

## K ]YbYf; fØbY ZcfXYfb a Y\f: fUi Yb ]b XYf Dc`]h]\_ ' 'K Ug' Yhnh' [ YgWX ]Y\h°

8]Y'K]YbYf'; fØbYb'ZcfXYfb'Y]bY'[YgWX`YWXhYf[YfYWXhY?`iVZÒfXYfib[ž'ia'XYb':fUiYbUbhY]`']a'; YaY]bXYfUh'niYf\Ò\Yb"



G]a a Yf]b[ ž'² ghYffY]W '! 8]Y'K ]YbYf'; fØbYb'\UVYb'\_Øfn`]W
Y]bYb'VYa Yf\_Ybgk YfhYb'J cfghc» 'ZØf'a Y\f
; YgW\`YW\hYf[ YfYW\h][ \_Y]h']a '; Ya Y]bXYfUh'i bhYfbca a Yb"'G]Y
a OW\hYb'X]Y'Z]bUbn]Y``Y'?`i VZOfXYfi b[ 'Ub'XYb': fUi YbUbhY]``]b
XYb'dc`]h]gW\Yb'; fYa ]Yb'\_cddY`b"'8YfnY]h'`]Y[ h'XYf': fUi YbUbhY]`
]a 'bYi '[ Yk À\`hYb'K ]YbYf'; Ya Y]bXYfUh'VY]'(%'DfcnYbhž'k Ug
nY][ hžXUgg']b'XYf' < Ui dhghUXh'Xi fW\Ui g': cfhgW\f]hhY'Yfn]Y`h
k i fXYb"'8YbbcW\VYhcbYb'X]Y'; fØbYbžXUgg'X]Yg'b]W\h
Ui gfY]W\Yž'i a 'Y]bY'[ YfYW\hY'dc`]h]gW\Y'J YfhfYhi b[ 'ni
[ Yk À\f`Y]ghYb"'@Ui h'a Y]bVYn]f\_"Uh'VYhfUW\hYb'X]Y'; fØbYb'g]W\
i bX'X]Y'BYcg'U`g'X]Y'Y]bn][ Yb'DUfhY]Ybž'X]Y'@VYf') \$'DfcnYbh
: fUi YbUbhY]``VY]'XYb'5V[ YcfXbYhYb'j YfZØ[ Yb"

 $8 \ Yf' 5b \ hfu[\ 'ni \ f'[\ YgWX\ 'YWX\ hYf[\ YfYWX\ hYb'?\ 'i\ VZOfXYfi\ b[\ z'XYf']a$   $;\ Ya\ Y]b \ XYfUh'Y]b[\ YVfUWX\ h'k\ i\ fXYz'ZUbX''YXcWX'_Y]bY'Ni\ gh]a\ a\ i\ b[\ i\ bX'k\ i\ fXY'UV[\ Y`Y\setminus bh'' 6YgcbXYfg'gWX\ UfZ'_f]h]g]YfhY'X]Y':\ D^2'XYb$   $J\ cfgWX\ `U[\ 'i\ bX'VYnY]WX\ bYhY']\setminus b'U`g'\ j\ c``_ca\ a\ Yb'Ub'XYb'<UUfYb \ YfVY][\ Ync[\ Yb\ '''5_hi\ Y```nÀ\`h'X]Y':\ fY]\Y]h`]WXY'DUfhY]'bi\ f'Y]bY$   $:\ fUi\ 'i\ bhYf']\setminus fYb' \&\&`A\ UbXUhUfYb' Y]b':\ fUi\ YbUbhY]''j\ cb'`YX][\ `]WX \ ('DfcnYbhz'k\ Ug'X]Y'8YVUhhY' ØVYf'I\ b[\ Y]WX \ Y]hYf'Ub\Y]nh''$ 

## ; `Y]WX ghY``i b[ ']a ': c\_i g

± XYf'VfY]hYfYb'8]g\_i gg]cb'i a ': fUi Yb']b'XYf'Dc']h]\_'nY][h'g]W\ž
XUgg'XYf'? Ua dZi a '; 'Y]W\ghY'`i b['b]W\h'bYi ']gh''6YfY]hg'gY]h'XYf
9]bZØ\fi b['XYg': fUi Ybk U\`fYW\hg'bUW\'XYa '9fghYb'K Y`h\_f]Y[']b
8 Yi hgW\`UbX'g]bX': fUi Yb'ZØf'['Y]W\Y'dc']h]gW\Y'FYdfÀgYbhUh]cb
i bX'9]bZi ggbU\a Y'Y]b[YhfYhYb''K]Y'X]Y'VdV''XY']bZcfa ]Yfhž'k]fX
\Yi hni hU[Y'cZh'ØVYf'X]Y'j YfgW\]YXYbYb'8]a Ybg]cbYb'XYf
FYdfÀgYbhUh]cb'X]g\_i h]Yfh'XYg\_f]dh]j ž'gi VghUbn]Y``ž'gma Vc`]gW\
i bX'Zcfa U`''8Yf'XYg\_f]dh]j Y'5bgUhnž'U`gc'XYf'5bhY]`'j cb': fUi Yb']b
dc`]h]gW\Yb'Ÿa hYfbž'V`Y]Vh'bUW\'k]Y'j cf'Y]bY'[fc»Y
<YfUi gZcfXYfi b[''

