

51. 2 - GNuhNkh gpa+l;NldpypUe;J>HBr<sup>-</sup> l ePf;Fk;nghOJ ----- cUthfpd;wJ

(A) 1-> kw;Wk; 2 - gpa+l;Bd; ,itfspd;; rk%yf;\$W msT fyt

(B) ngUk;ghd;ikasT 2 - gpa+l;Bd;

(C) ngUk;ghd;ikasT 1 - gpa+l;Bd;

(D) ngUk;ghd;ikasT 1 - gpa+l;ild

52. <j;ijy; FNshiuL AgCN cld; NrHj;J ntg;gg;gLj;jg;gLk;NghJ X vd;Dk;NrHkj;ijf; nfhLf;fpwJ. X-d; tpidr; nray; njhFjp khw;wpak;-----MFk;.

(A) C<sub>2</sub>H<sub>5</sub>NC

(B) C<sub>2</sub>H<sub>5</sub>NH<sub>2</sub>

(C) C<sub>2</sub>H<sub>5</sub>CN

(D) C<sub>2</sub>H<sub>5</sub>CHO

53. ,uz;L NkhNdh FNshNuh fpisg; nghUl;fs; kl;LNk ,jpy; rhj;jpakhFk;

(A) ngd;rPd;

(B) 2 - kPj;ijy; gpA+l;Nld;

(C)n - gpA+l;Nld;

(D) 2> 4 - il kPj;ijy; ngd;Nld

54. fPo;fz;l ve;j Nrh;kk;> S<sub>N</sub>2 tpidapd;NghJ> jiyfPo; khw;wpaj;ijj; jUk;?

(A) (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>CHCl

(B) (CH<sub>3</sub>)<sub>3</sub>CCl

(C) CH<sub>3</sub>Cl

(D) (CH<sub>3</sub>)<sub>2</sub>Cl

55. C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>Brcl; ePh;kNrhbak; i`l;uhf;irLtpidgpd;gw;WtJ

(A) S<sub>N</sub>1 topKiw

(B) S<sub>N</sub>2 topKiw

(C) ntg;gepiyiag; nghWj;JNkNyCs;s ,uz;by; VjhtJxd;W

(D) Nra;l;;nr::g; tpjp

56. fPo;f;fz;lve;jxUtpidapy; `hy[d; ghpkhw;wk; epfOk;

(A)R-F + KCl

(B)R - Cl + NaI

(C)R - I +NaCl

(D)CH<sub>3</sub> - F + AgBr

57. [NrhGNUhg;igy; GNUhikL Ch;l;]; tpidapy; \_\_\_\_\_ nfhLf;fpwJ.

(A)GNUhg;Ngd;

(B)n`f;Nrd;

(C)2,3-ilnkj;jpy;gpa+l;N;;ld;

(D)epNahn`f;Nrd;

58. vj;jpy; My;f`hiy  $K_2Cr_2O_7$ - cld; Mf;]p[Ndw;wk; mile;J nfhLg;gJ:

(A) mrpl;bf; mkpyk;

(B) mrpl;lhy;bi`L

(C) ‡ghh;khy;bi`L

(D) ‡ghh;kpf; mkpyk;

59.  $CH_3COOH \xrightarrow{LiAlH_4} A + CH_3COOH \xrightarrow{H_3O^+} B + H_2O$ ,

Nkw;fz;l tpidapy; A kw;Wk; B KiwNa ?

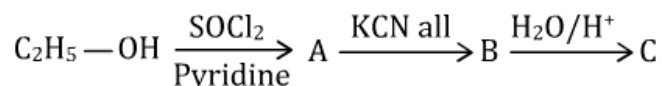
(A)  $CH_3COOC_2H_5, C_2H_5OH$

(B)  $CH_3CHO, C_2H_5OH$ ,

(C)  $C_2H_5OH, CH_3COH$

(D)  $C_2H_5OH, CH_3COOC_2H_5$ ,

60. gpd;tUk; njhlhpy; ,Wjptpisg;nghUis(C) fz;lwpf?



