

## $GWXU'_Y'$("YffY]WXh'Dc_U'fi bXY.'< Ufh Yf_Aa dZhYf'G]Y["]b'5U'Yb$

Nk Y]h`][ ]gh`GW\U`\_Y`\$( `g]Y[ h`&.\$`VY]a `J ZF `5U`Yb`]a `8: 6! Dc\_U``i bX`dfcZ]h]Yfh`j cb`XYf`5Vk YgYb\Y]h`XYg J]XYcUgg]ghYbhYb"

Nk Y]h`][ ]gh'GW\U`\_Y`\$( '\Uh'Ua 'j Yf[ Ub[ YbYb'GUa ghU[ 'Y]b gdUbbYbXYg'8: 6!Dc\_U`!Gd]Y`'[ Y[ Yb'XYb': ØbZh`][ ]ghYb'J ZF'5U`Yb UVgc`j ]Yfh'i bX']gh'gca ]h`]b'X]Y'bÀW\ghY'Fi bXY'Y]b[ Ync[ Yb"'8 Ug 9f[ YVb]g'j cb'&.\$'a U[ 'Ui Z'XYb'YfghYb'6`]W\_'b]W\h'gdY\_hU\_i `Àf YfgW\Y]bYbž'YXcW\'k UfYb'X]Y'I a gh\AbXY'i bX'X]Y'Gd]Y`k Y]gY Xi fW\Ui g'Yfk \A\bYbgk Yfh"'8]Y'5Vk YgYb\Y]h'XYg'J ]XYc! 5gg]ghYbhYb'fJ 5F \E\Uh'g]W\']b'X]YgYf'DUfh]Y'U`g'Yf\YV`]W\Yg'H\Ya U Yfk ]YgYbž'XUg'X]Y'9bhgW\Y]Xi b[ 'Ui Z'XYa 'D`Uhn'VYY]bZi gghY''

8 UgʻA UhW\ ZUbXʻ]a ʻgc[YbUbbhYbʻGdcfhdUf\_'5U`YbʻghUhhžXYfʻZØfgY]bYʻZYggY`bXYʻ5ha cgd\ÀfY`VY\_Ubbh']ghžXcW\`X]YʻNi gW\Ui YfYf`YVhYbʻ\_Y]bYʻUi ZfY[YbXYbʻGd]Y`nØ[Yʻj cbʻXYbʻ?Òb][gV`Ui Yb"ʻ\dot XYfʻYfghYbʻ<À`ZhYʻdfchYgh]YfhYbʻX]Yʻ5U`YbYfʻGd]Y`Yfʻj Y\Ya YbhbUW\`Y]bYfʻa ]gg]bhYfdfYh]YfhYʻGnYbYʻ]a ʻGhfUZfUi a žʻU`gʻY]b<br/>
<UbXgd]Y``j cbʻ:Y`]dYʻGUbW\Yn`b]W\h'[YU\bXYh`k i fXY"'\dot XYfʻ%' "A]bi hYʻ\AhhYʻXYfʻJZFʻ5U`YbʻY]bYbʻa Ò[`]W\Ybʻ9`Za YhYfni [YgdfcW\YbʻVY\_ca a Ybʻ\_ÒbbYbžʻYXcW\`V`]YV`X]YgYfʻK i bgW\ibYf\Òfh"

#### $Ib[Ykc\bhYIaghAbXYVY]a 8: 6!Dc_U`$

8 Yf'8: 6!Dc\_U`Yf`Ui Vh'XYb'J]XYc!5gg]ghYbhYb'Yfgh'UV'XYa
5 WkhY`Z]bU`Yž'k Ug']b'5bVYhfUWkh'XYf'; YgWkY\b]ggY']b'5U`Yb'U`g
J cfhY]`'ZØf'GWkU`\_Y'[Yk YfhYh'k YfXYb'\_Ubb"'GWk]YXgf]WkhYf': Y`]l
6fmWkž'XYf'bUWk'Y]bYf'qWkk YfYb'JYf`Yhni b['Ua'?fYi nVUbX'Y]bY

