

CHEMISTRY

RPMT - 2005

- Q.1 CH_3COOH ka pK_a 4.75 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) 4.75 (2) 5.25 (3) 5.00 (4) 4.50
- Q.2 CH_3COOH ka pK_a 4.75 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) 4.75 (2) 5.25 (3) 5.00 (4) 4.50
- Q.3 CH_3COOH ka pK_a 4.75 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) 4.75 (2) 5.25 (3) 5.00 (4) 4.50
- Q.4 CH_3COOH ka pK_a 4.75 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) 4.75 (2) 5.25 (3) 5.00 (4) 4.50
- Q.5 CH_3COOH ka pK_a 4.75 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) 4.75 (2) 5.25 (3) 5.00 (4) 4.50
- Q.6 CH_3COOH ka pK_a 4.75 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) 4 (2) 6 (3) 8 (4) 10
- Q.7 CH_3COOH ka pK_a 4.75 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) $\text{HCl} + \text{ZnCl}_2$ (2) $\text{dil HCl} + \text{ZnCl}_2$ (3) ZnCl_2 (4) $\text{Zn} + \text{Cl}$
- Q.8 KMnO_4 ka pH 5.25 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) 6 (2) 7 (3) 5 (4) 2
- Q.9 NH_3 ka pH 5.25 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) sp (2) sp^2 (3) sp^3 (4) sp^3d
- Q.10 CH_3COOH ka pH 5.25 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) $5\sigma, 1\pi$ (2) $3\sigma, 3\pi$ (3) $2\sigma, 4\pi$ (4) $4\sigma, 2\pi$
- Q.11 CH_3COOH ka pH 5.25 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) e, p (2) p, n (3) e, n (4) bueal sdbZugha
- Q.12 CH_3COOH ka pH 5.25 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) I^+ aur I^- (2) I^+ aur I^- (3) I^+ aur I^- (4) I^+ aur I^-
- Q.13 CH_3COOH ka pH 5.25 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) C-H (2) O-H (3) F-F (4) N-H
- Q.14 CH_3COOH ka pH 5.25 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) foy; el u (2) F. C. R (3) O^+ aur O^- (4) bueal sdbZugha
- Q.15 $K_p = K_c$ ka pH 5.25 hai. CH_3COO^- aur CH_3COOH ka pH 5.25 hai. CH_3COOH aur CH_3COO^- ka pH 5.25 hai.
- (1) $\text{H}_2 + \text{I}_2 \rightleftharpoons 2\text{HI}$ (2) $2\text{SO}_2 + \text{O}_2 \rightleftharpoons 2\text{SO}_3$
 (3) $\text{PCl}_5 \rightleftharpoons \text{PCl}_3 + \text{Cl}_2$ (4) $\text{N}_2 + 3\text{H}_2 \rightleftharpoons 2\text{NH}_3$

- Q.16 0°C rki ij , fuyhu dh $\text{HNO}_2 + \text{HCl}$ dh f0; kl sD; k curk gS-
 (1) QhulW (2) ulbVht hu (3) MbZt ls; lkd (4) buéal sdlbZugla
- Q.17 m0e. l; vfH0; keaglrkgS-
 (1) nksrjQ dhnj l eku glrhgS (2) l eku l khzkglrhgS
 (3) vfH0; k, d vlg foLFkr gkst lrhgS (4) buéal sdlbZugla
- Q.18 NH_3 fuHkdsvuody ifjflfr gS-
 (1) de rki o mPp nk
