < Br^-$ (B) $Cl^- < Bi^- < I^-$

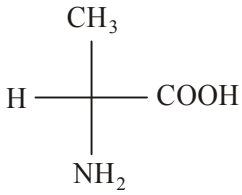
(C) $I^- < Br^- < Cl^-$ (D) $Br^- > Cl^- > F^-$

42. Which is the D configration of alanine

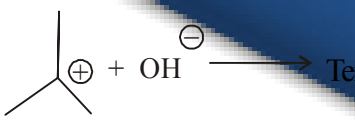
(A) 

(B) 

(C) 

(D) 

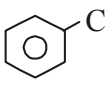
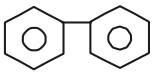
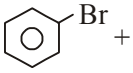
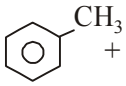
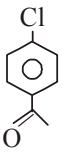
43.

	A	B
1.	$CH_3CH_2MgCl + H_2O \rightarrow$ Ethane $+ Mg(OH)Cl$	p. elimination reaction
2.	$2CH_3CH_2Br + 2Na \rightarrow CH_3(CH_2)_2 - CH_3 + 2Nax$	q. substitution reaction
3.	$CH_3CH_2Cl \xrightarrow[\Delta]{KOH + Ethanol}$ Ethene	r. courtz reaction
4.	 + OH^- → Tertiary but ylalcohol	s. grignard reaction

(A) 1-r, 2-q, 3-s, 4-p (B) 1-s, 2-r, 3-q, 4-p

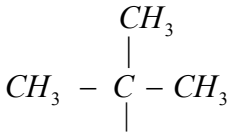
(C) 1-s, 2-p, 3-r, 4-q (D) 1-s, 2-r, 3-p, 4-q

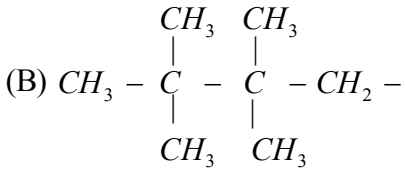
44.

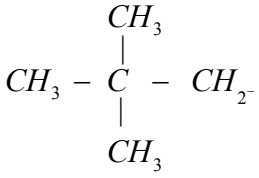
	A	B
(1)	2  + 2Na Ether →  + 2NaCl	(p) Fridal craft reaction
(2)	 + 2Na + CH_3 Br Ether →  + 2NaCl	(q) Fitting reaction
(3)	$C_6H_5Cl + HC_3 - C(=O) - Cl$ Anhyd.$AlCl_3$ →  + 2NaCl	(r) wurtz fitting reaction
		(s) Alkylation reaction.

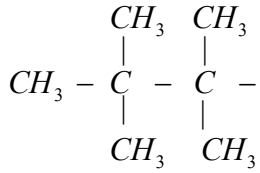
(A) 1-r, 2-q, 3-s (B) 1-r, 2-q, 3-s (C) 1-a, 2-s, 3-r (D) 1-q, 2-r, 3-a

45. R' X $\xrightarrow{Na/Ether}$  . Identify R^1

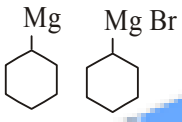
(A) 

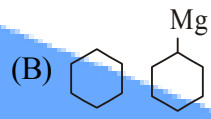
(B) 

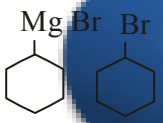
(C) 

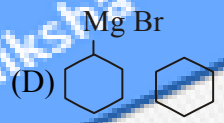
(D) 

46. Identify A & B respectively

(A) 

(B) 

(C) 

(D) 

47. For recemisation.

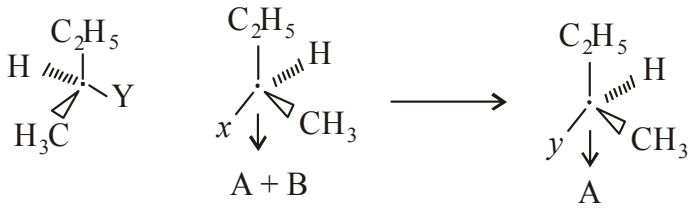
(A) 50 : 50 mixture & opticall active.