(A)  $C_2H_5-CH_2NH_2$

(B)  $C_2H_5-COOH$

(C)  $C_2H_5-CONH_2$

(D)  $C_2H_5-NH_2 + HCOOH$

61. gpd;tUtdtw;Ws; typikpFmkpyk;vJ?

(A) o - kPj;jhf;rpgPdhy;

(B) p - kPj;jhf;rpgPdhy;

(C) m - kPj;jhf;rpgPdhy;

(D) gPdhy;

62. ∴:gpidy; nkf;dPrpak; GNUhikil> %tpiza gpA+l;ldhYld; Nrh;j;J tpidgLj;jpdhy; gpd;tUk; vJ cUthFk;?

(A)%tpiza gpA+l;ily; <jh;

(B)ngd;rPd;

(C)%tpiza gpA+l;ily; ngd;rPd;

(D):.gPdhy;

63. ,tw;wpy; vJ mNahNIhghh;k; Nrhjidf;F Neh;kiwahf (POSITIVE) gjpyspf;Fk;?

(A) gpA+l;ld; -1-My;

(B) gpA+l;ld; -1-Vy;

(C) gpA+l;ld; -2-My;

(D) ngd;Nld; -3-Xd;

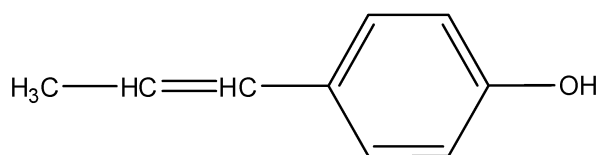
64. miw ntg;g epiyapy;> mlh; HCl kw;Wk; [pq;f; FNshiuLld; cldbahf fyq;fy; jd;ikia Vw;gLj;Jk; My;f hy; \_\_\_\_\_

(A) 2 - i'l;uhf;rp gpa+l;Nld;

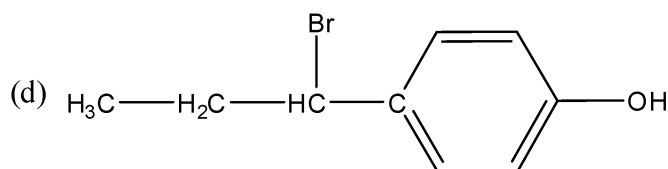
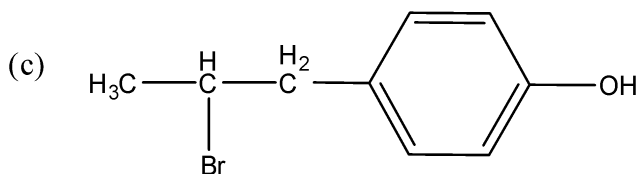
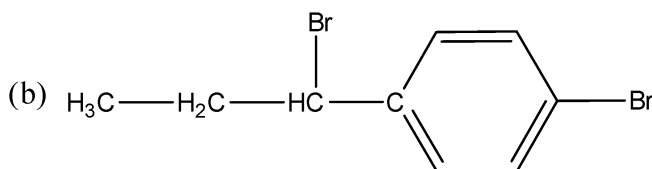
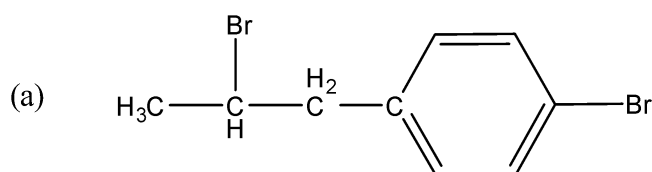
(B) 2 - i'l;uhf;rp - 2 - nkj;jpy; Gug;Ngd;

(C) 1 - i'l;uhf;rp gpa+l;Nld;

(D) 1 - i'l;uhf;rp - 2 - nkj;jpy; Gug;Ngd



HBr cld; tpidGhpe;J nfhLg;gJ



66.  $\text{CH}_3\text{CHO}$  kw;Wk;  $\text{C}_6\text{H}_5\text{CH}_2\text{CHO}$  ,tw;iw Ntjapay; Kiwg;gb ,t;thW NtWgLj;jp fhI;l KbAk;.