 (2) mPp rki o mPp nk o vfHclj dladhmPp l khzk
 (3) de nk o mPp rki o vfHclj dladhde l khzk
 (4) de rki o de nk o vfHclj dladhde l khzk
- Q.19 l khzHl o MbZfky bZlj
 (1), fky vk MbM (2), fky , Ydgy (3), Flu (4) eky vk MbM
- Q.20 $\text{Cr}_2\text{O}_7^{-2}$ esCr dh vM ldj. k voLFk gS-
 (1) 2 (2) 4 (3) 6 (4) 7
- Q.22 N dk byDVNd foU kl glk &
 (1) $1s^2, 2s^2, 2p_x^1, 2p_y^1, 2p_z^1$ (2) $1s^2, 2s^2, 2p_x^3$
 (3) $1s^2, 2s^2, 2p_x^2, 2p_y^1$ (4) $1s^2, 2s^2, 2p_x^2, 2p_y^1$
- Q.23 i fr pcdh rkd kd lj. kgS-
 (1) v; fer byDVW (2) ; fer byDVW
 (3) /uloskdsdlj. k (4)
- Q.24 ct hu dh, jleVd in fukgS-
 (1) M. O. T. (2) vuqln
 (3), jleVd i fr LFki u (4) l Hh
- Q.25 vKVoKM dkl EcUkgS-
 (1) fo/qr vi?Wu (2) mRjd
 (3) n0 vuqlrhfu; e (4) forj. kfu; e
- Q.26 n0 vuqlrhf0; kdkfu; e fdl usfn; k-
 (1) xycZ, o oks (2) cF/W (3) (4)
- Q.27 HI dscuusdsfy, $K = 50$ gA rksfo; kt u dsfy, K dkeku fdruk glk -
 (1) 0.02 (2) 0.2 (3) 50 (4) 5
- Q.28 ijek l0el l srkRi; ZgS-
 (1) iW/dhl q; k (2) U W/dhl q; k (3) ijek lqn0 eku (4) l a kt drk
- Q.29 fd.ou gS-
 (1) Å"ek Wsh (2) Å"ek li h (3) nslu (4) dlbZugla
- Q.30 $\text{HCOOH} + \text{l khzH}_2\text{SO}_4 \longrightarrow \text{l sD}$; k cusK-
 (1) CO_2 (2) CO (3) Oxalic acid (4) CH_3COOH

- Q.31 I olhkd DoFlulal gS-
 (1) CH_3CHO (2) $\text{C}_2\text{H}_5\text{OC}_2\text{H}_5$ (3) $\text{C}_2\text{H}_5\text{OH}$ (4) C_4H_{10}
- Q.32 efi; Dok Ve l f; kn' hzhgS-
 (1) ije kkdvkldj (2) pØ.kdskh l ox
 (3) d{kd dskh l ox (4) d{kd dkvffhoU k
- Q.33 $\text{CH} \equiv \text{CH}$ esH ije kkgk &
 (1) vEyh (2) {kh (3) mnk hu (4) buesal scdbZugla
- Q.34 DylkQeZcjhgoko izkkk l sfØ; kdj cukrkgS-
 (1) CCl_4 (2) COCl_2 (3) eLVMxS (4) CH_3Cl
- Q.35 ehu dkcak dskgkkgS-
 (1) $109^\circ 28'$ (2) 180° (3) 104.50° (4) 45°
- Q.36 ft ll e l wkgS-
 (1) $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ (2) $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$ (3) $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ (4) $\text{CaSO}_4 \cdot \text{H}_2\text{O}$
- Q.37 cMl lbMv; Ld gS&
 (1) $\text{Al}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$ (2) $\text{Al}_2\text{O}_3 \cdot \text{H}_2\text{O}$ (3) $\text{Al}_2\text{O}_3 \cdot 3\text{H}_2\text{O}$ (4) $\text{Al}_2\text{O}_3 \cdot \frac{1}{2}\text{H}_2\text{O}$
- Q.38 $\text{HCHO} + \text{NH}_3 \longrightarrow ?$
 (1) QMh (2) gdl lesly Vvk, feu
 (3) cgyd (4) buesal scdbZugla
- Q.39 ch eMy Li'V djrkgs-
 (1) H dsLi ÷ve dls (2) , dy by ÷M; dr ije kqdsLi ÷ve dls
 (3) glMt u v. kdsLi ÷ve dls (4) At kLi ÷ve
- Q.40 fdl esOH l eg ughgS?
