হিন্দুধর্ম ও নৈতিক শিক্ষা

সপ্তম শ্রেণি





জাতীয় শিক্ষাক্রম ও পাঠ্যপুস্তক বোর্ড, ঢাকা

RvZxq wk¶vµg I cvV~cy¯-K teW%KZ% 2013 wk¶veI%_‡K mßg tkNYi cvV~cy¯-Ki‡c wbanni Z

$\begin{array}{c} \text{wn} \text{ `pag}^\text{Q} \quad \text{`bwZK wk} \P \text{v} \\ \text{mBg tkily} \end{array}$

i Pbv
c¢dmi W. c‡ik P>`agÊj
c¢dmi W. `jvj Kwš-†f\$wgK
weòz`vk
W. ax‡i>`bv_ Zid`vi
W. wkwki gwj K
wkLv`vm

m¤úv`bv c‡dmi wbiÄb AwaKvix

RvZxq wk¶vµg I cvV"cy¯-K tewV°, XvKv

RVZXQ WK¶Vµg I cW"cy¯-K teW© 69-70 gwZwSj ewYwR"K GjvKv, XvKv-1000 KZK cKwkZ|

 $\begin{array}{c} [\texttt{CKVKK KZK me}^{\otimes \wedge} Z_{i} \, \texttt{msiw} \P | Z] \\ \texttt{cix} \P \texttt{vgj} \, \texttt{K ms}^{-} \, \texttt{<} \, \texttt{i} \, \texttt{Y} \end{array}$

 $c\underline{\tilde{0}}g\;cK\hspace{-0.1cm}\tilde{\hspace{-0.1cm}K}\hspace{-0.1cm}\tilde{\hspace{-0.1cm}V}\hspace{-0.1cm}\tilde{\hspace{-0.1cm}K}\hspace{-0.1cm}\tilde{\hspace{-0.1cm}V}\hspace{-0.1cm}\tilde{\hspace{-0.1cm}W}\hspace{-0.1cm}\tilde{\hspace{-0.1cm}I}\hspace{-0.1cm}\tilde{\hspace{-0.1cm}K}\hspace{-0.1cm}\tilde{\hspace{-0.1cm}V}\hspace{-0.1cm}\tilde{\hspace{-0.1cm}V}\hspace{-0.1cm}\tilde{\hspace{-0.1cm}I}\hspace{-0.1cm$

cvV~cy¯—K cVq‡b mgš^qK cWuZkKgvi miKvi †MŠiv½jvj miKvi

> Kw¤úDUvi K‡¤úvR Kvjvi MÖndK

cÖQ` my`k® evQvi myRvDj Av‡e`xb

> wPÎv¼b D¾jj †NvI

miKvi KZK webvg‡j¨weZi‡Yi Rb¨

gỳ ‡Y :

cm1/2-K v

wk¶v RvZxq Rxe‡bi m‡e@Zglx Dbqtbi ceRZ® Avi `Z cwieZ®kxj we‡k! P`vţjÄ tgvKvţejv Kţi evsjvţ`k‡K Dbqb I mgwxi w`‡K wbţq hvIqvi Rb¨ cøqvRb mykw¶Z Rbkw³ | fvIv Avţ> vjb I gy³hţxi †PZbvq † k Movi Rb¨ wk¶v_A AšwbwnZ †gav I m¤@ebvi cwicY®weKv‡k mvnvh¨ Kiv gvaïwgK wk¶vi Ab¨Zg j¶" | GQvov cø_wgK ¯‡i AwRZ wk¶vi †gŚwj K Ávb I `¶Zv m¤cðhwiZ I mynsnZ Kivi gvaïţg D"PZi wk¶vi †hvM¨ Kţi †ZvjvI G ¯‡ii wk¶vi Dţİk" | ÁvbvRţbi GB cøuqvi wfZi w`ţq wk¶v_kt †`ţki A_‰wZK, mvgwwRK, mvs¯wZK I cwiţekMZ cUfwgi †cø¶ţZ `¶ I †hvM¨ bvMwiK Kţi †ZvjvI qvaïwqK wk¶vi Ab¨Zq weţeP¨weIq |

bZb GB wk \P vµtgi AvtjvtK clyz ntqtQ gva`wgK $^-$ tii cliq mKj cvV`cȳK| D³ cvV`cȳ-K clyqtb wk \P v_At`i mvg_°, cleYZv I ce°AwfÁZvtK <code>itZi</code> mt½ wetePbv Kiv ntqtQ| cvV`cȳ-K¸tjvi weIq wbePb I Dc $^-$ vctbi t \P tî wk \P v_A mRbkxj cliZfvi weKvk mvatbi w`tK wetkIfvte <code>i'Zi</code>t`Iqv ntqtQ| cliZwU Aa`vtqi i'itZ wkLbdj hy³ Kti wk \P v_A AwRZe Ávtbi Bw½Z clvb Kiv ntqtQ Ges wewPî KvR, mRbkxj clkel Ab`vb` clkemsthvRb Kti gj `vqbtK mRbkxj Kiv ntqtQ|

RvZxq wk¶vbxwZ-2010 Gi AvtjvtK gva`wgK ¯-tii Iô†_tK Aóg †kŵYi wn>`pag®wk¶v cvV`cȳ-KwUi bvgKiY Kiv ntqtQ wn>`pag®l ^bwZK wk¶v| G cvV`cȳ-tKi cŵZwU Aa`vtqi atg® ZwwEjK welqmgn mij fvte Dc¯′vctbi cvkvcwwk agx@ aviYvi RxebvPiYgyLx wk¶v Ges Gi cŵtqwwMK w`K Avtj wPZ ntqtQ| dtj G cvV`cȳ-KwU Aa`qtbi gva`tg wk¶v_Mv Dcj wä KitZ cvite, atg® ZwwEjK Ávb kpgvî ag@j vc Ges Abpôvb Avtj vPbvi gta` mxgve™ bq GwU ^bwZK Pwiî MVb Ges mgvtRi GKRb ^bwZK I gvbweK ¸bm¤úbæfvtj vgvby Mto†Zvj vi c_ wbt`RKI|

GKwesk kZ‡Ki A½xKvi I c $^{\circ}$ Cq‡K mvg‡b †i‡L cwigwwR $^{\circ}$ Wk $^{\circ}$ Vµ‡gi Av‡jv‡K cv $^{\circ}$ C $^{\circ}$ -KwU iwPZ n†q‡Q| Kv‡RB cv $^{\circ}$ C $^{\circ}$ -KwUi AviI mgw×mva‡bi Rb $^{\circ}$ †h‡Kv‡bv MVbg $^{\circ}$ K I h $^{\circ}$ C $^{\circ}$ Cv $^{\circ}$ C $^{\circ}$ -KwUi AviI mgw×mva‡bi Rb $^{\circ}$ †h‡Kv‡bv MVbg $^{\circ}$ K I h $^{\circ}$ Cv $^{\circ}$ Civgk $^{\circ}$ civgk $^{\circ}$ civgk $^{\circ}$ civgtbi wecj Kg $^{\circ}$ tfi g‡a $^{\circ}$ AwZ $^{\circ}$ f mg‡qi g‡a $^{\circ}$ Cv $^{\circ}$ -KwUiwPZ n‡q‡Q| d‡j wKQz f $^{\circ}$ j Î*W † $^{\circ}$ t †h‡Z cv‡i | cieZ $^{\circ}$ Pms $^{\circ}$ ciY $^{\circ}$ ‡j v‡Z cv $^{\circ}$ Cv $^{\circ}$ -KwU‡K AviI m $^{\circ}$ ti, †kvfb I Î*Wg $^{\circ}$ S Kivi †Póv Ae $^{\circ}$ vnZ, $^{\circ}$ vK‡e | evbv‡bi † $^{\circ}$ 1 $^{\circ}$ 1 Abm $^{\circ}$ Z n‡q‡Q evsj v GKv‡Wgx KZ $^{\circ}$ C $^{\circ}$ XZ evbvbi xwZ |

cvV°cy¯—KwU i Pbv, m¤úv`bv, wPÎv½b, bg/pv ckwo` ckyqb I ckkvkbvi Kv‡R hviv AvšwiKfv‡e †gav I kgw tq‡Qb Zu‡`i ab°ev` Ávcb KiwQ| cvV°cy¯—KwU wk¶v_kt`i AvbwòZ cvV I ckZ°wkZ`¶Zv AR® wbwðZ Ki‡e e‡j Avkv Kwi|

c#dmi †gvt †gv⁻—dv Kvgvj Dwi b †Pqvi g¨vb RvZxq wk¶vµq I cvV¨cv-K †evW°,XvKv

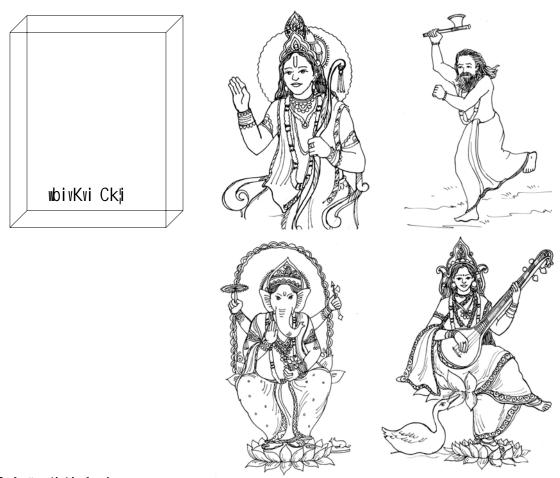
m⊮PcÎ

Aa¨v‡qi bvg	Aa¨v‡qi wk‡ivbvg	CÔV
c <u>Ö</u> g	Bk‡ii ⁻^i∈	1-8
мØZxq	ag¶š′	9-17
ZZxq	wn>`pa‡g® ⁻^iєlwekķm	18-26
PZ <u>ı</u> °	wbZ"Kg®I †hvMvmb	27-34
cÂg	t`e-t`ex I cRv-cve♥	35-42
lô	agxq DcvL"v‡b ^bwZK wk¶v	43-49
mßg	Av` k®RxebPwi Z	50-66
Aóg	wn>`pag®l ^bwZK gj-"‡eva	67-76

c<u>0g</u> Aa "vq

Ck‡ii m¦ie

G wekpłoviÊi mKj cŵYx I $e^{-\prime}$ i GKRb móv i tqtQb| hutK Avgiv myoKZPev Ckļi ewj | wZwb GK I AwØZxq| wZwb wbivKvi, Zte wZwb mvKvi i ε I aviY KitZ cvtib| thgb- AeZvi, t`e-t`ex cðfwZ Zwi mvKvi i ε I G Aa vtq móv Ges Ckļi ktāi A_\$ Ck\$ii $^{-\prime}$ i ε Ges Ck\$ii GKZ\$ m\(\time\)utK\(^{\infty}\)Avtj\(^{\infty}\)Dv Kiv ntqtQ|



G Aa vq tk 1 Avgiv-

- mớv Ges Ck¦i kã `yUi A_@e"vL"v Ki‡Z cvie
- Ck‡ii wbivKvi I mvKvi m¤úwKZ aviYv e~vL~v Ki‡Z cvie
- Ck‡ii mvKvi i‡ci eY®v Ki‡Z cvie
- Ck‡ii GKZ¡e"vL"v Ki‡Z cvie
- Ck‡ii ¯^iє m¤ú‡K®kåg`&FMe`MxZvi GKwU mnR ms¯<Z†kvK mijv_Mn ej‡Z cvie Ges e¨vL¨v Ki‡Z cvie
- Ck‡ii wewfbœmvKvi i‡ci g‡a~I Ck‡ii GKZ¡Dcjwä K‡i Zwi Dcvmbvq DØy™ ne|

2 Ck‡ii m¦∈

cW 1: mov I Ck ktai A_©

mốv gyth whwho mymó Ktib| thợph grukíx gwul wìtq nuwo-cwuZj, tljbv, chiZgv BZïwì mymó Ktib| wKšy-wZwb gwul mymó Kitz cytib bv| ïaygwuUB bq, Avgiv Rj, bìx-mgyì, Pɔì, mhọ, Mồn, b¶lì, Rxe-RšyBZïwì mymó Kitz cwwi bv| whwho Gme mymó KtitQb, ZwtK môv ev mymó Kzpejv nq| G mKj mymói wcQth GK Amxg kw³ weivR KitQ| G Amxg kw³i etjB mewKQy GKwU wbqtgi gaï wìtq AvewZV nt²Q| whwho GB gnvkw³ai ZwtK môv ev mymó Kzpejv nq| G môv ev mymó Kzpk Avgiv Ckti ewj|







Ck¦i kãwUi A_@n‡"Q clr̃z| wZwb meRw³gvb| wZwb k;Ljvi m‡½ Rxe-RMr‡K wbqš¿Y Ki‡Qb| mKj kw³ I ¸‡Yi wZwbB Avavi| m‡h® Av‡jv ZwiB Av‡jv| wZwbB Rx‡ei g‡a¨ AvZ\vi i‡c Ae¯′vb K‡ib| wZwb mwó, w¯′wZ I cvj‡bi GKgvl̃ KZ® wZwbB gZïi mxgvq Rxeb‡K †e‡a w` ‡q‡Qb| Gfv‡eB wZwb Rxe I RM‡Zi Ici clfZį

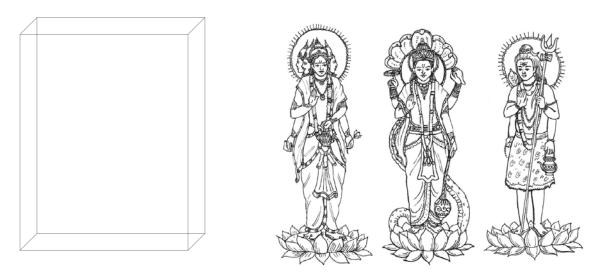
K‡ib | G Rb"B Zwi bvg Ck¦i | Zwi Awv` †bB, ZvB wZwb Abwv` | Zwi Aší †bB, ZvB wZwb Abší | Zwi webvk †bB, ZvB wZwb Awebk¦i |

wn.`yagfoynvti Avgiv móvtK wewfbæbvtg AwfwnZ Kwi| thgb Ñeþ, Ckļi, fMevb, cigvZ\ BZ``wv`|G cw_extZ Avtiv AtbK ag@Z AvtQ| thgb Ñ Bmjvg, te\s\ atb\ whom Z Kiv ntqtQ| wewfbæ atg® movtK wewfbæ bvtg AwfwnZ Kiv ntqtQ| thgbÑAvjv+\ tLv`v, MW BZ``wv`| GK moviB wewfbæbvg| Ck\ movi GKwU bvg|

GKK KvR : mőv I Ck‡ii m¤úK®ïvLïv Ki |

cvV 2 I 3 : Ck‡ii ¯^iє : wbivKvi I mvKvi

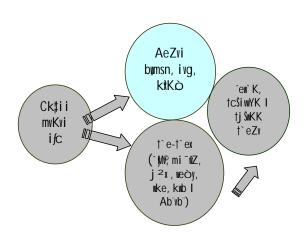




GK. Ck¦i wb‡R‡K ev wb‡Ri Askwe‡kI‡K mvKvi iє`vb K‡ib| G iє¸‡jv n‡jv AeZvi I †`e-†`ex| `ß. Ck¦i wb‡RB Rx‡ei g‡a¨ AvZ¥v i‡c Ae¯′vb K‡ib| ZLb Zu‡K RxevZ¥v ejv nq|

AeZvi

AeZvi m¤úţK®Avgvţ`i aviYv iţqţQ| hLb aţg® MwHo Dcw¯Z nq A_M® Ab¨vq AwePvţi wech®Í nq gvbeRxeb Ges AfÿÌvb NţU Aaţg® ZLb Ckţi †Kvţbv bv †Kvţbv iɛ aviY Kţi cw_exţZ AeZiY Kţib| Avgiv Rwho AeZiY kãwUi A_®tbţg Avmv | Ckţi weţkl Dţlʿţk¨ cw_exţZ AeZiY Kţib eţj ZvţK AeZvi ejv nq| thgb Ñ Ckţi tl̂ ZvhţM ivgiţc AeZxY®nţqwQţjb| ivg AeZvţi wZwb iveYmn `yeţt`i `gb Kţi ag® ev b¨vq I mţZ¨i cůZôv KiţwQţjb| Øvci hţM Ckţi ev fMevb mqs kůKòiţc tbţg GţmwQţjb| A_M® Ab¨vb¨ AeZvi Ckţii Ask AeZvi | Avi kůKò Ckţii cY®AeZvi | ZvB ejv nţqţQÑ ŮKò¯′ fMevb&¯^qgůÑ kůKò



t`e-t`ex

-^gs fMevb|

Ck‡ii †Kv‡bv ¸Y ev kw³ hLb iє ev AvKvi aviY K‡i mvKvi n‡q I‡V Ges we‡kl ¸Y, kw³ ev gwngv ciKvk K‡i ZLb Zu‡K †`eZv ev †`e-†`ex e‡j | A_\P^ †`e-†`exiv Ck‡ii we‡kl ¸Y ev kw³i mvKvi iє | †hgbÑ e*pv myói †`eZv, weòyi‡c Ck‡i RxeRMr‡K i¶v I cüZcvjb K‡ib, wke i‡c wZwb aÿsm

Ck‡ii m∫i∈

K‡i cw_exi fvimvg i¶v K‡ib| Aciw`‡K `MPkw³i †`ex, miছaZx we` "vi †`ex, j²x ধন-স¤ú‡`i †`ex BZ"w`| †h‡nZz†`e-†`exiv Ck‡ii Ask, ZvB†`e-†`ex‡`i mšyó Ki‡j Ck¦i mšyó nb|

RxevZ¥

Ck¦i hLb Rxtei gta¨ AvZ¥ i‡c Ae⁻′vb Ktib, ZLb ZutK RxevZ¥ etj | iexo`bv_ VvKi Rxtei gta¨ Ck‡ii Ae⁻′vb m¤útK®Zwi GKwU KweZvq etj‡Qb,

Ômxgvi gv‡S Amxg Znug evRvI Avcb my

Avgvi gv‡S †Zvgvi clkvk ZvB GZ gaji | 0

A_@r †`tni mxgvq RxevZ\ii\text{i\text{to}} tc cigvZ\text{i\text{we}`"gvb _v\text{Kb} | ^\vgx\text{we}\text{tb}\)`I etj\text{t0b} th,

Ckji eûi‡c Avgvt`i m¤\$jLB AvtQb| G eûi& ejtZ RxetKB wbt`R Kiv ntqtQ|

myZivs †`Lv hv‡"Q, Ck¦i wbivKvi ; wKšĺy wZwb mvKvi iє aviY Ki‡Z cv‡ib| Zwi mvKvi iє¸‡jv n‡"QÑ AeZvi, †`e-†`ex I Rxe| wKšy-Ck‡ii GmKj mvKvi iє Avjv`v wKQzbq| me mvKvi iє GKB Ck‡ii wewfbœcikvk | Ck¦i GK Ges AwØZxq |

GKK KvR : Ck‡ii mvKvi i‡ci `βwU ¸Y wPwęzZ Ki

cw 4 I 5 : Ck#ii GKZi

ce@Zx°cvVmgn †_‡K Avgiv †R‡bwQ, Ck‡ii ¯^iє bvbvfv‡e ckkwkZ| wZwb GK I AwØZxq| wZwb wbivKvi | Zw‡K wewfbœag@‡Zi Abynvixiv bvbv bv‡g AwfwnZ K‡i‡Qb| Avgiv Zwi wbivKvi ¯^iє‡K eþ e‡j _wwK| wZwb Kçvgq `qvgq e‡j Zu‡K fMevb ejv nq| Avevi Ck¦i `‡ói `gb, wk‡ói cvjb K‡ib Ges mZ¨ I b¨vq-



bwwZ cÖdZôvi Rb¨†Kv‡bv-bv-†Kv‡bv i∈ aviY K‡i cw_ex‡Z AeZxY©nb| Zwi †mB we‡kI we‡kI i∈‡K AeZvi ejv nq|

thgb-kilivg, kilkò, grm AeZvi cirwZ|

 $m_{\lambda} p_{g} = 1 \cdot b_{M} Z K \cdot w_{h} q_{V}$ 5

Ab¨w`‡K, Ck‡ii †Kv‡bv¸Y ev kw³ hLb AvKvi cvq ZLb Zu‡K †`eZv ev †`e‡`ex e‡j | †hgbÑ e∱ov, weòzl wke | Ck‡ii wZbwU cåvb K‡g® Rb¨ wZbwU cåvb iɛ | e∱ov i‡c Ck‡i myó K‡ib, weòzi‡c cvjb K‡ib Ges wke i‡c Rxe I RvMwZK e⁻' asm K‡i fvimvg¨ i¶v K‡ib | †`ex `yMv®Ck‡ii kw³iɛ | mi氡Zx †`ex i‡c Ck‡i Avgv‡`i we`¨v`vb K‡ib |

ft³iv t`e-t`exi cRv Kţib| Zut`i -[e-' wZ Kţi Zvt`i KvţQ weţkl weţkl c@_@v Rvbvb|

Gi ga w tq ckæRvtM : Zvntj wK Ckli eû ? G ckkie DËi nto : bv | wZwb GK I AwØZxq | wZwb wbivKvi | Avevi wZwb B mvKvi | FMket ej v ntqtQ, ÔGKs m &wecØ enpav e wsíð (1 | 64 | 46) GK eþtKB wecMY eû bvtg AwfwnZ KtitQb | wKsev ÔGKs mšís eûav Kíqwšíð (1 | 114 | 5) GK CklitKB mvaymtšíiv eû bvtg WvtKb Ges Dcvmbv Ktib | thfvteB Dcvmbv Kiv tnvK-bv tKb, meB Ckti Dcvmbv | meB Zwi KvtQ tcŠQvq |

k@q`&FMe`MxZvq ejv ntqtQ th Ñ

- 1. hviv Ab" † eZvq fw3 gvb n‡q k#vvi m‡½ Zu‡ i cRv K‡i, Zviv Ck‡iiB cRv K‡i | (9/23)
- 2. Ck¦iB mKj hÁ ev cRvi cůcK I dj`vZv| (9/24)
- 3. th Avgv‡K thfv‡e Dcvmbv K‡i, Awwg Zv‡K tmfv‡eB mšyó Kwi| gvb‡liv wewfbæv‡e gjZ Avgvi c_‡KB AbyniY K‡i| (4/11)

myZivs †Kej wn>`pagnej¤^xiv bq, wewfbœa‡gn Abynvixiv wbR wbR gZ I c_ Abynv‡i GKB Ck‡ii Dcvmbv K‡i|GBn‡jv Ck‡ii GKZ¡|Ck¦i wbivKvi n‡jI, ZwiBB"Qvq mvKvi i‡c Zwi wewPÎ ckkk|

GKK KvR: Ck‡ii GKZ¡m¤ú‡K©cuPnU hyv³ `vI |

cvV 6 : Ck‡ii ~^ie m¤ú‡K®king`nFMe`MxZvi †kvK

evqh\$gvnwMePYt kkv¼t
cRvcwZ^[sc@cZvgnð|
btgv bgt-[n-' mn-KZt
cþð ftqvnwc btgv bgt-[|11/39

 $\mbox{mijv}_{^{\otimes}}.$ Zwg hg, Zwg AwMæ Zwg eiY I P>`^| ZwgB e†pv, Avevi e†pviI $^{-}$ 6v Zwg| †Zvgv‡K bg^-<vi Kwi nvRvievi, Avevi evievi †Zvgv‡K bg^-<vi |

e'vL'v: knog`nfMe`nvxZvi wek¦ie`knothwww bvgK GKv`k
Aa'v‡q ARpo knok‡òi D‡l'‡k'' G Dw³ K‡i‡Qb| knokbò
-^qs Ck¦i | GLv‡b tmB Ck‡ii -^ie cnokvk Kiv n‡q‡Q|
hg, AwMoeeiY P>`a'cnowZ †`eZv‡K `povší wn‡m‡e MohY
K‡i ejv n‡q‡Q Zwiv Ck‡iiB GK-GKwU ie| wZwbB



mwói †`eZv e†ov Avevi wZwb e†ovil †6v| GLv‡b Ck‡ii mwó Kivi kw³mn Amxg kw³i K_v ejv n‡q‡Q|

6 Ck‡ii m¦∈

mKj † eZvi kw³ ZuiB kw³ | wZwb meRw³gvb | wZwb wbivKvi | Avevi wZwbB mvKvi | G gnvkw³ai Abw` Abšĺ Ck¦i‡K ZvB evievi bg¯<vi Rwwb‡q cig kë¬v cëKvk Kiv n‡q‡Q |

kãv_©.

hg Ñ g $Z\ddot{z}i$ † eZv | AwMan †ZR-Gi † eZv | ei Y Ñ Rj I AvKv‡ki † eZv | kkv ¼ Ñ Pu | cRv-myó | myZi vs cRvcwZ ej ‡Z †evSv‡bv n‡q‡Q myó i † eZv epv‡K; A $_R$ Ck $_I$ †h i‡c myó K‡ib Zwi bvg cRvcwZ | cRvcwZ epviB Aci bvg |

cůcZvgn Ñ wcZvi wcZv= wcZvgn; e†pv‡K wcZvgn ej v nq| cůcZvgn gv‡b wcZvg‡ni wcZv| GLv‡b Ck¦i‡K wcZvgn A_vP e†pviI wcZv ev ¯bv ej v n‡q‡Q|

Abkxj bx

kb⁻⁻'vb cɨY Ki :

- 1. whwb myxó K‡i b wZwb|
- 2. Ck‡ii †Kv‡bv †bB|
- 3. RxeRMr‡K i¶v I cůZcvj‡bi †`eZv n‡j b
- 4. Avgvi gv‡S †Zvgvi clKvk ZvB G‡Zv

Wwb cvk t_tK kã ev evK"vsk wbtq evq cvtki mvt_ wgj Ki:

evg cvk	Wvb cvk
1. mKj myói tcQ‡b	AeZvi I †`e-†`ex
2. Avgiv Ck‡ii Aw ⁻ ÍZ _i	eû bv‡g AwfwnZ K‡i‡Qb
3. Ck‡ii mvKvi i∈ n‡jv	Dcvmbv K‡i b
4. GK e†p‡KB wec®Y	Abyfe Kwi
	GK Amxg kw³ weivR Ki‡Q

wbţPi ckœţjvi msţ¶ţc DËi `vI :

- 1. ÔmKj myói g‡j Ck¦iÕÑ K_wU`,óvš+v`‡q e¨vL¨v Ki|
- 2. cw_extZ Ckti tKb AeZviitc Awef2 nb?evLvKi
- 3. ÔCk¦i eûi‡c Avgvt`i m¤\$JLB AvtQbŐÑ ¯^vgx weteKvbţ>`i Dw³wU`;óvšĺ w`tq e¨vL¨v Ki|
- 4. Ck‡ii mvKvi i e D`vniY w`ţq e vL v Ki

 $m_{\lambda}^{g} = m_{\lambda}^{g} + m_{\lambda}^{g}$

wb‡Pi ckçţjvi DEi `vI :

- 1. Ck‡ii ⁻^i∈ D`vniYmn e¨vL¨v Ki|
- 2. Ôme mvKvi i∈ GKB Ck‡ii wewfbœcKvkÕ Ñ Dw³wUi Zvrch9we‡k⊨Y Ki|

eûwbePPwb cke

1. Ck¦i kãwli A_°Kx?

K. Ávb L. c[®]Fy N. Zcm[°]v

2. †KvbwUi AvKvi Av‡Q?

K. evqy
 L. Av‡j v
 M. kã
 N. MvQcvj v

- - i. `ţói `gb
 - ii. Rxtei Kj¨vY
 - iii. †m\$`h@Dc‡fWM

wb‡Pi †KvbwU mwVK ?

K) i l ii L) ii l iii M) i l iii N) i, ii l iii

wbtPi Abt"Q`wU cto 4 l 5 b¤^i ctkie DËi `vI :

¯ώ`b cNZw`b mKvtj Ggb GKwU MBs'cvV Kti we`"vjtq hvq thwU Dct`kgjK Ges thLvtb itqtQ Kg® Ávb I fw³i GK Ace®mgšq|

4. ¯ús`b cůZw`b †Kvb MěsnU cvV K‡i ?

K. ivgvqY L. gbmvg½j M. শুগুচিভী N. kig`fMe`MxZv

- 5. D³ M˚s′ cv‡Vi dţj ¯ú›`b Dcjwä Ki‡Z cviţe Ñ
 - i. AvZ¥ Awebk¦i
 - ii. $Kg^{\circ}Z^{\circ}W$ bq $Avmw^{3}$ $Z^{\circ}W$
 - iii. Ck‡ii ⁻^i∈

wb‡Pi †KvbwU mwVK ?