(B) 75 : 25 mixture & optically inactive

(C) 50 : 50 mixture & optically inactive

(D) 25 : 75 mixture & optically active

48. Classify the configuration of product of a symmetric carbon atom. Consider the replacement of a group X by Y in the following reaction.



Process for A, B and A+B as under

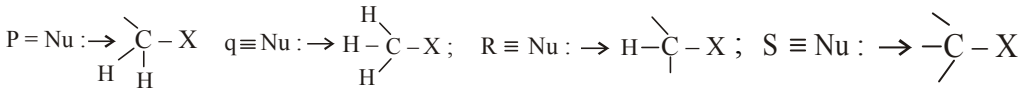
(A) A-retention of configuration A+B racemisation, B-Invention of configuration

(B) A-Inversion of configuration, A+B retention of configuration, B-recemisation.

(C) A+B - Inversion of configuration, B-retention of config n; A-recemisation.

(D) None of them

49. Predict the conect order for following reaction the approaching nucleophilies.



(A) $Q < P < R < S$ (B) $Q > P > R > S$

(C) $P > Q > R > S$ (D) $Q < P < R < S$

50. Predict the decreasing order of density for same Alkyl or cryle group.

(A) R / Ar - Br > Ar / R Cl > R / Ar - I > R /Ar > F

(B) R / Ar I > R / Ar – Br > R / Ar Cl > R / Ar – F

(C) R / Ar - I < R / Ar – Cl < R / Ar – Br > R / Ar – F

(D) R / Ar – F > R / Ar – Cl < R / Ar – Br < R / Ar – I

51. Predict the improper chemical reaction

(A) $C_6H_5NH_2 \xrightarrow[273-278\ K]{NaNO_2 + \ 2HCl} C_6H_5N_2Cl + NaCl + H_2O$

(B) $C_6H_5N_2Cl \xrightarrow[\Delta CuCl_2 + HCl]{Send\ \ Mayur\ \ reaction} C_6H_5\ \ Cl + N_2$

(C) $C_6H_5N_2Cl \xrightarrow[\Delta CuCl_2 + HBr]{Send\ \ Mayur} C_6H_5\ \ Br + N_2 + HCl$

(D) $C_6H_5N_2Cl \xrightarrow[\Delta]{KI} C_6H_5I + KCl + N_2$

52. Phenol + X ⟶ Chlorobenzne + HCl + SO_2; where X = ...?

(A) PCl_3 (B) $SOCl_3$ (C) PCl_5 (D) $SOCl_2$

53. Predict the no. of isomers for possible genimal dihalide in

(A) 0 (B) 4 (C) 3 (D) 9

54. for vinyl halide compound which is true ?

(A) chloro ethen (B) 1-chloro 3-phenyl propene

(C) 1–Bromo cyclohexa-1enc (D) All of above

55. Which is correct for aelaillic halide compounds.

(A) 3, Bromo, 2-Methy, Buyt 1-ene (B) 4-Bromo, 3-Methyl Buyt-2-ene

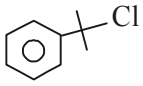
(C) 3, Bromo 2-Methyl Propene (D) 1-Bromo Buyt -2-ene.

56.

A	B
1. Benzail Bromaid	M. 
2. Ethilidin bromaid	N. $CH_3CH_2Br_2$
3. Finail Bromaid	O. $-H_2C=CHCH_2Br$
4. Alail Bromaid	P. 