 (1) Qhly (2) dckDI fyd vEy (3) , YMglM- (4) , Ydly
- Q.41 ik pavlorZefdrusrR ik stkrsgS-
 (1) 8 (2) 10 (3) 18 (4) 32
- Q.42 ukhd dkvldj gkkgS-
 (1) cm (2) Å (3) Fermi (4) Amu
- Q.43 Qhly fdl dsl kkvffhØ; kdj chlylv nsx-
 (1) HCHO (2) CH_3CHO (3) $\text{CH}_3 - \overset{\text{O}}{\parallel}{\text{C}} - \text{CH}_3$ (4) AlCl_3
- Q.44 t eñ fl Yoj gS-
 (1) $\text{Cu} + \text{Zn} + \text{Ni}$ (2) $\text{Cu} + \text{Au} + \text{Ag}$ (3) $\text{Al} + \text{Ni}$ (4) $\text{Cu} + \text{Sn} + \text{Ag} + \text{Ni}$
- Q.45 , fl fVy DylkM-LiAlH₄ ds} kkvip; u ij nsx-
 (1) $\text{C}_2\text{H}_5\text{OH}$ (2) CH_3COOH (3) CH_3CHO (4) $\text{CH}_3\text{CH}_2\text{NH}_2$
- Q.46 f lQ {kh dsl kkvkchjx nsx &
 (1) , YMglM- (2) dlvk (3) vEy (4) bZj
- Q.47 lo; al pd gS-
 (1) KMnO_4 (2) MeOH (3) HPh (4) fQly jM-

- Q.48 CH_3COOH k gS-
 (1) CH_3COOH (2) CH_3COCH_3 (3) $\text{CH}_3\text{COOC}_2\text{H}_5$ (4) CH_3COCl
- Q.49 AlCl_3 k gS-
 (1) Anhy. AlCl_3 (2) AlCl_3 (3) ZnCl_2 (4) bueal sdbZugla
- Q.50 $\text{Zn} + \text{H}_2\text{SO}_4 \longrightarrow \text{ZnSO}_4 + \text{H}_2$
 k gS-
 (1) vip; u (2) CH_3COOH
 (3) CH_3COCH_3 (4) bueal sdbZugla
- Q.51 $\text{C}_2\text{H}_5\text{OH}$ k gS-
 (1) $\text{C}_2\text{H}_5\text{OH}$ (2) $\text{C}_2\text{H}_5\text{OH} + \text{C}_2\text{H}_5\text{OH}$
 (3) $\text{C}_2\text{H}_5\text{OH}$ (4) $\text{C}_2\text{H}_5\text{OH}$
- Q.52 $\text{C}_2\text{H}_5\text{OH}$ k gS-
 (1) $\text{C}_2\text{H}_5\text{OH}$ (2) $\text{C}_2\text{H}_5\text{OH}$ (3) $\text{C}_2\text{H}_5\text{OH}$ (4) $\text{C}_2\text{H}_5\text{OH}$
- Q.53 $\text{C}_2\text{H}_5\text{OH}$ k gS-
 (1) $\text{C}_2\text{H}_5\text{OH}$ (2) $\text{C}_2\text{H}_5\text{OH}$ (3) $\text{C}_2\text{H}_5\text{OH}$ (4) $\text{C}_2\text{H}_5\text{OH}$
- Q.54 $\text{C}_2\text{H}_5\text{OH}$ k gS-
 (1) $\text{C}_2\text{H}_5\text{OH}$ (2) $\text{C}_2\text{H}_5\text{OH}$ (3) $\text{C}_2\text{H}_5\text{OH}$ (4) $\text{C}_2\text{H}_5\text{OH}$
- Q.55 $\text{C}_2\text{H}_5\text{OH}$ k gS-
 (1) $\text{C}_2\text{H}_5\text{OH}$ (2) $\text{C}_2\text{H}_5\text{OH}$ (3) $\text{C}_2\text{H}_5\text{OH}$ (4) $\text{C}_2\text{H}_5\text{OH}$