 $F @W\_Y \ f'ZY]YfhY \ z'`]Y \ "XYb'i a ghf]hhYbYb' < UbXY`Za YhYf'i bVYghfUZh i bX`hfi [ 'XUa ]h`ni f'?cbhfcj Yfg]hÀh`XYg`Gd]Y`g`VY]"`8]YgYg`: Y\`Yb a cXYfbYf`HYW\b]_'[ UV`XYb`GW\U`_Yfb`X]Y`A <math>O[`]W\_Y]hz']b`XYf'' \%'' A ]bi hY`]b`: @\fi b[ 'ni '[ Y\Ybz'U`g'?YbUb'?UfUa Ub`Y]bYb ?cdZVU``hfYZZYf`Yfn]Y`hY"'5i Z`XYb`YfghYb`6`]W_'gU\`XYf`HfYZZYf fY[i `Àf`Ui gz'U``YfX]b[ g`k Uf'?UfUa Ub`ni j cf`Ui g`Y]bYf 5VgY]hgdcg]h]cb`]bg`Gd]Y``[ Y_ca a Yb"$ 

 $GWWU^*_Y^*S( \ '\_cbbhY^*X]Y^?cbhfc^*Y^*]a^*k Y]hYfYb^*J Yf^*Ui Z'XYg^*Gd]Y^*g b]WWh^*Ui ZfYWWhYf\U^*hYb^*"; YbUi Yf^*[ YgU[ h^*gU\Yb^*X]Y^*GWWU^*_Yf!: Ubg Y]bY^*Y\Yf^*Xi fWWgWWb]hh^*]WWY^@Y]ghi b[ ^]a^*J Yf[ ^Y]WW^*ni^*XYb^*YhnhYb^*VY]XYb^*@][ Ugd]Y^*Yb^*[ Y[ Yb^*9]bhfUWWh^*6fUi bgWWkY][ ^i bX^*%": 7 \\ BØfbVYf[ z^*k c^*g]Y^*gci j YfAbY^*G]Y[ Y^*Y]bZi \fYb^*"^9]b^*k Y]hYfYg^*Hcf [ Y^*Ub[ ^iHcV]Ug^*A c\f^*]b^*XYf^**, "^A ]bi hYz^*k Ug^*XUg^*9f[ YVb]g^*Ui Z^*&.$ Yf\O\hY^*"^?i fnY^*NY]h^*gdAhYf^*\UhhY^*? UfUa Ub^*X]Y^*A O[ ^i]WW_Y]hz^*X]Y : Ø\fi b[ ^ibcWW^*Ui gni k Y]hYbz^*hfUZ^*YXcWW^*bi f^*X]Y^*@UhhY''$ 

± XYf 5 fY b U 'ghUb X 'ZØf 'X]Y 'GWX U`\_Yf 'XYf 'b Yi Y 'Hcf\ØhYf F cb!

H\cfVYb' < c ZZa Ub b 'nk ]gWX Y b 'XY b 'DZcghY b"' < c ZZa Ub b ž XYf j cf

? i fnYa 'Ui g '6 fUi b gWX k Y][ 'j Yfd Z]WX hYh'k i fXY ž 'ZY]Y fhY 'gY]b

DZ]WX hgd]Y`XYVØhž'k Uf 'YXc WX 'b]WX h'X]Y 'YfghY'K U\`ž 'XU 'HfU]b Yf

? UfY`'; YfUYfhg 'g]WX 'ØVYffUgWX Y b X 'ZØf '⇒ gh]b '< YY\_YfYb

Yb hgWX]YXY b '\UhhY'' '8]Y '9 b hgWX Y]Xi b [ Yb 'XYg 'HfU]b Yfg 'i b X 'XYf

5 i Zhf]hh'j cb '< c ZZa Ub b 'k YfXY b ']b 'XYb '\_ca a Yb XYb 'HU[ Yb 'g]WX Yf

XUg 'H\Ya U']b 'XYb 'A YX]Yb 'gY]b"

# < ]ghcf]gW\Y'DUfU``Y`Yb'i bX'VYgcbXYfY 9f]bbYfi b[Yb</pre>

9]b']bhYfYggUbhYf'5gdY\_h'XYg'Gd]Y`g'ZØf'X]Y'GW\U`\_Yf'k Uf'X]Y 9f]bbYfi b['Ub'X]Y'YfZc`[fY]W\Y'Dc\_U`gU]gcb'&\$%\$#%"'8 Ua U`g VY[Ubb'X]Y'FY]gY'YVYbZU``g'a ]h'Y]bYa 'G]Y[']b'5U`Ybž'i bX'X]Y : Ubg'\cZZYbž'XUgg'g]W\X]Y'; YgW\]W\hY'k]YXYf\c`h"'Gc`W\Y bcghU`[]gW\Yb'6Yf]W\hY'ghY][Yfb'X]Y'JcfZfYi XY'Ui Z'X]Y VYjcfghY\YbXYb'<YfUi gZcfXYfi b[Yb']a 'Dc\_U`"