K) i l ii L) ii l iii N) i, ii l iii

8 Ck‡ii m∮€

mRbkxj ckæ

1. AwbZv iwwb M‡n j²x‡`exi weMb ¯vcb K‡i wbqwgZ fw³c¥®g‡b Avivabv K‡ib| wKšy-ZviB cbZtekx wkjv‡`ex M‡n tMSi-wbZvB-Gi weMb ¯′vcb K‡i wbqwgZ k**vf‡i cRv K‡ib| Zv‡`i tQţjţgţqivI tjLvcovi cvkvcwuk Zv‡`i AbyKiY K‡i| Zv‡`i msmv‡i i‡q‡Q m`v myL I kwuš‡

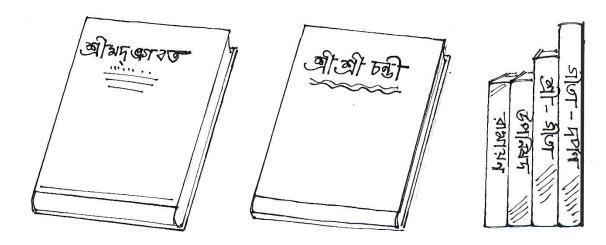
- K. Ck‡ii cY®AeZvi †K?
- L. Ck¦i Kxfvţe Rxe I RMţZi Ici cffgZ¡Kţib?e"vL"v Ki|
- M. AwbZv iwwb I wkjv‡`exi Avivabvq Ck‡ii †Kvb i&wU cÑZdwjZ n‡q‡Q Zv †Zvgvi cwVZ wel‡qi Av‡jv‡K e¨vL¨v Ki|
- N. ANDZv i wb I wkj v‡`exi Avivabvq ÔneMini wfbZv _vKţj I gjZ Ckţi i B cRv Ki v nqÕ-Dw³nUi ggP_\alphaZvgvi cnVZ welqe-' i Avţj v‡K weţk \text{HY Ki |

 $m_{\lambda} p_{g} = 1 \cdot b_{M} Z K \cdot w k \cdot q_{V}$

wØZxq Aa¨vq

agMis'

agMiš'atgPK_v_vtK, gvbţli Kj¨vtYi K_v_vtK| Ckţii gvnvZ\;, t`e-t`exi DcvL¨vb, mgvR I Rxeb m¤útK°bvbv Dct`kgjK Kwnbx cirwZ agMiš'i welqe-'| agMiš'cvV Kitj Avgvt`i Kj¨vY nq| te`, Dcwbl`, cjvY, ivgvqY, gnvfviZ, kilg`fMe`MxZv, kilküPsx cirwZ Avgvt`i agMiš'| te` Avgvt`i Awi agMiš'| G Aa¨vq t_tK Avgiv mst¶tc cjvY I kilküPsx m¤útK°Rvbe|



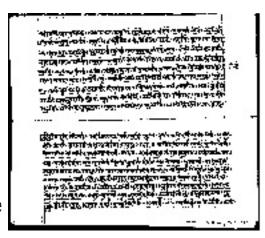
G Aa "vq †k‡l Avgiv Ñ

- cjvtYi A_@l aviYv e vL v KitZ cvie
- cyiv‡Yi msw¶ß cwiwPwZ I welqe⁻′ e¨vL¨v Ki‡Z cvie
- gvK¶Êq cjiv‡Yi Ask wn‡m‡e kijkijPÊxi cwiPq eY®v Ki‡Z cvie
- KÜKÜPÊxi GKNU Kwnbx eY®v Ki‡Z I Zvi wk¶v e"vL"v Ki‡Z cvie
- agiPiţY I ^bwZKZvţevţa cyivţYi ciFve weţk HY KiţZ cvie
- cjiv‡Y weaZ wk¶vi gva¨‡g mr Rxeb hvc‡b DØy™ ne|

cvV 1 : cvi vY

wn>`patg® Dtjl=thwM``M&s'_tjvi gta``cjvY Ab``Zg| ÔcjvYÔ kãwUi A_©nt*'Q cjvZb ev cdPxb| wKšy-GLvtb cjvY kãwUtK wetkI At_©e`envi Kiv ntqtQ| cjvY nt*'Q wetkI ^ewkó`cY©GK tkdYi agM&s'| tmLvtb mwó I t`eZvt`i DcvL`vb, FwI I ivRvt`i esk, cw_exi tf\$tMwjK cwiwPwZ, Zx_@vnvZ\f, `vb, e\z, Zcm`v, Avqte© (wPwKrmvkv-¿) cdFwZi ga``w`tq te`wFwEK wn>`pag®I mgvtRi bvbv K_v ejv ntqtQ| cjvY ejtZ GKwUgvÎ M&s'tevSvq bv| cjvY eû Mds'i mgwó| myZivs cjvYtK`iayM&s'bv etj ejv DwPZ M&svewj|

gnvfvi‡Zi i PwqZv gnwl ©KòôØcvqb e wm‡`e cjivYmg‡ni I i PwqZv | Mí ejvi Qţj cjivY¸ţjv i wPZ | gvbyl Mí i b‡Z fvţjvevţm | cjivţ Mí †kvbvţbv n‡q‡Q | †m Mţíi Dţl k n‡"Q agRxeb I îbwZK wk¶v †`Iqv | gvbyl‡K Kj "vYKi my`i Rxeb m ¤úţK Mţíi gva ţg Dcţ`k I bxwZ wk¶v cÖvb cjivţYi gj welqe ' | cjivţYi msL v AţbK | Zţe cðavb cðavb cjivţYi msL v AvVvi | GB AvVvi wU cjivY n‡"Q Ñ (1) e†p cjivY (2) cÙ cjivY (3) weòzcjivY (4) wke cjivY ev evqycjivY (5) fwMeZ cjivY (6) bvi` cjivY (7) gvK\$Êq cjivY (8) AwMœ cjivY (9) fwel cjivY (10) e†p %eeZ cjivY (11) eivn cjivY



(12) wj $\frac{1}{2}$ cjivY (13) $\stackrel{-}{\sim}$ cjivY (14) evgb cjivY (15) Kg $^{\circ}$ cjivY (16) grm $^{\circ}$ cjivY (17) Miyo cjivY (18) e $^{\circ}$ bvĐ cjivY G cjivY $_{\circ}$ ‡j v Abymi‡Y wKQzDc-cjivYI iwPZ n‡q‡Q| thgb- weòza‡g $^{\circ}$ Ei cjivY|

cjvtYi gta" wZbRb t`eZvi gvnvZ¥ wetklfvte cKwkZ ntqt0| Giv ntjb N etpv, weòzl wke|

GKK KvR: cjvYmg‡ni bvg tjL|

bZb kã: gvK¶Êq, e∱‰eZ°eivn, ¯<>`, evgb, Kg°, Miڻ|

cvV 2 : cjiv‡Yi welqe-'

cjvY bvbv ^ewk ${}^+$ ó" wewk ${}^+$ ó | kv ${}^+$ ¿ cj ${}^+$ v ${}^+$ Yi ^ewk ${}^+$ ó" m ${}^+$ ú ${}^+$ K ${}^+$ ej ${}^-$ v n ${}^+$ q ${}^+$ 0 Ñ

mM0 cůZmM0 es‡kv gš^šĺiwY P| eskvbpwi Zs ^Pe cjvYs c $\hat{A}j$ \P Yg& || (evqjcjvY)

A_Pr cjivtYi cuPvU ^evkó" - mM°, cüZmM°, esk., qšířši I eskvbPviZ | mM°qvtb myó | Kxfvte Rxe RMtZi

myó n‡jv, M‡íi AvKv‡i Zv cjv‡Y Av‡jvPbv
Kiv n‡q‡Q| cůZmM©gv‡b cþivq myó| Rxe
RM‡Zi mewKQi webvk nlqvi ci Avevi bZb
K‡i mewKQz myó nq| G‡KB e‡j cůZmM©
†`eZv l Fwl‡`i eY®vB n‡jv esk| G‡KKevi
myói ci Zv aŸsm nq Ges Zvi ¯‡j bZb
Ômyóð †R‡M l‡V| cůZwU myói Awv` cjyl
n‡jb gby|

Gfvte tPŠI Rb gby Kvj AwZµvš-ntqtQ | GK gbyt_tK AvtiK gby Kvtji ce°ch°s-mgqtK ejv nq gšŠi | Avi eskvbpwiZ nt"Q t`eZv, Fwl ev weL"vZ ivRvt`i RxebPwiZ | G Qvov cyvtY itqtQ eYnk°g ag°, AvPvi Abôvb, kö×,



un>`pg@l ^bwZK wk¶v 11

`vb, cRv, eZ I Zx_©'v‡bi eY®vmn A‡bK welq| tgvUK_v, cyiv‡Yi g‡a¨ tmKv‡ji ag©Ges Rxe‡bi cĎZdjb N‡U‡Q| Avgv‡`i ag©Ges Rxe‡b cyiv‡Yi ¸iyZi Acwimxg| KZ Mí, KZ DcvL¨vb, KZ Dc‡`k, Rxe‡bi DÌvb I cZ‡bi KZ K_v th cyiv‡Y i‡q‡Q Zv e‡j tkI Kiv hvq bv|

GKK KvR: cyiv‡Yi welqe⁻′mgn wPwęzZ Ki|

bZb kã: mM°, cNZmM°, gš\$i, eYRky)|

cvV 3 : agiPiY I ^bwZKZvq cjivY

Avgvt`i cůZ`wnK Ges mvgwkRK Rxetb cjvtYi ¸ijZ¡Acwimxg| cůPxb HwZtn¨ cjvY¸tjv agRvt⁻¿i ghPvq cůZwôZ| tcŠiwYK ag@tZ mZ¨, Awnsmv, ¶gv, kwmš-I Z¨vM gvbytK tkůbZg Avmtb cůZwôZ Kti| Avi Gme ¸YtK DcRxe¨ KtiB bvbv Mí, DcvL¨vtbi gva¨tg RxebtK my`i Kivi Dct`kvewj itqtQ cjvYkvt⁻¿| tm mg⁻ĺ Dct`kvewj Avgvt`i bxwZtevatK mRvM Kwitq t`q| atgP ct_ PjtZ mnvqZv Kti| memgq Ck¦itK ¬§iY Kiv Avgt`i KZ@¨| Zvntj cvc Avgvt`i ¯úk®KitZ cvite bv| cyV¨ct_ _vKtj g,Zïi ci Avgiv ¬¹tMP weòtjvtK Mgb KitZ cvie| wPišb ^ew`K Av`k® GtKk¦iev`, tjŠwKK AvPviwbôv, RwZtft`i ms⁻<vi t_tK gy³ cífwZ cjvtY AvtjvPbv Kiv ntqtQ| `¶hÁ, Aktga hÁ, gwnIvmj ea mn KZ eYfX¨ Rxetbi Dìvb-cZtbi K_v th cjvtY ewYØ itqtQ Zv etj tkI Kiv hvq bv| tmme exi ZçY®Kwnbx Avgvt`i RxebtK my`i I cwicwU Kti Mto ZjtZ AbţcůYv t`q|

GKK KvR: civtYi wk¶vi qva"tg RxebtK my`ifvte Mto ZitZ Kx Kx c`t¶c tbte?

bZb kã: wPišb, G‡Kk¦iev`, `¶hÁ, Ak‡ga, eY®"|

cvV 4 : kilkirPêx

kůkůPêx wn> pg@j x^xt i GKwU Dtj Lthwm Měs' GwU ^Zšjrvte i wPZ nqwb | kůkůPêx nt"0 gvK\$êq cjvtYi GKwU Ask | gvK\$êq cjvtYi 83 t_tK 95 ch\$í 13wU Aa vtqi bvg Pêx | gvK\$gq cjvtYi G AskwUi bvg wQj t`exgvnvZ¥ | PêxtZ mvZkZ gšj AvtQ, ZvB Gi AvtiK bvg mßkZx | gnvfvitZi Ask ntql MxZv thgb c_K Měsí ghPv tctqtQ, tZgwb kůkůPêxl gvK\$êq cjvtYi Ask ntql welqe' liPbvi tY Avjvv Měsí ghPv tctqtQ | kůkůPêxtZ ivRv mj_ l mgwa etki Kwnbx, t`ex gnvgvqv, t`ex \mathcal{M}, t`ex AvxKv l t`ex Kwj Kvi D™e l gwngv ewYZ ntqtQ | \mathcal{M}, mgv l evmšíx cRvi mgq wetklfvte Pêx cvV Kiv nq | MxZvi gtZv Pêxl GKwU wbZ"cvV" Měs'



agM8

cyivY g‡Z me@0g ivRv my_ emšĺKv‡j †`exi Avivabv ïi"K‡ib| GRb" G cRvi bvg nq evmšæcRv| eZ0v‡b kirKv‡j †h `MrcRvi Av‡qvRb Kiv nq GwU g1Z AKvj †evab| AcüZ mxZv‡K Dravi Ki‡Z ive‡Yi mv‡_ hyra Kivi Av‡M k0ivgP>`a kirKv‡j G cRvi Av‡qvRb K‡iwQ‡jb| Kvj μ ‡g ki‡Zi G cRvB eZ0v‡b AwaK iZicv‡"Q Ges kvi`xq `iMrme bv‡g cwiwPwZ jvf K‡i‡Q| ki‡Zi AvMgbxevZiPwb‡q g‡ZiC c`vciK‡ib† ex `iMriI Ki1 i lôx, mr3gx, Aógx, begx wZi2 †`ex Aei1 vb K‡ib Avgv‡`i ci2 extZ|

PÊx‡K wZbwU cëvb fv‡M fwM Kiv n‡q‡Q | h_v - 1. c<u>ü g</u> Pwi Z 2. ga g Pwi Z Ges 3. DËg Pwi Z |

`jxqKvR:cjvYg‡Z`MMcRvgjZemšKvtjAbyvôZntjIkvi`xq`¢MMrmeBeZ@vtb AwaKmgv`ZIcËwjZnIqviKtqKwUKviYtjL|

bZb kã : tevab, Pwi Z|

cvV 5 : klokirPêxi welqe-'

cjvKvtj ^Pî estk mj_ bvtg GK ivRv wQtjb| GKevi wZwb kîyØviv Avµvší ntq ivR"PïZ nb| ZLb ivRv mj_ ivR" tQto etb etb Nti teovtZ jvMtjb| NjtZ NjtZ wZwb tgav bvtg GK gwbi Avktg Gtjb| Zwi gtb tRtM iBj nvivtbv ivtR"i Rb" `tLteva Avi ctRvt` i Rb" ggZv| GKB mgtq tmB etb Gtjb mgwa bvgK GK ^ek"| e"emv Kti wZwb ctPi abm¤ú` KtitQb| wKšy-Zwi _v I cyÎMY Zv Amr ct_ e"q KitZ Pvq| wZwb evav w`tqtQb etj Zwi _v I cyÎiv ZwtK Acgvb KtitQ| wZwb gtbi `ttL etb Ptj GtmtQb| wKšy-ZwtK hviv Acgvb KtitQ, Kó w`tqtQ, wZwb Zvt`i fjtZ cvitQb bv| msmvi tQto GtmI Zvt`i Rb" Zwi Ly Kó nt"Q| tKb GB Kó, tKb GB Aš‡ii Uvb?

i vRv myi_ Ges mgwa ^ek ~ `\R\tau \ R\tau \ g\tau i g\tau i K_v Rvb\tau j b | `\R\tau b mge _x | `\R\tau b GKmv\tau | tM\tau j b tgav g\tau i Kv\tau | wR\tau Am Ki\tau j b, tKb Ggb nq? ZLb g\tau b ej\tau j b, GUv RM\tau ZiB wbqg | Gi bvg gvqv | Avi GB gvqv gnvgvqvi c\tau Fve | Z\tau c\tau bban\tau j gnvgvqv gvb\tau i g\tau j K\tau i Ges g\tau^3 I c\tau vb K\tau i b |



ivRv my_ ZLb gnwl @tgavi Kv‡Q Rvb‡Z Pvb, tK GB gnvgvqv, Kx Zwi ¯^i∈? tgav ej‡Z jvM‡jb, GB RMr gnvgvqvi gwZ®n‡jI wZwb wbZ", wZwb wPišĺb| Zwi aŸsm tbB| wZwb Avgvţ`i mKj wec` t_‡K i¶v K‡ib|

 $m_{\lambda}^{p}g^{q} \wedge b_{M}ZK_{M}k_{q}V$ 13

tgav gynb AviI etjb th GKB t`ex gnvgvqv, `yM®, Aw¤Kv I KwwjKv i‡c AwwefØ ntqtQb| Amyi ev ^`Z"t`i webvk Kti kwwš--~vcb KtitQb| t`eZviv ZwtK -~vwZ Kti k®v RwwbtqtQb| ivRv myj_ I mgwwa ^ek" tgav gynbi KvtQ t_tK t`exi G gvnvZ¥ I t`exi cRvc™wZ wktL tbb| Gici Zviv `yRtb wgtj t`exi gb¥qx gwZ® wbgvP Kti cRv KitZ _vtKb| t`ex cënbænb| t`exi Kcvq ivRv myj_ Zvi ivR" wdti cvb| Avi mgwwa ^ek" t`exi KvtQ wKQB Pvb bv| abm¤út`i tgvn Zwi `i ntq tMtQ| wZwb Pvb `ytL t_tK gyv³, Pvb Aš‡ii kw³| t`exi Kcvq mgwwa ^ek" kwwš-I gyv³ jvf Ktib|

hv † ex me \P ‡Zlykw³i‡cY msw¯Zv | bg¯[%m¯bg¯[%m¯bq](mr¯bq) bgt|| (PĒx 5/ 32,33,1 34)

A_@r th t`ex mKj Rxte kw3 itc AwawôZv, ZutK bg~<vi,bg~<vi, bg~<vi|

GKK KvR: ivRv my _ Ges mgwa ^ek" th Kvi‡Y Ni †Q‡o‡Qb tm KviY¸‡j v wPvezZ Ki

bZb kã : cồnbự gyqv, wPišbx|

cvV 6 : gwnl vmyi ea

kůkůPÊx ev gnvgvqv t`eZvmn gvbeKij‡K wZwb t`eZv‡`i bvbv wec` t_‡K i¶v K‡ib|

"MPviv†eZviv†eivR B‡>1 tbZ‡Z¡c½ţg tM‡j b eþvi Kv‡Q| eþv †eZv‡i `ţţLi K_v ïbţjb| weòz I wke thLv‡b e‡m K_vevZP ej‡Qb, tmLv‡b wM‡q Dfq‡K e> bv Kţi †eZvţ`i `ţţLi K_v Rvbvţjb| eþvi gţL Ggb ggmšÍK K_v ï‡b weòz Avi gţnkţi c½ţg e w_Z nţjb, Zvici µægwZ° aviY Kiţjb| eþv, weòz I wkemn Ab vb †eZvţ`i kixi t_‡K fq½i tZR tei nţjv| tmB tZR GKwÎZ ntq GK w`e bvixgwZP mycó ntjv| BwbB †ex `MP Zvici †eMY ZvţK bvbvb A-¿ I Aj¼vi `vb Kiţjb| Gfvţe `MP †ex Ace®mv‡R tm‡R DVţjb| ZLb wMwiivR wngvjq †exi evn‡bi



Rb¨w`ţjb wmsn| ţ`eZvMY Avbţ>` RqaŸwb w`ţjb, gwybiv ţ`ex-ſe Kiţjb| Amyiiv ţ`exi tmB fxlY MR® ïţb Zwi AwfgţL ZvovZwo `½ŢeţM Pjj | Zvici ïiynţjv ţ`eZv l Amyiţ`i gţa¨ fxlY hy¬ч| gwnlvmţii tmbvcwZ wP¶yi l Pvgimn PZiı½ tmbv wbţq hy¬ч KiţZ jvMj | ţ`ex `µMPwKšy- GKv| ZvţZ Kx? iţY gË gnvkw³gvb ţ`exi wbtk¼tm j¶ j¶ ^mb¨ mwó nţjv| ZLb G‡K G‡K wP¶i, Pvgimn cồq mKţjB ţ`exi

agM agM

A¯¿vNv‡Z wbnZ n‡jv| Zvici h‡r¾ bv‡gb gwnlvmji wb‡R| †`ex `MPAvi gwnlvm‡ii g‡a¨ fxlY hy× nq| Ae‡k‡l †`ex kj∙vNv‡Z gwnlvmji‡K ea K‡ib| †`eZviv Zw‡`i ¯^MPvR¨ Avevi wd‡i cvb|

B>`al Ab"vb" †`eZv †`ex `MMP ~ le Ki‡Z jwM‡jb|

GKK KvR : gwnlvmyi ea Kwnbxi wk¶v wPwęz K‡i †Zvgvi cÖZ¨wnK Rxe‡b Zvi cÖFve eY®v Ki|

bZb kã: eþţjνK, μκgwZ°, PZi ½, wMwi iνR|

cw7:濫wb濫ea

Avţi Kevi 濫 bvţgi GK Amj † eZvţ` i ciwRZ Kţi -^M° Lj Kţi tbq| tm -^M, °gZ°I cvZvţji Aaxkţi nţq eţm| Zvi fvB wbky¤¢ tmbvcwZ PÊ, gyÊ, i³exR cŵZôv Kţi Îvţmi ivRZ¡| Avevi † eZviv † exi - ſe Kţi † exţK cůnbœKţib| Gevi † exi tµva t_tK Awwef¶ nb † ex Aw¤Kv| dţj Zwi kixi Kvţjv nţq hvq| wZwb cwiwPZ nb KwjKv bvţg| GB KwjKv ev Aw¤Kvi Kv‡Q 濫 wb濫 i³exR, PÊ I gyÊ ciwRZ I wbnZ nq|

t`eZviv c\pivq TMPvR" wd\ti cvb| Gfv\te i'ay \tau\tau\tau t\pi eZv\tau\tau\tau iB bq, mgM\(\overline{\ove



`jxq KvR : KwjKv I Aw¤Kvi nv‡Z wbnZ Amj‡`i GKwU ZwjKv ^Zwi Ki|

bZb kã : Aaxk¦i, Îvm, Aw¤Kv, KwijKv, i³exR∣

cvV 8 : kököpêxi wk¶v

kůkůPÊxi c<u>ůg</u> PwiţZ kůmeòzgay^KUfţK ea Kţi kwmš-~vcb KţiţQb| ga¨g PwiţZ ţ`eZvţ`i tZR t_ţK m,ó ţ`ex`MPgwnIvmymn Amyiţ`i nZ¨v KţiţQb| ţ`eZviv wdţi tcţqţQb Zuţ`i ¬MPvR¨| DËi PwiţZ ï ¤¢ wbï ¤mn Amyiţ`i ea KţiţQb ţ`ex Aw¤^Kv I ţ`ex Kwwj Kv| ţ`ex`MPCkţii kw³i c\ZxK| DwjwLZ G Kwmbx `vLJ t_tK Avgiv tek KţqKwJ wk¶v cvB|

KÖKÖPÊX AVGVţ`i kw³ I mvnm thvMvq| t`ex`MPAb¨vq‡K`gb KţiţQb| kökÖPÊXi GB wk¶v AbyKiY Kţi
AvgivI Ab¨vţqi weiţ™ iţL`wove| MPïZ t`eZvMţYi HK¨B Zuţ`i Avevi >mM®ndwiţq w`ţqţQ| t`eZvţ`i
mw¤\$wjZ tZR ev kw³B nţ"Q gnvgvqv kökÖPÊX| GLvţb GKZvB kw³i cögvY tgţj| cvkvcwwk bvixkw³i DÌvb
NţUţQ| wn>`yaţg®bvixţK weţkIfvţe ghPv t`qv nţqţQ| weţkIfvţe cöZwôZ Kiv nţqţQ| kökÖPÊX A_P
t`ex`MPgvZkw³iţc AwawôZ| wZwb bvixkw³i cÖZxK| gvţqi gţZv KiYvgqx|

kůkůPÊxi e>`bvi gva¨‡g kΓi Kej †_‡K†`k I mgvR‡K i¶v Kivi AbţcůYv cvIqv hvq| mKj ciKvi `ţtL-`MneZi AemvbK‡í Zui Avivabv Kiv nq| mKj ciKvi `MneZbwkbx e‡jB wZwb kñ`Mne| †`ex‡K Avgiv GB e‡j ciVvg Kwi :

 $m_{\lambda} p_{g} = 1 \cdot b_{MZ} K_{MK} q_{V}$ 15

me $g_{2j}g_{2j}$ " wkte me e_m watK kitY" \hat{I} " a^+K tMŚwi bvivqwY btqvn $^-$ ' a^+Z

ÔZwg mKj cKvi Kj¨vY`wqbx| Zwg g½jgqx, Zwg me®Kvi AfxócYRvwiYx| Zwg RM‡Zi kiYfZv, Zwg wÎbqbv, Zwg tMšix, Zwg bvivqYx| tn t`ex, tZvgv‡K cKyg Kwi|Õ

t`ex`MPkiYvMZ‡Ki¶vKţib| wZwbmKjckvig½jmvabKţib| AvgivIţ`exiGAv`k®AbyniYKie| kiYwMZ‡Ki¶vKie| Amnvţqicv‡kwMţq`wove| g‡biwfZţiemevmKvixcïikw³‡KwebvkKie| mgv‡RMţoZjieAb¨vţqiwei‡×cůZţiva,MţoZjieAv`k®gj¨ţevaImy`imgvR|

`jxqKvR:ÔkÖkÖPÊxiwk¶vBe`w³iAmjkw³‡KwebvkKi‡Zcv‡i|ÕD`vniYmnhwj³`vI|

bZb kã: AfxócYRwiYx, kiYfZv, wl bqb, tMswi, `MMZbwkbx |

Abkxj bx

kb "- 'wb cɨY Ki :

- 1. cjvY k‡ãi A_[©].....|
- 2. PÊx n‡"Q cyiv‡Yi GKwU Askwe‡kI |
- 3. evmšx-cRvi mgq cvV Kiv nq|
- 4. mj_.....es‡ki ivRv wQ‡jb|
- 5. hv †`ex kw³ i ‡cb msw⁻′Zv|

Wvb cvk t_tK kã ev evK"vsk wbtq evg cvtki mvt_ wgj Ki:

evg cvk	Wvb cvk
1. cjiv‡Y gvbţli Rb¨	mßkZx
2. kn/kn/Pডn/i Aci bug	te`
3. gnvgvqv mKj‡K	Kj¨vYKi Rxeb m¤ú‡K®jvn‡q‡Q
4.†`eZv‡`i†ZRtcyÄn‡Z	GK w`e¨ bvixg₩Z® mwó nq
5. wn>`ţ`i Aw` agMiši bvg n‡"Q	kìt †MŠi v½
	wec` †_‡K i¶v K‡ib

wbţPi ckeţjvi msţ¶ţc DËi `vI :

- 1. agMůší aviYwU D`vniYmn e vL v Ki
- 2. cjvtYi gj wk¶v Kxfvte KvtR jvMvte e"vL"v Ki|
- 3. ivRv mj_ †Kb ivR nviv n‡jb?
- 4. gwnlymy etai Dtik ewStqtjL

ag∰š

wbţPi ckęţjvi DËi `vI:

- 1. cjivY cv‡Vi Avek¨KZv e¨vL¨v Ki |
- 2. cyivY i'ayGKwU weIq wb‡qB iwPZ nqwb Ñ K_wwU hy 3 w`‡q e $^\circ$ vL $^\circ$ v Ki †
- 3. kikiPÊxi wk¶v Kxfvte mgvtRi g½tji Rb" e"envi Kiv hvqÑ ewStq tjL|
- 4. kikiPÊx cvtVi gvnvZ¥ mgvRRxetbi AvtjvtK e vL v Ki

eûwbePPwb cikæ

1. cjiv‡Yi cävb ^ewkó" KqwU?

K. cwP

L. evi

M. AvVvi

N. GKk

2. - MGK_wUi A_GKx?

K. myL

L. kwš-

M. CY''

N. mwó

3. ag∰š′e⊮∕Z nq Ñ

i. Ck‡ii evYx I gvnvZ¥

ii. mgvRRxe‡bi Rb¨g½jRbKDc‡`k

iii. †`et`exi Kwnbx

wb‡Pi †KvbwU mwVK ?

K) i

L) ii

M) ii l iii

N) i, ii l iii

wbtPi Abt"Q`wU co Ges 4 I 5 b¤^i ctkie DËi `vI :

4. gnvgvqv †K?

K. `Mº

L. j2x

 $M. mi^{-}Zx$

N. kxZjv

- 5. †mšng cůZw`b kìkhPÊx cvV Kţi | G‡Z mviw`b Zvi gb fvţjv _v‡K | ZvQvov †m g‡b Kţi PÊx cvV Kivi d‡j Zvi I cwievţii g½j nq | †mšng cůZw`b kikhPÊx cvV Kţi | KviY Gi gva¨‡g Ñ
 - i. Ck¦ifw³i wb`k19itqtQ
 - ii. wec` †_‡K cwiÎv‡Yi c_cÖk®
 - iii. ag[©]i ⊮¶Z nq|

b‡Pi †KvbwU mwVK?

K. i l ii

L. i l iii

M. ii l iii

N. i, ii l iii

mRbkxj cke

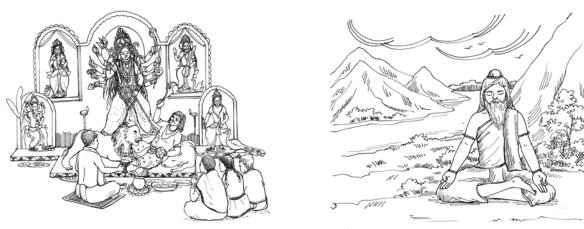
1 | mÄq `paP°I wbôi clKwZi ntjI mšwbermj | tm mvgvb" e"vcvtiB ivMvwšZ ntq ZijKvjvg KvĒ evavq | wkï t_tK e; mevi mt½ `pe°envi Kti | Zvi ¯^vt_°AvNvZ jvMtj gviai ch®-Kti | Ab"vqfvte Atb" i m¤ú tkto tbq | GmKj KvitY mKtjB ZvtK AcO>` Kti | A_P clÞi `vba"vb Kti etj ZvtK Z"vM KitZ cvti bv | ZviB tOtj †`ewRr Avevi m¤úY°wecixZ | tm AgwvqK I `qvjy Ges ctivcKvi I mgvRtmevgj K KvR KitZ fvtjvevtm | †`ewRr evevi A%bwZK KglkvĒ GtKevtiB cO>` Kti bv | Ab"vq †`LtjB cluZev` Kti etj cluB evevi mvt_ ØØ nq |

- K. kikiPÊx‡Z KZ¸‡jv gšįAv‡Q?
- L. kìkìPÊx Kxfvte cyvtYi AšM2?
- M. mÄţqi Pwiţî i mvţ_ gwnlvmţii Pwiţî i Zijbvg¡K AvţjvPbv Ki |
- N. ÔkikitPÊxi wk¶v†`ewRr-Gi Pwiţî AţbKUvB cöZdwj Z nţqţQÕÑK_wU gj "vqb Ki|

ZZxq Aa¨vq

wn> ptgp -1e I weklm

wn>`pag@GKwU mycliPxb ag\ G atg\ cniZôvZv wntmte tKvtbv GKRb gvl e`w³tK wPw\ Z Kiv hvq bv| eû mvatKi mvabvq G ag\ eKwkZ ntq PjtQ| Cktii ^i\e, Zwi cniZ wekym, Kg\ v, Rb\sili, AeZviZË, t`e- t`exi cRv, tgv\ jvf, bvixi cniZ gh\ vteva - G_tjv wn>`patg\ cnivb ^ewk\ o`'| GmKj ^ewkt\ o`i ga`` w`tqB wn>`patg\ ^i\e\ Dcjwä I e`vL`v Kiv hvq|



Avevi wn>`patg® -^ie e vL v KitZ wMtq Avgiv wn>`patg® wfwË-^ie KwZcq wekym I agf&tZ i mt½ cwiwPZ nB|

G Aa v tq v JU cwi v 0 t 1 h_v v 1 t 2 wn> v 2 t 3 f t 6 I ag t 8ekJm m v 4tK t 8Av t 1 vKcvZ Ki v 1 ntqt0 | G Aa v 1vq tk t 1 Avgi v 1

- wn>`γa‡g® ¯îε-ˆewkó¨ wPw∞Z Ki‡Z cvie
- un>`ptq® ^ewkó" wntmte CkjiZË; Cktii cůZ fw³ I wekytmi aviYv e"vL"v KitZ cvie
- wn>`ya‡g® KwZcq †gŚwjK wekp‡mi aviYv e¨vL¨v Ki‡Z cvie (†hgb-Kg®v` I Rb\#ši, RM‡Zi Kj¨vY Ges †qv¶)
- agRZ untmte Dcvmbv c×vZ, cRv, agPvi I ms vi e vL v KitZ cvie
- ag@eklm wntmte Kg@v` I Rb\vši- aviYv`\uU e"vL"v KitZ cvie
- Kg@j I Rb\stii ga"Kvi aviYv e"vL"v Ki‡Z cvie
- Kg@j I Rb\si+ m¤ú‡K°GKwU agx@ DcvL"vb I Zvi wk¶v eY®v Ki‡Z cvie
- agx@q wk_¶vi AvtjvtK bvixi gh@vi aviYv e~vL~v KitZ cvie
- bvixi gh@v cÖv‡b KiYxq m¤ú‡K°e~vL~v Ki‡Z cvie
- Kg@v` I Rb¥ši+evt` wekļm †i‡L Z¨vMx n‡q ï fK‡g¶ijß _vKe
- bvixi cůZgh₽vIkë~v†cvIYKie|

wn>`pag®l ^bwZK wk¶v 19

 $C\underline{0}g$ $Cwi \ddagger "0$: wn> $pa \ddagger gP$ $^-$ i ϵ

 $cV 1 : wn > patg P ^ewk 6"$

cůZ K atg®B wbR-^ wKQy^ewkó itqtQ| tmB ^ewkó ţiv ZvtK -^vZš; w`tqtQ| wn>`patg®l wetkl ZË; KZ¸tjv ag@eklm l ag@Z itqtQ, th¸tjv wn>`patg® wbR-^ ^ewkó | thgb- Ckli ZË; Ckti weklm l fw³, Kg@v` l Rb\si+, AeZviev`, tgv¶jvf, Rxe l RMtZi Kj vYfvebv BZ w` | Avi G ^ewkó ţivi ga w`tq c\kvk tctqtQ wn>`patg® -^ie| GLb wn>`patg® -^ie c\kvkK c\u00e4vb c\u00e4vb ^ewkó m¤útK\u00e4mst¶tc Rvbe| Ckli ZË;

wn>`patg©Ck¦i‡K wbivKvi etj eY®v Kiv ntqtQ| wZwb GK Ges Aw0Zxq- G weltq my`p wekym e¨³ Kiv ntqtQ| Avgiv Rwb, wbivKvi Ck¦i‡K ejv nq e†p, hLb c#fZ;Ktib ZLb wZwb Ck¦i| Rxe‡K hLb Kcv Ktib ZLb ZvtK ejv nq fMevb|

wn>`yatg® wetkl ^ewkó" GB th, wbivKvi Ck¦i c#qvRtb mvKvi iɛ aviY KitZ cvtib| mvKvi iɛ aviY Kticw_extZ tbtg AvmtZ cvtib| Avgiv Rwb, Ck¦i Gfvte tbtg Avmtj ZwtK AeZvi etj| G AeZviev` wn>`yatg® wetkl ^ewkó"| Avevi Ck‡ii tKvtbv ¸Y ev kw³ AvKvi tctj Zvi bvg t`e-t`ex| G t`eev`l wn>`yatg® GKwU wetkl ^ewkó"|