(A) ngdpbf;l; Nrhjid

(B) mNahNlhghh;k; Nrhjid

(C) lhyd;]; fhuzp

(D) ngypq;f; fiury; Nrhjid

67.  $\text{RCH}_2\text{OH} \rightarrow \text{RCHO}$  Mf khw;w nghUj;jkhd fhuzp vJ?

(A)  $\text{KMnO}_4$

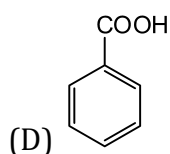
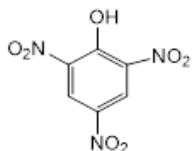
(B) mkpykhf;fg;gl;l  $\text{K}_2\text{Cr}_2\text{O}_7$

(C)  $\text{CrO}_3$

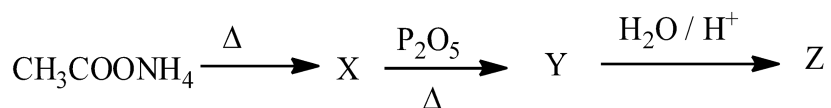
(D) PCC (igupbdpak; FNshNuh FNuhNkl;)

68. gpd;tUdtw;ws; typikahd mkpyk; vd;gJ

- (A)  $\text{CCl}_3\text{COOH}$   
 (B)  $\text{FOH}_2\text{COOH}$   
 (C)



69.  $\text{mLj;J mLj;J epfOk; tpidapy; 'Z' -l fz;Lgpb}$



- (A)  $\text{CH}_3\text{CH}_2\text{CONH}_2$   
 (B)  $\text{CH}_3\text{CN}$   
 (C)  $\text{CH}_3\text{COOH}$   
 (D)  $(\text{CH}_3\text{CO})_2\text{O}$

70.  $\text{m-FNshNuhngd;rhy;bi`L mlu; KOH cld; miw ntg;gepiyapy; tpidgl;LjUtJ}$

- (A)  $\text{nghl;lhrpak; m- FNshNuhngd;NrhNal; kw;Wk; m- i`l;uhf;rp nld;rhy;bi`L}$   
 (B)  $\text{m- i`l;uhf;rpngd;rhy;bi`L kw;Wk; m- FNshNuhngd;iry; My;f`hy;}$   
 (C)  $\text{m- FNshNuhngd;iry; My;f`hy; kw;Wk; m- i`l;uhf;rp ngd;iry; My;f`hy;}$   
 (D)  $\text{nghl;lhrpak; m- FNshNuhnld;NrhNal; kw;Wk; m- FNshNuhngd;iry; My;f`hy;}$

71.  $450-470 \text{ K, ntg;gepiyapy; , vj;jpyPd;fpisfhypy; KOH cld; mrpl;NIhgpNdhd; i`l;uNrhid ntg;gLj;jpdhy; jUtJ.}$

- (A)  $1\text{- gpidy; vj;jdhy;}$   
 (B)  $2\text{- gpidy; vj;jdhy;}$   
 (C)  $\text{<j;ijy; ngd;rPd;}$



(C)  $m\text{-NO}_2\text{-C}_6\text{H}_4\text{NH}_2$

(D)  $\text{C}_6\text{H}_5\text{CH}_2\text{NH}_2$

76. %yf;\$W tha;ghl;by;  $\text{C}_4\text{H}_{11}\text{N}$  vd;w vj;jid Kj d;ik mkPd;fs; rhj;jpakhdJ?