(A) 1-M, 2-N, 3-O, 4-P (B) 1-P, 2-N, 3-M, 4-O

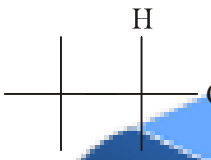
(C) 1-P, 2-N, 3-O, 4-M (D) 1-N, 2-O, 3-M, 4-P

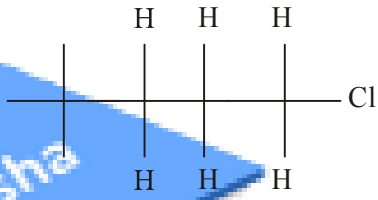
57. Give IUPAC Name 

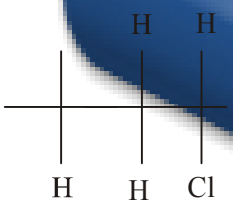
(A) 2-Phenyl 2-chloropropane (B) 1-chloro, 1-Methyl ethyl Benzene

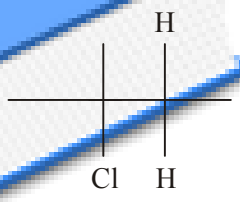
(C) isopropyl chlorobenzene (D) 1 dimethyl, 1, chlorobenzene

58. Which alkylhalide known as Neopentyl chloride ?

(A) 

(B) 

(C) 

(D) 

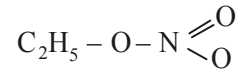
59. $R-H+PX_5 \rightarrow R-X+B+HX$ B menas = ...?

(A) H_3PO_3 (B) $HPOX_3$

(C) POX_3 (D) H_3PO_4

60. $C_2H_5I \xrightarrow{AgNO_2} X.$ .....?

(A) $C_2H_5-O-N=O$ (B) $C_2H_5-N=O$

(C)  (D) 

61. Which compound known as kiral molecule & giving optical isomers ?

(A) 2 – chloropropane (B) 2 – Methyl butane

(C) 2 – Bromo butane (D) 2, 2 dichloro butane

62. $C_2H_5OH + NaCl + H_2SO_4 \rightarrow A + NaHSO_4 + H_2O$

$A + \underset{\text{dry Ether}}{\xrightarrow{2Na}} B + 2NaCl$? For A & B respectively

(A) Ethyl Bromide, ethane (B) Methyl chloride ; ethane

(C) Ethyl Bromide butane (D) Ethylchloride butane

63. Benzene $\xrightarrow{X}$ Chlorobezene $\xrightarrow{Y}$ For X & Y respectively.

(A) $Cl_2, [FeCl_3]$; Cl_2 $[FeCl_3]$ (B) $Cl_2, [\text{dry } AlCl_3]$; $[\text{dry } AlCl_3]$

(C) $Cl_2, [FeCl_3]$; $[\text{dry } AlCl_3]\, C_2H_5\, Cl$ (D) $Cl_2, [FeCl_3]$; $[\text{dry } AlCl_3]\, CH_3\, Cl$

64. Silver nitrate not giving the Precipates with chloro form because of .....

(A) Chloroform is organic compound. (B) Chloroform is non ionised in water

(C) $AgNO_3$ indouble in chloroform (D) Chloroiform is insoluble in water

65. Which compound on oxidation gives Banzoic Acid ?

(A) Chlorobenzene (B) Chloro Tolune

(C) Benzyl Chloride (D) Chloro phenol.

66. Which is Gemexine compond ?

(A) DDT (B) BHC (C) a & b (D) None of these

67. Chloroform on slow oxydation with air gives

(A) Formile Chloride (B) Formic Acid

(C) $Cl_3C - COOH$ (D) $COCl_2$

68. For which compound iodoform test not possible ?

(A) C_2H_5OH (B) CH_3CHO

(C)  (D) Benzophenone

69. Reaction of CCl_4 with $AgNO_3$ soultion gives...

(A) White PPT of Agcl (B) No reaction take place

(C) NO_2 gas produce (D) CCl_4 dissolved in $AgNO_3$ Solution

70. What is DDT ?

(A) Insecti side (B) Bleaching agent

(C) Weedkiller (D) Oxydiging agent

71. Predict the condition for conversion of Benzyl bromide form Tolluene.

(A) Bl_2 / $FeBr_3$ (B) HBr

(C) Bl_2 / Light (D) Br_2

72. Which compound having stranger C-X ?

(A) $CH_3 - F$, (B) CH_3Cl

(C) CH_3I (D) $CH_3.Br$

73. For C–Cl of chlorobenzene campair with C-Cl of ethyl chloride

(A) Larger bond length & weak bond.