Avgiv Rwho, Rxtei gta AvZ\(\fi\)itc Ck\(\fi\) Ae \(^{\fi}\)vb Ktib | Rxtei gta B Ck\(\fi\)ii Ask | ZvB Rxegv\(\hat{I}\) B k\(\fi\) Ges Zvi tmev Ki\(\fi\)Z nq | KviY Rxetmev th Ck\(\fi\)ii tmev | Avi GLv\(\fi\)bB i\(\fi\)qtQ wn\(^{\fi}\)pt\(\gamma\)pt\(\gamma\)\(\fi\)Pvi g\(\fi\)wF\(\fi\) Kv\(\fi\) Kv\(\fi\) Avi tKv\(\fi\)b\(\fi\) -msNvZ ev nvbvn\(\warma\)bi c\(\fi\)k\(\fi\)B I\(\fi\)V bv | Rxe\(\fi\)K \(\fi\) \(\fi\) Iqv g\(\fi\)b Ck\(\fi\)i\(\fi\)K \(\fi\) \(\fi\) Iqv |

un>`pag®Abynvti e†p ev Ck¦i, AeZvi, t`e-t`ex Ges Rxe- me ugujtq GK Ck¦i| GB ntjv un>`patg® Ck¦iZË¡

GKK KvR: †Zvgvi Rvbv GKRb e w³i Rxe‡mevgjK KgKvos eY®v Ki|

20 wn> ptgP - î e I wekļm

$cVV2I3:Ck\sharp i$ weklym I fw³

wn>`pa‡g® Abymvixiv Ck‡i Mfxifv‡e wekļm K‡ib| ZwiB wbaw® Z wbqg AbymiY K‡i wekļmsmvi Pj‡Q| wZwb mywó, w~wZ I webv‡ki megq KZg wZwb cig `qvjy-cig KiYvgq| ZvB Zw‡K fw³ Kiv KZg | †`e-†`exivI Ck‡ii Ask| ZvB Zu‡`iI fw³ Kiv nq|



Kg@v` I Rb₩š∔

CK¦i meRw³gvb| mKj wKQj cwiPvjK wZwb| Rxtei RxweKv AR\$bi Rb" KgP wZwb mwó KtitQb| Avgiv hv wKQyKwi, tm meB KgP Ni-ewwo ^Zwi Kiv, dmj Drcv`b Kiv, e"emv-ewvYR" Kiv, tj Lvcov Kiv, cRv-AP®v, a"vb-aviYv meB KtgP gta" cto| ctZ"K KtgPB dj AvtQ| if KtgP dj if ev cv/ Avevi Aif KtgP dj Aif ev cvc| GB Kg@j wKšy+KgRZv\$K Aek"B tfw KitZ nq| tfw Qvov tKvtbv Kg@j bó nq bv| GUvB Kg@v`| GB Kg@j tfvtMi Rb" cqqvRtb cqbivq Rb\mbY KitZ nq| GtK ejv nq Rb\msit| GB Kg@v`| Rb\msit| Rb\msit| GB Kg@v`| Rb\msit| Rb\msit| Rb\msit| GB Kg@v`| Rb\msit| Rb\msit| Rb\msit| GB Kg@v`| Rb\msit| Rb\msit

tgv¶j vf

wn, patg® AvtiKwU ^ewkó" nt"O tgv¶jvf| Ôtgv¶Õ K_wwUi gvtb nt"O wPigym³ jvf| tKv_v t_tK gym³? evievi Rb¥I gZïi Pµ t_tK gym³ | Rxtei AvZ\w Ck¦i ev cigvZ\wi Ask| wPigym³ jvf Kti RxevZ\w Ck¦i ev cigvZ\wi mt½ wgtk hvq| ZLb Avi Rb\w\b\y KitZ nq bv| GtKB etj tgv¶|

tgv¶ jv‡fi Dcvq n‡"Q mKj Kg©Ck‡i mgc♥ Kiv| A_P mKj KvR Ck‡ii KvR g‡b K‡i m¤úv`b Kiv, †fv‡Mi AvKv•¶v cwiZ"M K‡i Z"M-wZwZ¶vi ga" w`‡q Rxeb hvcb Kiv Ges Rxe I RM‡Zi Rb" Kj"vYKi KvR K‡i hvlqv|

GKK KvR : Kg@v` aviYwU KţqKwU D`vniY w`ţq ewSţq ţjL|

cvV 4 I 5 : Rxe I RM‡Zi Kj¨vYfvebv

wn>`pag@Abmvti agiPitYi gj j ¶" nt"Q : ÔAvZ\gv¶vq RMw×Zvq P|Õ A_P agiPitYi gj j ¶" nt"Q wbtRi tgv¶jvf I RMtZi Kj"vY| tKej wbtRi tgv¶jvtfi weItq wPš+KitjB nte bv| Zvntj Zv nte GKvšB AvZ\myLi wPš+| wn>`pag@tKej wbtRi myLi wPš+| Kivi weIqwU tgvtUB Abţgv`b Kţi bv| AvZ\gv¶ wPš+i cvkvcwk RMtZi Kj"vY KitZ nte| bBtj agiPiY Am¤úY@t_tK hvte| Avi tgv¶I jvf nte bv| myZivs Rxe I RMtZi Kj"vY Kiv tgv¶jvtfi Ab"Zq Dcvq|

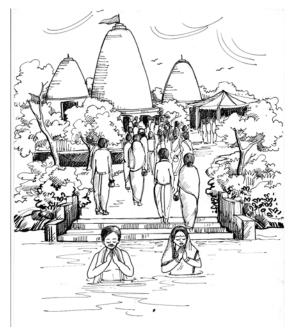
agRZ"

atg® c#qwM Zvi KZ" ev Dcvmbvq, ag@Pvti I AvPiYxq ms¯<vti| wn>`yag®Abynvti Cktii wbivKvi iєtK Dcvmbv Kiv nq gšįRtc I Mvtb-KxZ\bar{v}b | Avevi mvKvi Dcvmbv Kiv nq †`e-†`exi c#\Zgv wbg@Y Kti Zut`i mybw`& cRwewa AbyniY Kti cRv Kivi gva"tg|

wn>`pag@PPA t¶tî wKQzagAPvi I ms¯<vi cvjb KitZ nq| agAPvtii gta" itqtQ wbZ"Kg@l thvMvmb, itqtQ Zx_@agY, M½v b`xmn cweî Rjvktq mwb, AwZw_ tmev, Zjimx tmev BZ"wv`| ms¯<vi nt"Q cÄRb¥ci¤úivq Ptj Avmv^`bw`b Rxetbi t¶tî KiYxq wKQzKvR| thgb- Rb\KZ", weevn, Atš~wówuqv I kÄ~ BZ"wv`|

myZivs Ck¦i ZË; Ck‡i wekļm I fw³, KwZcq tgŠnjK aviYv I wekļm Ges agf<tZ"i ga" w`tq wn>`yatgf ^îє

ciKvk cvq



GKK KvR : tgv¶jvtfi KtqKwU Dcvtqi t¶l Dtj LKi

22 wn>`ptgP ⁻î∈ I wekļm

w0Zxq cwi ‡"Q`: agneklm

cw 1, 2 I 3 : Kg@v I Rb\si+

Avgiv Rwb thtKvtbv ag®KZ¸tjv ag@ekļtmi Ici `wotq _vtK| H ag@ekļm¸tjv Zvi wfwË| Kg@v` I Rb\siliev` wn>`patg\partial \text{g\text{P}} \text{\text{MU c\text{\text{B}}} kyf-Aif th dj Drcb\text{\text{c}} mn\text{V} kg\text{\text{R}} K Aek B tf\text{W KitZ nq| PjwZ Rtb\text{\text{K}} Kg\text{\text{Q}}tji tf\text{\text{M} hw` tkI bv nq Zvntj KZKtg\text{\text{R}} dj tf\text{\text{V}} i Rb\text{\text{B}} gvb\text{\text{f}} i c\text{\text{b}} t c\text{\text{b}} Kg\text{\text{C}}tji tf\text{\text{M} hw` tkI bv nq Zvntj KZKtg\text{\text{C}} dj tf\text{\text{V}} i Rb\text{\text{B}} etj Kg\text{\text{\text{C}}}i |

Avi R‡b¥i ci gZi ci cpRb¥-G‡KB Rb ψ Š \dotplus e‡j | Rb ψ Š \dotplus ii †cQ‡b i‡q‡Q Kgev $^{\circ}$ | Rb ψ Šf‡i KgeJ† fv‡Mi GK ψ U agvQ DcvL $^{\circ}$ b GLb eYbV Kiv n†jv|

AţbK AţbK Kvj AvţM weòtf³ GK ivRv wQţjb| Zvi bvg wQj fiZ| wekţi‡ci Kbïv cÂRbvţK wZwb weţq Kţib| Zvţ`i msmvţi cwP cţlî Rb¥nq| ivRv fiZ cylţ`i gţa¨ivR¨ fvM Kţi ţ`b| Gici wZwb Zcmïvi Rb¨ eţb Mgb Kţib| mvabvi Øviv ivRv fiZ nţjb mvaKfiZ - gwpbfiZ|

GKw`b wZwb b`x‡Z mwb Ki‡Z tM‡jb| tmLv‡b t`L‡Z tc‡jb GK nwiYx Rj cvb Ki‡Z G‡m‡Q| nwiYxwUi ev"Pv cën‡ei mgq n‡q G‡m‡Q| Ggb mgq e‡bi tfZi t_‡K wms‡ni MR® tkvbv tMj| f‡q nwiYx b`xi Zx‡i c‡o hvq Ges Zvi Mf®t_‡K GK ev"Pv nwi‡Yi Rb¥nq| nwiYx gZÿeiY K‡i| GB `k" t`‡L fiZgydb `qvhy³ wP‡Ë nwiYwkkyU‡K i¶vi Rb" wb‡q Av‡mb Zvi Avk‡g| gvZnxb nwiYwkïi h‡Zæ Av`‡i Zvi mgq Kv‡U| Gi

dţj gwbi Zcmv Avi iBj bv| GB
nwiYwkri wPš+ KiţZ KiţZ wZwb
t`nZ`WM Kţib| kvţ-; eţj gvby
thie wPš+ KiţZ KiţZ t`nZ`WM
Kţib wZwb tmB iKg Rb\jvf
Kţib| ZvB fiZgwbţKI nwiYiţc
Rb\Wby KiţZ nţjv| Zţe nwiY nţq
Rb\tj ZvB nwiYRxeţbI Zc-'\xţ`i
Avkg coţš-t_tK ag\ck_v, Zcm`vi
K_v ïbţZ ïbţZ t`nZ`WM Kţi
coţivq gby Rbg coß nb Ges Ck\i
Avivabv Kţi Zvi Ab\Wb jvf Kţib|



Kg@j Aek"B ffvM Ki‡Z nq| GB agrq weavb weÁvbm \mathbb{Z} | c \mathbb{Z} "K Kv‡RiB GKUv KviY ev †nZz_v‡K| Avi hLbB GKUv KviY G‡m c‡o Zvi m‡½ hý³ n‡q Av‡m Kv‡Ri dj | GK evj K ewó‡Z wf‡R Vv \mathbb{Z} v R‡j mwb K‡i Avb>` cvq| wK \mathbb{Z} y†m Rv‡b bv †h ewó‡Z †fRv Ges \mathbb{Z} v \mathbb{Z} 1 \mathbb{Z} 1 \mathbb{Z} 2 \mathbb{Z} 2 \mathbb{Z} 2 \mathbb{Z} 2 \mathbb{Z} 2 \mathbb{Z} 3 \mathbb{Z} 3 \mathbb{Z} 4 \mathbb{Z} 4 \mathbb{Z} 4 \mathbb{Z} 4 \mathbb{Z} 5 \mathbb{Z} 5 \mathbb{Z} 5 \mathbb{Z} 5 \mathbb{Z} 6 \mathbb{Z} 6 \mathbb{Z} 6 \mathbb{Z} 7 \mathbb{Z} 8 \mathbb{Z} 9 $\mathbb{$

GKK KvR : Rb\vš‡i Kg@j †fvţMi agx@pDcvL¨v‡bi wk¶v †Zvgvi Rxe‡b Kxfvţe cŵZdjb Kiţe|

 $m_{\lambda}^{p}g^{Q} = b_{M}ZK_{M}k_{N}$ 23

cvV 4 I 5 : bvixi ghPv

Rxetb bvix-cyitli Ae vb itqt0 | cyitli Kg®j c0qB _v‡K M‡ni evB‡i| Aciw`‡K AwaKvsk bvixi Kq®'i Zwi msmvi‡K wbtq Mto ItV | Rtb¥i cti Kb~v qv-evevi tmæh‡Zœteto ItV, wk¶v MönY Kti| weewnZ Rxetb tm ¯ı̂gxi N‡i hvq, ¯^vgxi msmvi Zv‡K †`L‡Z nq| eç₹ eqtm GB qwnjvtKB cvl Kb~vt i Ici wbf° KitZ nq GBfvte mgvtRi GKRb bvixi wZbwU Ae v † Lv hvg-Kb"v, ea~I gvZv| ea~wntmte "vgxi msmvi t`Lv-tkvbv, tQtj-tqtqt`i jvjb-cvjb, wk¶vi e"e"'v Kiv Zvi KvR ntq cto | GB KvtRi ga w tq bvix Zvi msmviag Ges mšvb; i wk¶v, PwiÎ MV;b Drmvn w`;g v;K| GKRb Av`k@ytqi nvtZ Av`k@mšvb Mto DVtZ cvti| mšvtbi KvtQ gvtqi gtZv Avi eÜztbB| tivtM, tkvtK, Avbt>`, Drmte qv-B nt"Qb mšvtbi tkô Avka, Drmvn`vZv I Avb\$`i Drm| Gqb qvZi.ex bvixi c\(\textit{d}\)Z m\(\textit{s}\)\dip ktb KZ\(\textit{e}\)'' nt"O qvtK ktv Kiv, Zvi tmev ikuv Kiv wn>`vatq® Ab"Zg agRv-i, nt"O gbymswnZv| tmLvtb msmvi Rxetb †Kgb K‡i kwiš-G‡m _v‡K Zvi eY®v †`lqv Av‡Q| tmLvtb ejv ntqtQ, th msmvti bvixiv Avbt>`-Drmte mtL Rxeb hvcb Kti tm msmvi Cktii Kcvg kwiš-mgyrstZ



fți DţV | ZvB bvixţ`i cÖZ m`q k*~vcY°AvPiY aţgP A½ wnţmţe MÖnY Kiv|

Ab`w`‡K wn>`paţg@Ckţii cKwZ ev kw³ n‡"Q bvix| GB kw³‡K ejv nq Av``vkw³ gnvgvqv| kw³ Qvov†Kv‡bv KvR nq bv| Avi †mB kw³i †`ex n‡"Qb bvix| Gfvţe bvix kw³i cNZ wn>`pag@ghPv cKvk KţiţQ|

agMis'Avil ejv n‡q‡Q, Ck¦i myói Rb" wb‡R‡K `yfwl Ki‡jb| GK fwl cyj"l Ges GK fwl bvix| G fwl wKšymgvb mgvb, tewk ev Kg bq|

ÔAaĐvixk¦iÕ bvgK GKNU cÖZgvq †`Lv hvq, A‡aR wke I A‡aR cveZx (`MP) Gi ZvrchP cyi1 I bvixi mgZv Ges bvixi cÖZ cY°ghP v‡ev‡ai cÖKvk |

gnvfvi‡Z ejv n‡q‡Q, th cwiev‡i bvixi cůZ h_v‡hvM $^\circ$ gh $^\circ$ v cůvb Kiv nq, t`eZviv tm cwiev‡i Avb‡>` evm K‡ib| (Abþvmb ce $^\circ$ 46/5)| Ab $^\circ$ w`‡K †Kv‡bv cwiev‡i bvix hw` Ak $^\circ$ v cvb, Zvn‡j mg $^-$ Í $^\circ$ fKg $^\circ$ bõj nq| (Abþvmb ce $^\circ$ 46/6)|

bvixi côZ ghPv côk\$bi Dcvq n‡jv, Zu‡K cigv côKwZ t`ex Av`"vkw³ gnvgvqvi Ask g‡b K‡i côKZ kô*v côk\$b| ag¶nôší Abykvmb tg‡b bvixi côZ mgZvcY®AvPiY Kiv| m‡encwi bvixi g‡a"I AvZ\vi‡c Ck\iAe^-'vb K‡ib, ZvB bvixi côZ ghPv côKvk tZv Ck\p\$ii côZ ghPv côKvk|

24 wn>`ptgP ⁻î∈ I wekļm

wn>`pagMis'mg‡n bvixi cůZ ghPv‡ev‡ai th mKj `,óvš-i‡q‡Q, Avgiv Zv AbyniY Kie| me¶¶‡Î mg AwaKvi bvixi cůc"- G mZ" g‡b †i‡L Avgiv bvixi cůZ ghPv cíKv‡k DØy× ne| Kg®v` I Rb¥s÷, bvixi cůZ ghPv‡eva, Ck¦iÁv‡b Rxe‡mev, cvc-cy", ^^M°I bi‡Ki aviYv BZ"wì AviI

Kgêv` I Rb\sii, bvixi c\textit{0}Z gh\textit{P}v\textit{eva, Ck\siav\textit{1} Av\textit{b Rxe\textit{mev, cvc-c\textit{y}", -^M\sizmal bi\textit{Ki avi\textit{Yv BZ\"w\ Avil A\textit{bK wek\textit{y}mi Ici wn\ \alpha\gsigma\ceil\textit{Zw\ceil\textit{z}} Avil G ag\textit{Rek\textit{ym}_\textit{\textit{j} vi j \neq \neq n\textit{j} v gvb\textit{j} \textit{K C\textit{KZ gb\textit{j} \neq v\textit{mi bi\textit{z}} \textit{mi bi\textit{z}} \textit{mi bi\textit{k} \textit{L\textit{w}\ceil\textit{z}} \textit{S\textit{mi bi\textit{z}} \textit{mi
`jxq KvR : bvix‡K Kxfv‡e h_v‡hvM" ghP vq fwl Z Kiv †h‡Z cv‡i Zvi K‡qKwU Dcvq †jL|

bZb kã : Kg\hM, gvnvZ\, Aa\vixk\ |

Abkxj bx

kb⁻⁻′vb cɨY Ki :

1. Ck‡ii mvKvi i‡c AeZiY Kiv‡K ejv nq|

2. Rxetmev Kitj tmev Kiv nte

3. wn>`pag@g‡Z Ck‡ii clKwZ ev kw³‡K ejv nq

5. Ck|i fMevb ZLbB hLb Rxe‡K K‡ib|

Wwb cvk t_tK kã ev evK vsk wbtq evg cvtki mvt_ wgj Ki:

evg cvk	Wb cvk
1. Rxţei gţa¨ Ckţi	weòf ³ wQ‡jb
2. wPigyv³jvfgv‡bBn‡″Q	Avgvt`i‡K m/pvMwiK wn‡m‡e M‡o †Zv‡j b
3. ivRv fiZ	AvZ¥i‡c Ae⁻′vb K‡ib
4. gvZi.ex Ckļi	tgv¶j vf
_	cwi ÎvY jvf

wbţPi ckeţjvi msţ¶ţc DËi `vI :

- 1. †Zvgvi cůZ¨wnK Rxe‡bi K‡qKwU ï fK‡g® e¨vL¨v `vI |
- 2. Rb\si\iev`ej\Z Kx\tevSvq?
- 3. fiZ qwb‡K nwiYi‡c Rb\mb\nY Ki‡Z ntqwQj †Kb?
- 4. Kxfv‡e bvixi cůZ ghPv cÖk® Kiv hvq?

wb‡Pi ckœţįvi DËi `vI :

- 1. Ôeþ, AeZvi, †`e-†`ex Ges Rxe-me wgwj‡q GK Ck¦i ÕÑ e"vL"v Ki|
- 2. Kg@v` I Rb\#šiev` Gi gta" m¤úK\AvtjvPbv Ki |
- 4. ÔgvZi.∈B GKRb bvixi me\$kô Ae⁻′vbÔÑ `,óvš-mnKv‡i e¨vL¨v Ki|

 $\text{un} \geq \text{pag}^{\text{Gl}} \quad \text{fin} \mathbb{Z} K \text{ uk} \P \text{v}$ 25

eûwbePwb cke

1. Ck¦i Rxţei gţa¨ Kxi‡c Ae¯′vb Kţib?

K. AvZ¥ L. cÖY M. evqy N. mvKvi

- 2. tgv¶jvtfi Ab Zg Dcvq nt″Q Ñ
 - i. Rxţei Kj¨vY Kiv
 - ii. wb‡Ri g½‡ji Rb¨ KvR Kiv
 - iii. RM‡Zi wnZmvab Kiv|

wb‡Pi tKvbwU mwVK?

- K) i L) ii N) i, ii l iii
- 3. cwi ewi K Rxetb kwš-cůZôv KitZ ntj Aek KZ® Kx?
 - K. erdeqtm gv-evevtK tmev Kiv
 - L. $cwiewiK^{-n}QjZvic\ddot{u}Z_iT^{1}qv$
 - M. cwiev‡ii bvix m`m"‡`i h_v‡hvM" AwaKvi I gh® v cůZvôZ Kiv
 - N. AwZw_IcÖnZ‡ekx‡`ik†≪wKiv∣

wbtPi DÏxcKwU cto 4 l 5 b¤^i cữkác DËi `vl :

- 4. mš+b‡K Dchy³ bvMwiK wn‡m‡e M‡o †Zvjvi †¶‡Î †mŠwgiwbi KiYxq Ñ
 - i. Dchy³ wk¶v cÖvb
 - ii. ^bwZK Pwi \hat{I} MVb‡K $\hat{Z}_i \uparrow \hat{Z}_i \uparrow \hat{I}$ I qv
 - iii. "ej ¤^x K‡i †Zvjv|

wb‡Pi †KvbwU mwVK ?

- K) i M) i l ii N) i, ii l iii
- 5. †mŠingi wibi cwi ewi K Rxetb AvPi wYK th Ae vb w uetk I fvte dt U DtVtQ Zv ntj v Ñ
 - i. Kb vi‡c
 - ii. ea∔‡c
 - iii. gvZ.i.‡c

wn>`ptg° ⁻î∈ I wekļm

wb‡Pi †KvbwU mwVK ?

1. mRbkxj cke

Aaxi evey Kg\(\frac{P}K\) ag\(\frac{Q}A\)vb K\(\frac{1}{1}b\) gv-evev, fvB-tevb, AvZ\(\frac{1}{2}q\)-\(\frac{P}K\) mK\(\frac{1}{2}i\) Rb\(\maximu\)zwb Aw\(\frac{P}K\), cwwi ewwi K wewfbck\(\frac{1}{2}K\) mnvqZv K\(\frac{1}{2}ib\) Z\(\frac{1}{2}E\) wZ\(\maximu\) Z\(\frac{1}E\) wZ\(\maximu\) Z\(\frac{1}E\) wZ\(\maximu\) Z\(\frac{1}E\) wZ\(\maximu\) Z\(\maximu\) Z\(\max

- K. $\hat{0}$ †gv¶ $\hat{0}$ K_wUi gv‡b Kx?
- L. ÔRb₩š‡ii tcQtb itqtQ Kg@v`ÕÑ K_wU e vL v Ki |
- M. Aaxi eveji AvPi ‡Y wn>`pa‡g® th ^ewkó" cŵZdwj Z n‡q‡Q, Zv e"vL"v Ki |
- N. gv, tevb l ¬ıki cınız Aaxieveyi AvPiYh_v_© K_wuU †Zvgvi cınıv Z ûbvixi ghı® võ wel‡qi Av‡jv‡K gji "vqb Ki|

PZ<u>1</u>SAa "vq

wbZ"Kg $^{\circ}I$ thwMvmb



GB Aa "vq tktl Avgiv-

- wbZ"Kg@tjve"vL"vKitZcvie
- mulumithi aviYv e"vL"v Ki‡Z cvie Ges Abykxjb c×wZ eY®v Ki‡Z cvie
- mulumibi cifve eYBv Ki;Z cvie
- kj fwm‡bi aviYv e "vL" v Ki‡Z cvie Ges Abkvjb c™wZ eY®v Ki‡Z cvie
- kjfvm‡bi cïfve eY®v Ki‡Z cvie
- cwðţgvËvbvmţbi aviYv e vL v KiţZ cvie Ges Abţkxj b c×wZ eYĐv KiţZ cvie
- cwðţgvËvbvmţbi cŰrve eY®v Ki‡Z cvie
- mlumb, kjfvmb I cwðtgvËvbvmtbi jiZjDcjwä Kti GwU wbqwgZ Abkxjtb DØk ne
- mŁwmb, kj fwmb I cwótgvEvbvmb Abkxj b Ki‡Z cvie

28 wbZ"Kg[©]I †hvMvmb

cW 1, 2, 3 I 4: wbZ"Kqmqn

cůZtKvj †_‡K iwl ch\$-mgqKvj‡K Qq fv‡M fvM Kiv nq| h_v- (1) cůZt (2) celPhè(3) ga væ (4) Acivnè (5) mvqv \approx I (6) ^bk|

mgqKv‡ji GB QqwU wefv‡Mi w`‡K j¶ †i‡L wbZ¨KgਊKI QqwU fv‡M fvM Kiv n‡q‡Q| h_v- (1) cÖZtKZ¨ (2) cePhKZ¨, (3) ga¨v≅ KZ¨ (4) AcivnKZ¨ (5) mvqv≅KZ¨ I (6) iwlÎ ev ^bkKZ¨|

1| cÑZtKZ": m‡hPtqi wKOzAvtM Nygt_tK DtV weQvbvi Dcti ce©ev DËigyL ntq etm Ckli ev t`e-t`ext`i ~\iv Kti gš¿cvV KitZ nq| G Rb" agMiš' gš¿ev tkwK itqtQ| wbtP GKwU gš¿mijv_mn t`qv ntjv:

eʻpv gyi wi wi cyi všKvi x fvbyt kkx fwgmyzv eyað jið i µt kwbi vû‡Kzzt K‡e§ym‡e°gg mçöfvzg&\

mijν_©. e'ρν, gyiwi (Κὸ), wl̂ cyivmţii webvkKvixwke, mh© P>`*, eya, ¸i*, eya, ¸i*, eya, kwb, ivû, †KZzmKţj Avgvi cθτνΖwUţK †hb my`i Kţib|

GKK KvR: cÖZtKv‡ji gšyU AveyVË Kil

Gici ¸i‡K ¯§iY K‡i Ni †_‡K evB‡i G‡m cw_ex‡K I mh®K cÖvg Ki‡Z nq| cÖdZw`b mKvj Ges mÜʻvq wcZvgvZv‡K cÖvg Ki‡Z nq| Zvici nvZ-gyL ay‡q, mwb K‡i cwiজnvi RvgvKvco ci‡Z nq|

2 | cennek Z": cüZtK‡Z"i c‡i Ges ga"v≅ ev `pcţii ce°ch®-mg‡q th mKj KvR Kiv nq, ZvB cennek Z" | GB mg‡q ců_Đv, Dcvmbv I cRv Ki‡Z nq | GB KZ" cůZw`b cwiev‡ii mK‡jiB cvjb Kiv DwPZ | Zvici w`‡bi Ab"vb" KvRKg®Ki‡Z nq | thgb-Avnvi Kiv, Kg®‡j hvIqv, Mp, wji KvRKg®Kiv, Aa"qb ev we`"vj‡q hvIqv BZ"w` |

GKK KvR: †Zvgvi cennkt, Z"i GKnU Zwnj Kv ^Zwi Ki |

- 3 | ga"v\(\frac{\text{z}}{\text{z}}\): ce\(\frac{\text{q}}{\text{ni}}\) ci Ges Aciv\(\text{tni}\) ce\(\text{ch}\)\(\frac{\text{s}}{\text{-mgtq}}\) th KvR Kiv nq, Zv-B ga"v\(\frac{\text{k}}{\text{Z}}\)" | GB mgqUv\(\text{K}\) etj \cdots\(\text{cyj}\) | \cdots\(\text{cyj}\) | \cdots\(\text{cyj}\) | \cdots\(\text{cyj}\) | Kv\(\text{t}\) bv Av\(\text{Z}\)w__ Av\(\text{tm}\) Zv\(\text{LV}\) | Av\(\text{Z}\)w__ i thev Ki\(\text{t}\) | Ck\(\text{ti}\) thev Ki\(\text{v}\) nq | Kv\(\text{V}\) | Vx\(\text{v}\) | Av\(\text{Z}\)w__ i thev Ki\(\text{t}\) | Ck\(\text{ti}\) i thev Ki\(\text{v}\) nq |
- 4| AcivnKZ": `ycţii ci Ges mvqvṭṣi ce®ch®-mgṭq th KvR Kiv nq Zv‡KB eṭj AcivnKZ"| GB mgqUv‡K eṭj weKvj, GB mgṭq wb‡Ri Ges cwievṭii cʧqvRbxq KvR Ki‡Z nq| GQvov cʧZw`b we‡Kṭj †Ljvayjv, e"vqvg ev ågY Kiṭj kixi fvṭjv _v‡K|
- 5| mvqv∞cKZ": mvqv∞c gv‡b mÜ"v| mÜ"vKv‡j Avevi nvZ-gyL aytq cwi"Qbœn‡Z n‡e| Zvici Ck‡ii Dcvmbv Ki‡Z n‡e| mvaviY K_v, ¯e ev Mv‡b k™v-fw³‡Z Ck‡ii ¸YMvb Ki‡Z n‡e| wb‡P Kwe¸i"ie»`bv_ VvK‡ii GKwU Mvb Z‡j aiv n‡jv:

 $un^{g} g^{g} buZK uk qv$ 29

avq thb tgvi mKj fvtjvevmv

côfy †Zvgvi cv‡b, †Zvgvi cv‡b, †Zvgvi cv‡b| hvq †hb †gvi mKj Mfxi Avkv

- côfy, †Zvgvi Kv‡b, †Zvgvi Kv‡b, †Zvgvi Kv‡b|
 wPË gg hLb †h_v _v‡K mvov †hb †`q †m Ze Wv‡K,
 hZ ewab me U‡U †Mv †hb
- cry tzvgvi Uvtb, tzvgvi Uvtb, tzvgvi Uvtb|
 ewntii GB wf¶v-fiv _wj Gevi thb wbttktl nq Lwj,
 Aši tgvi tMvctb hvq fti|
- cry tZvgvi `v‡b, tZvgvi `v‡b, tZvgvi `v‡b| tn eÜztgvi, tn Aš÷Zi, G Rxe‡b hv wKQzmy`i mKjB AvR te‡R DVK m‡i
- c#Fy †Zvgvi Mvtb, †Zvgvi Mvtb, †Zvgvi Mvtb \

`jxq KvR:iexo`bv_ VvK‡ii Mv‡bi wk¶v Ges KiYxq wPw∞Z Ki|



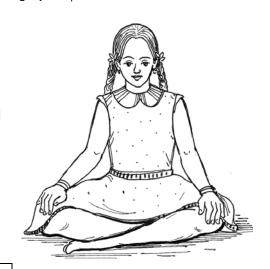
6| ^bkKZ": mÜ"vi ci †_‡K Ngv‡Z hvlqv ch®-mgqKv‡ji KvR‡K ^bkKZ" ejv nq| G mg‡q Aa"qb I Ab"vb" c‡qvRbxq KvR Kiv nq| iv‡Îi Avnvi MbY Ki‡Z nq| Zvici kqb K‡i kaleòi Ôcùbvfð bvgwU D"PviY Ki‡Z nq| KviY kv‡-¿ejv n‡q‡Q-Ôkq‡b cùbvfÂð|

bZb kã: cliZtKZ", gjiwi, ivû, †KZı, celPnKZ", ga"v\(\bar{z}\)KZ", AcivnKZ", mwqv\(\bar{z}\)

cvV 5 I 6 : m/Lvmb

myLvm‡bi aviYv: †h AvmbwU mn‡R Kiv hvq Ges myL`vqK Zvi bvg myLvmb|

Abjexj b criz : gwlltz ev tkvtbv k³ cik -RvqMvq tgiỳ Ê tmvRv titl `ycv mvgtbi w`tk j ¤r kti Qwotq emtz nte| Zvici Wvb cv nwlltz tft0 Wvb cvtqi cvZv ew Eit wbtP Avi ew cv nwlltz tft0 ew cvtqi cvZv Eij wbtP Gtb ivLtz nte| Gevi Wvb nvtzi cvZv Wvb nwlli Dci Avi ew nvtzi cvZv ew nvlli Dci Avjtzvfvte Dcyp Kti ivLtz nte| kixi k³ nte bv, kixtii tkv_vI tkvtbvi kg Uvb _vkte bv| tkej tgi Ê tmvRv titl wkw_j fvte emtz nte| hz¶Y BrQv emv hvte-1 wgwbU t_tk 5 wgwbU| Zvici kevmtb wektg wbtz nte, hz¶Y Avmbwl Kiv ntqtQ wVK Zz¶Y|



