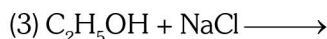
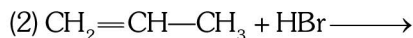
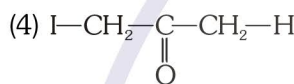
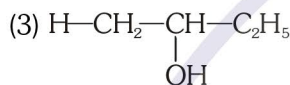
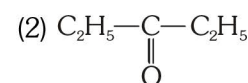
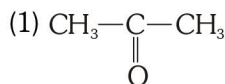


1. Alkyl halides can be obtained by all methods excepts



2. Which of the following will not give iodoform test



3. Which of the following product is obtained when bleaching powder is distilled with acetone



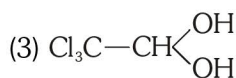
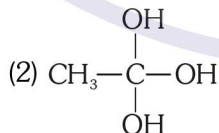
4. Which will give yellow ppt. with iodine and alkali

- (1) Propan-2-ol
 (2) Benzophenone
 (3) Methyl acetate
 (4) Acetamide

5. Which of the following has the highest boiling point

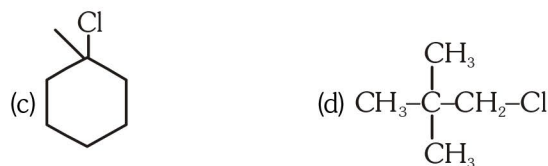
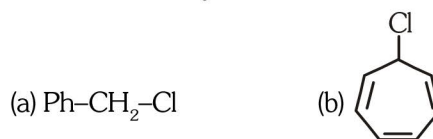
- (1) $\text{CH}_3\text{CH}_2\text{I}$ (2) CH_3Cl
 (3) CH_3I (4) CH_3Br

6. A compound containing two -OH groups attached with one carbon atoms is unstable but which one of the following is stable



(4) All

7. Arrange the following compounds in decreasing order of reactivity in $\text{S}_{\text{N}}1$ reaction :-



- (1) $a > c > b > a$ (2) $c > d > b > a$
 (3) $a > b > c > d$ (4) $b > a > c > d$

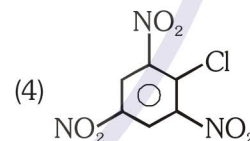
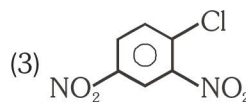
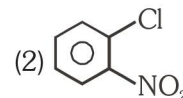
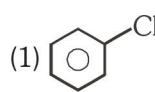
8. The purity of CHCl_3 can be checked by

- (1) treating CHCl_3 by NaOH
 (2) treating CHCl_3 by HCl
 (3) treating CHCl_3 with aq. AgNO_3
 (4) treating CHCl_3 by $\text{C}_2\text{H}_5\text{—OH}$

9. Pure CHCl_3 and pure CHI_3 can be distinguished by

- (1) treating with litmus paper
 (2) treating with aq. KOH
 (3) treating with HCl
 (4) treating with aq. AgNO_3

10. Which of the following undergoes hydrolysis most easily



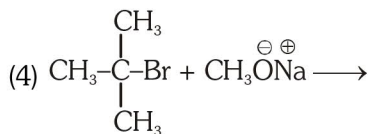
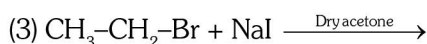
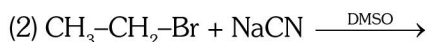
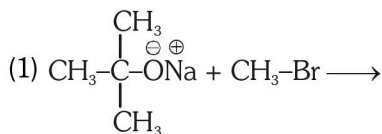
11. Which of the following is used as insecticide

- (1) D.D.T. (2) Chloretone
 (3) CHCl_3 (4) All of them

12. Which of the following when heated with KOH and primary amine gives carbylamine test

- (1) CHCl_3 (2) CH_2Cl_2
 (3) CH_3OH (4) CCl_4

13. Which reaction gives elimination as a major product



14. When alkyl magnesium halide reacts with $\text{R}'\text{-NH}_2$, the product is

- (1) $\text{R}-\text{R}$ (2) $\text{R}-\text{H}$
 (3) R_2NH (4) $\text{R}-\text{X}$