(B) Shorter bond lenth & weak bond

(C) Larger bond length & strenger bond

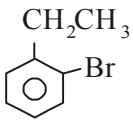
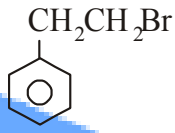
(D) Shorter bond length & strenger bond

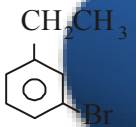
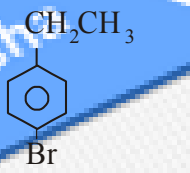
74. Predict the correct order of bond energy for C-X (where x = cl, Br, I)

(A) C–I > C–Br > C – C*l* (B) C–C*l* > C – Br > C – I

(C) C–I > C – C*l* > C – Br (D) C – Br > C – I > C – C*l*

75. *Ethylbenzene* + $Br_2 \xrightarrow{[FeBr_3]}$ ..... ?

(A)  (B) 

(C)  (D) 

76. Which compound having zero dipolmoment.

(A) cis 1-2, dichloro ethelene (B) 1, 1, dichloro ethelene

(C) trans 1-2, dischroethelen (D) none of these

77. Which compound formed when ethenolic KOH react with normal propile bromide ?

(A) Propane (B) Propanol

(C) Propene (D) Propine

78. Benzen + n–propail chloride $\xrightarrow{\text{any } AlCl_3}$ ..... ?

(A) propile benzene (B) n-propile benzene

(C) 3-propile 1-chloro benzne (D) none of these

79. For Lucast test.....

(A) conc HCl+dry $Zncl_2$ (B) conc HNO_3 + dry $Zncl_2$

(C) conc $HNO_3 + ZnCl_{2(aq)}$ (D) $HCl + ZnCl_{2(aq)}$

80. Geonetrical isomerssm is not shown in by

(A) 1, 2 dichlorobutane (B) 1,1 dichlorobutane

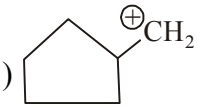
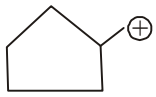
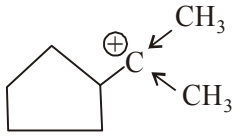
(C) 1, 3 dichlorobutane (D) none of these

81. Which type of product produce.
Circal Centre in the reaction

$$CH_3CHO + HCN \rightarrow CH_3 - CH_3 - CH(OH) - CN$$

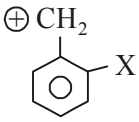
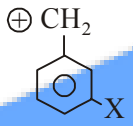
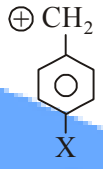
(A) Dextro rotatory (B) Mesoisomer
(C) Levo-rotatory (D) Recemic mixture

82. On the base of inductive effect predict the increasing stability order

(1)  (2)  (3) 

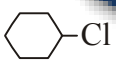
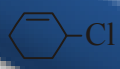
(A) I > II > III (B) I < II < III
(C) III > I > II (D) II = III < I

83. According to -I effect predict in creasing order of stability.

(1)  (2)  (3) 

(A) III > I > II (B) II < I < III
(C) I < II < III (D) III < II > I

84. Which among the following compunds will be most recetive for SN^1 reaction ?

(A)  (B)  (C)  (D) 

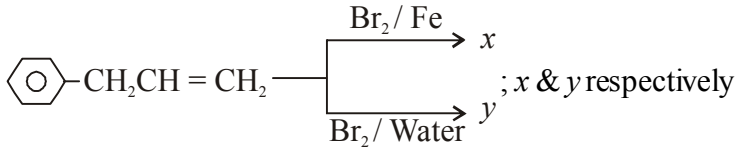
85. Phosgene react with excess of benzene in presence of anhyd $Alcl_3$ to give.
(A) benzoylchlorde (B) benzophenone
(C) benzoicacid (D) benzbinacol

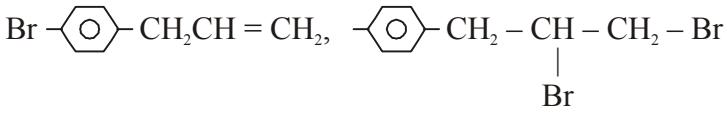
86. The correct order of reactivity of the following compound ith H_2O is .....