GKK KvR: mtvmbwU Abykxj b Kti † LvI

côve: my_vmtb cvtqi tcwki w~wZ~vcKZv wdti Avtm, cvtqi kw³ evto| hut`i nuUzk³ ntq tMtQ, gwUtZ nuUzgyto emtZ Kó nq, nuUzgwU t_tK DtV _vtK Zut`i ct¶ GB Avmb fvtjv| Avevi gwUtZ emtZ tMtj hut`i cvtq wLj ati Zut`i ct¶I G Avmb DcKvix| GtZ tctUi tivM mvti| nRgkw³ I ¶av ew cvq| tKvgtii e~v, evZ-e~watZ G Avmb DcKvix| tgi*tÊi tKvtbv tivM _vKtj Zv tmti hvq| mshg kw³ ew cvq I gtb Avb>` Avtm| GB Avmb a~vtbi ct¶ DËg|

`jxq KvR: myLvm‡bi DcKwiZv wj‡L GKwU†cv÷vi ^Zwi Ki|

bZb kã: m½mb, m½ vgK, ck l, Ei, Avj‡Zv, wkuj, tcwk, w'wZ'vcKZv, wLj, mshg

 $\text{un} \cdot \text{pg}^{\text{Gl}} \cdot \text{buZK} \cdot \text{uk} \cdot \text{Tv}$ 31

cw 7 I 8 : kj fvmb

kj fvm‡bi aviYv : Ôkj fÕ k‡ãi A_ $^{\circ}$ cZ½| Avmb Ae $^{-}$ vq †`nwU A‡bKUv cZ‡½i g‡Zv †`Lvq, ZvB AvmbwUi bvg kj fvmb|

Abykxj b crewZ: gwwUi Dci ev k³ RvqMvq Dcyo ntq ïtq cotZ nte| wPeyK gwwUi Dci _vKte| `ynvZ tmvRv Kti t`tni `ycvtk Eiyi wbtP Ges nvtZi Zvjy`tUv gwwUtZ mgvb Kti cvZv _vKte, AvOj ¸tjv Mvtq Mvtq tjtM _vKte| nwUz, EiyI cvtqi tMvowij tRvov ivLtZ nte|



Gici kļm axţi axţi MbtYi mvţ_ nwUy fwR bv Kţi Eiy I cv `wU tmvRv tiţL tgţS t_ţK t`o t_ţK `ynvZ Dcţi ZijţZ nţe| GB Ae¯'vq 20 t_ţK 30 tmţKÛ _vKţZ nţe| kļm-cikļm ¯rfweK _vKţe| AvmbwU 4/5 evi Abţkxj b KiţZ nţe Ges ciliZevi kevmţb wekîg wbţZ nţe|

GKK KvR: kjfvmbwU Abykxjb K‡i †`LvI

côfve: †Kvgi I †gi*‡©i †h †Kv‡bv e _vq GB Avmb DcKvix| AvmbwU †giỳê‡K bgbxq I mej Kţi, Zj‡cU I wc‡Vi wb‡Pi As‡ki †g` Kgvq| G‡Z Eiy I †Kvg‡ii †cwki MVb my`i nq, ürwcê mej nq| AvmbwU evZ ev mvqwUKvi GK Avðh®cŵZ‡IaK| ¶avg>`v A¤,—ARxY® †KvôKwWb côfwZ †ivM wbivg‡q GB Avmb djc0| GB Avm‡b Mïww÷K mgmïv `i nq, †c‡U evqji colkvc K‡g, †cUdwcv mv‡i, nRgkw³ evr²d cvq| hviv†KvjKk‡Rv GB Avmb Zv‡`i Rb we‡kI DcKvix|

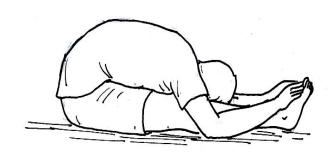
`jxq KvR: kjfvm‡bi DcKwiZv wj‡L GKwU †cv÷vi ^Zwi Ki|

bZb kã : kj fvmb, cZ½, wPeK, Avðh°, cÖZ‡laK, bgbxq, A¤,—ARxY°, †KvôKwVb°, cÖKvc, djcÖ, †KvjK¢Rv|

cvV 9 I 10 : cwð‡gvËvbvmb

cwótgyÉvbvmtbi aviYv : th AvmbwUtZ cwóg A_mP kixtii wcQb w`tK tewk e¨vqvg nq, Zvi bvg cwótgyÉvbvmb|

Abjkuj b c \(\text{viv}Z : \) y cv tmvRv Kti mvgtbi w`tK \(\text{Owotq emtZ nte} \) Gici \(\) nvZ tmvRv Kti Wvb nvtZi eţov AvOj, ZR®x Avi ga gv w`tq Wvb cvtqi eţov AvOj Ges eu nvtZi eţov AvOj, ZR®x Avi ga gv w`tq eu cvtqi eţov AvOj k³ Kti tPtc aitZ nte \) tgi \(\text{E} \) UvbUvb I wcV



mgvb ivL‡Z n‡e| Gici †PvL eÜ †i‡L nwU‡Z Kcvj †VKv‡Z n‡e| †mB m‡½ nv‡Zi KbjB fwR K‡i nwUi cv‡k ivL‡Z n‡e| †cU I ejK h_vm¤e Ei1 m‡½ wg‡k _vK‡e| kļm-cikļm ¯v̂fweK †i‡L G Ae¯′vq 30 †m‡KÛ _vK‡Z n‡e| Gici wbtkļm wb‡q nwUz†_‡K gv_v Z‡j, `ycv‡qi eţtov AvOj †Q‡o w`‡q 30 †m‡KÛ kevm‡b wektig wb‡Z n‡e| Gfv‡e 3/4 evi Abjkxjb Ki‡Z n‡e|

GKK KvR : cwð‡gvËvbvmbvU Abykxjb K‡i†`LvI |

côfve: AvmbwU tgi"Ê I tctUi ct¶ wetkI DcKvix| GB Avmtb tMvUv tgi"Ê mtZR nq| nwUzi wcQb w`tKi tcwk Ges tctUi mg [hš;gReyZ nq, Zvt`i Kg®¶Zv evto| GB Avmtb Ax^j, ¶zvgy`v, Avgvkq, tctU evqycôfwZ tivtMi Dckg nq, nRgkw³ ewra cvq| mwqţ`Šeŷ", mvqwUKv, evZ I WvqvtewUm tivtMI GB Avmtb DcKvi cvIqv hvq| GtZ wKWwbI fvtjv _vtK| tcU I tKvgtii tg` Kwgtq t`tni Mob my`i Kti| wKtkvi-wKtkvixt`i jxrîntZ mvnvh" Kti| gtbi Aw⁻'iZv, PÂjZv I D`"gnxbZv wbevitY GB Avmb LyeB DcKvix|

hut`i hKZ eyr≒dcÖr3 n‡q‡Q ev huiv G‡cwÛmvBwUm ev nwwbQnq fMy‡Qb Zut`i GB AvmbwU Abykxjb Kiv wb‡la∣

`jxq KvR : cwōţgvËvbvmb Ab¢xj‡b †h mg~-DcKvi cvlqv hvq Zvi GKvU ZwijKv^Zwi Ki|

bZb kã : cwð‡gvËvbvmb, ZR®x, ga¨gv, UvbUvb, m‡ZR, A¤ĵ, D`¨gnxbZv, Dckg, mæqţ`Šeŷ¨, mvqwUKv, hKZ, G†cwÛmvBwUm, nvwb@v|

Abkxj bx

kb⁻⁻′vb cɨY Ki:

- 1. c**ü**Zw`b mKv‡j Ges mÜ'vq cÖ'vg Ki‡Z nq|
- 2. AwZw_i †mev Ki‡j †mev Kiv nq|
- 3. mvgvnægv‡b
- 4. a "v‡bi c‡¶ DËg
- 5. kjfk‡ãi A_[©].....|

 $\text{un}^{\text{pg}} = \text{bwZK} \text{wk} = \text{visited}$

Wwb cvk t_tK kã ev evK"vsk wbtq evq cvtki mvt_ wqj Ki:

evg cvk	Wb cvk
1. mvaviYK_v, ⁻ ĺe ev Mv‡b	tewk e vqvg nq
2. `yc‡ii Avnvi MônY I wekêg †blqv	Ck‡ii ¸YMvb Ki‡Z nq ga"vn k Z"
3. cwð‡gvËvbvm‡b kix‡ii wcQb w`‡K	Dcp K‡i ivL‡Z n‡e

wbţPi ckeţjvi msţ¶ţc DËi `vI :

- 1. cůZtKZ †Kb iZcY®?
- 2. cemktZ"i KiYxq¸tjvKx?
- 3. kixi-g‡bi lci myLvmb wbqwgZ Abykxj‡bi cðfve wPwnoZ Ki|

wb‡Pi ckkęţjvi DËi `vI :

- 1. wbZ"Kgmgn D`vniYmn e"vL"v Ki |
- 2. Ôm/LvmbÕ Ab/kxj b c™vZi avc tjv tj L|
- 2. Kxfv‡e kj fvmb Abkxj b Ki‡e e vL v Ki |
- 4. kixi-g‡bi lci kjfvm‡bi wbqwgZ Abykxj‡bi c@fve e vL v Ki

eûwbePPwb ckæ

- 1. †Kvb AeZv‡ii Aci bvg gyiwi?
 - K. ivg

L. Kò

M. bymsn

- N. kimPZb"
- 2. ga"vn**k**\t\ta' i ci \takk \text{KVb KZ"?
 - K. ce⊮nœ

L. Acivnœ

M. mvqvহ্ন

- N. ^bk
- 3. myLvmb wbqwgZ Abykxj‡b cv‡qi Ñ
 - i. kw³ evto
 - ii. wLj a‡i
 - iii. †cwki w~wZ~'vcKZv wd‡i Av‡m|

wb‡Pi †KvbwU mwVK ?

K) i l ii

L) ii l iii

M) i l iii

N) i, ii l iii

Abţ"Q`wU cţo 4 I 5 b¤^i c#kie DËi `vI :

igv m/3g tkiVtZ cto| tm tj Lvcov I AvPitY Lye fvtjv| wK sztm memgq KtRv ntq _vtK| GKw b wk \PK ZvtK GKwU Avmb Abjkxjtbi civgktb| igv wk \PtKi civgkttb| ttb| t

 $^{\mathrm{Nb}}Z^{\mathrm{T}}\mathrm{Kg}^{\mathrm{G}}$ $^{\mathrm{h}}\mathrm{M}\mathrm{hmb}$

- 4. wk¶K igv‡K †Kvb Avmb Abkxj‡bi civgk®`b?
- K. cÙvmb L. m/Lvmb
- M. kj fvmb N. cwð‡gvËvbvmb
- 5. D^3 AvmbuU Abykxj‡bi d‡j igv†h DcKvi †c‡q‡Q Zv n‡jv \tilde{N}
- i. †gi″ড †mvRv nI qv
- ii. ürwcÊ aodo Kiv
- iii. †Kvg‡ii †cwki MVb my`i nlqv|

wb‡Pi †KvbwU mwVK ?

K) i l ii L) ii l iii M) i l iii N) i, ii l iii

mRbkxj ckæ

- 1. m/3g tkiNi QvÎ m/Rtbi kviwiK MVb LefKwZ| wKšy-G eqtm tgvUv nIqvq m/Rtbi wewfbæKtg® Am½wZ t`Lv t`q| m/Rtbi gv-evev wPwšZ ntq ctob| ZvtK Wv³vtii KvtQ wbtq tMtj Wv³vi ZvtK thwNmb Abykvjtbi gva¨tg kixitK wbqšy/ Kivi civgk®t`b| m/Rb Wv³vtii civgk®tgtb Ptj AtbK DcKvi tctqtQ|
- K. KLb Ng †_‡K DV‡Z n‡e ?
- L. mvqv枣K‡Z¨i¸i″Z¡e¨vL¨v Kiv|
- M. mRb tKvb thvMvmbvU wbqwgZ Abykxjb Kti mydj tctqtQ ? D 3 AvmbvUi Abykxjb c \times wZ e $^\circ$ vL $^\circ$ v Ki |
- N. Ôm/R‡bi Ab/kxjbKZ AvmbwUi DcKwiZv eûg/LxÕÑ we‡k+Y Ki|

cÂg Aa"vq †`e-†`ex | cRv-cve\varphi

cRv kţãi A_°cksmv Kiv ev kਝч Kiv| wKšy+un>`paţg°cRv kãwU weţkI Aţ_°e¨eüZ nq| cRv ejţZ tevSvq Ckţii ckZxK wewfbæt`e-ţ`exţK dij I bvbv DcKiY w`ţq kਝч wbţe`b ev cksmv Kiv| GRb¨ gš¿cvV Kţi cţ٣٩vÄwj, AviwZ Ges a¨vb Kivmn wewfbægv½wjK KvR Kiv nq|







cve \P k‡ãi A_entjv ceev Drme | Drme gvtb Avb>`cYeAbyôvb | cRv-cve \P ejtZ Avgiv eyS, th ceetjv cRv AbyôvbtK Avb>`gq Kti Ges Cki ev t`e-t`exi cůZ fw³i myo Kti | cRv-cve \P Yi GmKj weltqi gta itqtQ cůZgv wbg \P Y, gw`i mvRvtbv, wewfbœaitbi evt`"i AvtqvRb wetkl Kti XvK, tXvj, NÈv, Kwwk, k•L Ges f³t`i mvt_ fve wewbgq, wKQybv wewPîag\Perlang\Per

G Aa "vg tktl Avgiv -

- cRwewai aviYv e vL v Ki‡Z cvie
- j²x†`exi cwiPq eY®v Ki‡Z cvie
- j²x†`exi cRvc×wZ eY®v Ki‡Z cvie
- j²xcRvi c\notannan\notanij I c\notannan\notanigas\notania
 Z fvIvq ej‡Z cvie Ges evsjv A_\notania
 Ki‡Z cvie
- j²xcRvi wk¶v I côFve we‡kH Ki‡Z cvie
- wekKqPt`tei cwiPq eY®v KitZ cvie
- wekKgPt`tei cRvc×wZ eYDv KitZ cvie
- wekKgPcRvi c\(\mathbb{P}^2\n\A\)wj I c\(\mathbb{V}\)vgg\(\si_i\)ms⁻<Z fvIvq ej‡Z cvie Ges evsjv A_\(\mathbb{P}^2\n\L\)v Ki‡Z cvie
- cwiewiK I mgvR Rxetb wekKgPcRvi wk¶v I ctve wetkHY KitZ cvie
- j²x l wekKgPcRvPOvg DOMY ne

36 †`e-†`ex I cRv-cve¶

cvV 1, 2 I 3 : cRwena

wn> ptg cr Kivi Rb KZ tjv wbqg AbyniY Kiv nq G mKj wbqgbwz tjvtK crwewa etj ciłzgv, NU, cU (Qwe), gÊj, kvj Mig, cy K, wkewj ½ I Rj - G AvUwU e jy th-tkvtbv GKwU e 'tz cr Kiv hvq G AvUwU e'tk cr Avavi etj G Kvity cr Avavi wntmte G tivi tkvtbv-bv-tkvtbwUi e envi t Lv hvq cr Kivi tgśwj K w K ty i gta itqtQ t e-t exi Avevnb, a vb, ciłzov, crygš; cw, ciłvgj cu kivi cte cat cr Kiv nq cât ezv kivi cte cat cat cr Kiv nq cât ezv nt ob: wke, we cat mavi y wewa ev wbqg-bwz itqtQ | wbt wkQywkQywewai Dtj kiv ntjv-



- 1. Avmbi i AvPgb: G wewa Abynvţi cRv Kivi c‡e°cRvi DcKiYmgn ïwx Kţi wbţZ nq | ïwx Kiv ejţZ t`vlgy³ KivţK tevSvţbv nq | G t¶ţÎ Avmbi wra, Rjkyra, Kiïwra, cyrrî wx Kţi cRvi NU ¯'vcb KiţZ nq | AZtci AvPgb KiţZ nq | AvPgb ejţZ nvZ, cv, tPvL cwi® <vi Rj w`ţa ţq weïx Rj wZbevi cvb KiţZ nq | G mgq wbw` gš;cvV KiţZ nq | AvPgţbi mvţ_ fMevb weòţK ¯§iY KiţZ nq | AZtci ¯nf ſevPb | ¬nf ſevPb ejţZ ïfKvgbv tevSvţbv nq | mvaviYZ cţi wnZ cRvi ïiţZ th ïf ev g½j Kvgbv Kţib ZvţK ¬nf ſevPb eţj |
- 2. msKí MồY : G wewa Abynvţi mwVKfvţe cRvKvh@m¤úv`ţbi Rb" msKí MồY KiţZ nq| msKí kţãi A_@cöZÁv ev`p B"Qv|
- 3. cRvq Afxó †`e-†`ex‡K Avgšý Rvbv‡bv, P¶ìvb I cöycöZôv: cRvi cög wewa Abynv‡i wbw`& †`e-†`exi cözgv ev cU wbw`& K‡i cRv I cö_®v Mön‡Yi Rb¨ u`q w`‡q Avgšý Rvbv‡bv nq| wekļm Kiv nq, Afxó †`e-†`ex wbw`& cözgvi g‡a¨ Ae¯vb Ki‡Qb| cözgvq P¶z`vb K‡i wb‡Z nq| AZtci †`e-†`exi D‡Ï‡k¨ wb‡gœewYZ Kvh@gmgn AbyniY Ki‡Z nq:
 - K. emvi Avmb ev wmsnvmb mgc9: G Kvhpg Abynvti Afxó t`e-t`exi emvi Rb" Avmb ev wmsnvmb mgc9 Kiv nq | Avmb ev wmsnvmb cRwii mvg_® Abynvti AvtqvRb Kiv nq Ges AvKl9xqfvte mvRvtbv nq l wewfbœaitbi `wwg wRwblcî ivLv nq |
 - L. nvZ, cv I modbi Rb¨cwiï× Rj I tcvkvK-cwi″Q` mgc¶: G wewa Abynv‡i t`e-t`exi nvZ, gy_cwi®<vi I cv tavqvi Rb¨clZxK wntmte Rj ivLv nq | KLtbv KLtbv cv`yKv ev Pàj ivLv nq | G QvovI modb Kivi Rb¨cwikyk Rj I gayev `ya mgc¶ Kiv nq | cRwii mvg_® Abynv‡i G DcPv‡i Afxó t`e t`exi Rb¨tcvkvK-cwi″Q` mgc¶ Kiv nq |

M. Af šɨxY A½-c烷½ ϊ琴KiY: G wbqgbxwZ Abymvṭi cRwwiṭ i wf Zṭii A½-c烷½ ï琌 Kivi Rb gš¿cvṭVi gwa ṭg gţL, cvṭq, nvṭZ I mg f † ṭn cwi ï琌 Rj wQUvṭbv nq Ges gbṭK cwi ï琌 Kiv nq |

- N. cweî myZv Ac¶: GK¸"O cweî myZv evg Kwa †_‡K AvovAwwofv‡e Wvb w`‡K †Kvgi ch®-we¯íZ Kiv nq|
- 0. mMwÜ `e` mgc♥: G DcPvi Afxó †`e-†`exi g‡b cweÎZv Avbqb, †`n 対域 ivLv I wZjK KvUvi Rb` mMwÜ wn‡m‡e P>`b‡c÷ mgc♥ Kiv nq| G QvovI †`e-†`exi g½gÊj‡K my`i Kivi wewfbœai‡bi `wwg Aj ¼vi mgc♥ Kiv nq|
- P. cyprot cRv t G wewa Abymvti t`e-t`extK mš'ó Kivi Rb¨Ges Zut`i cůZ fw³ l fvtjvevmvi wb`kb¯fe wewfbœ it0i cpc w`tq cRv Kiv nq | GtKK t`e-t`ex GtKK iKtgi cpú wetklfvte cO>` Ktib | thgbÑ mi Zx t`exi wcůt dj cjvk |
- Q. ae, cöxc, ^bte` I cvb-mycwi mgc♥: ae tmšif myo Kti _vtK Ges gtbi cweÎZv Avbqb Kti | cRvi DcPvi wntmte cöxc kw³i cØxK | wn>`yag@bynvti t`e-t`exivl Amxg kw³i cØxK | wn>`yag@bynvti cöxc ev `xc AvZ\vi cØxK | tKbbv Avtjv AÜKvi `i Kti gvbţli gtb mtZ"i Dtb\vPb Kti _vtK | Avtjv Ávtbi cØxK | mvaviYZ cRvi Rb Avgiv gwUi cöxc e envi Kti _wK | Zte th tKvtbv cöxc e envi Kiv thtZ cvti | t`e-t`ext`i Dtïtk ^bte` mgc♥ Kiv nq | ^bte` wntmte wgwo, dj-djwi, ivbæ Kiv Lvt` vcv`vb thgb cvtqm, wLPyno BZ wi t`e-t`extK Avc vqb Kivi Rb mgc♥ Kiv nq | me\ktl cRv DcKiY wntmte cvb I mycwi mgc♥ Kiv nq |
- 4. Afxó †`e-†`exi a¨vb, cRvgš¿cvV, cp•nvÄwj, cÖ_Ðv, AvZ¥mgc¶ I bg¯<vi cÖvb: G wewa Abynv‡i gšçv‡Vi gva¨‡g †`e-†`exi D‡Ï‡k¨ a¨vb, cRv, cp°cvÄwj Ac¶, cÖ_Ðv I cðvg Kiv nq| cRv Kvhþ‡g †Kv‡bv fjjΓwU n‡j ¶gv cö_Ðv Ges †`e-†`exi Kv‡Q Avgv‡`i B″Qv cɨ‡Yi Rb¨ AvZ¥mgc¶ Kiv nq| †`e-†`exi cRv Kivi Rb¨ G wewawU AZ¨š-¸iZcY¶
- 5. AviwZ cövb I wemR19: G wewa Abynvţi Afxó t`e-t`exi DţÏţk" AviwZ cövb Kiv nq | AviwZi mgq Afxó t`e-t`exi KvţQ Avgvţ`i wfZi I evBţii mKj Lvivc w`Kmgn `i Kţi t`qvi Rb" KcP cNzyjZ Kţi cö_19v Kiv nq Ges mKj cRwiţK AvkxeP cövb Kiv nq | G wewai gva"ţg Awfó t`e-t`exi Ici Avgvţ`i Mfxi k19zv-fw³ cüZwôZ nq | AeţkţI Afxó t`e-t`exi cüZgvţK wemR19 t`qv nq |

G QvovI cRvi msKí MhY, GKUzGKUzK‡i Rj cvb Kivi Rb" Rj mgc\, †`e-†`ex‡K AjsKvi mgc\, QvZv mgc\, cvLv (Pvgi) wemR\, c\, cvLv (Pvgi) wemR\, c\, cvLv (Pvgi) wemR\, cvLv

DcPv‡ii wfwˇZ cRvi cKvi‡f`: mvKvii‡c †`e-†`exi cRv wewfbœDcPvi Abynv‡i wewfbœv‡e Kiv †h‡Z cv‡i |

c‡ÂvcPvi cRv: DcPvi kţãi A_@DcKiY| cţÂvcPvi cRv cuPuU DcKiţYi gva¨ţg Kiv nq| MÜ, cŷú, aє, `xc I ^bţe`¨ G cuPuU cţÂvcPvi cRvi DcKiY|

38 †`e-†`ex I cRv-cve♥

`‡kvcPvi cRv: `‡kvcPvi cRv `kwU DcKi‡Yi gva¨‡g Kiv nq| cv`¨, AN¨® AvPgbxq, gaycK® cybivPgbxq, MÜ, c®ú, aɛ, `xc I ^b‡e`¨-G `kwU `‡kvcPvi cRvi DcKiY|

†I vo‡kvcPvi cRv: Avmb, ¬MZ, cv`", AN"® AvPgbxq, gaycK® cybivPgbxq, mwbxq, emb, AvfiY, MÜ, cyví, aɛ, `xc, ^bţe`" I e>`bv- G †Ivj wU DcKiY w`ţq †Ivo‡kvcPvi cRv Kiv nq|

AÂjţfţ` cRwewai wKQywelţq gZcv_R" †`Lv hvq| Zţe mvaviY fvţe mKj AÂţji cRvc×wZ GKB iKg|

GKK KvR : cRvi mvavi Ywewa †j L

cvV 4 I 5: kikki j 2 xt exi cwi Pq



j²x‡`exi cwiwPwZ

t`exj 2 x m 2 u`, mg 2 u, I tmŠfv 4 M"i t`ex | wZwb my`ix I gva 4 n 2 qx t`ex| wZwb cRwi 1 i abÑm 2 u` `vb K 4 i _v 4 Kb|

t`ex j²x kit wn‡m‡e AwfwnZ| †Kbbv wZwb †mš`h© I wmo>Zvi ciZxK| wZwb fMevb weòi mnawq®x|

$$\label{eq:continuous_problem} \begin{split} &\text{$\uparrow$$ ex j 2x $ AZ"\~s-my\^i $Ges $Pvi nvZwewk\'o| Zwi \\ &Pvi nvZ $gvbeRxetbi $PviwU $AvkxeP$ enb $Kti| \\ &h_v\~N $ag\$, A_\$ $Bw\^qvMZ $Avb\^s $Ges $gy^3| wZwb \\ &c\`Udtji $Dci Dcwe\'o| $f`ex j 2xi $Mtqi $i0$ \\ &ami, mv`v, $D^3/4j njŷ $I bxjvf ntq $_vtK| \\ &kikkij 2x tm\'s`th$ $f`ex, $m$$aut`i $f`ex| $Avgvt`i $cwievtii $DbwZ wbf$ $Kti m$$aut`i $Ici| $Avi $GB $m$$au`, $tjvi gta" $itqt0 $fwg, $ci', km", $Avb, $ah\$, $mZZv, $k$$atZv $BZ"w`| $\end{split}$$

j²xcRv c¾wZ : th tKvtbv cRv KitZ cRwewa AbymiY KitZ nq| j²xcRvi c¾wZ wntmte i¾ Avmtb etm AvPgb t_tK ïi"Kti cÂt`eZvi cRv KitZ nq| AZtci j²xi aïvb Kti wewfbœDcKiY w`tq t`ex j²xi cRv Kiv nq| j²xcRv ctÂvcPvi, `tkvcPvi ev tIvotkvcPvti Kiv ntq _vtK| cRvi tgŚwjK bwwZ wntmte t`ex ktj²xi aïvb, cRvgš¿cW, ç®cvÄwj cÖvb, I ctVggŷî cvV KitZ nq| AetktI wemR® w`tZ nq|

j²xcRvi mgqKvj: mvaviYZ cůZ e,n¯úwZevi j²xcRv Kiv nq| cwiewiK j²xcRvq j²xi cuPwj cvV Kiv nq| we‡kl fv‡e Awkþ gv‡mi ï Kє‡¶i cwYĝwZv_‡Z j²xcRv Kiv nq| G j²xcRv †KvRvMix j²xcRv bv‡g cwiwPZ|

GKK KvR : j²x ab-m¤ú‡`i †`ex, G †`exi cRvcr<nZ †Zvgvi wbR AwfÁZvi Av‡jv‡K eY®v Ki |

cvV 6 I 7 : j2x c@cvÄwj, c@vggšį I j2xcRvi wk¶v I c@rve

j²x‡`exi c⊮cvÄwj

Tubg‡¯ĺme♥Zvbvsei`wm nwivc¢q| hv MwZ¯ĺrc&bwbvsmv†qfqvË;"P®vr||

mijv_©. Zwg mKj‡K ei w`ţq _vK, abm¤ú` w`ţq _vK| Awwg †Zvgv‡K ~§iY KiwQ| Avgv‡K †Zvgvi AvkxeP `vb Ki| Avgv‡K abm¤ú` `vb Ki|

j²‡`exi cŴvggšį

mijv_©: †n †`ex Kj¨vYx, wek¦iє kůmeòi ¯¿x, Zwg cÙv I cÙvi Avjq| mKj‡K ïfdj `vI| Zwg Avgv‡K mKj‡¶‡Î i¶v K‡iv| Awng †Zvgv‡K cữvg Kwi|

j²xcRvi wk¶v I ciFve

cůZwU wn>`ycwievti cůZw`b j²xcRv Kiv nq | G QvovI cůZ mßvtni e,n¯úwZevti Ges t`qvjx Abyôvtbi mgq wetkI AvtqvRtbi gva¨tg j²xcRv Kiv nq hv wn>`ymgvtRi wewfbæm¤cÖvtqi gta¨ GKvZ\Zvtevtai myó Kti |



j²xt`ex ab-m¤ú` `vb Ktib| cRvi ga¨ w`tq j²xt`exi Dci wekl/m ¯′wcZ nq| j²xt`exi kvš-¯fve cRwitKI kvš-Kti tZvtj |

`jxq KvR : j²xcRvi Av_MogwRK I agxQ cÖfve µPw≂Z Ki|

cvV 8 : wekKgPt`tei cwiPq I cRvcMvZ

wekKgP† tei cwiPq: wn> pag® Abynvti wekKgP wkíx I fv~<h@Ges hsil hsitKšktji† eZv| G gnwetki cbvb cwZ| wkí%bcy, vcZwkí Ges KviKvh@mwótZ Abb kí%bcy, vcZwkí Ges KviKvh@mwótZ Abb kvix vzwb cyvY Abynvti wzwb tewkíx| wzwb vcz tebvtg GKwU Dcteti iPwqzv|wekKgP tiei PzfRie Azš-tkšhRvjx| zwi evg witki GK nvtZ abyk Avi Ab nvtZ zjvis Ges Wvb witki GK nvtZ nvzwo Ab nvtZ ep Kyvi| zvi evnb n íx| zwi Kcvq gvby wkíKjv I hšweivq

cvi`wk \mathbf{Z} v jvf K‡i| wZwb AjsKvi wk‡íi mốv Ges † \mathbf{e} Zv‡ \mathbf{i} wegvb I A \mathbf{z} ybg \mathbf{e} Zv| wZwb e \mathbf{f} pvi wb \mathbf{i} \mathbf{f} K wKw \mathbf{z} 4 \mathbf{U} \mathbf{v} bMix, hgI ei \mathbf{z} † \mathbf{f} 1 e \mathbf{v} 0, c \mathbf{e} 0, wk‡ei w \mathbf{f} 1 e \mathbf{r} 0, wk‡ei w \mathbf{f} 3, fMevb weò \mathbf{z} 1 mg k \mathbf{f} 4 pvi k \mathbf{f} 6 pvi k \mathbf{f} 5 k \mathbf{f} 6 pvi k \mathbf{f} 6 pvi k \mathbf{f} 6 pvi k \mathbf{f} 6 pvi k \mathbf{f} 7 k \mathbf{f} 8 pvi k \mathbf{f} 9 pvi k \mathbf{f} 8 pvi k \mathbf{f} 9 pvi k \mathbf{f} 8 pvi k \mathbf{f} 9 pvi k

40 †`e-†`ex I cRv-cve♥

wekKgPcRvc**r4**wZ

me@Kvi KviKvh@wekKgPt`tei mwó| wekKgPgvbyltK ^kwiK Ávb I tgav `vb Ktib| wekKgPcRvi gj-Dtİk Zwi Kcv Ges Ktg@ki%bcy/ jvf Kiv| Kviwki I wkikngtKiv fv`agvtmi msµwwš-wZw_tZ wekKgPcRv Kti _vtKb| cRvi ixwZbxwZ Ab"b" cRvi Abyje ntjI cRvi mgq cwiewiK m`m"MY thmKj tckvq wbtqwRZ Zwt`i e"eüZ DcKiYmgn wekKgP cnZgvi KvtQ ivLv nq| wekKgPcRv ctÂvcPvti, `tkvcPvti ev tIvotkvcPvti Kiv thtZ cvti|

GKK KvR : wek,Kg® cRvc™wZ wbR AwfÁZvi Av‡jv‡K tjL|

cvV 9 I 10 : wekKgPcRvi czmłvÄwj , clyggsį I wekKgPcRvi wk¶v I Gi clFve cpuvÄwj gšį

GI mP>`b`ePcPúwejţÎvÄwjt Iuwkíe‡Z kN wekKq\$Y bqt|

mijv_P>`b, `eP, cPú I wej þl w`‡q wkí‡`eZv wekKgAK G cPúvÄwj cÖvb KiwQ Ges cÖvg Rvbw'Q|cÖvggšį

Iut`ewkíx‡b gnvfvM t`evbvs KvhfnvaK| wekĶgBg-'f"s meffxó djcÜt|

mijv_@tn t`ewkíx wekKgP, Avcwb gnvb, me@m`&Ykvjx, me@t`eM‡Yi KvhAn¤úv`K, me@Afxó cłYKvix| Avcbv‡K cBvq|

wekKgPt`tei cRvi wk¶v I ciFve

- wekkg@ Kcvq wki I weÁvtb cvi`wkZv jvf Kvi hvq| Zwi Avkxe@ KviwkiKtg© ¶Zv AR® Kiv hvq| cwiewiK I gw`iwfwËK G cRv Kivi gva"tg wekkgv® tei cwZ cRwit`i fw³ cwZwôZ nq| wekkg@cRvi ga" w`tq wkti weKvk NUvtbvi tcwYv cvI qv hvq Ges my3 cwZfvi weKvk NtU|
- cRwi MY -^ -^ KvtR gtbvthvWx ng Ges KvhMaxúv`tb ^kwi K gtbvfvte Mto DtV
- wekKg@ Kcvq cRwiMY wkiKjv I hwišK we` vq cvi`wk\varsay jvf Ki‡Z cv‡i |
- wekKgPcRvi ga"w`tq tjvKwktí i weKvk NtU|

 $un^{g} g^{g} buZK uk qv$ 41

Abkxj bx

kb '- 'vb ciY Ki:

- 1. cRvgšįcW cRv Kivi GKwU w`K|
- 2. th †Kvtbv cRvi AvtM cRv Ki‡Z ng|
- 4. j^2xt exi Pvi nvZ gvbeRxetbi Pvi vU enb Kti |
- 5. 'vcZ"te` bvtg GKwU Dctet`i i PwqZv

Wwb cvk t_tK kã ev evK vsk wbtq evg cvtki mvt_ wgj Ki:

evg cvk	Wvb cvk
1. cRv Ki‡Z cRwewa	j²xcRv Kiv nq
2. ae †mši f myó K‡i	AZ¨Š-†kŠhŔvj x
3. cůZ eņ⁻úwZevi	wkţíi weKvk NţU
4. wekKg₽t`tei PZÆRi€	g‡bicweÎZvAvbqbK‡iAbmyiYKi‡Znq
	AbmiY K‡i

wbţPi ckeţjvi msţ¶ţc DËi `vI :

- 1. cRvi mgq Kxfvte Avmb i 🕪 I AvPgb Kiv nq?
- 2. Ôkiklij 2 x m¤ú`, mgyr4 I †mŠfv‡M"i †`exÕ-e"vL"v Ki|
- 3. kůkůj²x†`exi cRvi Av_9mvgwRK I agx@ cőfve wPwszZKi|
- 4. wekKgPt`tei cRv Kxfvte Kiv ng?

wb‡Pi ckkętjvi DËi `vI :

- 1. ÔcRv-cvetY cRwewa¸tjvi ¸iZ¡AcwimxgÕÑ wetk⊬Y Ki∣
- 2. cwiewiK I mgvRRxetb j 2xcRvi wk¶v I cifve wetk HY Ki
- 3. Ďwkí %bcy myó‡Z Abb "Ykvjx† eZv wekKgy®Ñ we‡k+Y Ki |
- 4. cwi ewi K I mgvRRxetb wekKgPt\tei cRvi wk¶v I cifve wetkHY Ki|

eûwbePPwb cke

1. cRvi DcPvi wntmte tKvbwU kw3i c\ZxK?