## $Dc^{h}gWXYFYU_hcbYbibX5igV^{W}$

 $\label{eq:Kandalanda} $$K \ \mathring{A}\fybX'X]Y': D^2 '[Y[Yb'EichYbfY[Y'ib[Yb'cddcb]Yfhži]b]YfghØhnYb'X]Y'BYcg'XYb'JcfgWX'U['XYf'; fØbYb'ibX'gY\Yb']bXYf'; `Y]WXghY``ib['Y]bY'BchkYbX][_Y]h'nif': \mathring{O}fXYfib['XYfXYac_fUh]gWXYb'HY]`\UVY''5i WX'X]Y'GD^2 'j YfkY]gh'Ui Z'VYfY]hgXifWX[YZØ\fhY'5bdUggib[Yb'XYf'?`iVZ\mathring{O}fXYfib['ž'X]Y'Ui Z'X]Y: \mathring{O}fXYfib['XYf':fUiYbVYhY]`][ib['UVn]Y`Yb'''8]Y'^2 J D'\]b[Y[Yb'']$ 

ghY``h`g]W\`YVYbZU``g`[Y[Yb`X]Y`[YZcfXYfhYb`ŸbXYfib[Yb`ibX VYhcbhž'XUgg`X]Y`KU\`YbhgW\Y]Xib[`XYf`KÀ\`Yf`fYgdY\_h]Yfh kYfXYb`gc``hY"

8 ]Y '8 Y V UhhY 'ØV Y f'; Y g W 'Y W hY f [ Y f Y W h] [ \_Y ]h']b 'X Y f'Dc ']h]\_']b K ]Y b 'n Y] [ hž k ]Y k ]W h] [ 'Y g']ghž ØV Y f'E i chY b i b X : Òf X Y fa U » b U \ a Y b 'b U W ni X Y b \_Y b " 8 ]Y 'K ]Y b Y f'; f Øb Y b 'Z c f X Y f b b] W h' b i f 'Y ]b Y 'Z U] f Y f Y J Y f hY ]' i b [ 'd c `]h]g W Y f' A U W hž g c b X Y f b 'U i W \_c b \_ f Y h Y 'Z ]b U b n] Y ``Y 'A U » b U \ a Y b 'n i f '9 f \ Ò\ i b [ 'X Y g : f U i Y b U b h Y] `g" '8 ]Y g Y '8 ]g\_i gg] c b ']gh' b] W h' b i f '`c \_ U ``f Y `Y j U b h / 'g] Y gh Y \ h' U i W 'gh U f \_']a '? c b h Y I h '] b h Y f b U h] c b U `Y f '9 b h k ]W\_`i b [ Y b ž k ]Y X] Y '6 i b X Y ggh] Z hi b [ 'Z Ø f'; `Y ] W gh Y ``i b [ 'U i Z n Y ][ h" '9 g 'V `Y ] V h U V ni k U f h Y b ž k ]Y 'g] W 'X ]Y 'D c `]h]\_ '] b 'X Y b '\_ca a Y b X Y b '\$U \ f Y b Y b k ]W\_Y `b 'k ]f X ž i b X 'c V 'X c W 'b c W 'Y ]b 'I a X Y b \_Y b '] b 'F ] W hi b [ Y ]b Y f '[ `Y ] W V Y f Y W h] [ h Y f Y b 'd c `]h] g W Y b '@ U b X g W U Z h 'gh U h Z] b X Y b U b "

8 YhU]`g	
Cfh	G]a a Yf]b[ ž <sup>-2</sup> ghYffY]WX
Ei Y``Yb	<ul> <li>k k k "a Y]bVYn]f_"Uh</li> <li>k k k "Vi bXYggh]Zhi b[!</li> <li>[ `Y]WX ghY ``i b[ "XY</li> </ul>
	• k k k "VdV"XY

6Yqi WXYb G]Y i bq Ui Z. a Y]b!k ]Yb bYh