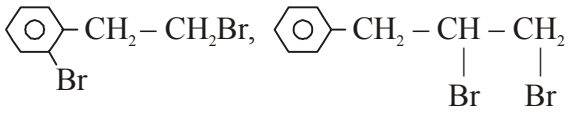
(i)  (ii)  (iii)  (iv) 

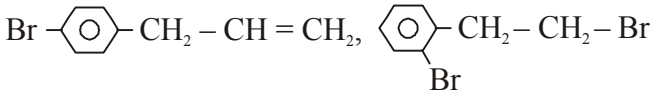
(A) IV > III > I > II (B) I > II > IV > III
(C) I > IV > III > II (D) I > IV > II > III

87. The reactivity of the compounds.....
(I) MeBr (II) $PhCH_2Br$
(III) MeCl (IV) P - Meo C_6H_4Br decreases as
(A) I > II > III > IV (B) IV > II > I > III
(C) IV > III > I > II (D) II > I > III > IV

88. 
; x & y respectively

(A) 

(B) 

(C) 

(D) None of these

89. Geometrical isometrism is not shown by ?

(A) 1, 4 dichloro, 2-pentene (B) 1,1 dichloro 1-pentene

(C) 1,2 dichloro, 1-pentene (D) 1,3 dichloro 2-pentene

90. The no. of structural & configurational isomers of a bromo compound C_5H_9Br obtained by the addition of HBr on 2-pentyne respectively are.....

(A) 2, 4 (B) 4, 2

(C) 1, 2 (D) 2, 1

Hint : $CH_3 - CH_2 \equiv C - CH_3 \xrightarrow{HBr} CH_3CH_2 - \underset{\underset{Br}{|}}{C} = \underset{\underset{H}{|}}{C} - CH_3$; $CH_3CH_2 - \underset{\underset{H}{|}}{C} = \underset{\underset{Br}{|}}{C} - CH_3$

Thus, each one of the these will exist as (I) as a pair of geometrical isomer. Structural isomers = 2 & stereosomers = 4.

91. How many enantiomer pairs are obtained by monochlorination of 2, 3-dimethyl butane ?

(A) two (B) three

(C) four (D) one

92. Which intermidiat increase the SN^2 reaction ?

(A) carboniyan ion (B) activated complex ion

(C) Freeredical (D) carbenion ion

93. $3CCl_4 + 2SbF_3 \xrightarrow[\text{high Pressure}]{SbCl_5} A + 2SbCl_3$; A = ...

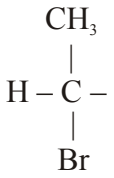
(A) CH_2Cl_2 (B) CCl_3F

(C) CCl_2F_2 (D) $CClF_3$

94. Which compounds are used as a Antiseptic ?

(A) CCl_4 (B) CHI_3

(C) $CHCl_3$ (D) CCl_2F_2

95.  Which is the configuration of this compound.

(A) S- (B) R -

(C) L - (D) D -

96. Reaction of chlorobenzene with Mg in presence of dry other will gives compound A. Compound A reacts with aqueous halogen acid give which product.

(A) Phenol (B) Phenyl Ether

(C) Phenyl ketone (D) Benzene

97. In sulfonation of chlorobenzene gives .....

(A) Benzen sulfonic acid (B) m-chloro benzene sulfonic acid

(C) O & P Chlorobenzen sulfonic acid (D) O-chlorobenzen sulfonic acid

98. $C_2H_5I \xrightarrow[KOH]{\text{Ethenol}} A \xrightarrow{Br_2} B$; Where B = ...