Κ. aεΜ. cÖκcΝ. ˆbţe`¨

42 †`e-†`ex I cRv-cve♥

2. cRvq AvPgtbi mvt_ tKvb t`eZvtK ~§iY KitZ nq?

K. wke L. we'dy
M. e'dov N. AwMe

- 3. †`e-†`exi cRvq AvZ\mgc\varphi wewawU AZ"\s__i Zc\varphi\varphi KviY Gi gva"\tg Avgiv \varPi
 - i. cÖZÜVKV CɨY Kwi
 - ii. fw³i c**K**vk NUvB
 - iii. fţji Rb" ¶gv c0_0v Kwi |

wb‡Pi †KvbwU mwVK?

K) i l ii
M) ii l iii
N) i, ii l iii

wbtPi Abt"Q`wU cto 4 l 5 b¤^i c@kne DEi `vI :

cÜZwiZţ`i ewoţZ cüZeQi Awkþ gvţmi cwYgwzw_ţZ weţkl cRv Kiv nq| cÜZwiZl Zvi gvţqi mvţ_ Dcevm t_tK G cRv Kţi | G Dcjţ¶ Zvţ`i ewoţZ eÜzevÜe, AvZ\kq-^^Rţbi mgvMg NţU Ges GK Avb>`qq cwiţek mwó nq |

4. c@xwZ †Kvb †`e-†`exi cRv K‡i ?

K. mi^-Zx L. j^2x M. M^+_2Yk N. $wek^*_Kq^p$

- 5. cŽxwZ D³ †`e-†`exi cRv Kţi jvf Kiţe Ñ
 - i. kvš-fve
 - ii. abm¤ú`
 - iii. wkí %bcy

wb‡Pi †KvbwU mwVK ?

K) i l ii L) i l iii N) i, ii l iii

mRbkxj cke

- 1. Aebxevey`v, ewU, KwwP^Zwi Kti RxweKv wbenPh Ktib| wZwb G tckvq`¶Zv AR® I Kcvjvtfi Avkvq cniZeQi cig fw³tZ ctÂvcPvti GK wetkI t`e-t`exi cRv Ktib| G cRvq Zvi tckvq e¨eüZ DcKiYmgn cniZgvi KvtQ ivtLb| Zvi Dcjwä tckwMZ cvi`wkØv jvf Ges Ktgn mlpvg meB G cRvq cig fw³i dj|
 - K. cRvkţãi A_Kx?
 - L. cRvi GKwU wewa e"vL"v Ki
 - M. AebxeveycůZeQi cig fw³‡Z †Kvb †`e-†`exi cRv Ges Kxfv‡e K‡ib Zv e¨vL¨v Ki|
 - N. Aebxevej e w³Rxe‡b D³ cRvi wk¶v I cðfve gj vqb Ki |

Iô Aa "vq

aging DcvL"vtb ^bwZK wk¶v

agMis' ZE_iI Z_1^* i gva"tg ag^QI ^bwZK wk \P v c0 vb Kti| DcvL"vtbi gva"tg tmB wk \P vi c0qvtMi `,óvšł t`qv ntqtQ| ce@ZP tk0YtZ Avgiv agAq DcvL"vtbi mvt_ ^bwZK wk \P vi m \cong úK Q wbtq AvtjvPbv KtiwQ| mZ"ewi Zv, \P gv, Rxetmev, KZ Q wbôv, åvZtc0g BZ"wi ^bwZK wk Q vi aviYv Ges G m \cong úwK Q `,óvšgjK DcvL"vb I Zvi wk Q v m \cong útK Q tRtbwQ| GLb Avgiv Z Q WI `qv Ñ G ^bwZK gj"tevtai aviYv Ges c0mw½K agAq DcvL"vb I Zvi wk Q V m \cong útK Q AvtjvKcvZ Kie|





G Aa vq tktl Avgiv

- wn>`patg® AvtjvtK Z"vM-wZwZ¶v I `qvi aviYv e"vL"v KitZ cvie
- Z"M-wZwZ¶v I `qvi `,óvšg; K ag®q DcvL"vb eY®v Ki‡Z cvie
- DcvL"v‡b ewYZ NUbvi wk¶v e"vL"v Ki‡Z cvie
- Z~M-wZwZ¶v I `qvi ¸i~ZiDcjwä Kţi e~w³ I mgvRRxeţb Zv Abţkxj‡b DØyk ne|

$CVV 1 : Z^{"}VM - WZWZ\PV$

mvaviYZ Z¨vM ej‡Z †Kv‡bv wKQy eR® ev cwinvi Kiv tevSvq| wKšywe‡klfv‡e Z¨vM ej‡Z tevSvq wb‡Ri ¬ˆp_\PK wemR® †`lqv| wb‡Ri my_ ev jv‡fi wPšy-†_‡K wb‡R‡K weiZ ivLv| †fvM ev myŁi B″Qv cwinvi Kiv‡KB Z¨vM e‡j | Z¨vM gvbePwi‡Îi GKwU we‡kl ^bwZK ¸Y | Z¨vM a‡g\Pl A½ | Z¨vMx e¨w³ mgv‡R Av`iYxq nq | Zw‡K mK‡j k*zv K‡i | Z¨vM Qvov ag\Pnq bv | †fv‡Mi †Kv‡bv †kl †bB | hZB †fvM Kiv hvq, †fv‡Mi jvjmv ZZB †e‡o hvq | †fv‡Mi B″QvB gvbyl‡K †jvfx K‡i †Zv‡j | Avi GB †jvf gvbyl‡K aŸs‡mi gyŁ †V‡j †`q | mgv‡R †W‡K Av‡b nvbvnwb, wnsmv l we‡Øl | Z¨vM gvbyl‡K K‡i gnvb, mgv‡R G‡b †`q kwiš+wn>`pa‡g\P M\Bmg‡n ZË; Z_¨ l DcvL¨v‡b Z¨v‡Mi gwngv KxZ\B Kiv n‡q‡Q |

wZwZ¶vI Z¨vtMi g‡Zv Avţi KwU weţkI ¸Y| wZwZ¶v ej‡Z tevSvq mwnòZv| wZwZ¶vI aţg® A½| ^bwZKZv MVţb wZwZ¶vi ¸iZçY®fwgKv iţqţQ| wZwZ¶v mgvţR kwwš-Avbqb Kţi| e¨w³‡Z e¨w³‡Z Mţo †Zvţj tmŠnvţ` "P gţbvfve| wZwZ¶v bv _vKţj e¨w³‡Z e¨w³‡Z msNvZ Awbevh® mKţj wgţj, ci¯úi ci¯úţii gţZi I wPšvi cÔZ mwnòznţqB gvby mgvR MVb KţiţQ| mwnòzbv nţj mpŷyfvţe mvgwRK KvRKg®Kiv Am¤@| ZvB Kó mn¨ Kivi ¶gZv bv _vKţj e¨w³RxeţbI DbwZ Kiv hvq bv| Rxeţb mwnòzVi ¸iZ¡ Acwimxg| ZvB Z¨vţMi cvkvcwk mwnòzVv ev wZwZ¶vi K_v GKB mvţ_ D″PwiZ nţq _vţK| cÔKZcţ¶ Z¨vM I wZwZ¶v A½v½xfvţe RwoZ| wZwZ¶v bv _vKţj Z¨vţMi djI webó nţZ cvţi|

wn>`yaqMis'wZwZ¶vi AtbK Kwnbx ewYZ ntqtQ| kilivqPt>`i Z"vM-wZwZ¶vi Kwnbx GKwU D¾;j `jóvš+

$cvV 2 : k i vgP \Rightarrow i Z^vM - wZwZ \P v$

A‡hva"vi ivRv `ki_| Zwi wZb iwb| eo iwb †KŠkj"v, †g‡Sv iwb `K‡Kqx, Avi †QvU iwb myg \hat{I} v| †KŠkj"vi cylivg, `K‡Kqxi cyl fiZ, Avi myg \hat{I} vi `ß cyl j¶Y I k \hat{I} "No‡



GKK KvR: †Zvgvi Rvbv GKRb Z"vMx e"w3 i bvg Ges Zwi Z"v\$Mi GKvU w K D\$j \(\bar{\mathbb{L}} \)Ki |

wbqgvbynvti wcZvi AeZ@vtb eo tQtj hyeivR ntZv| Zvici tm-B jvf KiZ ivRc` I ¶gZv| ivtgi t¶tÎ I ZvB nIqvB ^vfweK| ivg ZLb cwPk eQtii hyeK| ivRv `ki_ ey* ntqtQb| ivgtK hyeivR ct` Awfwl³ Kiteb| AwftIK Abyôvtbi AvtqvRb Kiv ntjv| wKšy-evav Gj wegvZv ^KtKqxi KvQ t_tK| ivRv `ki_ GKevi Amȳ' ntq ctowQtjb| ^KtKqxi tmevhtZœvZwb mȳ' ntq DtVb| ivRv `ki_ Lyk ntq ZvtK `yU ei w`tZ PvBtjb| wKšy-KtKqx ejtjb, ÔqnvivR, Awwg GLb wKQB PvB bv| Awwq mgq gtZv tPtq tbe|Õ

GLb thb tmB mgq Dcw-Z ntjv| ^KtKqx gš'ivi civgk® gtZv ivRv `kit_i wbKU Ggb `ØwU ei c@_®v Kitjb, hv ivRv `kit_i Rb" ü`qwe`viK| ^KtKqx PvBtjb, GK eti ivg tPŠI ermtii Rb" etb hvte, Avi GK eti Zvi cŷ fiZ ivRv nte| ivRv `kit_i gv_vq thb AvKvk tft0 coj | ^KtKqxi K_vq wZwb wegl®ntq cto iBtjb| ivgtK Avbv ntjv `kit_i KvtQ| `ki_ ivgtK me eËvš-ejtjb| wZwb wcZvi mZ" i¶v KitZ etb hvlqvi Rb" cÖ' Z ntjb| wZwb ivR" Z"wM Kti, ivRtcvkvK cwi Z"wM Kti eéj cwi avb Kitjb|

ivg mxZvi mvt_ †`Lv Ki‡Z tMtjb| mxZv ivtgi mvt_ etb thtZ PvBtj mxZvi Kó nte tfte ZvtK mt½ wbtZ PvBtjb bv| wKšymxZv tKvtbv K_vBïbtjb bv| wZwb hvtebB ivtgi mvt_| Gw`tK j²Yl Kvtiv evav bv tgtb ivtgi mvt_ etb hvlqvi Rbï^Zwi ntjb| tktl ivtgi mt½ mxZv l j²Y etb ilbv ntjb| ivg etb hvlqvi cö°vtj wbtRi abiZcGgbwK wbtRi nwzWU ch\$-`vb Kti w`tjb| etb hvlqvi mgq mKtj hLb tft0

 $m_{\lambda}^{p}g^{Q} = b_{M}ZK_{M}k_{N}$ 45

c‡o‡Q, ivg ZLb nwmgţtL mg¯ĺ Kó mn¨ Kţi‡Qb| wZwb wcZv‡K ejţjb, gvZvi cŴZ `wó ivL‡Z| wb‡Rikixţii cŴZ hZœwb‡Z|

ivg, mxZv I j 2 Y cvtq tntU Pj 1 Z Pj 1 Z AtbK c_ AwZµg Kti wPÎ KU ce 2 Z Gtjb| ivRvi 1 yij tmLvtb cYRwUi wbgPY Kti evm Ki 1 Z jwMtjb| GLvtb ivRtfvM tbB, Lv 1 etbi djgj Avi eb 1 gM| fi Z krivgP> 1 K wdwi 1 q wb 1 Z GtmwQj | wK sy-Z 1 WMx ivg wd 1 i hvbwb| krivgPt> 1 1 Ctiv RxebUvB Z 1 W -wZwZ 1 V Abmi Yxq 1 Avi + krivqPt> 1 1 Z 1 W -wZwZ 1 V Abmi Yxq 1 Avi + krivqPt> 1 1 Z 1 W -wZwZ 1 V Abmi Yxq 1 Avi + krivqPt> 1 X Cyriv RxebUvB Z 1 V Abmi Yxq 1 Avi + krivqPt> 1 X Cyriv RxebUvB Z 1 V Abmi Yxq 1 Avi + krivqPt> 1 X Cyriv RxebUvB Z 1 V Abmi Yxq 1 Avi + krivqPt> 1 X Cyriv RxebUvB Z 1 V Abmi Yxq 1 Avi + krivqPt> 1 X Cyriv RxebUvB Z 1 V Abmi Yxq 1 Avi + krivqPt> 1 X Cyriv RxebUvB Z 1 V Abmi Yxq 1 Avi + krivqPt> 1 X Cyriv RxebUvB Z 1 V Abmi Yxq 1 Avi + krivqPt> 1 X Cyriv RxebUvB Z 1 V Abmi Yxq 1 Avi + krivqPt> 1 X Cyriv RxebUvB Z 1 V Abmi Yxq 1 Avi + krivqPt> 1 X Cyriv RxebUvB Z 1 X Cyriv Rxeb

bZb kã: m`vPvi, mZïwbôv, ¸YvwšZ, Dcvqvši, g,Zïkhïv, ciRvermj, wZwZ¶v, g‡bviÄb, mwnòzv, GKvMZv|

cvV 3 : `qv

Kvi I Kó † L † gb Kv † | Zvi Kó † K † iv † Z B"Qv nq | g † gb i G fve † K e † v nq † qv |

Acţii Kó `i Kivi cëwËi bvg `qv| `qv GKwU ^bwZK ¸Y| mgvţRi Rb" GKwU c#qvRbxq cëwË nţ"Q `qv| `qv Kiv ng KvţK? th ¶avq Kó

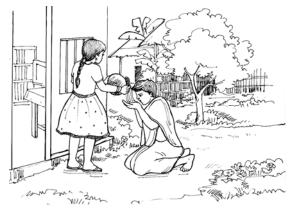
cvt"Q, ZvtK Lv` w`tq Avgiv `qv Kwi | Avgiv Rwb, Rxtei gta AvZ\vi\tacki tc Ck\i Ae-'vb Ktib | ZvB RxetK

`qvKiţj,Rxţei`ţL`iKiţjCk¦imšyónb|Ck¦iwbţRB`wi`iţcNţi teovb`qvcvţebeţj|wek;Kweiexo`bv_VvKţiifvlvq:

ÔRM‡Z`wi`fi‡c wdwi `qv Z‡i, Mpnx‡b Mp w`‡j Awg _wK N‡i|Õ

> Ôbv‡g i #P Rx‡e `qv ^eòe †meb | Bnv ^n‡Z ag®Avi bwn mbvZb | |



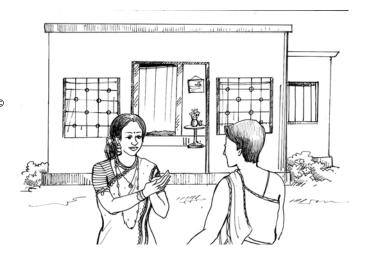


GOvov`qvi cënyËi Øviv Avgvt`i gb †Kvgj I mnvbyFnvZkxj nq Ges mgv‡Ri g½j nq| kiNkò, kiN%PZb¨, ivRv nwið>`³, gnvexi KY©cënyL`qvi eû `,óvš-¯′vcb K‡i‡Qb| AvgivI Avgv‡`i Rxe‡b I mgv‡R`qvi Av`‡k® cäZdjb NUve|

GKK KvR : wb‡Ri ev A‡b¨i Rxeb †_‡K `qvi `wU K‡i NUbv D‡j⊫Ki|

cw 4 : kik t.òi `qv

knkò ZLb ØviKvq ivRZ; Ki‡Qb| G
ØviKvq wQţjb GK `wi`a enpy| bvg Zwi
knì vg | knì vg evj Kvtj mɔ`xcwb gywbi
cvVkvjvq knktòi mncvVx wQţjb | knì vg
wQţjb cig Ávbx I awwgnk | wZwb ag kg°
I we` "vPPnq w`b KvUvtZb | †Kvtbww`b
Avnvi RyJZ, †Kvtbww`b RyJZ bv | Zwi ţl
Rxy°emtb, Abvnvti Aannvti `tL-Kţói
ga w tq Rxeb KvUvtZb | GKw`b knì vgtk
Zwi v ejţjb: i bQ? Awwg `wovtZ cviwQ
bv | Abvnvti Lpe `pp ntq ctowQ | ØviKvi



i vRv k1K \dot{o} †Zv †Zvgvi mncvVx w0‡j b| Zv hvI bv Zwi K1Q| Zwi \dot{o} qvi K_v 1 Awg \ddot{u} 1 \dot{o} 1 \ddot{v} 2V \dot{v} 3 \ddot{v} 4 \ddot{v} 5 \ddot{v} 6 † \dot{v} 8 \ddot{v} 9 wf \P v PvB‡Z iwwR wQ‡jb bv k¾`vg| Zey $^{}$ ¼i `jie $^{'}$ v†`‡L wZwb iwwR n‡jb| †M‡jb ØviKvq| A‡bK ` $^{}$ ‡ii c $_{}$ | †ek mgq jvMj|

kầKò t`Ltjb `i t_tK| ZvovZwo DtV GwMtq wMtq Awij½b Kitjb kầ`vgtK| GKRb ØviKvi ivRv, citb ivRtcvkvK| AvtiK Rb `wi`a eðpY| citb tQrov Kvco-tPvco| `Rtb AtbKw`b ci `RbtK t`tL Avbt>` tKt` tdjtjb| kầKò Avc¨vqtb cwiZró Kitjb kầ`vgtK| Zvici KZ K_v! Avbt>`B w`b KvUtQ kầ`vtgi| wKšyth DtÏtk¨ Avmv, Zvi wKQB ejv ntjv bv| wZwb kåKtòi KvtQ wKQB PvBtZ cvitjb bv| tek Kw`b KvUj| kầ`vg wdti Pjtjb wbtRi ewotZ| kầKò ZutK AtbKUv c_ GwMtq w`tjb| `yrðšvq cotjb kå`vg| -¿xtK Kx ejteb! wKšyGwK!

kit`vigi KitoNi thLvib wQj, tmLvib DiViQ cimv` | cimvi` i mvgib D`"vb | _vi ciib gnvgj"evb kwo Avi Mqbv | ab-m¤úi` i †Kvibv Afve tbB | kit`vigi tPviL Gj Akit! `qvgq kikkò, †Zvgvi Kx`qv! bv tPiql Avgiv tcjvg cibi ab-m¤ú` |



DcvL"vtbi wk¶v: Gfvte fMevb kiKò ~vcb Kitjb `qvi GK D3/4j Av`k®

 $\text{un}^{\text{pg}} = \text{buZK} \text{uk} = \text{visited}$

Ggwlofv‡e Avgiv Rx‡e `qv Kie| Zv‡Z Rx‡ei Kj¨vY n‡e| Ck¦il mšyó n‡eb| G t_‡K Avgiv wkLjvg th, `qv GKwU ^bwZK ¸Y| GwU a‡g® A½| `qv e¨w³‡K gnvb K‡i| `ţLxi, Av‡Z® ev cxwoZ‡`i `ţL`i K‡i|

`jxqKvR: ÔkÖK‡òi `qvÕDcvL¨v‡biwk¶vev¯ĺeRxe‡bcÖqvMK‡i‡QbGgb`ß-GKRb gnvcyi‡licwiPq`vI|

Abkxj bx

kb^{~-}′vb cɨY Ki :

- 1. wZwZ¶vi Aci bvg
- 2. †fv‡M qvb‡l i eyr◄ cvq |
- 3. Acţii Kó`i Kivi GK bvg
- 4. Z"wM gvbţli g‡b G‡b †`q|

Wwb cvk t_tK kã ev evK"vsk wbtq evg cvtki mvt_ wgj Ki:

evg cvk	Wvb cvk
1. ^bwZKZv MV‡b	Z"M nq bv
2. wZwZ¶v bv _vK‡j	me [©] ı k ‡ r≼q
3. Z"vMx gvbyl	`qvi ¸iyZ _i Acwi mxg
4. Rxe‡K`qv Ki‡j	wb‡R‡K mg;≅dkyjx Kivevi
	Ck¦i mšyó nb

wbţPi ckœţjvi msţ¶ţc DËi `vl

- 1. `qvej‡Z Kx tevSvq?`qvi`**y**U D`vniY`vI |
- 2. kůKò ků`vg‡K`qvK‡i vQ‡jb†Kb?
- 3. j 2 Y i vgmxZvi mvt_ etb tMtjb tKb?
- 3. ^K‡Kqx ivRv `ki‡_i Kv‡Q ei `**y**U c**ö**_®v Ki‡jb †Kb?

wb‡Pi c¢kętjvi DËi `vl

- 1. Z¨vM-wZwZ¶v Kv‡K e‡j ? D`vniYmn e¨vL¨v Ki |
- 2. cwi ewi K I mvgwRK Rxetb Z"WH-wZwZ¶v Kxfvte kwš-AvbtZ cvti Ñ e"vL"v Ki|
- 3. Ô`qv Kivi gva"‡g gvbţli m¤úK©Avil `p nqÕ Ñ ÔkÖ`v‡gi cÖZ kÖK‡òi `qvÕ DcvL"v‡bi Avţjv‡K e"vL"v Ki|

euwo	eryno cika		
1.	-^qs weòz†Kvb h‡M ivg AeZvii‡c Awwef望 n‡qwQ‡jb?		
	K. mZ"h j ll	L. Øvci h M	
	M. †Î Zvh y i	N. Kwj h y M	
2.	Z¨vM I wZwZ¶v Av`‡k°cëFweZe¨w³ me®vBÑ		
	i. cwi kögx		
	ii. mwnòz		
	iii. `qvjy		
wb‡Pi	†KvbwU mwVK ?		
	K. i	L. ii	
	M. ii l iii	N. i, ii I iii	
3.	Rx‡e `qv Ki‡j Ñ		
	i. mgv‡R Kj¨vY mwaZ nq		
	ii. mugwwRK eÜb`p nq		
	iii. Avb>`gq cwi‡ek ^Zwi nq		
wb‡Pi	†KvbwU mwVK ?		
	K. i	L. i l ii	
	M. i l iii	N. i, ii I iii	
4.		nVvr mR‡ji evev Amȳ′n‡q covq tm cix¶vi wd w`‡Z cvi Kv mRj‡K w`‡q t`q mRj `yvðšvgy³ nq Ges covib ¸YwU cKvk tc‡q‡Q?	
	K. Z¨M	L. KZ®	
	M. †mev	N. mnkxj Zv	
5.	mR‡ji c ü Ζ AY‡ei Giε AvPi‡Yi	Kvi Y n‡"Q Ñ	
	i. eÜ Z į		
	ii. `qv		
	iii. Ki y v		

 $un^{g} g^{g} buZK uk qv$ 49

1| mRbkxj cke

bxjiZb I g‡bvigvi tek m‡LB mvsmwiK Rxeb KvUw″Qj | tek K‡qKeQi n‡jv Zv‡`i †Kv‡bv mšvbw` n‡″Q bv | Wv³vi e‡j‡Q Zv‡`i mšvb nIqvi †Kv‡bv m¤¢ebv †bB | GRb¨ Zv‡`i `}R‡bi g‡a¨ GKUv nZvkv weivR Ki‡Q | ewoi KgPvix `xbbv_ e¨vcviwU j¶ K‡i | †m `wi`ª | Zvi `ydU mšvb | `xbbv_ ~\text{z‡K iwR Kwi‡q Zvi GKwU mšvb‡K g‡bvigvi †Kv‡j Ztj †`q| g‡bvigv bxjiZ‡bi msmv‡i kwiši Aven wd‡i Av‡m |

- $K. WZWZ \P V K X ?$
- L. wZwZ¶vi gva"tg mgvtR Kxfvte kwnš-cüZwôZ nq-e"vL"v Ki?
- M. `xbbvţ_i Pwiţî i ^ewkţó" ivgPţ>`1 †Kvb w`KvU cÖZdwjZ nţqţQ e"vL"v Ki|
- N. g‡bvigv I bxjiZ‡bi msmv‡i m‡Li Ave‡ni g \ddagger j i‡q \ddagger Q `xbbv‡_i f \ast gKvÑ †Zvgvi c \ast VZ DcvL"v‡bi Av \ddagger j v \ddagger K g \ddagger "vqb Ki|

mßq Aa "vq

Av`k®RxebPwiZ

RM‡Zi mKj gvb) GK i Kg bq | †KD †KD wb‡R‡K wb‡qB e $^-$ Í _v‡K | memgq wb‡Ri g½‡ji K_vB wPšrK‡i | Giv mvaviY gvb) | Avevi †KD †KD Av‡Qb Gi wecixZ | Zwiv Ac‡ii g½‡ji K_vI wPšrK‡ib | wb‡Ri ¶wZ n‡jI Ac‡ii g½j K‡ib | †KD †KD msmv‡ii m½ Z $^+$ W K‡i RM‡Zi g½j mvab K‡ib | Giv n‡jb gnvcyi¹ ev gnxqmx bvix | G¢ i RxebPwiZB Av k $^+$ RxebPwiZ | G¢ i Rxebx †_‡K Avgiv A‡bK wKQy wkL‡Z cwi | Avgv‡ i Rxeb‡K my i fv‡e Mo‡Z cwi | G¢ i c_ AbyniY K‡i AvgivI RM‡Zi g½j Ki‡Z cwi | G Aa $^+$ Vţq RxebPwiZ eY $^+$ V Kiv n‡jv | Giv n‡jb $^+$ N kåK $^+$ O, kå%PZb $^+$ O, $^-$ Vqx we‡eKvb $^+$ O, gv mvi $^+$ V † ex, mvaK i vgc $^+$ Dr Ges c $^+$ FyRMØÜz|

G Aa vq tktl Avgiv -

- k\(\frac{1}{4}\text{K}\(\frac{1}{4}\text{O}\) i evj "I \(^{1}\text{K}\(\frac{1}{4}\text{Kvi}\) Rxe‡b ewY\(\frac{1}{2}\text{ wewfb@NUbvq c\(\frac{1}{4}\text{NZ}\), b "vq c\(\frac{1}{4}\text{Z}\(\frac{1}{4}\text{O}\), Rxe‡c\(\frac{1}{6}\text{mnn wewfb@Av}\) wk\(\frac{1}{4}\text{V}\)
 w\(^{1}\text{Ki eYBv Ki‡Z cvie}\)
- ^bwZKZv MV‡b ki%PZb"‡`‡ei Rxeb I wk¶vi ¸i"Z¡e"vL"v Ki‡Z cvie
- ^bwZKZv MV‡b ~v̂gx we‡eKvbţ>`i Rxeb I wk¶vi ¸iZ¡e~vL~v Ki‡Z cvie
- ^bwZKZv MV‡b mvaK ivgcñv‡`i Rxeb I wk¶vi įiZ¡e¨vL¨v Ki‡Z cvie
- ^bwZKZv MV‡b cðfyRMØÜi Rxeb I wk¶vi ¸iZ¡e¨vL¨v Ki‡Z cvie|

cw 1, 2 I 3 : kkKò

fMevb kåKò ^kkteB Amjt`i nvZ †_tK †MvKtji wkït`i i¶v KtitQb| g_jvi AZïvPvix ivRv Ksm ZutK nZïv Kivi Rb¨ AtbK †Póv KtitQb| wKšy-cvtibwb| Zui nvZ †_tK kåKò wbtRtK ewPtqtQb, †MvKtji Ab¨ wkït`iI ewPtqtQb| GtZ Ksm Avtiv wnsm³ ntq ItVb| wZwb †MvKtji †jvKt`i Ici AZïvPvi Avtiv ewotq †`b| ZvB GKw`b †Mvtciv hyv³ Kti †MvKj †Qto e;`vetb Ptj hvb | kåKò Ges ejivgI mt½ hvb| tmLvtb Kò nb †Mvcevj Kt`i `j cwZ|

wKšytMvKj tQto e; vetb tMtj Kx nte? Ksm KòtK gvitebB| ZvB wZwb GtKi ci GK AbPi cwVtqtQb e; vetb| KòtK gvivi Rb"| AbPtiiv wewfbœQÙtetk e; vetb tMtQ| wKšyfMevb kiKò Zwi w`e" Ávbetj Zv RvbtZ tcti mevBtK nZ"v KtitQb| dtj wZwbI i¶v tctqtQb Ges Ab" tMvcevjtKivI i¶v tctqtQ|

ermvmyi ea

GKw`b kikò, ejivg Ges Ab¨vb¨ tMvcevj‡Kiv Mi" Piw"Q‡jb| ZLb Ks‡mi GK AbPi evQţii ic aţi Kò‡K gvi‡Z G‡jv| †KD hv‡Z eyS‡Z bv cvţi ZvB †m Mi"-evQţii m‡½ wg‡k †Mj| wKšy-Kò wVKB Zv‡K wPb‡Z †c‡iwQţjb| ZvB wZwb ermvmţii †jR I `ycv aţi †Rvţi GK Mv‡Qi Ici AvQţo †dţjb| dţj ermvmjgviv hvq|

 $\text{un} \geq \text{pg}^{\text{Gl}} \cdot \text{buZK} \text{uk} \cdot \text{fl}$ 51

eKvmj ea

ermwnj gviv tMtj Ksm KòtK gvivi Rb¨eKvmjtK cvVvtjb| GKw`b tMvcevjtKiv hg/bv b`xi Zxti tLjwQj | k\u00e4K\u00f3l Zvt`i mt½ vQtjb| tMvcevjtKiv b`xi Zxti c\u00e4Kv\u00f3 GK eK cwwL t`LtZ tcj | K\u00f3 Zvi wbKU thtZB eKvmj ZvtK M\u00f3m KitZ GwMtq Gj | K\u00f3 ZLb Zvi weivU tVwU`tUv ati we`xY\u00e8Kti tdjtjb| eKvmj gviv tMj |

ANvmj ea

ANvmj ntjv cZbv iv¶mxi fvB| Ksm ZvtK tWtK ejtjb, ÔKò tZvgvi tevbtK nZïv KtitQ| Zwg Gi cÖZtkva bvI |ÕANvmyi m¤\$Z ntq e; vetb Ptj tMj|

GKw`b Kòmn tMvcevj‡Kiv GK e‡bi av‡i †LjwQj | ANvmyi Av‡M †_‡KB †mLv‡b wM‡q ARM‡ii iє aij Ges weivU nu K‡i PrcPvc c‡o iBj | tMvcevj‡Kiv e߇Z cv‡iwb | Zviv g‡b K‡i‡Q †Kv‡bv wMwi¸nv n‡e | ZvB Zviv ARM‡ii g‡Li g‡a¨ X‡K coj | wKšy+Kò Kv‡Q G‡m e߇Z cvi‡j b G wMwi¸nv bq | ARMiifcx †Kv‡bv Amyi | ZLb wZwb ARM‡ii g‡Li g‡a¨ wM‡q Ggbfv‡e `wov‡j b †h ARM‡ii kļm-ckķm eÜ n‡q †Mj | d‡j ANvmj gviv †Mj Ges †Mvcevj KMYmn Kò †e¢P †M‡j b |

Gfv‡e Ksm k 1 K 1 K gvivi Rb n Awióvm 1 , †Kkx 1 vbe I te n vgvm 1 ‡KI cw 1 4 1 4 1 5 1 4 wK 1 5 1 5 1 6 nv‡Z mK 1 5 1 7 1 7 nv 1 7 nv 1 7 thick is a constant.