 $8 ]Y GWW U`_Yf'j Yf`]Y * Yb XUg'Gd]Y`ZY`X a ]h'Y]bYa 'G]Y[ ž'XYf'] \ bYb ']b XYb '_ca a YbXYb K cWW Yb 'dcg]h]j ']a '; YXÀWW hb]g'V`Y]VYb k ]fX''$ 

8 c W 'X]Y '5 fh'i b X 'K Y]gY ž'k]Y 'X]YgYf'9fZc`[ 'ni ghUb XY '\_Ua ž'k]fZh : fU[Yb 'b UW 'XYf'@Y]ghi b[gZÀ\][\_Y]h'Ui Z"'9g'V`Y]Vh'UVni k UfhYb ž k]Y 'g]W 'XUg'HYUa ']b 'XYf'b À W ghYb 'F i b XY 'XYg'8: 6!Dc\_U`g gW `U[Yb 'k]fX'i b X 'c V 'g]Y']\fY': cfa 'V]g'XU\]b 'ghUV]`]g]YfYb \_ObbYb"

## GWX U`\_Y`\$( ']a '8: 6!Dc\_U`. '9]b '6`]W\_']b 'X]Y Ni \_i bZh

GWW U`\_Y`\$(`g]Y\h`g]WW`bi b`XYa`bÀWW,ghYb`?Ud]hY``]a`8:6!Dc\_U` [Y[YbØVYf"8]Y`:fU[Y`V`Y]VhžcV`g]Y`]b`XYf`@U[Y`g]bXž`XUg bchk YbX][Y`GY`Vghj YfhfUi Yb`i bX`X]Y`:cfa`Ui g`XYf`@][U`]b`X]Y k Y]hYfY`Dc\_U`fi bXY`ni `ØVYfhfU[Yb"8]Y`Gd]Y`Yf`i bX`XUg HfU]bYfhYUa `g]bX`[YZcfXYfhž`X]Y`f]WW,h][Yb`GWW`ØggY`Ui g`XYa V]g\Yf][Yb`Gd]Y``ni `n]Y\Ybž`i a`]b`XYf`bÀWW,ghYb`Fi bXY`b]WW,h k ]YXYf`Ui Z`À\b`]WW,Y`DfcV`Ya Y`ni `ghc»Yb"

8]Y'GW\U`\_Yf'6i bXYg`][U!GU]gcb']gh'[Ydfà[h'j cb
<YfUi gZcfXYfi b[Yb"BUW\'XYa '5Vgh]Y['Ui g'XYf'YfghYb'@][U
\UVYb'X]Y'JYfUbhk cfh`]W\Yb'VY]'GW\U`\_Y'\$('nU\`fY]W\Y
JYfàbXYfi b[Yb'j cf[Ybca a Ybž'i a 'XYb'JYfY]b']b'XYf'nk Y]hYb
@][U'\_cb\_i ffYbnZà\]['ni '\U`hYb"'HfU]bYf'?UfY`'; YfUYfhgž'XYf']a
Gca a Yf'&\$&' j YfdZ]W\hYh'k i fXYž'k Uf'Ub[YhfYhYbž'i a 'XUg'HYUa
bYi 'ni 'Zcfa ]YfYb'i bX'XYb'K ]YXYfUi Zgh]Y['ni 'Yfa Ò[`]W\Yb"'8]Y
GhfUhY[]Y'i a ZUggh'bYVYb'XYf'=bhY[fUh]cbgUfVY]h'a ]h''\ b[Yb
Gd]Y`Yfb'Ui W\'X]Y'JYfdZ]W\h' b['hU`Ybh]YfhYf'BYi ni [Àb[Yž'i a 'X]Y
A UbbgW\UZh'ni 'j Yfgh\Af\_Yb"