(A) $CH_3 - CHBr_2$ (B) $CH_2Br - CH_2Br$

(C) $CH.Br = CH.Br$ (D) CH_3CH_2Br

99. Which is the true drecreasing order for

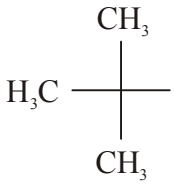
(A) CH_3Cl; $CH_3 - Br$, $CH_3 - F$ (B) CH_3Br, $CH_3 - F$, $CH_3 - Cl$

(C) $CH_3 - CI$; $CH_3 - F$, $CH_3 - Br$ (D) $CH_3 - Br$, $CH_3 - Cl$, $CH_3.F$

100. Which is not a sendmayer reactant ?

(A) $Cu_2(CN)_2 + KCN$ (B) $Cu_2Cl_2 + HCl$

(C) $Cu_2I_2 + KI$ (D) $Cu_2Br_2 + HBr$

101.  CH_2OH gives which observation in Lucas test ?

(A) reaction not take place (B) give colour layer

(C) Oilly point on layer (D) milky solution

102. Which compound having zero dipole moment ?

(A) Cis 2-Butene (B) Tras 2-Butene

(C) 2-Methyl 1-Propene (D) 1-Butene

103. In which compound ciral centre is absent ?

(A) $DCH_2CH_2CH_2Cl$ (B) $CH_3CH.D.CH_2Cl$

(C) $CH_3CH.Cl.CH_2D$ (D) $CH_3CH_2CH.D.Cl$

104. Which compound is optically active ?

(A) 2,2 dimethyl pentene (B) 3-Methyl pentene

(C) Butene (D) 2-Methyl Penten

105. How d and l isomer are differ from eachother ?

(A) On the basis of reactivity with unoptical reactant

(B) On the basis of melting point

(C) On the basis of solubility of unoptical reactant

(D) On the basis of optical rotation of polarised right.

106. Main product of reaction between tertiary butyle chloride and sodium ethoxide

(A) 1-Butene (B) 2-butene

(C) 2-Methyl Prop. 1-ene (D) 2 Etoxy 2-Methyl propane

107. Which compound gives only one monochloro product ?

(A) 2-Methyl penten (B) 3-Methyl pentene

(C) Neopentene (D) 2, 3 dimethyl pentene

108. $(CH_3)_3COCl$ having IUPAC name ?

(A) 3-chlorobutene (B) 2-chloro, 2-Methyl propane

(C) tertiary butile chloride (D) n-bytyl chloride

109. $C_3H_8 + Cl_2 \xrightarrow{light} C_3H_7Cl + HCl$ is which type of rx^n.

(A) Addition (B) Substitution

(C) elimination (D) Re-arrangement

110. 1, Chloro butane react with Alcoholic KOH produce.....

(A) 1-Butenol (B) 1-Butene

(C) 2-Butene (D) 2-butenol

111. Which compound contains Antiseptic property ?

(A) Trifloro methane (B) Triiodo methane

(C) Tetra chloromethane (D) dichloro methane

112. In presence of which compd. Benzene react with I_2 to form Iodobenzene ?

(A) HI (B) SO_2

(C) H_2O (D) HNO_3

113. Give correct reaction for methyl floride

(A) $CH_4 + HF \rightarrow$ (B) $CH_3OH + HF \rightarrow$

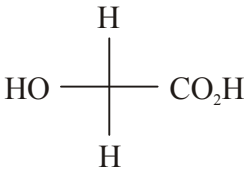
(C) $CH_4 + F_2 \rightarrow$ (D) $CH_3Br + AgF \rightarrow$

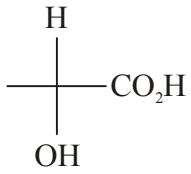
114. Which compound on liquification SN^1 reaction is not possible ?