GQvov kìkkò Av‡iv A‡bK RbwnZKi KvR K‡i‡Qb| thgb Ñ Kvjxq `gb, `vewMœcvb, k•LP Θ ea, tMvea Θ aviY BZ `w` |

Kvj xq `gb

Mi"toi ftq Kwj>`x nt` Avktq wbtqwQj Kvjxq bvtg GK gnwelai mvc| Zvi wetl nt`i Rj ntq wMtqwQj welv³| th-tKD H nt`i Rj cvb Kitj Zr¶Yvr gviv thZ|

GKw`b kikkò tMvcevjKt`i mt½ wbtq H
nt`i cvto tLjwQtjb| ZLb ZòvZ®ntq
KtqKRb evjK nt`i Rj cvb Kti| GtZ
Zvt`i gZï nq| wKšy-fMevb kikttòi Kcvq
Zviv Rxeb wdti cvq| Kò estz cvitjb,
wbðqB GB nt` welai tKvtbv mvc AvtQ|

Zvi wetlB nt`i Rj welv³ ntqtQ| wZwb ZLb w`e'Ávtb Kvjxq bvtMi K_v RvbtZ cvtib| Kò mt½ mt½ Rtj Swc t`b| Avi Lv`" gtb Kti Kvjxq bvM Gtm KòtK tcmPtq ati| Kòl Ggbfvte Kvjxtqi Mjv tPtc atib th Zvi cŵ hvq hvq| ZLb Kvjxq



ejS‡Z cv‡i Bwb mvaviY tjvK bb| ~qs fMevb| ZLb tm ¶gv cij_6v K‡i| K.ò ZLbB Zu‡K n~ t_‡K P‡j

52 Av` k®RxebPwi Z

th‡Z ej‡jb| Kvjxq ZLb Zvi gj Avktq igYK Øx‡c wd‡i hvq| Gici t_‡K Kwj>`xi Rj Avevi cv‡bi thvM¨nq|

`vewMocvb

GKw`b mKj tMvc wgtj hgybvi Zxti ebfwgtZ Ae-'vb KiwQtjb| nVvr etb `vevbj Rtj ItV| `vD `vD Kti Av¸b RjtQ| cvjvevi c_ tbB| mevB ewPvi Rb" nvnvKvi KitQ| Kò ZLb mKjtK Afq t`b| wZwb mKjtK kvš-_vKvi AvnŸvb Rvbvb| Zvici HkwiK etj wZwb tmB `vevbj cvb Ktib| dtj `vevbj t_tK mKtj i¶v cvq|

tMvea® aviY

GKw`b mKj tMvc wgtj B>`cRvi AvtqvRb KtitQb| Zv t`tL Kò b>`tK wRtÁm Kitjb, ÔB>`tK cRv KitQb tKb, evev?Õ b>` ejtjb, ÔB>`ewói t`eZv| wZwb ewó t`b etjB ZY, Zi*jZv BZïwi` Rtb¥ Ges ewr
cvq| Zv tLtq Avgvt`i Mvfx_tjv üócyó nq Ges AtbK `ya t`q| ZvB Avgiv B>`cRv KiwQ|Õ Kò ejtjb, ÔGB tMvea® wMwi tZv ZY, Zi*jZv BZïwi` Drcv`b Kti| Zv tLtq Avgvt`i Mi*_tjv üócyó nq| ZvB Avmb Avgiv tMvea® wMwii cRv Kwi|Õ

Kò BwZc‡e®A‡bK Amva¨ mvab Kţi‡Qb| A‡bK wec` †_‡K †Mvcţ`i i¶v Kţi‡Qb| ZvB Zwi K_v †KD Dţc¶v Ki‡Z cviţjb bv| ZLb mevB wgţj wewea DcPvţi †Mvea® wMwii cRv Kiţjb|

Gwìtk cồZevtii gtZv Gevil cRv bv tctq tìeivR B>`at¶tc tMtjb| wZwb tgNmgntk Avtìk wìtjb Zgy eRal ewócvZ NUvtZ | ïi"ntjv eRal ewócvZ | me tftm thtZ jwNj | tMvciv KvbwkwU ïi"Kti wìj | ZLb knkò Zwi evg nvtZi Kwbô AvOj Øviv tMvea® wMwitk k‡b Ztj aitjb | mKj tMvc Zvtì Mi"-evQj Ges Ab vb wRwbmcî wbtq Zvi wbtP Avkq wbj | Zv tìtL B>`aeßtZ cvitjb, -^qs weòz KòveZvii‡c Rb¥ wbtq G KvR KitQb | ZLb wZwb jw¾Z ntq Ktòi KvtQ Gtm ¶gv cồ_®v Ktib | Zvici Avevi me -ôfweK ntq hvq | tMvea® wMwi aviY Kivi Rb Ktòi GK bvg nq wMwi aviX |

wk¶v: knktiòi Rxebx t_tK Avgiv GB ^bwZK wk¶v cvB th, fMevb Zwi mwótk fvtjvevtmb| `ţói `gb Ges wktói cvjtbi Rb"B wZwb AeZvii‡c RbWmY Ktib| ZLb fMevb ntjl wZwb gvbţli gtZvB AvPiY Ktib| Zvt`i mt½ ~vfweKfvte tgjvtgkv Ktib| Zvt`i g½tji Rb" m¤e-Am¤e me KvRB wZwb Ktivtb| th-tKvtbv wec` t tk Rxetki¶v Kivi Rb" wZwb mvgtb GwMtq hvb|

Kò Zui ^Ktkvti ermiex Amyi, ARMiiex ANvmyitK ea Kti th mvntmi cwiPq w`tqtQb, Zv Avgvt`i mvnmx ntZ DØyra Kti | Kvjxq `gtbi ga" w`tq welv³ Atcq RjtK mţcq Kti tZvjvi ga" w`tq RbMtYi DcKvi KtitQb | Avevi Kvjxq bwMtK nZ"v bv Kti ¶gv Kti t`lqvi ga" w`tq kWKò ¶gvi Av`k® ^vcb KtitQb | `vewMœcvb I tMvea® avitYi ga" w`tq mgvtRi g½j mvatbi Av`k®ckvk tctqtQ | ZvB Avgiv ZutK fw³-krav Kie Ges AvgivI Zui gtZv Atb"i g½j mvatbi Rb" h_vmva" tPóv Kie |

GKK KvR : K. kijk‡òi Rxe‡cijqi uk¶v¸‡jv uPvæZ Ki|

L. b"vg cůZôvg kůK‡òi fwgKv NUbvi Av‡j v‡K q‡"vqb Ki|

`jxq KvR : fMevb k@K‡òi wk¶vi c@qvM‡¶Î wPvॡZ Ki|

 $m_{\lambda} p_{g} = 1 p_{g} =$

cvV 4, 5 I 6 : kimPZb"

kử/PZb" 1486 wLiốvţãi 18 †deªqwi fviţZi cwōget½i beØxţc Rb\Mby Kţib| Zwi wcZv RMbwe_ wgkª Ges gvZv kPxţ`ex| RMbwe_ wgţkî ^cZk wbevm wQj evsjvţ`ţki kntptei (eZgvb wmţjU) XvKv `w¶Y Möţg| we`"wk¶vi Rb" wZwb beØxc wMtqwQţjb| bxjv¤^i PµeZrī Kb"v kPxţ`exţK weţq Kţi wZwb †mLvţbB _'vqxfvţe emevm Kţib|

 $RMbv\underline{e}_wg\sharp ki ^*) B \dag Q \sharp j \tilde{N} wek \sharp \varepsilon + I wbgvB + GB wbgvB - B cieZRKv \sharp j ki \& PZb ^* ev ^PZb ^* \sharp e bv \sharp g L ^*vZ nb + WbgvB \sharp qi AM \& R wek \sharp \varepsilon + I \& E b Ni \dag Q \sharp e mb wm M \& Y K \sharp ib + WbgvB \sharp qi eqm hLb ^*k - GMvi , ZLb Zwi wcZvi + I & E b Ni + I & E b$

qZi ng | qv kPxt`ex Kwbô cvî tK wbtg Lye wect` ctob|evjK wbgvB wQtjb LpB PÂj I `yiš+ Zte Lye tgavex| kPxt`ex ZutK M½v`vm cwÊtZi PZ₽úvVx‡Z fwZ®Kwi‡q †`b | Zwi †gav Ges i‡ci Kvi‡Y mK‡jB Zu¢K †mma Ki‡Zb| įi"M½v`vm Ggb GKRb Qvî tctq LveB Lvvk | vvbqvB -^fvte PÂj I `viš-nţi Kx nţe? covi bvi ţej vq wQţj b LeB wbôvevb| ZvB AíKvtji gtaB wZwb e vKiY, AjsKvi, - suz I b vq kv‡-¿AMva cwêz AR® K‡ib| †Ivj eQi eq‡mB wZwb ÔcwÊZ wbgvB0 etj mvivt`tk cwiwPZ ntq ItVb | G-mgg wZwb GKwU tUvj Ltj Qvî covtZ jvMtjb| AíKv‡ji g‡a B Zwi Aa vcbvi L wz Pviw ‡K Qwotq coj | cţî i GB L wwZtZ gv kPxt ex LyeB Lwk | Zwi qtb Avbt>`i aviv eBtZ jvMj | wZwb wmrenš-wbijb tQiji wetq t`teb| Ktbl wVK n‡q †Mj| cwÊZ ejfwPv‡hP **mj¶**Yv Kb∵v i2xt`ex| kPxt`ex ZLb GKwU AmvaviY KvR Kiţjb | ZLbKvi wbqgvbhvqx wZwb †Qţji weţq‡Z A‡bK cY wb‡Z cvi‡Zb| wKš⊬cYcÖvi GB wele‡¶i q‡j wZwb KWvivNvZ Ki‡jb| webv c‡Y



wZwb tQtji wetq w`tjb|wbgvB th KZeo cwÊZ wQtjb, Zv GKwU NUbv t_tK tevSv hvq| tm-mgq Kvk*kti GK weL"vZ cwÊZ wQtjb tKke wgk*| wZwb Kvkx, KvÂx, bvj>`v cëfwZ -'vtbi cwÊZt`i kv-wePvti ciwRZ Kti GKw`b beØxtc Gtm Dcw-'Z nb| wZwb mMte@cwÊZt`i c@Z tNvIYv Ktib, ûnq ZK@nePvi Kib, bv nq RqcÎ wjtL w`b|0 Zwi cwwÊtZ"i K_v mevB RvbtZb| ZvB beØxtci cwÊZ-mgvR fxZ ntq ctob| ZLb ZiY cwÊZ wbgvB webtqi mt½ GwMtq Avtmb| M½vZxti `Rtbi gta" Kkj wewbgq nq| wbgvBtqi Abţivta tKke cwÊZ Zr¶Yvr gţt gţt kZwaK tkw+K M½vt-Ívî iPbv Ktib| Gici wbgvB "i" Ktib Zvi mgvtjvPbv| wZwb tKvb tkv+K tKv_vq Kx fj AvtQ Zv e"vL"v Ktib| wbgvBtqi mgvtjvPbv "tb Dcw-'Z

Av` k®RxebPwi Z

cwêzmy wew-§z ntq hvb| tKke wgk1 zwi fy -^xkvi ktib| G NUbvi ci beØxtc wbgvBtqi cwêtzii Liwz Avtiv teto hvq|

wbgvB GKevi ce@½ åg‡Y Av‡mb| beØx‡c wd‡i wM‡q †kv‡bb mc@Nv‡Z j²x‡`exi gZï n‡q‡Q| G‡Z wZwb Lje AvNvZ cvb| msmv‡ii c@Z Zwi gb D‡V hvq| ax‡i ax‡i Zwi g‡a¨ ag@bjvM c@j n‡q I‡V| G weIqwU e\$‡Z †c‡i qv kPx‡`ex mbvZb cwʇZi Kb¨v weòwc@vi m‡½ Zwi Avevi we‡q †`b|

K‡qK eQi m‡LB Kv‡U| Zvici GKw`b wbgvB hvb Kvkxav‡g| ci‡jvKMZ wcZvi AvZ\vi m`MwZ Kvgbvq wc \mathfrak{T} `v‡bi Rb"| †mLv‡b wZwb Ck¦icjixi wbKU Kòbv‡g `x¶v †bb| G‡Z Zwi g‡b weivU cwieZ\vartheta Av‡m| beØx‡c wd‡i Aa"vcbv, msmviag\vartheta †0\tau †`b| "ayKòbvg K‡ib| beØx‡ci ^eòeMYI Zwi m‡½ †hvM †`b| Zw‡`i g‡a" wQ‡j b wbZ"vb>`, k\vartheta k\vartheta vai, gyK\vartheta`, A\vartheta ve\vartheta ve\vart

Abynvixt`i wbtq wbgvB ewo ewo wMtq, GgbwK MÖtgi ct_ ct_ kòbvg cÖvi KitZ _vtKb| GtZ Aek¨ AtbtK ¶ä nb| AtbtK evavI t`b| RMvB-gvavB bvtg gvZvj `ß fvB GKw`b wbgvB I wbZ¨vb>`tK AvµgY Ktib| wKšywbgvB tcÖgfw³ w`tq mevBtK Avcb Kti tbb| Zwiv mKtj wbtRt`i fyj eyStZ tcti wbgvBtqi G tcÒgfw³ i atg⊕ cÖZ ktvvkxj nb|

kầ‰PZb" Zwi tcἄgfw³i ag®cӪν‡ii Rb" fviZe‡l® wewfbæ⁻′vb N‡i teovb| cjx, `ww¶YvZ", e¸`veb, Kvkx cỡfwZ ⁻′vb N‡i wZwb Rxe‡bi tkl AvVvi eQi cjxi bxjvP‡j AwZewnZ K‡ib| G-mgq kåiɛ, mbvZb, iNþv_fÆ, iNþv_`vm, kåRxe, tMvcvj fÆ cἄyL wewkó ^eòe cwÊZ Zwi m‡½ wQ‡jb|

bxjvPtj Ae¯′vbKvtj kk%PZb¨ cNqkB Kòbvtg DbN` ntq _vKtZb| Ggwb DbN` Ae¯′vq 1533 wLbovtãi Avlvp gvtm GKw`b wZwb RMbve_t`tei gw`ti cNek Ktib| nVvr gw`tii `iRv eÜ ntq hvq| mevB evBti DbN_ ntq etm _vtKb| Zvici `iRv Ltj ZwtK Avi t`Lv hvq bv| tfZti ïay RMbve_t`tei gwZ\partition f³t`i aviYv, kk%PZb¨ RMbve_t`tei t`tn wejxb ntq tMtQb|

wn>`ymgv‡R ZLb eY®f` I A¯úk¨Zv cëjfv‡e we`¨gvb wQj | k¯ªI চডাল‡`i mevB N,Yv KiZ| wKšy ki%PZb¨
†Kv‡bv †f`v‡f` gv‡bbwb| Zwi †cgfw³i a‡g®D″P-bxP, eY®f` I A¯úk¨Zvi †Kv‡bv ¯′vb wQj bv| wZwb
আচডা‡j †mma weZiY K‡i‡Qb Ges mevB‡K eţK ¯′vb w`‡q‡Qb| wb‡R eðpYmš*b n‡qI চডাল‡`i m‡½ GK
mwwi‡Z e‡m Avnvi MồnY K‡i‡Qb| Gi d‡j wn>`ţ`i wewfbœm¤cÖv‡qi g‡a¨ †h we‡f` wQj, nvbvnwwb wQj, Zv
eûjvs‡k `i n‡qwQj| Gfv‡e wZwb wn>`ymgvR‡K bvbv Ae¶q†_‡K i¶v K‡i‡Qb| GUv Zwi GKUv eo Ae`vb|

ïaywn>`β bq, Zwi tcၛ̞fw³i Kv‡Q gynjgvb, wL66vb BZ¨wv` RwZ‡f`I wQj bv| mevB‡K wZwb tcၛၟ̈w`‡q Avcb K‡i wb‡qwQ‡jb| ZvB wZwb e‡j‡Qb:

> thB f‡R, tmB eo, Af³ nxb Qvo| Kò fR‡b bwn RwZ Kj w` wePvi \ DËg nTv ^eòe n‡e wbi wfgvb| Rx‡e m¤§vb w` ‡e Rwb Kò Awaôvb \

 $m_{\lambda} p_{g} = 1 p_{g} =$

wk¶v: kk%PZtb"i Rxebx t_tK Avgiv th ^bwZK wk¶v cvB, Zv ntjv Ñ cwwÊtZ"i AnsKvi Kiv hvte bv| me mgq webqx _vKtZ nte| tKD Avgvi mt½ Lvivc AvPiY Kitj fvtjv e"envi Øviv ZvtK Rq KitZ nte| gvbţl gvbţl tKvtbv tf`vtf` Kiv Pjte bv| mevBtK KòÁvtb m¤§vb w`tZ nte| mgvtRi KvDtK N,Yv Kiv hvte bv| gvbyl wntmte mevB mgvb| mevBtK tmBfvte t`LtZ nte| ZteB mgvtRi mevB myLx ntZ cvite| mgvRUvI my`i ntq DVte|

GKK KvR : K. kimpzb † tei Av`k@Rxeb † tK ^bwZK wk¶vmgn wPvozZ Ki |

L. $mgvRRxetb kllmPZb" \uparrow tei bwZK wk fvi clibe tj L$

`jxq KvR: k@%PZb"†`ţei wk¶v†Zvgvţ`i Rxeţb Kxfvţe c@qvM Kiţe?

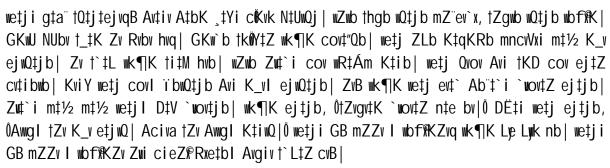
cvV 7, 8 I 9 : "rgx weteKvb>"

weteKvbt>`i clkZ bvg bti>`bv_ `Ë| tQtjtejvq Zwi AvtiKwU bvg wQj Ñ extik|i| Zte Av`i Kti ZwtK mevB Ôwetj0 etj WvKtZb|

weteKvbt>`i Rxeb Lye `xN°wQj bv| gvÎ 39 eQi 5 gvm 23 w`b wZwb te¢PwQtjb| GB Aí mgtq fviZel°Z_v mgMöwetk;i gvbe RwZi Kj"vtYi Rb" wZwb th Ae`vb titL tMtQb, Zv AmvaviY| wPiw`b qvby Zwi GB Ae`vtbi K_v \{\sigma}iY Kite|

AvtMB ejv ntqtQ, tQtjtejvq weteKvb>`tK mevB wetj etj WWKtZb| wetj wQtjb LyeB `yiš-I GKtivLv| Zte Lye tgavex| tilvaava Lye fittiv di KitZb| avkvanda tlivaiv L MybavDbya

 $\label{topicond} \mbox{tjLvcovq Lpe fvtjv dj KitZb| cvkvcwk tLjvajv I MvbevRbvqI cvi`k PvQtjb| }$



wetj mvaymbœmxt`i Lye k**v Ki‡Zb| `wi`t`il Lye fvtjvevmtZb| ZvB Zvt`i t`Ltj t`Što Nti thtZb| Nti Rvgv-Kvco, Lvevi-`vevi hv tctZb, Gtb w`tq w`tZb|



Av` k®RxebPwi Z

wetj th cieZ® Rxetb exi mbòwmx nteb, ^vgx weteKvb>` nteb, Zvi Avfvm Zwi tQtjtejvqB cvI qv tMtQ | wetj wQtjb Zwi tLjvi mv_xt`i `jtbZv | mţhvM tctjB wZwb mv_xt`i wbtq ûaïvb-aïvbû tLjvq tgtZ DVtZb | KLtbv GKv-GKvB aïvbgMontq thtZb | aïvb KivUv Zwi GKUv wcü tLjv wQj |

GB mv`wm‡a mvaK kitivgKo‡K b‡i>`bvţ_i fvţjvjvţM| Zwi cäZ tKgb thb GKUv fw³i fve tRţM I‡V| ZvB wZwb wbqwgZ `w¶|‡Ykţti hvZvqvZ ïi"Kţib| GK mgq kitivgKţoi wbKU Z¨vţMi gţšį`x¶|v tbb| bţi>`bv_ nb MnZ¨wMx mböwmx| ZLb Zwi bvg nq weţeKvb>`| cieZiRvţj f³iv ZwţK ¯igx weţeKvb>` ev ïay ¯igxRx eţjB WvKţZb|

weteKvb>` MmZ"vM KtitQb etU, wKšy-fviZel©Ges Zvi gvbyltk Z"vM Ktibwb| ZvB wZwb tewitq cotjb tiki ct_ ct_| wbtRi tPvtL tiltz PvBtjb fviZetl© gvbyli Ae-'v| wZwb mviv fviZel©Nyitjb| tiltjb, mviv titk tKej `wwi`* Avi `wwi`*| tKej Awk¶v Avi Kwk¶v| tikevmxi GB nxb Ae-'v tit wZwb Lye Kó tctjb| wZwb GB Awk¶v, Kwk¶v Avi `wwiti* KviY RvbtZ PvBtjb| Kxfvte Gme t_tK tikevmxtK Dravi Kiv hvq, tm-K_vI wPšy-KitZ jvMtjb|

t`tk ZLb BstiR kvmb PjtQ| civaxb t`k| wZwb eßtZ cvitjb, ctii kvmtb t`k aÿsm ntq hvt"Q| G t`ktK ewPvtZ nte, RvMvtZ nte| t`ktK -^vaxb KitZ nte| civaxb t`k KLtbv DbweZ jvf KitZ cvti bv| t`tki `wi`a `i KitZ nte| Awk¶v-Kwk¶v `i KitZ nte| me gvbyltK fvtjvevmtZ nte| mevi gta AvZwek/m RwMtq ZjtZ nte| ZteB t`tki DbweZ nte|

1893 wLióvłã weteKvb>` AvłgwiKv hvb| tmLvtb wkKvtMv knti AbynôZ wekag@mt¤§jtb wZwb e³Zv t`b| e³Zvi ïitz wZwb Dcw⁻′Z mKjtK ÔfwMbx I åvZe" Õ etj mt¤′vab Ktib| Ab¨iv KtitQb cÖwMZfvte Ôf`ågwnjv I f`ågtnv`qMYÕ etj | wKšyweteKvbt>`i g\$L GB bZb mt¤′vab ïtb Dcw⁻′Z mKtj gy> nb| ARvbv AtPbv tjvKt`i Gfvte fvB-tevb etj Avcb Kti tbqvi gvbwmKZv t`tL Zwiv wew⁻§Z nb| Zvici weteKvb>` Zwi e³Zvq etjb, Ôwn>`pag®cw_exi mKj ag\$K mgvb mZ¨ gtb Kti| me atg₱j¶¨B GK| b`xmgn thgb GK mwMti wMtq wgwjZ nq, tZgwb mKj atg₱Bj¶¨ GK Ñ Ck‡jvf| ZvB weev` bq, mnvqZv; webvk bq, ci⁻útii fve MbnY; gZwetiva bq, mgš^q I kwwš†Ō weteKvbt>`i GB e³Zvq mevB AZ¨š-Lyk nb| ag\$fvi wePvti wZwb nb tkô e³v| ZLb Zwi eqm gvÎ wÎ k eQi AvU gvm|

agmfvq e³Zvi ci mviv Av‡gwiKvq we‡eKvbţ›`i bvg Owoţq cţo| wewfbœRvqMv t_‡K AvnŸvb Avţm e³Zvi Rb"| wZwbI wn›`yag® k® m¤úţK®GţKi ci GK e³Zv w`ţq AvţgwiKv Rq Kţib| Zvici hvb BDţivc| Bsj"vÛ, dwÝ, BZwj cðfwZ ţ`k Nţi teovb Ges e³Zv ţ`b| Zwi e³Zv t_‡K BDţivţci gvby wn›`yag®I `k® m¤úţK®bZb Kţi RvbţZ cvţib| AţbţK Zwi cig f³ nţq hvb| Zwţ`i gţa" gwM@tiU GwjRvţe_tbvej-Gi bvg weţkIfvţe Dţj \\ h\\" | wZwb weţeKvbţ›`i Av`ţk®GZUvB DØy™ nb th, wbţRi Rb\\ fwg

Avqvij \tilde{v} 0 †Qto fviZet1 \tilde{v} Ptj Avtmb| weteKvbt> i Kvt0 wZwb \tilde{v} 9 \tilde{v} 1 tbb| ZLb Zwi bvg nq fwMbx wbtew \tilde{v} 2 \tilde{v} 1

côq Pvi eQi cw_ex ågY Kţi weţeKvb>` 1897 wLtóvţã t`tk tdţib| t`tki gvby ZuţK gnvmgv`ţi MbY Kţi| wekvj mseafbv t`q| mseafbv Abypvţb wZwb t`ţki gvbylţK Abïvţqi weiţ™ joţZ eţjb| mg¯ſ Kms¯<vi cwiZïW KiţZ eţjb| t`ţki me gvbylţK weţf` fţj GK nţZ eţjb| wZwb eţjb, kw³ I mvnwmKZvB ag® `ppPZv I KvcyilZvB cvc| ¯vaxZvB ag® civaxbZvB cvc|

weteKvb>`ejtZb, mZ"B mKj atg® wfwË| ctivcKviB ag© cicxobB cvc| mr nlqv Avi mr Kg®Kiv atg® A½| bxP RwZ, gŁ®`wi`å, AÁ, gwP, tg_i mKtjB Avgvt`i fvB| Gt`i tmevB cig ag® AvZWekvm I Ckti wekvm Ñ G-`wU wRwbmB DbwZ jvtfi GKgvÎ Dcvq| hyeKt`i AvtM kixi MVb KitZ nte| Zvici ag® PP® Kite| `ye® kixti ag®PP® nq bv| tKvtbv KvRB nq bv| GRb" Zvt`i MxZv covi AvtM dbej tLjtZ nte| ZvtZ kixi MwVZ nte| ZLb Zviv MxZv Avtiv fvtjv eySte| metPtq ¸i*ZcY®K_v ntjv Ñ Lwwj tctU ag® nq bv| ZvB mevi AvtM gvbţli `wwi`* tNvPvtZ nte| CkţiÁvtb Rxtei tmev KitZ nte| Rxetmev KitjB Ckţitmev nte| G e vcvti Zwi weL"vZ Dw³wU ¬§iY Kiv thtZ cvti:

eûi‡c m¤\$fL †Zvgvi Qwo †Kv_v LynRQ Ck;i? Rxte †c0j Kti †hB Rb †mB Rb †mwetQ Ck;i\

weteKvbt>`i KvtQ DPzbxPztKvtbv tf`vtf` wQj bv| A-úk"ZvtK wZwb NYv KitZb| weteKvb>` Zwi ¸it`e ivgKò cignsmt`tei bvtg GKwU gV -'vcb Ktib| ivgKò gV| cwðget½i nvlov tRjvi tejţo M½vi cwðg cvto GwU Aew-'Z| mvaviYfvte GwU tejp gV bvtg cwiwPZ| gvbetmevi Av`k@wbtq G gV c@ZwôZ nq|

jit`tei Av`k©cPvtii Rb¨weteKvb>`ivgKò wgkbl c@Zôv Ktib| cw_exi wewfbæt`tk GB ivgKò gV livgKò wgktbi kvLv itqtQ| Gmtei c&vb tK>`atejyo gV| evsjvt`tk thme gV lwgkb itqtQ, tmmtei c&vb tK>`aXvKvi ivgKò wgkb| cw_exe¨vcx GB gV lwgktbi gva¨tg kZ kZ gvbyltK tmev cÖvb Kiv nt″Q| tmevi gta¨itqtQ wk¶v, wPwKrmv, AvcrKvjxb mvnvh¨ cÖvb BZ¨wi |

weteKvbt>`i tmevatg@tKvtbv RwwZtf` ev ag\$f` wQj bv| RwwZ-ag@wbwe\$ktl wZwb tmev cövb KitZb| GKevi tKvjKvZvq cPÊ `yvf¶ †`Lv w`tqwQj| ZLb ivgKò wgktbi c¶ †_tK AvkqtK>° tLvjv ntqwQj| tmLvtb KtqKRb gynjgvb evjK GtmwQj _vKvi Rb"| Gt`i Kx Kiv nte RvbtZ PvBtj weteKvb>` etjwQtjb, gynjgvb evjtKiv Aek"B _vKte| ïay Zv-B bq, Zvt`i Lvlqv-`vlqv Ges ag\$PP\$q hvtZ tKvtbv weNœbv NtU, tmw`tK wetkl tLqvj ivLtZ nte|

weteKvb>`KtVvi cwikgx wQtjb|KvR Qvov wZwb wKQBepStZbbv|ZvBwek#tgiAfvteAíw`tbBZwikixitft0cto|dtj1902wL6ovtãi4RjvBtejypgtVwZwbt`nZ`vMKtib|

wk¶v:weteKvbt>i Rxebxt_tK Avgiv GB bxwZwk¶v cvBth, mZZvI wbftkZv gvbţli `yUtkb ¸Y| GQvovtKD eo ntZ cvti bv| cw_exi mKj gvby GK RwZ| ag®Zvt`i c_K c_K ntZ cvti | Zte me atg®B wfwEGK Ges Zv ntjv mZ" | mZ"B ag® ctivcKvi, ^vaxbZv Ñ G¸tjv atg® A½ | civaxbZv I cicxob cvc | gvbytk atg® K_v ejvi AvtM Zvi `wi`* tgvPb KitZ nte | KviY Lwyj tctU tkD atg® K_v ïbtZ Pvq bv | abx-`wi`*, gyP-tg_ti tKvtbv cv_k" tbB | mevB fvB-fvB | tKvtbv gvbyB A ûk bq, tckv Zvi hv-B tnvK |