- Q.56 $\text{CH}_2 = \text{CH}-\text{CH}_2-\text{Cl}$ k gS-
 (1) $\text{CH}_2 = \text{CH}-\text{CH}_2-\text{Cl}$ (2) $\text{CH}_2 = \text{CH}-\text{CH}_2-\text{Cl}$
 (3) $\text{CH}_2 = \text{CH}-\text{CH}_2-\text{Cl}$ (4) $\text{CH}_2 = \text{CH}-\text{CH}_2-\text{Cl}$
- Q.57 $\text{C}_2\text{H}_5\text{OH}$ k gS-
 (1) $\text{C}_2\text{H}_5\text{OH}$ (2) $\text{C}_2\text{H}_5\text{OH}$ (3) $\text{C}_2\text{H}_5\text{OH}$ (4) bueal sdbZugla
- Q.58 $\text{C}_2\text{H}_5\text{OH}$ k gS-
 (1) BHC (2) $\text{C}_2\text{H}_5\text{OH}$ (3) $\text{C}_2\text{H}_5\text{OH}$ (4)
- Q.59 $\text{C}_2\text{H}_5\text{OH}$ k gS-
 (1) CH_3COOH (2) CH_2ClCOOH (3) CHCl_2COOH (4) CCl_3COOH
- Q.60 Fe^{+2} l Fe^{+3} k gS-
 (1) Fe^{+2} (2) Fe^{+3} (3) Fe^{+2} (4) Fe^{+3}
- Q.61 AgCl k gS-
 (1) AgCl (2) AgBr (3) Ag_2O (4) AgF
- Q.62 $\text{C}_2\text{H}_5\text{OH}$ k gS-
 (1) $\text{C}_2\text{H}_5\text{OH}$ (2) C_2H_4 (3) C_2H_2 (4) bueal sdbZugla
- Q.63 $\text{C}_2\text{H}_5\text{OH}$ k gS-
 (1) $\text{C}_2\text{H}_5\text{OH}$ (2) $\text{C}_2\text{H}_5\text{OH}$ (3) $\text{C}_2\text{H}_5\text{OH}$ (4) vip; u

- Q.64 H_2O fdl dkgS-
 (1) H (2) Li (3) B (4) Na
- Q.65 CHCl_3 , ehu HNO_3 ; kea, YdgyhKOH fdl dsl HCl fdl dkgS-
 (1) $\text{CHCl}_3 + \text{Ag}$ (2) $\text{CH}_3\text{CN} + 1^\circ$, ehu (3) $\text{CHCl}_3 + 1^\circ$, ehu (4) $\text{CHCl}_3 + \text{HNO}_3$
- Q.66 N dkiP v H_2O ltu l svf/kl glrkgsD; kcd -
 (1) NH_3 (2) Zn p-d {kl dkLEH; Rb
 (3) C_6H_6 (4) bueal sdbZugla
- Q.67 H_2O dhprQydh vld fr l cl sigysfdl usnh-
 (1) H_2O (2) H_2O (3) H_2O (4) fofy; el u
- Q.68 H_2O fdl dkgS-
 (1) l r Ir glbMklcZ (2) vl r Ir glbMklcZ (3) bZj (4) , Ydgy
- Q.69 fuFu eal sdb l h/hrqep vLFk eagS-
 (1) Al (2) Mg (3) Cu (4) Fe
- Q.70 jibej Vleku H_2O ; keadle vlrkgs-
 (1) CHCl_3 (2) $\text{C}_2\text{H}_5\text{Cl}$ (3) $\text{C}_2\text{H}_5\text{OH}$ (4) CH_3CHO
- Q.71 ufhdlugh, fyQsvd foLFki u eaulfhdlughl leku r%glrkgs-
 (1) vEj (2) {Hj (3) mnkl lu (4) yo.k
- Q.72 xscy fLyelbM-l akuu H_2O ; kl si hr glrkgs-
 (1) 1° , ehu (2) 2° , ehu (3) 3° , ehu (4) bueal sdbZugla
- Q.73 , fYg bMo dhvku esfdl ds} jkfoHn djrsgS-