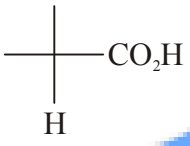
(A) $CH_2 = CHCH_2Cl$ (B) C_6H_5Cl

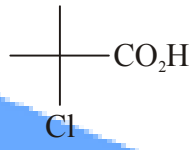
(C) $C_6H_5CH(CH_3)Cl$ (D) $C_6H_5CH_2Cl$

115. Which compound show optical isomerism ?

(A) 

(B) 

(C) 

(D) 

116. Onheating Chloroform with silver powder gives .....

(A) Ethane (B) Ethyne

(C) Methane (D) Eethene

117. Which compound gives more reactivities in SN^1 reaction of

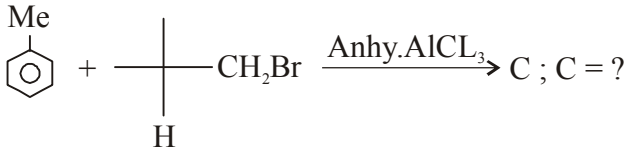
(A) $C_6H_5CH_2Br$ (B) $C_6H_5C(CH_3)(C_6H_5)Br$

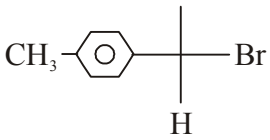
(C) $C_6H_5CH(C_6H_5)Br$ (D) $C_6H_5CH(CH_3)Br$

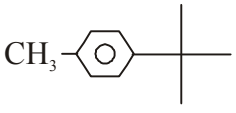
118. $CH_2 = CH_2 + HCl \rightarrow X + NaI \xrightarrow{\text{Acetone}} Y + NaCl$ x and y Respectively

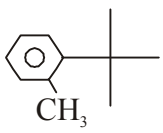
(A) Iodo ethane, chloroethane (B) 1, 2 dichloro ethane, Iodo form.

(C) Chloro ethane, iodo ethane (D) Broimoethane, iodoethane

119. 

(A) 

(B) 

(C) 

(D) None of these

120. The number of isomers for the compound with colecular formula $C_2BrClFI$ is ...

(A) 3 (B) 4

(C) 6 (D) 5

121. In the presence of peroxide, hydrogen chloride and hydrogen iodide do not give anti Markovnikov addition to alkenes because.

(A) both are hightly tonic

(B) one is oxidising and other is reducing

(C) one of the steps is exothermic in both cases

(D) all the steps are exothermic in both the cases

122. An SN^2 reaction at an a symmetric carbon of a compound always gives.

(A) a product with the optical rotation (B) a single stereomer

(C) a mixture of diastereomers (D) a product with opposite optical rotation

123. A solution of (+) 2-chloro-2 phenyl ethane in toluene recemises slowly in the presence of small amount of $SbCl_5$ due to the formation of

(A) carbanion (B) carbenec

(C) carbocation (D) Free redical

124. The final product formed by distilling ethyl alcohol with excess of Cl_2 and $Ca(OH)_2$ is

(A) CH_3CHO (B) CCl_3CHO

(C) $CHCl_3$ (D) $(CH_3)_2O$

125. The reaction of $CH_3CH=CH-C_6H_4-OH$ with HBr gives.

(A) $CH_3CH.Br.CH_2-C_6H_4-OH$ (B) $CH_3CH_2CH.Br-C_6H_4-Br$

(C) $CH_3CH_2CH.Br-C_6H_4-OH$ (D) $CH_3-CH.Br.CH_2-C_6H_4-Br$

126. A new C-C bond formation is possible in

(A) Cannizzaro reaction (B) Hydrohelognation reaction

(C) Clemmensen reduction (D) Reimer tiemann reaction

127. The product of reaction of alcoholic silver nitrate with ethyl bromide is

(A) Ethylene (B) Ethyl nitrite (C) Nitro ethane (D) Ethyl Alcohol

128. Which of the following will have zero dipolemoment ?

(A) 1,1 dichloro ethelene (B) cis-1-2 dichloro ethylene

(C) trans. 1,2-dichloro ethelene (D) none of these

129. Chlorination of Tolnene in the presence of light and heat followed by treatment with aqueous NaOH gives.

(A) O-cresol (B) P-cresol

(C) Ben zoic Acid (D) 2, 4 dihydroxy toluene

130. 2-Phenyl 2-chloro propane on treat ment with alcok gives mainly.

(A) 2-phenyl propene (B) 3-phenylpropane

(C) 1-phenyl propan 2-ol (D) 1-phenyl propane 3-ol

131. Only two isomeric monochloro derivaties are possible for

(A) n-hexane (B) 2, 4 dimethyl pentane

(C) benzene (D) 2, methyl propane

132. The C-H bond distance is longest in

(A) C_2H_2 (B) C_2H_4

(C) C_2H_2Br (D) C_2H_6

133. Chloroform on treatment with alcoholic KOH + aniline gives

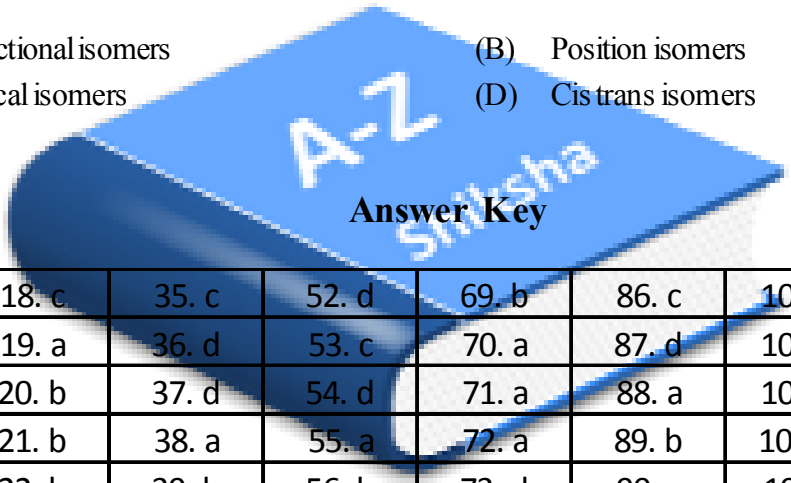
(A) phenyl isocyanide (B) Phenol

(C) Cyanobenzene (D) None of these

134. The molecular formula of a saturated compound is C_2H_4Br. The formula permits the existance of two.

(A) Functional isomers (B) Position isomers

(C) optical isomers (D) Cis trans isomers



Answer Key

1. c	18. c	35. c	52. d	69. b	86. c	103. a	120. c
2. c	19. a	36. d	53. c	70. a	87. d	104. b	121. c
3. d	20. b	37. d	54. d	71. a	88. a	105. d	122. b
4. c	21. b	38. a	55. a	72. a	89. b	106. c	123. c
5. b	22. b	39. b	56. b	73. d	90. a	107. c	124. c
6. d	23. d	40. c	57. b	74. b	91. d	108. b	125. c
7. c	24. b	41. b	58. a	75. d	92. b	109. c	126. d
8. b	25. d	42. c	59. c	76. b	93. c	110. b	127. c
9. c	26. c	43. d	60. d	77. c	94. b	111. b	128. c
10. c	27. b	44. d	61. c	78. a	95. a	112. d	129. c
11. c	28. c	45. a	62. d	79. a	96. d	113. d	130. a
12. d	29. c	46. d	63. d	80. b	97. c	114. b	131. d
13. c	30. b	47. c	64. b	81. d	98. b	115. b	132. d
14. c	31. c	48. a	65. c	82. b	99. c	116. b	133. a
15. b	32. a	49. b	66. b	83. c	100. c	117. b	134. b
16. a	33. b	50. b	67. d	84. c	101. a	118. c	
17. b	34. c	51. b	68. d	85. b	102. b	119. b	