(A) 1

(B) 2

(C) 3

(D) 4

77. mdpyPd; Kjy py; mrpily; FNshiuL cld; tpidGupe;J 'A' Nru;kj;ij jUfpwJ. 'A' cld; iel;upf; my;yJ ry;gpa+upf; mkpyj;jpd; fyitapy; tpidGupe;J 'B' Nru;kj;ij jUfpwJ. 'B' ia ePuhw;gFf;Fk; NghJ Nru;kk; 'C' fpilf;fpwJ. Nru;kk; 'C' d; milahsk; vd;gJ.

(A) mrpl;ldpiyL

(B) p-iel;Nuhmrpl;ldpiyL

(C) p-iel;NuhmdpyPd;

(D) ry;ghdpypf; mkpyk;

78. nfhLf;fg;gl;Ls;s Nru;kj;Jld;  $\text{NaNO}_2/\text{HCl}$  kw;Wk; gPdhyld; ,ide;J ghuh - i`l;uhf;]p mNrhngd;rPd; jUfpwJ vdpy;

(A) iel;Nuh ngd;rPd;

(B) mNrh ngd;rPd;

(C) gPdhy;

(D) mdpyPd;

79. Xu; Xupiza mkPd; FNshNuhghu;k; kw;Wk; vj;jdhypf KOH; cld; tpidGupe;J fpilf;Fk; tpi snghUs;

(A) xU INrhraidL

(B) xU My;bi`L

(C) Xu; raidL

(D) xU My;f`hy;

80. mdpyPd; ngd;rhy;bi`Lld; tpidGuptJ ----- tpid MFk;.

(A) gjpyPl;L

(B) Nru;f;if

(C) FWf;fk;

(D) gygbahf;fy;

81. nfhLf;fg;gl;Ls;s mikLfspy; GNuhkikL tpidf;F cl;glhjJ vJ

(A) CH<sub>3</sub>CONH<sub>2</sub>

(B) CH<sub>3</sub>CH<sub>2</sub>CONH<sub>2</sub>

(C) C<sub>6</sub>H<sub>5</sub>CONH<sub>2</sub>

(D) CH<sub>3</sub>CONHCH<sub>3</sub>

82. xU %yf;\$W Rf;Nuh]; ePuhw;gFj;jypd; NghJ \_\_\_\_\_ If; nfhLf;fpwJ.

(A) 2 %yf;\$Wfs; FSf;Nfh]; kw;Wk; 1 %yf;\$W ‡gpuf;Nlh];

(B) 1 %yf;\$W FSf;Nfh]; kw;Wk; 1 %yf;\$W ‡gpuf;Nlh];

(C) ,uz;L %yf;\$Wfs; FSf;Nfh];

(D) ,uz;L %yf;\$Wfs; ‡gpuf;Nlh];

83. gpd;tUk; njhFg;Gfs; vtw;wpy; mj;jpahtrpa mkpNdh mkpyq;fs; kl;Lk; nfhz;Ls;sJ ?

(A) myidd;> iNuh;rp;bd;

(B) ypA+rp; iyrp; l;hpg;Nlhghd;

(C) myidd;> FSlhkpd;> iyrp;

(D) ypA+rp; GNuhbd;> fpisrp

84.  $\alpha$  – D(+) FSNfh]; kw;Wk;  $\beta$  – D(–) FSNfh]; vd;git ?

(A) ,dd;rpNahkh;fs;

(B) tr mikg;Gfs;

(C) vgpkh;fs;

(D) MNdhkh;fs;

85. nry;YNyh]; xU Neh;Nfh;l;L rq;fpyp gygb rh;f;fiu — ,iaG (gFjp) kl;Lk; cs;sJ

(A)  $\alpha$ –fpisNfhrpbf; gpizg;G %yk; D –FSNfh]; myFfs; Nrh;e;j

(B)  $\beta$ –fpisNfhrpbf; gpizg;G %yk; D –FSNfh]; myFfs; Nrh;e;j

(C)  $\alpha$ –fpisNfhrpbf; gpizg;G %yk; D –fhyf;NlhR myFfs; Nrh;e;j

(D)  $\beta$ –fpisNfhrpbf; gpizg;G %yk; D –fhyf;NlhR myFfs; Nrh;e;j

86. F@Nfh]pd; tisa mikg;gpy; xU Mf;rp[d; mZ nfhz;l le;J mZf;fs; nfhz;l tisa Nrh;kj;jpd;

tb;tj;jpy; ,Uf;Fk; F@Nfh]pd; tisa mikg;ig — Mf miof;fg;gLfpd;wd ?