 (1) NH_3 (2) Qgfyx foy; u (3) H_2SO_4 (4) NaHSO_4
- Q.74 fn; kx; kby H_2O fdl dkgS-
 (1) s-Gy (2) p-Gy (3) d-Gy (4) f-Gy
- Q.75 l Øe.krRb glrkgs-
 (1) l Hh/hrq (2) dN /hrqdN v/hrq (3) mPp fØ; k hly (4) fefJr /hrq
- Q.76 dkl kizlf' kd l fØ; gS-
 (1) $\begin{array}{c} \text{H} \\ | \\ \text{H}-\text{H}-\text{COOH} \\ | \\ \text{H} \end{array}$ (2) $\begin{array}{c} \text{H} \\ | \\ \text{CH}_3-\text{H}-\text{COOH} \\ | \\ \text{Cl} \end{array}$
 (3) $\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_3-\text{C}-\text{COOH} \\ | \\ \text{OH} \end{array}$ (4) $\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_3-\text{C}-\text{COOH} \\ | \\ \text{Cl} \end{array}$
- Q.77 oS r l a k d cUkgs&
 (1) BF_3 (2) SiCl_4 (3) MgCl_2 (4) CH_4

- Q.78 CH_3CONH_2 dhp₂O₅ l sfØ; k } kjk curk gS-
 (1), ffly, ehu (2), ffly, Ydly (3), fl fvd vEy (4) efly l k ulbM-
- Q.79 dlcluy l eg eal alj. kgk-
 (1) sp² (2) sp³ (3) sp (4) All
- Q.80 , Li hu gS-
 (1), fl fvy l syfl fyd vEy (2) efly l syfl fyd vEy
 (3) efly l syl sy (4), ffly l syl sy
- Q.81 fdl eami l gl ak d cak gS-
 (1) CH₃COOH (2) H₂O (3) NH₄Cl (4) AlCl₃
- Q.82 cLVMo yk dsvud kj vEy o {kj nks gS-
 (1) H₃O⁺ (2) HCO₃⁻ (3) SO₄⁻² (4) Cl⁻
- Q.83 , Y; fefu; e dlclM-dht y l svffØ; k } kjk curk gS-
 (1) CH₄ (2) C₂H₆ (3) C₂H₂ (4) C₂H₄
- Q.84 dlkl kyo.k ty vi?Wu nrk gS-
 (1) CH₃COONa (2) KNO₃ (3) KCl (4) K₂SO₄
- Q.85 ybZ fl Øhr dsvud kj vEy gS-
 (1) iWlu nrk (2) iWlu xgh (3), dlclhbyDVW; Ynrk (4), dlclhbyDVW; Yxgh
- Q.86 CH₃—CH₂—X + KOH(, Ydlk —————> C₂H₄ mijDr vffØ; kgS-
 (1) foyliu (2) ifrLFliu (3); klRed (4) iqBU kl
- Q.88 ca hu ea, fl fvd vEy fyd dhrjg dk Zdjrk gS; lid -
 (1) COOH l eg dsdlj.k (2) α - H dh vEyl; rk dsdlj.k
 (3) H - cak dsdlj.k (4) bueal sdlbZugla
- Q.89 izy vEy dkl a fghrk gS-
 (1) izy {kj (2) nqZ {kj (3) nqZ vEy (4) bueal sdlbZugla
- Q.90 i Fohl s/lrqfdl l sihr dj l drsgS-
 (1) [kut (2) dPpkinkFZ (3); lxd (4) yo.k
- Q.91 H - cak vuqflFkr gS-
 (1) C₂H₅OH (2) H₂O (3) CH₄ (4) NH₃
- Q.92 mØe. hr vffØ; keaox glrk gS-
 (1) l eku (2) vyx & vyx (3) vflkl (4) vfuf' pr
- Q.93 vipk d inkFZrk gS-
 (1) byDVW xg.k djrk gS (2) byDVW nrk gS (3) iWlu nrk gS (4) iWlu yrk gS