8]Y 'nk Y]hY '@][ U'dfÀgYbh]Yfh'g]WX ']b 'X]YgYf'GU]gcb'U`g'VYgcbXYfg
Ui g[ Y[ `]WX Ybž'k cVY]'A UbbgWX UZhYb'k ]Y '9]bhfUWX h'6fUi bgWX k Y][
i bX 'XYf'%": 7 'B ØfbVYf[ 'YVYbZU``g'ghUf\_'Ui Zgd]Y`Yb'i bX 'X]Y
GWX U`\_Yf'\_cbghUbh'i bhYf'8fi W\_'gYhnYb"'8]Y '9fZU\fi b[ 'i bX 'XUg
HU`Ybh']b 'XYf'GWX U`\_Yf'A UbbgWX UZh'g]bX 'YbhgWX Y]XYbXž'i a ']a
Yb[ Yb'FYbbYb'i a 'X]Y'cVYfYb'HUVY``Ybd`ÀhnY'ni 'VYghY\Yb"'8]Y
Gd]Y`k Y]gY 'XYg'HYUa g'\Uh'g]WX 'i bhYf'; YfUYfhg'k Y]hYfYbhk ]W\_Y`hž
Yg'V`Y]Vh'YXcWX'UVni k UfhYbž'cV'g]WX 'X]YgYf'DfcnYgg'`Ub[ Zf]gh][
Ui gnU\`h"

## : U\_hYb ni f U\_hi Y ``Yb 8: 6!Dc\_U `!GU]gcb

8]Y'8:6!Dc\_U`!GU]gcb`&\$&'#&(`\Uh'VYfY]hg'Y]b][Y
, VYffUgW\ib[Yb'\Yfjcf[YVfUW\h"'HfUX]h]cbY``]gh'XYf'Dc\_U`'XUZØf
VY\_Ubbhž'Ui W\'\_Y]bYfYb'7`i Vg'X]Y'A Ò[`]W\\_Y]h'ni '[YVYbž'g]W\
[Y[Yb'YhUV`]YfhY'HYUa g'Xi fW\ni gYhnYb"'\#b'XYf'YfghYb'Fi bXY'[UV
Yg'a Y\fYfY'\cW\\_UfÀh][Y'5i g[YgW\`cggYbY'k]Y'XUg'8i Y``
nk]gW\Yb'XYa ':7'6UmYfb'A ØbW\Yb'i bX'Y]bYf
5a UhYi fa UbbgW\UZh"8Yf'Dc\_U`']gh'XUa]h'gck c\`'ZØf'[fc\\*Y'U`g
Ui W\'\_Y]bY'JYfY]bY'Y]bY'A Ò[`]W\\_Y]hž'i bj Yf[Ygg`]W\Y'A ca YbhY
ni 'gW\UZYb"

### 8]Y 6YXYi hi b[ XYg J 5F ]a 8: 6!Dc\_U`

#bgVYgcbXYfY^]a :: U```j cb'ghf]hh][ Yb'G]hi Uh]cbYbž'k ]Y
VY]gd]Y`gk Y]gY XYa 'a Ò[`]W\Yb'< UbXY`Za YhYf'XYf'5U`YbYfž'nY][ h
g]W\ž'k ]Y'k ]W\h][ 'Yg']ghž'ØVYf'U\_hi Y``Y'HYW\bc`c[ ]Yb'ni 'j YfZØ[ Ybž
i a '[ YfYW\hY'9bhgW\Y]Xi b[ Yb'ni 'hfYZZYb"'8]Y'ZY\`YbXY'HYW\b]\_
\_Ubb']b'Dc\_U`gd]Y`Ybž'X]Y'cZh'j cb'BYfj cg]h\hii bX
I bj cf\YfgY\VUf\_Y]h'[ Ydf\hat{h}[ h'g]bXž'YbhgW\Y]XYbX'gY]b'i bX</pre>

a  $O[\]WXYfKY]gY OVYfG]Y[\]CXYfB]YXYfU[YYbhgWXY]XYb$ 

8]Y'8]g\_i gg]cb'i a 'XYb'J 5F'i bX'gY]b'DchYbn]U'ž: U]fbYgg']a
: i » VU``ni 'Yf\Ò\Ybž'k]fX'g]W\Yf`]W\'k Y]hYf[ YZØ\fhž']bgVYgcbXYfY
k Ybb'a Ub'X]Y'9fZU\fi b[ Yb'Ui g'X]YgYf'Dc\_U`fi bXY'VYhfUW\hYh"
<]Yf'a ØggYb'X]Y'J YfUbhk cfh`]W\Yb'XYg'8: 6'UVk À[ Ybž'k ]Y'g]Y'XYb
J 5F']a 'bÀW\ghYb'\J\f']bg'Gd]Y`'Vf]b[ Yb'k c``Ybž'i a 'gck c\``X]Y
E i U`]hÀh'XYf'Gd]Y'Y'U`g'Ui W\'X]Y'Ni Zf]YXYb\Y]h'XYf'Ni gW\Ui Yf'ni
Yf\Ò\Yb"

8 YhU]`g

6Ygi WXYb G]Y i bg Ui Z b!U[ "XY