(A) gpuNdh]; (PYRANOSE)

(B) ‡gpAuNdh];

(C) gphpbd;

(D) gphpkpbd;

87. gpd;tUk; \$w;Wfspy; vit ,ul;il rh;f;fiu khy;NlhR gw;wp rhpahdit my;y ?

(A) ,uz;L F@Nfh]; gFjpf; gpuNdh]; tb;tj;jpy; cs;sd

(B) xU FSNfh]; gFjppd; C<sub>1</sub>– $\beta$ , kw;nwhU F@Nfh]; gFjppd; C<sub>4</sub>–f;F ,izf;fg; gl;Ls;sd

(C) ,it ];lhh;r;Rapd; vd;irk; ePuhw;gFg;G %yk; fpilf;fpwJ

(D) ,it xU XrNrh; tpidgL nghUis cUthf;Fk;

88. gpd;tUk; ghypkh;fspy; v];lh; ,izg;ig nfhz;Ls;sJ vJ?

(A)Ngf;iyl;

(B)nlupypd;

(C)PVC

(D)ieyhd;

89. ,aw;if ug;gh; vd;gJ?

(A)midj;Jk; rp]; Gwntsp mikg;ig ngw;Ws;sJ.

(B)midj;Jk; buhd;]; Gwntsp mikg;ig ngw;Ws;sJ.

(C)khw;W rp]; kw;Wk; buhd;]; Gwntsp mikg;ig ngw;Ws;sJ.

(D)rPuw;w rp]; kw;Wk; buhd;]; Gwntsp mikg;ig ngw;Ws;sJ.

90. fpisrPd; kw;Wk; mkpNdh Nfg;uhapf; mkpyj;jpypUe;J jahhpf;fg;gLk; kl;Fk; gygb vd;gJ

-----

(A) PHBV

(B)Nylon 6,6

(C)Nylon 2, 6

(D) Buna - N

91. gpd;tUk; gygbfspy; vjpy; typik kpFe;j %yf;\$WfSf;fpilg;gl;l fth;r;rp tpir cs;sJ?

(A)kPs;nghUl;fs;

(B),iofs; ( fibers)

(C)ntg;gj;jhy; ,sFk; nefpop

(D)ntg;gj;jhy; ,UFk; gygbfs;

92. vj;jpyPid ghypj;jPdhf khw;Wk; gygbahf;fypy; gad;gLk; gygbj;jhd tpida+f;fp vJ?

(A)thf;fu; tpida+f;fp

(B)rPf;yu; el;lhtpidA+f;fp

(C)tpy;fpd;rd;]; tpida+f;fp

(D)Uj;Njdpak; tpida+f;fp

93. rp];gpshl;bd; ve;j rpfpr;irf;F cjTfpwJ?

(A)va;l;];

(B)kNyupah

(C)Gw;WNeha;

(D)fhrNeha

94. fpUkp ehrpdpahfpa nll;lhy; \_\_\_\_\_d; xU fyitahFk;

(A)o-fpurhy; + nlh;gpdpahy;



(B)gPdhy; + nlh;gpdpahy;

(C)FNshNuh irypdhy; + nlh;gpdpahy;

(D)o-FnshNuh gPNdh irypdhy; + nlh;gpdpahy

95. gpd;tUk; njhIh;fspy; vJ mikjpg;gLj;Jk; kUe;J vdf; \$Wf?

(A)kpgp[h];NIhd; (mifepristone)

(B)GNuhkpj;j[pd; (promethazine)

(C)thypak; (Valium)

(D)ehg;Nuhrpd; (Natproxen)

96. 2 - mrpl;lhf;rp ngd;Nrhapf; mkpyk; \_\_\_\_\_ Mfg; gad;gLj;jg;gLfpwJ?