Av`k®RxebPwi Z

AvZ\|kek\|m | Ck\|ti wek\|m Db\|wZi c\|\u00dg kZ\|\u00e9 ag\|PP\PA Av\tM kixi m\|\u00fa' | ejevb ivL\tZ n\te| KviY \u00ea\|\u00e9 kixti \u00ea ag\|\u00e9 q, tKv\tbv KvRB wVKg\tzv Kiv hvq bv|

weteKvbt>`i GB wk¶v Avgiv Avgvt`i Rxetb KvtR jvMve| Zvntj AvgivI mdj Rxetbi AwaKvix ntZ cvie|

GKK KvR : -î/gx weţeKvbţ>`i Rxebv`ţkP wk¶vmgn wPwzZ Ki|
`jxq KvR : -î/gx weţeKvbţ>`i wk¶vi c#qvMţ¶Î wPwzZ Ki|

cvV 10, 11 I 12 : mvi `v † ex

cwōget½i ewKov tRjvi RqivgevUx Motta mvi`v t`exi Rb¥| tm w`bwU wQj evsjv 1260 mvtji (1853 wLòvã) 18 tcŠl en¯úwZevi| wcZv ivgP>`a gtLvcva¨vq, gvZv k¨vgvmy`ix| Rtb¥i ci Zwi bvg ivLv nq VvKiigwY t`ex| gv bvg ivtLb t¶gv¼ix| tmægqx gwwm bvg ivtLb mvi`v| gwwmi ivLv bvtgB cieZ®Kvtj wZwb L¨wwZ jvf Ktib| mvi`v t`ex wQtjb Zwi gv-evevi cŌg mšwb| Zwi Avtiv GKwU tevb I cwPwU fvB wQj|

mvi`v †`ex‡`i cwievi m"Qj wQj bv| mvgvb" Rwg-Rgvi dmj Ges wcZv †cЇiwmZ" K‡i hv AR® Ki‡Zb, Zv w`‡q †Kv‡bviK‡g msmvi PjZ|



tmKvtj mvaviY tjvtKi aviYv wQj, tgtqiv tjLvcov Kitj

Avi msmv‡ii KvR Ki‡e bv| ZvB wcZv ivgP>`amvi`v†`exi †jLvcovi cůZ wQ‡jb D`vmxb| wKšy+mvi`v†`ex wb‡Ri Drmv‡n fvB‡`i m‡½ Mů‡gi cvVkvjvq †h‡Zb| Gfv‡e wZwb wKQywKQyco‡Z wk‡LwQ‡jb, wKšy+wjL‡Z †k‡Lbwb| Z‡e K_K VvKit`i K_v, hvÎv, KxZ19 cůfwZ ï‡b ï‡b wZwb bvbv wel‡q A‡bK Ávb jvf K‡iwQ‡jb|

Kvgvi c**/Ki** Mitgi ¶w`ivg PtÆvcva¨vtqi cyl M`vatii mt½ mvi`v t`exi wetq nq| GB M`vaiB weL¨vZ mvaK kitivgKò cignsmt`e|

mvi`v †`ex ¯ígxi mwwbæ Lje GKUv cvbwb| Zut`i `v¤úZ"Rxebl `xN®wQj bv| wetqi eQi †`toK cti kingKò Ptj Avtmb `w¶tyk‡i| mvi`v †`ex Ptj hvb wclvjtq| `jB eQi ci RqivgevUxtZ Zut`i Avevi mv¶vr nq| tmLvtb wKQyr`b †_tK kingKò Avevi `w¶tyk‡i Ptj Avtmb| `xN®mvZ eQi ci kingKò Rb\fwg Kvgvi cyKi `k\b hvb| tmLvtb mvi`v †`exi mt½ Zui cybivq mv¶vr nq| G mgq kingKò mvi`v †`extK Rxetbi KZ® I Cki m¤útK®AtbK Dct`k t`b| wZwb etjb, ÔCki mKtjiB AwZ Avcbvi| th ZutK gtb-cüty fvtjvevtm, WvtK, tm-B Zui †`Lv cvq| Zug hw` WvK, Zugl Zui †`Lv cvte| Zui †`Lv cvq| Zug hw` WvK, Zugl Zui †`Lv cvte| Zui †`Lv cvlq| Rxetbi Dtİk"|Õ

^vgxi GB Dct`k mvi`v t`exi Aši ~úk©Kţi| wZwb GţK gšį‡c MḃnY Kţi mvabvi cţ_ hvlvïi"Kţib| Ab¨ ¬xţjvKţ`i gţZv wZwb wbţRţK msmvi-eÜţb Ave™t Kţibwb| ~^vgxţKI tQţo w`ţqţQb mvabvi RMţZ|

wn>`pag®l ^bwZK wk¶v 59

mvZ gvm c‡i knivgKò Avevi `w¶‡Yk‡i P‡j Av‡mb| mvi`v†`ex P‡j hvb wclvj‡q|

Zvici `xNP b †K‡U hvq| ^vgxi wPšvq mvi`v †`ex DwØMæn‡q c‡ob| wZwb wmzvš-†bb `w¶‡Yk‡i hv‡eb| wcZv‡K Zwi g‡bvfve Rvbvb| ivgP>`ª†g‡q‡K wb‡q iIbv nb| †mUv 1872 wL6vã| dvêþx cwYgvq †Kvj KvZvi M½vZx‡i M½vmwb Drme n‡e| GB Drme‡K mvg‡b †i‡LB Zwiv hvÎv K‡ib| A‡bK Kó K‡i cv‡q †n¢U Zwiv `w¶‡Yk‡i †cďQvb|

`w¶‡Yk‡i G‡m mvi`v†`ex ^\vgxi tmev-h‡Zægb-cÖV†X‡j†`b| ^\vgxi mvabvq hv‡Z†Kv‡bviKg weNæbv N‡U, †m e`vcv‡i wZwb wQ‡jb mZZ hZkxxj| wZwb wb‡RI ^\vgxi Dc‡`kg‡Zv K‡Vvi mvabvq gMænb| Gi d‡j mK‡ji Kv‡Q Zwi bZb cwiPq nq ÔkûgvÕ e‡j|

mvi`v†`exI Zwi AvPvi-AvPiY I mvab-fR‡bi gva"‡g kirivgK‡òi †hvM" mnawgin n‡q I‡Vb| mK‡jB Zw‡K AZ"š-kinatoria" KiZ| wZwbI mKj‡K mšv‡bi b"vq †mma Ki‡Zb| Gfv‡e ¯^vgx-¯¿x wg‡j Ck‡i mvabvq AvZwb‡qvM K‡ib|

1293 mvtji 31 kileY (1886 wLićvtāi 15 AvM÷) kilivgKò citjvK Mgb Ktib| Rxebmv_xtK nwwitq kilgv thb GtKevti GKv ntq hvb, hwì I Zwi f³-mšvtbiv me mgq ZwtK wNti _vKtZb| gtbi kwwši Rb¨ wKOyr`b cti kilgv Zx_@gY ïi"Ktib| G Dcjt¶ wZwb Kvkx, e;`veb, cjx cifwZ Zx_®′vb ågY Kti Avtmb| GtZ Zwi gb AtbKUv kvš-nq|

mvi`v †`ex wkw¶Z wQtjb bv| wKšy-Zwi gbUv wQj Lye D`vi| Zwi gta" †Kvtbv Kms¯<vi wQj bv| Gi cǧvY cvl qv hvq fMmewbtew`Zvi GKwU NUbvq| weteKvb>` GKw`b wbtew`ZvtK cwWtqtQb mvi`v †`exi mt½ mv¶vr Kitz| wZwb †MtQb| Zvi AvtM GKRb wkl" wMtq mvi`v †`extK wRtÁm Kitjb wZwb GB †ggmvtnevi mt½ mv¶vr Kiteb wK-bv| DËti mvi`v †`ex ejtjb, Ôbtib GKwU †kZcÙ cwVtqtQ| Zv wK Awg bv wbtq cwi?Õ†mKvtj KZUv D`vi ntj GKRb wet`wkbxtK Gfvte Avcb Kti †bqv hvq?

tkl eq‡m kitgv Lje Amy¯'n‡q c‡ob| wkl¨mvi`vb>`‡K tW‡K e‡jb, ÔAvgvi teva nq hvevi mgq n‡jv|Ō Gi wKQyr`b ci 1327 mv‡ji (1920 wLiovā) 4 kiteY gv mvi`v bkļi †`n Z¨vM K‡ib| tejpo g‡V Zwi t`‡ni mrKvi Kivnq| c‡ii eQi tmLv‡b GKwU gvZgwo`i wbwg\naddalang|

mvi`v†`exi K‡qKwU Dc‡`k

- 1. cw_exi g‡Zv mn~,Y PvB| cw_exi lci KZ iK‡gi AZ~vPvi n‡~Q, cw_ex Aev‡a me mB‡Q, gvbţlil †mB iKg PvB|
- hw`kwwš-PvI, KviI †`vI †`L bv, †`vI †`L‡e wb‡Ri | RMr‡K Avcbvi K‡i wb‡Z †kL, †KD ci bq, RMr †Zvgvi |
- 3. mvab ej , fRb ej c<u>ü</u>g eqtmB Kti tbte| tktl wK Avi nq? hv KitZ cvi GLb Ki|

mvi`v †`exi Rxebx †_‡K Avgiv c<u>ö</u>‡gB th ^bwZK wk¶wU cvB, Zv n‡jv Z¨vM | Z¨vM bv Ki‡j eo wKQynlqv hvq bv | mvi`v †`exi Z¨v‡Mi Kvi‡YB M`vai k*ivgKò n‡Z tc‡iwQ‡jb | hviv ¨aymsmv‡i Ave™ _v‡K, Zviv RM‡Zi Rb¨ wKQyKi‡Z cv‡i bv | gvb‡li g‡a¨ mn¨¸Y _vK‡Z n‡e | gvbyl Amwnòz n‡j mgv‡R kwwš-Avm‡e bv | †Kej A‡b¨i †`vl bv †`‡L wb‡Ri †`vl †`L‡Z n‡e | Z‡eB RMr‡K fv‡jvevmv hv‡e | RM‡Zi mKj‡K

Av` k®RxebPwi Z

Avcb Kiv hv‡e| mvab-fRb c $\underline{0}$ g eq‡mB Ki‡Z n‡e, kixi hLb mȳ'-mej _v‡K| `yeŷ kix‡i †Kv‡bv KvRB nq bv|

mvi`v†`exi GB wk¶v Avgiv memgq g‡b ivLe Ges Zv cvjb Kie|

`jxq KvR : gv mvi`v‡`exi Rxe‡bi NUbvcëvn I wk¶v wPw≂Z Ki|

cvV 13,14, 15 I 16 : mvaK i vgcthv`

ivgcönv` wQţj b gvZmvaK| epÁvţb wZwb Kvjxi mvabv Ki‡Zb| KvjxB wQj Zwi wbKU Ckţi| nwi, epv, wke, `\$MPÑ meB wZwb| ZvB ivgcönv` eţj‡Qb:

Kvj x eþ †R‡b gg©

ag@ag@ne ftj wQ|

evsjv 1127 m‡bi (1720 wL6vã) Awkþ gv‡m ivgcåvţ`i Rb¥| cwðge‡½i M½vZx‡i nwyjkni Måţg| wcZv ivgivg †mb Ges gvZv m‡eئix†`ex|



ivgcňnv` evj¨Kvj †_‡KB wQ‡jb AZ¨Š-†gavex| Aí eq‡mB wZwb ms¯<Z, dwwm°, D`Pl evsjv fvlvq `¶Zv ARÐ K‡ib| †lvj eQi eq‡mB Zwi g‡a¨ AmvaviY KweZkw³i ckkk N‡U| wKšy+msmv‡ii cŵZ Zwi gb wQj bv| ZvB msmvigyLx Kivi Rb¨ Zw‡K we‡q Kiv‡bv n‡jv| ¯xi bvg kefYx†`ex|

wKšy-ivgcthv` msmvigy_x n‡jb bv| gvZmvabvq Zwi g‡bv‡hvM Av‡iv te‡o tMj| msmv‡ii cthZ wZwb Av‡iv D`vmxb n‡q co‡jb| Ggb mgq Zwi wcZwe‡qvM N‡U| d‡j msmv‡ii mg¯ĺ`vq G‡m c‡o Zwi Ici| ZvB A‡_ncvR\$bi Rb¨wZwb GKw`b †KvjKvZv hvb|

ZLb †Kvj KvZvi Mivbnv‡Ui Rwg`vi wQ‡jb `pMPiY wgÎ | ivgcñnv` Zwi Rwg`wi‡Z gŷwii c‡` †hvM`vb K‡ib | Zwi KvR wn‡me-wb‡Kk ivLv | wKšyZwi g‡b memgq gv‡qi wPšr | ZvB wnmv‡ei LvZvq wZwb gvZm½xZ ev k¨vgvm½xZ iPbv K‡i Pj‡jb | G Lei GKw`b Rwg`v‡ii Kv‡b †Mj | wZwb LvZvmn ivgcñnv`‡K WvKv‡jb | ivgcñnv` f‡q f‡q Rwg`v‡ii Kv‡Q †M‡jb | PvKwi eys Avi _vK‡e bv | wKšy-n‡jv Zvi wecixZ | Rwg`vi ivgcñnv‡`i k¨vgvm½xZ c‡o AZ¨š-gy> n‡jb | wZwb ej‡jb, wnmve Kivi Rb¨†Zvgvi Rb¥ nqwb | †Zvgvi Rb¥ n‡q‡Q Av‡iv eo KvR Kivi Rb¨ | Zwg ewo wd‡i hvI | gv‡qi mvabv K‡iv Avi k¨vgvm½xZ iPbv K‡iv | Zwg th wî k UvKv †eZb †c‡Z, Zv Zwg wbqwgZ cv‡e |

un>`pg@l ^bwZK wk¶v 61

Gfv‡e Rwg`vi `MMPiY ivgc6nv‡`i gvZ.f.w³ I m½xZ iPbvi cNZfv‡K m¤§vb †`Lv‡jb| ivgc6nv` P‡j †M‡jb Zwi MNg nwyjkn‡i| Rwg`v‡ii †`qv UvKvq Zwi msmvi †Kv‡bvg‡Z Pj‡Z jvMj| Avi GKg‡b wZwb gv‡qi mvabv Avi k¨vgvm½xZ iPbv K‡i Pj‡jb|

ivgcồnv` M½vi Nv‡U e‡m Avcb g‡b ¯îwPZ k¨vgvm½xZ MvB‡Zb| Zwi mgayi Mvb ï‡b †bšKvi gwS‡`i `wo †_‡g †hZ| GKw`b beve wmivR-D`-†`šjv M½vi Dci w`‡q eRivq hwvQ‡jb| wZwbI eRiv _wwg‡q gb f‡i ivgcồnv‡`i Mvb †kv‡bb| Zwi gb AwZkq Z.ß nq|

k'vgv gv wQtjb ivgcBnvt`i a'vb-Ávb| Avnvti-wenvti, kqtb-'ĉtb wZwb i'aygvtqi K_vB wPš⊬KitZb| Ab'' †Kvtbv wKQj cBZB Zwi †Kvtbv AvMBn wQj bv| wZwb nvtZ KvR KitZb, gţL k'vgv gvtqi bvg wbtZb| GB GKwbôZvi KvitY k'vgv gv-I Zwi GKvš-AvcbRb ntq wMtqwQtjb| Kb'vitc wZwb ivgcBnvt`i wbKU aiv w`tqwQtjb| NUbwW Gi€:

GKw`b ivgcönv` N‡ii †eov ewawQ‡jb| Aci cvk †_‡K †g‡q RM`xk¦ix Zw‡K mvnvh¨ KiwQj| GK mgq eq‡mi Pvcj¨ekZ RM`xk¦ix †Lj‡Z P‡j hvq| ZLb gv k¨vgv †g‡qi iɛ a‡i G‡m ivgcönv`‡K Kv‡R mvnvh¨ K‡ib| A‡bK¶Y c‡i RM`xk¦ix G‡m †`‡L evevi †eov ewav n‡q †M‡Q| †m evev‡K me L‡j ejj| ZLb ivgcönv` eyS‡Z cvi‡jb k¨vgv gv-B Zvi †g‡qi iɛ a‡i G‡mwQ‡jb| ivgcônv` gv-gv e‡j WvK‡Z jvM‡jb| fw³fv‡e Zwi `‡PvL w`‡q Akö Mwo‡q co‡Z jvMj|

ivgcồnyt`i mvabv Pj‡Z jvMj | Mfxi †_‡K Mfxţi | ivZw`b wZwb ïaygvţqi wPšvqB gMœ_v‡Kb | Zwi GB GKwbô mvabvq GKw`b gv Gţm †`Lv w`ţjb | Pviw`K AvţjwwKZ Kţi wZwb ivgcồnyt`i mvgţb Gţm `wovţjb | ivgcồnv` gvţqi PiţY c∳ûvÄwj Ac♥ Kiţjb | Zwi mvabv wm™ nţjv | gvZi.ţc Ckţi mvabvi th `"óvš—ivgcồnv` ⁻′vcb Kiţjb, Zv-B cieZ¶Kvţj knigKò, evgvţ¶cv coţvL mvaKţK G mvabvq DØy™ Kţi |

i vgcồn` gvZmvabv Ki‡Z wMtq th-me k vgwm½xZ i Pbv Kti‡Qb, Zv evsj v m½xZRMtZ GK Agj m m ú` | Zwi Mvb¸tj v Ôi vgcồn` xỗ Mvb bvtg cwi wPZ | Gi ga v tq thgb Ckti mvabv nq, tZgwb Rb¥ vÎ x gvtqi cồZI ktw Ávcb Ki v nq | cw_extZ gv nt Qb m švtbi KvtQ metPtq Avcb | GB wPš⊬t_tKB nqtZv i vgcồn` Cktt gvZÁvtb Avi vabv KtitQb | 1785 wLtóvtã GB gvZmvaK Bntj vK Z WM Ktib |

wk¶v: ivgcčnv‡`i Rxebx †_‡K Avgiv c<u>ö</u>‡gB †h ^bwZK wk¶wU cvB Zv n‡jv, GKwbôZv| GKwbô_vK‡j †h-†Kv‡bv Kv‡R mdj nlqv hvq| wØZxqZ Ck¼‡K gvZi.‡c mvabv Ki‡j Rb¥`vÎx gv‡qi cůZl k™v Ávcb Kiv nq| ZvB GKwbôZvïayagPPA †¶‡ÎB bq, Rxe‡bi me Kv‡RB _vK‡Z n‡e| RvMwZK wel‡qi cůZ wb‡jAfntq GKwbôfv‡e Avgv‡`i me KvR Ki‡Z n‡e|

`jxq KvR : mvaK ivgcḃnv‡`i Rxe‡bi NUbvewj Ges Gi wk¶v wPwęzZ Ki∣

Av` k®RxebPwi Z

cW 17, 18, 19 I 20 : cFyRMØÜz

1871 wLłóvţãi 17 tg cwðget½i gynk®vev` tRjvi Wvnvcvov Miðtg Rb\Miðy Kţib cðfy RMØÜz| Zwi wcZv`xbbv_ PµeZ\mathbb{R}, gvZv evgvţ`ex| evev-gvi ZZxq mš\wb wQtjb RMØÜz| `xbbvt_i wcZwbevm wQj dwi`cjtRjvi tKvgicji Miðtg| cùvi fv½tb MiðgwU wejxb ntq tMtj Zwiv tMvwe>`cji Miðtg Gtm emevm Kţib| `xbbv_wQtjb GKRb kv-\alpha eð\pY cw\mathbb{E}z| cw\mathbb{E}tZ^ii Rb^w wZwb Ôb^vqi Zðe Dcwwa tctqwQtjb| Ktg\mathbb{R}cjt\mathbb{T} wZwb gynk®vev` wMtqwQtjb| tmLvtb AwZ Aí eqtm Zwi \nit vi gZ\vec{z} nq| RMØÜ\vec{z} Zub ^kke Ae^v| vi gZ\vec{z} tevb w`M\mathbb{M}\vec{z} tevb w`M\vec{z} tevb w`M\mathbb{M}\vec{z} tevb w`M\mathbb{M}\vec{z} tevb w`M\mathbb{M}\vec{z} tevb w`M\vec{z} tevb w`M\ve

RMØÜi eqm hLb cuP eQi, ZLb Zui wcZvi gZi nq| Gi KţqK gvm ci tMwe>`cj MôgwUI cÙvi fv½ţb cţo| ZLb PµeZP cwievi Pţj Avţm dwi`cţii kniZwj eðþYKv>`vq|

RMØÜzdwi`cj †Rjv ~<†ji QvÎ wQ‡jb| cţi wZwb cvebv knţi wMtq covţkvbv Kţib| knţii DcKţÉ wQj GK c@Pxb eUMvQ| Zvi wbţP _vKţZb GK evKwm™ gnvcj¹| gvby ZuţK Û¶ïvcv evevÕ eţj WWKZ| GKw`b Zwi m‡½ mv¶vr nq RMØÜi | RMØÜz ZuţK ej‡Zb Ûeţov wkeÕ| mgq tcţjB RMØÜz Zwi KvţQ thţZb| Gi dţj `Ptbi gtaï fve nţq hvq| RMØÜi †fZţi GKUv cwieZ® Avţm| wZwb tMšiv½ fvţe fweZ nţq fw³aţg® c` iPbv KiţZïi"Kţib| Avi Aemi tcţjB eUMvţQi wbţP wMtq Mfxi aïvţb gMœ nţq thţZb| Gi dţj Zwi covţkvbv ţewk `i GţMvq wb| cvebv kni I kniZwjţZ Zwi GK ZiY f³`j Mţo IţV| RMØÜy ciKZ bvg wQj RMr| wKšyZwi f³iv ZuţK WvKţZb ÛcîFyRMØÜØ eţj | cieZ®Kvţj wZwb GB bvţqB cwiwPZ nţq IţVb|



RMØÜzGKw`b f^3 †`i †0‡o Zx_°åg‡Y †ei nb| wZwb wewfbæZx_°I Måg-M‡Ä nwibvg wewj‡q Dcw⁻'Z nb kåavg e¸¸ve‡b| †mLv‡b Zwi mvabv Pj‡Z _v‡K Mfxi †_‡K Mfx‡i| wZwb kåivavi f^3 n‡q hvb| ivavi bvg ï b‡jB wZwb fv‡e we‡fvi n‡q †h‡Zb|

e; vetb wKQKvj t_tK RMØÜzwdti Avtmb dwi`cţi | 1890 wLôvtã wZwb eðþYKvo`vq Avmb cvtZb | ZLb dwi`cţii DcKtÉ wQj mwl Zvj, ewM`x l bgtk²t`i evm | mgvRcwZt`i `wótZ Zviv wQj NY" l A-úk" | Gt`i Rb" RMØÜzi gb tKt` DVj | wZwb GKw`b evM`xt`i m`ði iRbxtK tWtK cvVvtjb | iRbx Gtj cðfy ZvtK eţK Rwotq aitjb | cðfy Avwj½tb iRbx ab" ntjb | iRbx ejtjb, ÔAvgiv bxPzRwz | mevB Avgvt`i NYv Kti Avi Zwg AvgvtK eţK tUtb wbtj !Õ cðfyZLb ejtjb, ÔtK etjtQ tZvgiv bxPzRwz? gvbţli gta" tKvtbv DPzbxPztbB | mevB mgvb | mevB Ckţii mšvb | tZvgiv mevB ktnwii `vm | tZvgvt`i cvovi mKtjtgvnvš-esk | AvR t_tK tZvgvi bvg nwi`vm tgvnvš+ fyeb g½j nwibvg Ki | mKtj ab" nl | AwPtiB tZvgvt`i mKj `tL NtP hvte | Õ

 $m_{\lambda} p_{g} = \sum_{i=1}^{n} p_{i} = \sum_{i=1}^{n$

côfy K_v Avi e¨env‡i iRbx AwffZ n‡q tM‡jb| wZwb ewo wd‡i mevB‡K G-K_v ej‡jb| mevB wg‡j nwi bv‡g †g‡Z DV‡jb| nwi`vm †gvnvš-Aíw`‡bi g‡a¨B côfy Kcvq côm× c`KxZ®xqv i‡c AvZ¥ckkvk Ki‡jb| ax‡i ax‡i dwi`cyi, ewikvj, h‡kvi côfwZ †Rjvq nwi bvg KxZ¶bi GK A™ØZ mvov c‡o †Mj| côfy nwi bvg KxZ¶bi ga¨w`‡q M‡o I‡V gnvbvg m¤cÖvq| G m¤cÖvq MV‡b hwi Ae`vb †ewk, wZwb n‡jb côfy Abyi³ f³ kůcv` g‡n>`fx|

cwōge‡½I cðfj bv‡gi gvnvZ¥ cwie"vß n‡jv| †mLvbKvi bxPz Rwz wn‡m‡e MY" †Wv‡giv cðfj †cðYvq D¾xweZ n‡jv| †KvjKvZvi †Wvgcwj i— ewm>`v‡`i g‡a" msKxZ\$bi `j M‡o DVj| Zviv n‡q DVj e†RRb| gvbţli AwaKvi wb‡q gvbţli‡c gv_v DPzK‡i mgv‡R Pjvi mvnm †cj Zviv| mgvR cwieZ\$b cðfyRMØÜi GB Ae`vb wPi¯§iYxq|

cốty GKwì b f³‡ì i wb‡q åg‡Y tei n‡q‡Qb| dwiìcyi kn‡ii AbwZì‡i GK R½j vKxY©RvqMvq G‡m wZwb ej‡jb, ÔGLv‡bB Awwg kìA½b cốiZôv Kie|Õ Gici Zwi Ab¢cõiYvq H ¯′v‡bB kìA½b cốiZwôZ n‡jv| GB kìA½‡bB ïi"nq cốtyi M¤ƙiv jxjv| 1309 mv‡ji (1902 wLtóvã) AvIvp †_‡K Avi¤¢ K‡i 1325 mv‡ji (1918 wLtóvã) 16 dvêþ ch\$— 16 eQi 8 gvm cốtyi M¤ƙiv jxjv P‡j| G mgq wZwb wQ‡jb †gŠbx| Gi wZb eQi c‡i 1921 wLtóv‡ã cốtyBnjxjv mseiY K‡ib|

cðfyRMØÜzÔkíkínwiK_vÕ, ÔP>`tvZÕ I ÔwÎ Kvj Õ bv‡g wZbLvbv Mðs' Ges eû KxZÐ i Pbv K‡i †M‡Qb | cðfyRMØÜi K‡qKwU Dc‡`k

- 1. GUv cÿlqKvj, bvg msKxZ®B mZ" | G h‡M GKgvÎ nwibvgB myxó i¶vi Dcvq | tKej nwibvg Ki, nwibvg Ki |
- 2. åóeyr≺ n‡q wcZv-gvZvi g‡b Kó w`‡Z tbB| th msmv‡i kwiš-cvq bv, tm msmvi Z¨vM Ki‡jI kwiš-cvq bv|
- 3. e_v evK¨e¨q `yf`M™ | ciPPP K‡Y©ev Aš‡i ¯'vb w`l bv| ciPPP, ciwb>`v Z¨vM Ki| N‡ii †`qv‡j wj‡L †iL, ciPPP wb‡la|

wk¶v: cðfyRMØÜi Rxebx t_‡K Avgiv GB ^bwZK wk¶v cvB th, me gvbyl mgvb, tKD DPz-bxPz bq| tKv‡bv gvbyl B N;Y" ev A¯úk" bq| mgv‡R mK‡jiB mgvb AwaKvi| wcZv-gvZv‡K Kó w`‡Z tbB| mvab Ki‡Z msmvi Z"WM Kiv jv‡M bv| ciwb>`v, ciPP® fv‡jv bq| G¸‡jv Z"WM Ki‡Z n‡e| GB wk¶v¸‡jv AvgivI Avgv‡`i Rxe‡b tg‡b Pje|

GKK KvR : c@frRMØÜi Dct`kmgn Kxfvte wbtRi Rxetb c@fqvM Kite? `jxq KvR: †Zvgvt`i Rvbv †Kvtbv gnvcji'l ev gnxqmx bvix m¤útK© kwU evK" †jL| Av` k®RxebPwi Z

Abkxj bx

kb⁻⁻′vb cɨY Ki:

- 1. kilKò Rb AeZxY hb
- 2. kPxt`ex wele‡¶i g‡j Kb/vivNvZ K‡i|
- 3. Kvtm bti>`bvt_i AvPitY cKvk cvq
- 4. Rwg`vi `MPPi‡Yi Abmi‡Y Avgiv ¸Yxi Kie|

Wwb cvk t_tK kã ev evK vsk wbtq evg cvtki mt1/2 wgj Ki:

evg cvk	Wvb cvk
1. kilkò	wbfxRZv
2. wbgvB‡qi cwwÊZ¨ cKvk cvq	wb‡Ri †`vI †`Lv
3. kw [−] ∔ fq bv Kţi mZ¨cKvk KivţK eţj	i vgcthv`
4. g‡bvgwj b¨ †i va Kivi fv‡j v Dcvq Av‡M	h y ³Lʇbi Øviv
5. ÔKwei ÄbÕ Dcwa †c‡qwQ‡j b	w`e Áv‡bi AwaKvix
	`MPPiY

ckeţivi msw¶ß DËi `vI :

- 1. tMvtciv tMvKj tQto e; vetb tMj tKb?
- 2. ermvmj Kxfvţe k¾K;òţK nZ~v Kivi †Póv Kţib?
- 3. Kxfvte †Kke wgtki AnsKvtii cZb nq?
- 4. mgv‡Ri Ici cityRMØÜi wk¶vi citve `,óvš-mnKv‡i eY®v Ki|
- 5. mvi`v†`exi wk¶v Avgiv Kxfvte ev-Íte KvtR jvMvtZ cwi?

wb‡Pi ckkęţjvi DEi `vI :

- 1. kłkt.òi Kvjxq bvM `gtbi wk¶v mgvRRxetb Kxfvte c@qvM Kiv hvq?
- 2. ^\ngx weteKvbt>\i wkKvtMrtZ Dc \' \nwcZ e^3Zvi dj\ndj gj \' \nqb Ki |
- 3. Ôcw_exi g‡Zv mn Y PvBÕ Ñ evYxwU D`vniYmn e vL v Ki
- 4. Kxfvte i vgchvt`i mvabv mv_R nq?
- 5. nwiRb m¤cÖvţqi eRRb nţq IVvi Kwnbxi wk¶v e vL v Ki

eûwbePPwb cke

1. wbgvB‡qi wcZvi bvg Kx?