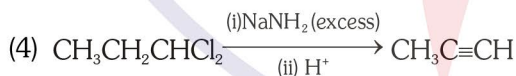
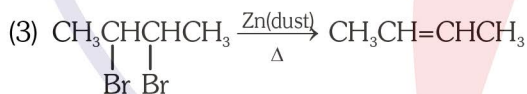
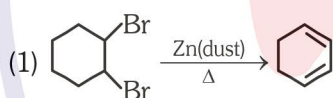
15. Chloroform on reaction with acetone gives:-

- (1) Acetylene (2) Chloroform
 (3) Nitrochloroform (4) Chloroacetone

16. Chloroform reacts with aniline and aqueous KOH gives :-

- (1) $\text{Ph}-\text{N} \equiv \text{C}$ (Phenyl isocyanide)
 (2) Benzene
 (3) Phenyl cyanide
 (4) None of these

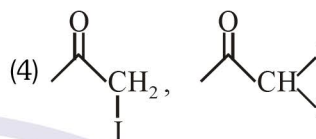
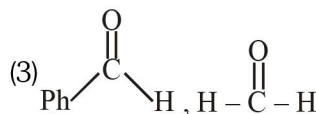
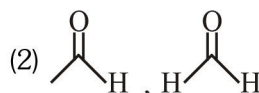
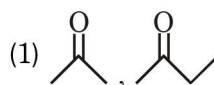
17. Which reaction product is wrong (major) product



18. Which of the following undergoes nucleophilic substitution by $\text{S}_\text{N}1$ mechanism at fastest rate :



19. Which of the following pair is differentiated by iodoform test?



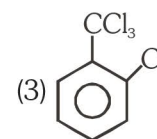
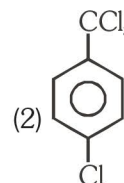
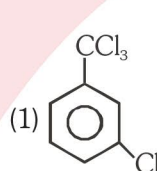
20. Identify z in the following series



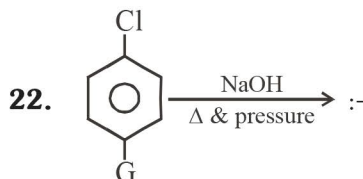
- (1) $\text{C}_2\text{H}_5\text{I}$ (2) $\text{C}_2\text{H}_5\text{OH}$
 (3) CHI_3 (4) CH_3CHO



In the above reaction X is



(4) None of these



Rate of reaction is maximum if G is :-

- (1) $-\text{OCH}_3$ (2) $-\text{CH}_3$
 (3) $-\text{NO}_2$ (4) $-\text{H}$

23. Hydrolysis of optically active 2-bromobutane gives-

- (1) d-butan-2-ol (2) l-butan-2-ol
 (3) (d/l)-butan-2-ol (4) either of these

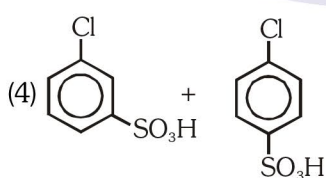
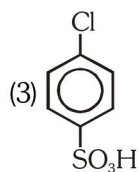
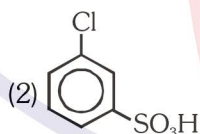
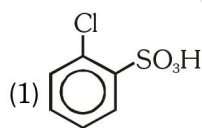
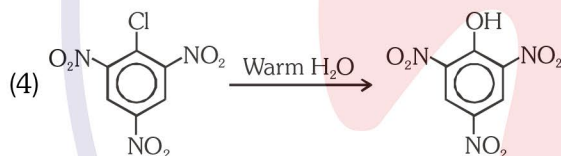
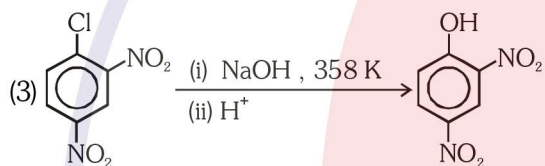
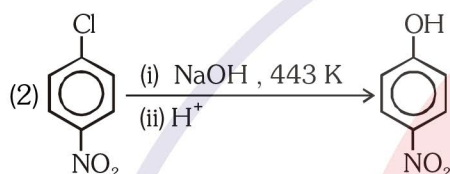
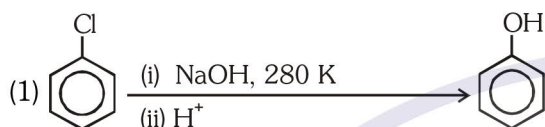
HALOGEN DERIVATIVES

24. When a haloalkane with β -hydrogen is heated with alcoholic solution of KOH the product and the type of mechanism is-
- (1) Alcohol, S_N1 (2) Alkene, α -elimination
 (3) Alcohol, S_N2 (4) Alkene, β -elimination

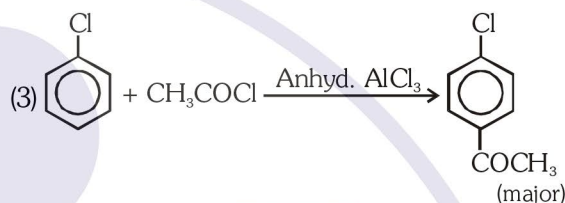
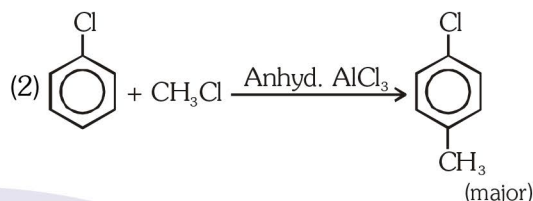
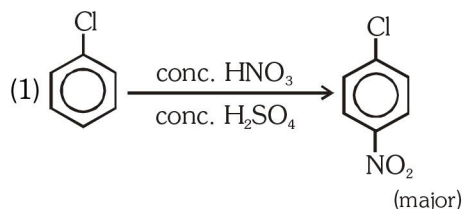
25. In $RMgX$, C-Mg bond is-

- (1) Non polar covalent
 (2) Polar covalent
 (3) Ionic
 (4) Coordinate

26. The incorrect reaction is-

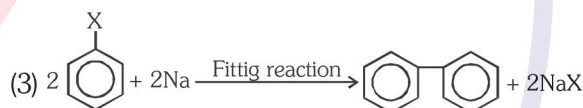
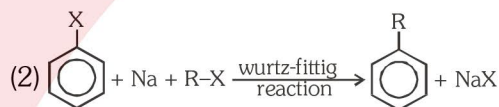


28. The correct reaction is -



(4) All of these

29. Which of the following is correct



(4) All of these

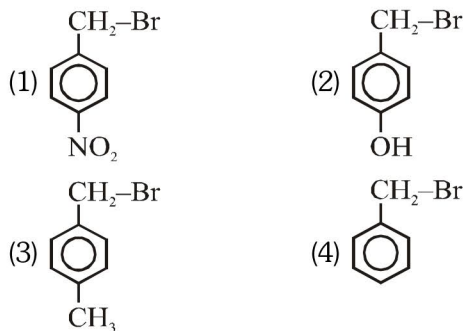
30. Incorrect match is-

- (1) Iodoform - Antiseptic
 (2) Pyrene - Fire extinguisher
 (3) Freon 12 - aerosol propellants
 (4) DDT - Fat insoluble

31. Which is most reactive for S_N1 reaction :-



32. Which is most reactive for S_N1 ?



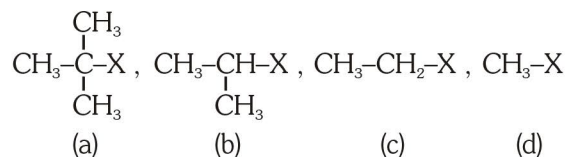
33. The reaction $\text{CH}_3\text{Br} + \text{OH}^- \longrightarrow \text{CH}_3\text{OH} + \text{Br}^-$ obeys the mechanism

- (1) S_N1 (2) S_N2
 (3) E^1 (4) E^2

34. S_N1 reaction on an optically active substrate having only one chiral centre which is also reaction centre, gives :-

- (1) Retention in configuration
 (2) Inversion in configuration
 (3) Partially racemised product
 (4) Complete racemised product

35. Arrange the following compounds in the increasing order of their S_N2 reactivity?



- (1) (a) < (b) < (c) < (d)
 (2) (a) < (c) < (d) < (b)
 (3) (d) < (c) < (b) < (a)
 (4) (b) < (d) < (c) < (a)

36. Which of the following alkyl halides gives a mixture of alkenes on dehydrohalogenation

- (1) n-Propyl halide (2) Isopropyl halide
 (3) s-Butyl bromide (4) t-Butyl bromide

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	3	2	2	1	1	3	4	3	4	4	1	1	4	2	2
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	1	1	3	2	3	1	3	3	4	2	1	3	4	4	4
Que.	31	32	33	34	35	36									
Ans.	2	2	2	3	1	3									