(A) Giu jLg;ghd;

(B) kd mOj;j vjph;g;G kUe;J

(C)kNyhpah vjph;g;G ,Uf;Fk;

(D)Ru ephuzpfs;

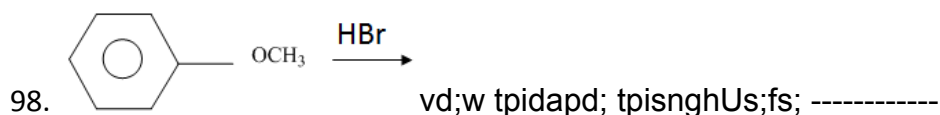
97. Nrhg;Gld; fpspruhy; Nrh;f;fg;gLfpwJ mJ vd;dthf nray;gLfpwJ.

(A)epug;gpahf

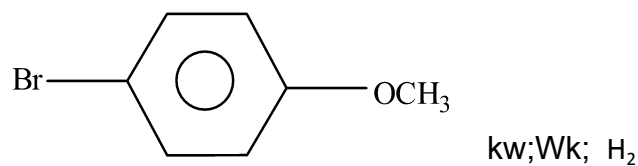
(B)Eiuj;jiy mjpfhpg;gjw;fhf

(C)tpiuthf cyh;jiy jLf;f

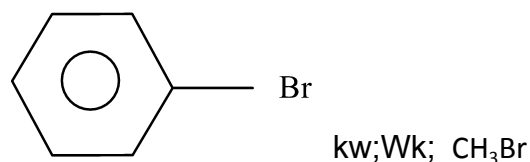
(D)Nrhg;G Jfs;fis cUthf;f



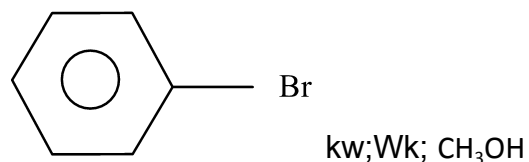
(A)



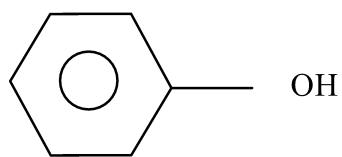
(B)



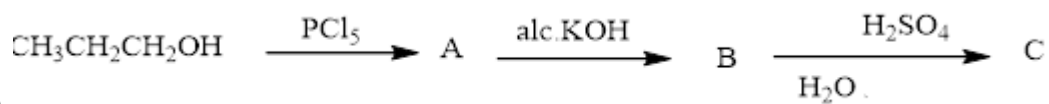
(C)



(D)



kw;Wk; CH<sub>3</sub>Br



99.

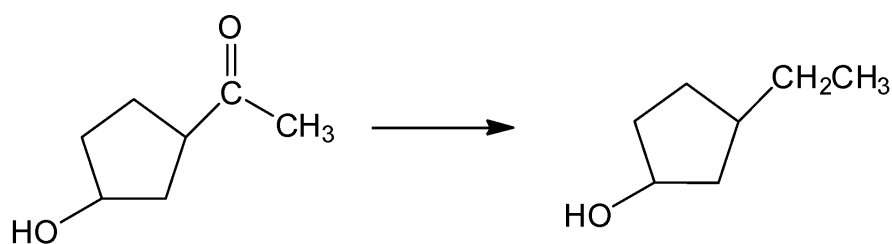
(A) Gug;Ngd;

(B) Gug;gPd;

(C) 2- Gug;gdhy;

(D) Gug;gNdhd

100. ,ej khw;wj;jpw;fhd rupahd fhuzp vd;gJ



(A) Zn (Hg), HCl

(B) NH<sub>2</sub>NH<sub>2</sub>, OH<sup>-</sup>

(C) H<sub>2</sub>/Ni

(D) NaBH<sub>4</sub>.