K. †Kke wgka

L. RMbne_wgka

M. bxjv¤î wgka

N. RMrwgka

 $wn > pag^{el} \ ^bwZK \ wk \Pv$ 65

2.	Kvjxq`g‡bi Øviv DcKZ nqÑ K. ejivg M. RbMY	L. kìtkò N. Kwj>`x
3.	Avgvţ`i AvPiY†_‡K†h welq¸ţjv Z i. ciwb>`v ii. wg_~VPvi iii. KZÁZv‡eva	∵wM Kiv DwP Zv n‡jv Ñ
wb‡Pi	†KvbvU mvVK?	
	K) i l ii M) ii l iii	L) i l iii N) i, ii l iii
Abţ"(D`wUc‡o4,5l6b¤^icÕjkoéDËi	`vI :
	-^ûgxi wb‡`Rg‡Zv wbôvi mv‡_ ag¶ nwmg‡L KZ®¨K‡i hvb ZvB mK‡jE	g©l mvsmwiK `vq-`wwqZ _i cvjbKţib kZKţói gţa¨l 3Zw‡Kfv‡jvev‡m
4.	ebkîti AvPiwYK ^ewkţó" wbţPi †Kvl K. gxivevC M. kPxţ`ex	ognxqmx bvixi Av`‡k¶wgj LytRcvB? L. mvi`v‡`ex N. k¨vgvmy`ix
5.	mgvRRxe‡b D³ gnxqmx bvi xi wk¶v	n‡j v Ñ
	i. RMr‡K Avcbvi Ki‡Z tkL, tK[Oci bq
	ii. mvab fRb c <u>Ö</u> g Rxe‡bB K‡i †	•
	iii. th msmv‡i kwrš-cvq bv, tm msm	ni Z"M Ki‡jI kwwš-cvq bv∣
wb‡Pi	†KvbıU mıVK?	
	K) i l ii M) i l iii	L) ii l iii N) i, ii l iii
6.	D ³ wk¶vi mv‡_ ev¯ĺe Rxe‡bi wgj	
	i. w0‡Rb mgv‡Ri mKj‡KB Avcb	•
	ii. gvjv evj¨Kvj †_‡KB wbôvi mv‡_	Rxe‡mev I agRg°K‡i
	iii. msmv‡i Akwmši Kvi‡Y Kgj msn	nvi Z"M Kij, wKšykwuš‡cj bv∣
wb‡Pi	†KvbwU mwVK ? K) i I ii	L) i l iii
	M) ii l iii N)	i, ii l iii

Av` k®RxebPwi Z

mRbkxj cke

1. Aa wcKv wPÎţjLv Kòf³, AZ š-tgavex I AgwqK| wZwb AZ š- wbôvi mvţ_ Aa vcbv Kivi cvkvcwk gvbţli RvMwZK I AwZ\K DbqbgjK M\b'iPbv K\tib| wZwb Ges Zwi m š\tabi weţq Ab eţY m \u2012\u2016 m \u2016 de Kţit | DbwZi K_v fvţeb| D`viZv I fvţjvevmv w`ţq mevBţK nwmgţL Rq Kţib| Zwi GB wbinsKvi Av`k mKjţK AvK\u2016 Kţi| thţKvţbv evawecw\u2016 Avmţj I wZwb Zv nwmgţL Rq Kţib|

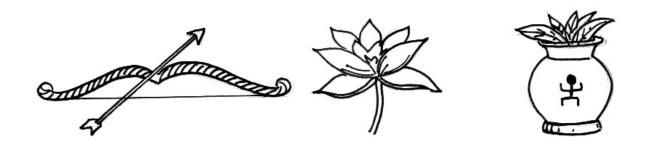
- K. gnvcji 1 KvtK etj?
- L. KòfR‡b bwn RwZ Kjjw`wePviÑevYwUi A_@eyS‡q†jL|
- M. kit%PZ‡b"i Av`‡k® †Kvb w`KwU Aa"wcKv wP·jLvi AvPi‡Y cÖZdwjZ n‡q‡Q, e"vL"v Ki|
- N. wbinsKvi Av`k®mevB‡K AvKó K‡i- DÏxcK I kk\PZ‡b¨i `óv‡ši Av‡jv‡K Dw³wU we‡kHY Ki|
- 2. Awbţgl GKRb D`"gx I cÖYeš-hœK| cvovi Ab" tQţjţ`i wbţq GKwU mwgwZ Mţo bvbv cÖKvi mgvRţmevgjK KvR Kţi | Möţgi tjvţKi A_ms^'vţbi Rb" Zviv GKwU KwUiwkí cÖZôvb Mţo tZvţj | Möţg wk¶we-ſvţii Rb" tQvUţ`i cvVkvjv I eq-< wk¶vţK>`1 Mţo tZvţj | gvbţli wecţ` Avcţ`l bvbviKg mvnvh"-mnţhwwMZv Kţi | GQvov gvbţli gvbwmK I Awz¥K Dbæţbi Rb" mÜ"vi ci KvţRi Aemţi tQţjţ`i wbţq Möţg bvgmsKxZ10 I agmfvi AvţqvRb Kţi | Gfvţe Awbţgl I Zvi mwgwZi bvg Pwwiw`ţK Qwoţq cţo | Awbţgl Zß GB tfţe th mrwPšrl KvţRi qva"ţq cvovi qvbVţK HK"er KţiţZ tcţiţQ |
 - K. \hat{y} weteKvb \hat{i} \hat{i} y1 \hat{i} \hat{j} \hat{j}
 - L. Kxfvţe ÔRxeţmevB CkţiţmevÕÑ`, ´ovš-w`ţq e ¨vL¨v Ki |
 - M. Awbţqţli Kvh@wj ^^vgx weţeKvbţ>` i †Kvb wk¶vi mvţ_ wgj iţqţQ- e vL v Ki |
 - N. ÔmrwPš⊬ I Kv‡Ri Øviv gvbţli gţa¨ GKvZ¥Zv Mţo †Zvjv m¤€Õ Ñ K_wwU ¯^vgx weţeKvbţ>`i wk¶vi cĎiZdjb Ñ gjïvqb Ki|

 $un_{p}^{g} = \int d^{g} d$

Aóg Aa "vq

wn>`pag@l ^bwZK gj"teva

ag@vj‡bi ga" w`tq ^bwZK wk¶v AR® Kiv hvq| G cȳ—ţKi cwVZ Aa"vqmgn t_‡K Avgiv tRţbwQ, ^bwZKZv MVţb ag®LţeB mnvqK| G Qvov Z"WM-wZwZ¶v I `qvi g‡Zv ^bwZK ¸‡Yi `,óvšgjK agxQ DcvL"vţbi m‡½I cwiwPZ nţqwQ| G Aa"vţq Avgiv D`viZv, cţivcKvi, mrmvnm I cigZmwnòzv cðfwZ ^bwZK gj"ţevamgn Ges G¸ţjv AR\bi ¸iZim¤úţK\ealpha AwbwZ KZvi cvkvcwwk gv`Kvmw³i g‡Zv GKwU A\bwZK KvR Ges Zv t_ţK weiZ _vKvi Dcvq m¤úţK\ealpha R\bartet b G KvRţK Avgiv N,Vv Kie|



G Aa vq tk‡l Avgiv-

- ag@l ^bwZK wk¶vi cvi ~úwiK m¤úK@e~vL~v Ki‡Z cvie
- D`viZv, cţivcKvi, mrmvnm, cigZ-mwnòZv G ^bwZK gj "ţeva ţj v wn>`paţg\P Avţj vţK e "vL"v Ki‡Z cvi e Ges G gj "ţeva ţj v Abţkxj ţbi ţiZi I Dcvq eY\Bv Ki‡Z cvi e
- gv`K I gv`Kvmw³i aviYv e vL v Ki‡Z cvie
- gv`K †meb A%bwZK KvR- e¨vL¨v Ki‡Z cvie
- gv`K MbY †_‡K weiZ _vKvi Dcvq eYbv Ki‡Z cvie
- mwgwwRK Rxetb ^bwZK AvPiY KitZ DØyr</br>

cvV 1 : ag@l ^bwZK wk¶vi cvi ~úwi K m¤úK®

mZ", mshg, Atµva, ¶gv cðfwZ atg\$`kwUj¶Y itqtQ| G¸tjv GK-GKwU ^bwZK¸Y| whwb ^bwZK¸Y¸tjv AR® Ktib Ges Rxetb I mgv‡R cðjqvM Ktib, wZwb awgR etj wetewPZ nb| tjv‡K Zv‡K fvtjv gvbyl etj | wZwbB mgv‡Ri Ávbx gvbyl|

Ávb †Kej AR® Ki‡jB nq bv, Zv‡K ev¯—ţe c@qwM Ki‡Z nq| myZivs ag@k¶vi ga¨w`ţq Avgiv †h Ávb jvf Kwi, Zv‡KI Rxe‡b I mgv‡R c@qwM Ki‡Z nq| Avi hLb ag@ţ‡K cvI qv Ávb wb‡R‡`i Rxeb I mgv‡R c@qwM Kwi, ZLb Zv nq ^bwZK AvPiY| ag@†Kej AvPvţi I AvbyôwwbKZvq mxgve™ bq| ag@GKw`‡K ÔAvZ\\$gv¶vqÕ A_@`wb‡Ri wPigw³ I kwwši Rb¨| Ab¨w`K †_‡K Zv ÔRMw×ZvqÕ- RM‡Zi ÔwnZÕ A_@`Kj¨vţYi Rb¨| D`vniY¯îє ejv hvq, Rxţei g‡a¨ AvZ\\$i‡c Ck\\$i Ae¯′vb Kţib-G agx@ wk¶v Awwg MbY Kijvg Ges Gi g‡a¨B †_‡g _vKjvg| Zv‡Z †Kv‡bv jvf †bB| hw` Awwg Rxţei g‡a¨ AvZ\\$i‡c Ck\\$i Av‡Ob †R‡b Rxe‡K Ck\\$i Áv‡b kbe\\$v Kwi Ges Rxţei †mev Kwi, ZvnţjB †m agx@ Ávb AR® mv_R nţe|

GLv‡b $ag@k\Pv wQj : Rxe‡K Ck‡i e‡j we‡ePbv Ki‡e| Avi G †_‡K ^bwZK wk¶v cvI qv †Mj : Rx‡ei †mev Kiv DwPZ| myZivs †`Lv hv‡"Q, <math>ag@n‡"Q ^bwZK wk¶vi GKwU Dcvq| Avi bxwZ Qvov †Kej <math>agx@p AvPvi-Aby@vb cvj b Avbp@wbKZv gvÎ|$

^bwZK wk¶v agxq ïf †PZbv‡K RvMŽ K‡i Avi ag°`bwZK wk¶vi wfwˇK `pZi K‡i †Zv‡j | Avgiv GLv‡b `ʻoʻvš--^iє wn>`pa‡g® Av‡jv‡K D`viZv, c‡ivcKvi, mrmvnm I cigZmwnòzv G PviwU- ^bwZK gj¨‡eva m¤ú‡K®Av‡jvPbv Kie Ges ag®l ^bwZKZvi m¤úK®ëvLïv Kie|

GKK KvR : ag@l ^bwZK wk¶vi m¤úK@PviwU D`vni‡Yi gva¨‡g eys‡q tjL|

cw 2 : D`vi Zv

 $\hat{D}^*vi\tilde{0} \ k\tilde{a}wU \ A_{n}^*Q \ gnvb, \ m^3\!4b \ ev \ mvay | \ D^*viZv \ k\tilde{a}wU \ D^*vii \ fve \ tevSvq | \ A_{n}^*D^*viZv \ n^*vQ \ Pwi \ t\hat{1} \ i \ qnZ_i \ ev \ mvavZv |$

huiv mvay huiv gnvb, Zuiv Kx K‡ib? Zuiv mKj gvbJ‡K mgvb g‡b K‡ib| abx-ubað, cwÊZ-gŁ $^{\mbox{mevB}}$ Zu‡`i Kv‡Q mgvb gh $^{\mbox{p}}$ v cvq| mKj a‡g $^{\mbox{p}}$ mKj m $^{\mbox{w}}$ v‡qi gvbJ Zui Kv‡Q mgvb| D`vi e $^{\mbox{w}}$ i cwiPq w $^{\mbox{p}}$ tZ wM‡q ejv n‡q‡Q| D`viPwiZvbvs Zz em‰ae KtJ $^{\mbox{p}}$ Kg&| G K $^{\mbox{v}}$ i A $^{\mbox{en}}$ ‡jv, D`viPwiZ e $^{\mbox{w}}$ 3‡`i Kv‡Q cw $^{\mbox{ex}}$ ti Kv‡Q cw $^{\mbox{ex$

Kvtjv Avi atjv ewnti †Kej wfZti mevi mgvb ivOv

GB th, gvbţli gţa" tf`vţf`nxb tPZbv GţKB eţj D`viZv| myZivs D`viZv GKwU ^bwZK ¸Y Ges aţg\PA½| D`viZv e"w\si PwilţK Db\z Kţi| D`vi e"w\si KLbl GUv tcjvg bv, lUv tcjvg bv eţj nv-ûZvk Kţib bv| wZwb wbţRţK KLbl ew\hat Z teva Kţib bv| cvlqvţZ bq, t`lqvţZB Zwi Avb>`| D`viZv gbţK ckwisţZ fwiţq t`q|

wn>`pag®l ^bwZK wk¶v 69

Ab`w`‡K e`w³-ft_P wPšy-Avgyt`i gb‡K msKxY[©]Kţi †Zvţj | ZLb Avgiv mgv‡Ri Ab`vb`‡`i -ft_P K_v, mţLi K_v Ges g½ţji K_v ftţj hvB | Zv‡Z mgv‡Ri Db**w**Z I AMMwZ evavMÖ-nq | myZivs mgv‡Ri †¶ţÎ I D`viZv LpB ¸i*Zç¥P

wn>`yagMismg‡n D`viZvi A‡bK DcvL"vb i‡q‡Q| Fwl ewkô evievi wek∤wgţîi cûZ D`viZv †`wL‡q‡Qb| †`eZv‡`i g½ţji Rb"`axwPgwpbi AvZ¥Z"v‡Mi D`viZv "YP¶†i†jLv i‡q‡Q|

AvgivI Avgvt`i AvPitY D`viZvi cwiPq t`e| Actii mţL mţLx ne, Actii `ţtL `ţtLx ne| Zvntj Avgvi e`w³PwiÎ DboZ nţe| mgvtRiI g½j nţe|

GKK KvR:mgv‡Ri`βRbD`vieïw³wPwe₹ZK‡iZu‡`i¸Y¸‡jv†jL|

cvV 3 : ctivcKvi

GB th Avejt`i cwievtii colZ ivZtji AvPiY, GtKB etj ctivcKvi|

ÔDcKviÔ gv‡b fv‡jv Kiv| c‡ii fv‡jv Kivi bvg c‡ivcKvi| †Kv‡bv ¯⁄qt_P cŒ vkv bv K‡i c‡ii g½‡ji Rb¨ th KvR Kiv nq, Zv‡KB e‡j c‡ivcKvi|

c‡ivcKv‡ii cwiPq cvB Kwe Kwgbx iv‡qi GKwU KweZvq| wZwb wj‡L‡Qb :

c‡ii Kvi‡Y -^v_% qv ewj

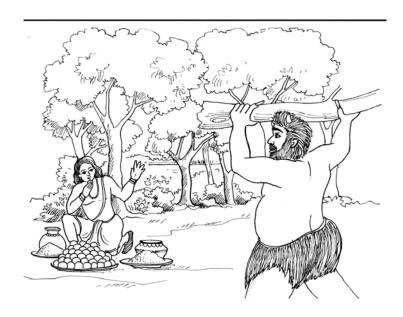
G Rxeb gb mKjB \ullet vI,

Zvi g‡Zv my_ †Kv_vI wK Av‡Q

Avcbvi K_v fwj qv hvl |

cţivcKvţii ga w tql Rxţei tmev Kiv nq| thţnZz Rxţei gţa AvZ\viţc Ckţi Ae vb Kţib, ZvB cţivcKvţii ga w tq, CkţiiB tmev Kiv nq| cţivcKvi Kiţj e w D vi nq| Zvi gţb ckws-Avţm| KviY cţivcKvi Kivi gţa GK aiţbi AvZ\ZwB AvţQ| cţivcKvţii ga w tq Rxţei tlkó t nq| cţivcKvix Ges DcKZ e w g gţa v v cwz nq cluzi e Ub ZvB e w Rxeb l mgvţRi t t t cţivcKvi ewjô fwgKv cvjb Kţi|

gnvfvi‡Z Av‡QÑGK`v GKwU iv¶m GK MÖtg G‡m Lye AZ¨vPvi ¨ii"Kij | iv¶mUvi bvg ÔeKiv¶mÕ|



tm cůZw`b A‡bK gvby I MncwjZ cï AvµgY K‡i tg‡i tdjZ| Zvici wKOztLZ, wKOzc‡o _vKZ| Mů‡gi gvb‡liv ZLb eKiv¶m‡K Ab‡iva Rvbvj, ÔcůZw`b cůZ ewo t_‡K GKRb K‡i gvby t`e| Gfv‡e GZ tjvK, GZ cï tg‡i tdj bv| eKiv¶m Zv‡Z iwnR n‡jv|

GKw`b GK cwievtii cvjv Gtjv| H cwievi t_tK GKRbtK iv¶tmi Lv` ntq gitZ nte|

ZLb gv Křistmin cvĚteiv cuPfvBÑ hyrawôi, fxg, ARP, bKj I mnt`eÑ H ewotZ wQtjb | KvbwKwU ïtb GwMtq tMtjb Kyšk-|

H cwievi †_‡K eKiv¶‡mi Lv`¨wn‡m‡e hvi hvlqvi K_v wQj, gv Kšxi Abţiv‡a cyl̂ fxg Zv‡K i¶v Ki‡j b| eKiv¶m‡Kl †g‡i †dj‡j b| Mögevmxivl wec` †_‡K gy³ n‡j v| fxţgi G AvPiY cţivcKvţii `øvš‡

AvgivI cţivcKvix nţev | Zvnţj Avgvţ`i PwiÎ Db@Z nţe | mgvţRi Ab~vb~ gvby I DcKZ nţe |

`jxqKvR:ci‡cvKv‡iicwPwU`,óvš-wPwszKţiGic@FveţjL|

cvV 4 : mrmvnm

mvnm kãwUi gvtb nt"Q fq bv tctq tKvtbv KvR KitZ GwMtq hvIqv| wbtRi wec` nte tRtbI Kj¨vYKi tKvtbv KvtR Swctq covi th cëvë, Zvi bvg ÔmrmvnmÕ| Rxetb Pjvi ct_ mrmvnm t`Lvtbvi cÖqvRbxqZv itqtQ| mrmvnm gtbvej evovq| wbfRkZvi mt½ cÖZKj cwitetki g\$LvgywL`wovtZ tkLvq|

 $\text{un} \geq \text{pg}^{\text{Gl}} \cdot \text{buZK} \text{uk} \cdot \text{fl}$ 71

mej hLb `ppji Ici AZ vPvi Kti| ZLb mrmvnmx `ppji ct¶ `wovb| Zvi Rb jovB Ktib|

gnvfvi‡Z Av‡Q, evjK Awfgbÿ mrmvnm †`wL‡qwQ‡jb| ivgvqY, gnvfviZ, cyjvY cðfwZ agMðiš' mrmvnm †`Lv‡bvi eû `,óvš-i‡q‡Q| †`k‡K i¶vi Rb¨ mrmvnm †`wL‡qwQ‡jb Rbv, cëxi I we`jv cöyL|

Avgv‡`i wcdq gvZ.f.wg evsjv‡`‡ki ~^vaxbZvi Rb~ gyv³‡hv~~viv ZrKvjxb cwK~—v‡bi nvbv`vi ewnbxi wei‡r~d `wwo‡qwQ‡jb| gyv³‡hv~~vt`i A~ej †ewk wQj bv| wKšy-Zu‡`i e‡K wQj mrmvnm| ZvB mrmvnm †`k‡cdg‡Kil GKwU ^ewkó~| mrmvnm a‡g $^{\circ}$ A½ Ges GKwU ^bwZK _Y|



GKK KvR : mrmvnm cök\$bi PviwU t¶î wPvezZ Kţi †Zvgvi fwgKv Kx nIqv DwPZ ţjL|

cvV 5 : cigZmwnòZv

Avgiv gvbyl | gvbyl wntmte Avgvt`i ctZ"tKiB wbR^^ Ávb AvtQ, eyu× AvtQ, RMr-Rxeb m¤útK9nbR^^aviYv AvtQ | wbR^^gZ AvtQ |

Avgvi thgb wbR^gZ AvtQ, tZgwb Atb"iI wbR^gZ AvtQ| wKšymvaviYZ Avgiv Kwi wK, Avgiv Avgvt`i wbR wbR gZtKB eo Kti t`wL| Atb"i gtZi _iZiw`B bv| Atb"i gZ Dtc¶v Kwi| Avi Gi dtj Avgvt`i gta" wetiva t`Lv t`q| wetiva nvbvnwb ch\\$-Movq| wKšyAvgiv hw` Atb"i gtZi mvieËv etS wm\\$-M\b\Y Kwi Zvntj tKvtbv wetiva NtU bv| eis mKtji g½j nq|

GB th, Atb"i gZtK kë™ Kiv, Atb"i gtZi cüZ mnbkxj nIqv GtKB etj cigZmwnòZv|

cw_extZ AtbK gZ, AtbK c_ AvtQ| ag@vjtbi t¶tÎl bvbv gZ l ct_i mwó ntqtQ| mKj gZ l c_tK, mKj ag\kitev Rvbvtbvi ga`w`tq cigZmwnòZv ckkvk cvq| c\kitevZmôZ ng m¤úxwZ|

kĎivgKò cignsm‡`e Lye mnR K‡i e‡j‡Qb : hZ gZ, ZZ c_| Dcv‡m¨i bvg Ges Dcvmbv I RxebvPi‡Yi c™wZi g‡a¨ wewkóZv wewfbœag@ţZi D™ê NwU‡q‡Q| Avm‡j D‡Ïk¨ mK‡jiB GK| Zv n‡″Q m°ovi Kcv jvf Ges Rxe I RM‡Zi Kj¨vY|

kilg`&Me`MxZvq fMevb kilKiO ARPO‡K e‡j‡Qb-

th h_v gvs c&```‡š-Zvs¯-‰_e fRvg``ng&|
gq eZ\@vbeZ\S-gb\| "vt cv_\me\Rt (4/11)|

A_P th thfvte ev thi‡c AvgvtK Dcvmbv Kti, Awg ZvtK tmfvteB mšnó Kwi| tn cv_©(ARP), gvbţliv mKj ckvti Avgvi ct_iB AbyniY Kti|

cigZmwnòzV mgv‡Ri k;Ljvi Ab¨Zg Dcv`vb| cţii gZţK ¯^xKwZ bv w`ţj GK gţZi mvţ_ Ab¨ gţZi weţiva Awbevh©nţq DVţe| tKej wb‡Ri ag@ZţK tkb gţb Kiţj, Ab¨ ag@ţZi Abymvixţ`i LvţUv Kiv nţe|

G iKg gZvÜZv Rb¥ †`q agPÜZvi | Avi agPÜZv cwiYZ nq tMvowg‡ZÑ wnsm² mv¤ú² wqKZvq | myZivs e`w³Rxeb, mgvRRxeb I iv‡ó¹i †¶‡Î cigZmwnòzv GKwU įi*Z祩`bwZK \Y, a‡gPI A½|

GKK KvR : mwnòzv cük\$bi cuPvU †¶î uPvęz Ki|

cw 6: D`viZv, c‡ivcKvi, mrmvnm I cigZmwnòZv- $G`bwZK ¸Y ¸‡jv Abykxj‡bi ¸i<math>Z_i$ I Dcvq|

D`viZv gvbyl‡K gnvb K‡i | c‡ivcKvi Ki‡j mgv‡Ri g½j nq| D`vi e¨w³i GKwU ¸YI Avevi c‡ivcKvi Kivi g‡bvfve | Ab¨w`‡K c‡ivcKvi Kiv D`vi e¨w³i GKwU ^ewkó¨ | GKwUi m‡½ Av‡iKwU RwoZ |

D`viZvI cţivcKvţii ga" w`ţq ag@cwjZ nq Ges ^bwZKZv AR® Kiv hvq|

mrmvnm n‡"Q fv‡j v Kv‡R mvnm †`Lv‡bv| `‡ói `gb, b¨vqwePvi, †`ki¶v BZ¨w` †¶‡Î mrmvn‡mi c#qvRb| cigZmwnòZv m¤úðwZ I kwš‡ Ab¨Zg Drm| cigZmwnòZv mgvR‡K mjk;Lj iv‡L| hLbB cigZmwnòZvi Afve N‡U, ZLbB D™ê N‡U mv¤ú³ wqKZv I msKxYØvi| mjZivs kwš, m¤úðwZ I k;Ljvi †¶‡Î cigZmwnòZv ewjô fwgKv cvjb K‡i|

`jxq KvR : ÔD`viZv, c‡ivcKvi, mrmvnm I cigZmwnòzZvB e¨w³Pwi·K Dboz K‡iÕÑ Dˇii ^c‡¶ hyv³ `vI|

cvV 7 : qv K tmeb A%bwZK KvR

Gevi GKwU A%bwZK Kv‡Ri K_v eje, hv †_‡K Avgv‡`i weiZ _vK‡Z n‡e| Zv n‡j v gv`K †meb| gv`K n‡"0 Ggb wK0z wRwbm, hv †bkvi mymó K‡i| †hgb - wewo, wmMv‡iU, ZvgvK, g`, MwRv, †n‡ivBb, c"v‡_wWb, †dbwmwWj BZ"w`| G0vov N‡gi II ja bvgK †PZbwkw_j Kvix wK0z II ja I gv`K wn‡m‡e e"eüZ nq|

gv` Kvmw³

gv`Kvmw³ ej‡Z tevSvq gv`K `‡e"i lci wbf®kxjZv Ges Mb‡Yi HKwsK AvMb|

 $\text{un} \geq \text{pg}^{\text{Gl}} \quad \text{buZK uk} \, \text{TV}$ 73

gv`K tmeb I A%bwZK KvR

gv`K tmeb GKwU A‰bwZK KvR| gv`Ktmeb e`w³i t`tni ¶wZ, Kti gtbi ¶wZ Kti At_P ¶wZ Kti Ges cwievi I mgvtRi Ag½j tWtK Avtb|

†`‡ni ¶wZ

gv`K‡meb Ki‡j bvbv iK‡gi †ivM nq| †hgb, Lvev‡i AinP, e`nRg ev nRgkw³ bó n‡q hvlqv, Acyró, kýmbwji ¶wZ, ¬'vqx Kd I Kwk, nucwb, dmd‡mi K¨vÝvi cďrwZ|

G Qvov ü`**t**ivMI n‡Z cv‡i| wKWwb bó n‡q th‡Z cv‡i|

g‡bi ¶wZ

gv`K †me‡b †bkv nq| gv`Kvm³ Ae⁻′vq we‡eKeyr⊶ †jvc cvq| ZLb gv`K‡mex bv-Ki‡Z cv‡i, Ggb KvR †bB|

Aw_₹¶wZ

gv`K`e" µ‡qi Rb" gv`K‡mex‡K cðiZw`b cði A_e"q Ki‡Z nq| G A_e"†hvMvo Ki‡Z gv`K‡mex gv-evev AvZ*kq^R‡bi Ici Pvc cðiqvM K‡i| KLbI KLbI Am`ycvq Aej¤^b K‡i gv`‡Ki Rb" A_emsMði K‡i| myZivs gv`K †meb Ggb GKwU A%bwZK KvR, hv AviI A‡bK A%bwZK Kv‡R wj ß K‡i|

gv`K tmetb cwievi I mgvtRi Ag½j nq| cwievti kwwš-_vtK bv| gv`Ktmex KLb Kx Kti etm Zvi Rb¨ cwievtii mKj m`m¨ DwØMœ_vtK| mgvtRI Gi c@Fve cto|

wn>`pag®Abymv‡i gv`K tmeb ev tbkv Kiv gnvcvc| gv`K‡mex gnvcvcx| tKej Zv-B bq| gv`K‡mexi m‡½ m¤úK®ivLv ev PjvI gnvcvc| myZivs gv`Kvmw³ t_‡K Avgiv weiZ _vKeB|

gv`Kvmw3 † ‡K weiZ vKvi Dcvg n‡"Q :

- 1. gv`K‡meb gnvcvcÑ agx@ G Abkvmb †g‡b Pjv
- 2. gv`K †meb A%bwZK KvRÑ mZivs ^bwZK w`K †_‡KI Avgiv gv`K MbY Kie bv|
- 3. gv`Kţmexi mţ½ m¤úK®'vcb bv-Kiv ev m¤úK®bv-ivLv
- 4. cůZÁvKiv:

gv`K‡K bveje, bwZag[©]g‡b Pje|

Abkxj bx

kb⁻⁻'wb cɨY Ki

- 1. AwRZ Ávb‡K ev¯‡e Ki‡Z nq|
- 2. D`vi Zv gvbePwi ·K K‡i |
- 3. mrmvnm evovq|
- 4. cigZmwnòZv mgv‡R cůZôvi Ab¨Zg Dcv`vb|
- 5. Îgv`K †meb gnvcvcÎ G agx@ Abţkvmb Pje

Wwb cvk t_tK kã ev evK vsk wbtq evg cvtki mvt_ wgj Ki :

evg cvk	Wb cvk
1. ag ^q Kej AvbýpwbKZvq	AvZ¥ZwG Av‡Q
2. D`vi Pwi‡Îi e¨w³‡`i Kv‡Q	bvbviK‡gi †ivM nq
3. c‡ivcKvi Kivi g‡a¨GK ai‡bi	Ab ⁻ Zg Drm
4. gv`K †meb Ki‡j	cw_exi mK‡jBBóKIJg
	mxgve™ bq

wb‡Pi ckœţjvi msţ¶ţc DËi `vl

- 1. Ô^bwZK wk¶v agx@j ï f †PZbv‡K RvMZ K‡iÕÑ Dw³wU `,óvš-w`‡q e¨vL¨v Ki |
- 2. D`vi Zv avi YwU D`vni Ymn e"vL"v Ki |
- 3. Kxfvte ctivcKvi Kiv hvq?`,óvš-mnKvti e vL v Ki |
- 4. b¨vq cÖZôvq mrmvn‡mi ¸i″Z¡`,óvšmn e¨vL¨v Ki||
- 5. gv`K tmetb t`tni Kx ¶wZ ntZ cvti ?

wb‡Pi ckkętjvi DEi `vl

- 1. $ag^{q} \hat{b}wZKwk^{q}vi cvi^{u}wiKm^{u}iK^{q}viiYmn e^{v}L^{v}Ki$
- 2. mgvR I e w³Rxe‡b D`viZv Abykxj‡bi cðfve we‡k⊬ Ki∣
- 3. mgvRRxetb ctivcKvtii Dcvq wPw₹Z Kti cΦqwM t`LvI |
- 4. gv`K tmetbi Av_9mvgwRK ciFve wetkHY Ki|

 $m_{\gamma}^{g} = -b_{\gamma} \times k_{\gamma}$ 75

eûwbePPwb cikæ

1. AvZ\\\Z\\\v\text{Mi ^bwZK \text{ }PZbv\\\\ Kx \\ etj \?

K. $c \pm i v c K v i$ L. $D \cdot v i Z v$ M. m Z'' e w w i Z v N. K Z @ w b o i v

- 2. $mrmvnm ej \ddagger Z tevSvq \tilde{N}$
 - i. †Kv‡bv Kv‡R fq bv-cvI qv
 - ii.Rxe‡bi S**w**K wb‡q wec` †gvKv‡ejv Kiv
 - iii. `petji ct¶ b"vtqi Rb" jovB Kiv|

wb‡Pi †KvbwU mwVK ?

K. i l iiM. i l iiiN. i, ii l iii

K. kit ivgP> aM. kit weRq K.òN. kit ivgchv`

wbtPi Abt"Q`wU cto 4 l 5 b¤^i ctkie DËi `vI

mvab gy_vRPMZ `#MPmte weRqv`kgxi w`b ga¨v枣tfvtR Mitgi mKj ¯ti gvbyltK wbgšyl Ktib Ges Zvt`i mvt_ etm wZwbl Avnvi Ktib | GtZ Zvi eÜzmytLb PµeZx®wew¯sZ nb Ges Abkxjtb DØyr•t nb |

4. mvab qlvRM AvPitY tKvb YvU clkvk tctqtQ?

K. ¶gv
 M. D`vi Zv
 L. mrmvnm
 N. c‡i vc Kvi

- 5. D³ ¸YwUi Abkxj‡b m‡L‡bi KiYxq Ñ
 - K. $f \not t j i R t b^{"} K v D t K k w b v t^ l q v$
 - L. Rxetbi SwK wbtq wec`tgvKvtejv
 - M. mKj gvb/l‡K mgvb ghPv cÖvb
 - N. c‡i i g½‡j ¯ℓ_©Z¨W|

mRbkxj cke

- K. $atg^p KqwU j \P Y i tqtQ ?$
- L. Ôagºn‡"Q ^bwZK wk¶vi GKwU DcvqÕÑ e"vL"v Ki|
- M. cłex `ţËi Pwiţî †Kvb ^bwZK ¸YwU dţU DţVţQÑ Zv ^bwZK gj¨ţeva wk¶vi AvţjvţK e¨vL¨v Ki|
- N. cwi evi I mgv‡R k;Lj v Avbq‡b D 3 ¸YwUi fwgKv gj $\ddot{}$ vqb Ki |

mgvß



জীবনের উদ্দেশ্য ঈশ্বর লাভ -শ্রী রামকৃষ্ণ

শিক্ষা ও জ্ঞান অর্জনের মাধ্যমেই জীবনে সাফল্য অর্জন করতে হবে
– মাননীয় প্রধানমন্ত্রী শেখ হাসিনা



২০১০ শিক্ষাবর্ষ থেকে সরকার কর্তৃক বিনামূল্যে বিতরণের জন্য

মুদ্রণে: