J YfgWk c`Yb`]b`DUbUa U.`8]Y`a mghYf]ÖgY HfU[ ÖX]Y`i a`nk Y]`Ghi XYbh]bbYb

9bhXYW_Yb`G]Y`]b`/ ei ch/J YfgWk c`Yb`]b`DUbUa U/ ei ch`X]Y
a mghYf]ÖgYb`l a ghAbXY`XYg`HcXYg`j cb`@]gUbbY` : fccb`i bX
?f]g`?fYa Yfg` `Y]bY`Zi bX]YfhY` : U`UbU`mgY"

9]bV`]W\_Y`]b`Y]bYb`i b[Y`ÖghYb` : U`

⇒ `]f`&\$%(j YfgWk UbXYb`X]Y`b]YXYf`AbX]gWk Yb`Ghi XYbh]bbYb
@]gUbbY` : fccb`f&&L`i bX`?f]g`?fYa Yfg`f&%L`gdi f`cg`k A`fYbX`Y]bYf
K UbXYfi b[`]a`8gWk i b[Y`j cb`DUbUa U" `A`fY` ; YgWk ]W`hY` \Uh
b]W`h`bi f`X]Y`<YfnYb`j ]Y`Yf`A YbgWk Yb`VYfØ`fh`gcbXYfb`Ui W`X]Y
5i Za Yf_gUa _Y]hj cb`Hfi Y`7f]a Y!9bh`i g]UghYb`Ui Z]g]Wk [Ync [Yb`
A cbUhY`gd`AhYf`k i fXYb`Y]b][Y`k Yb][ Y`?bcWk Yb`ZfU[a YbhY
YbhXYW`h`X]Y`bUWk`gcf[Z`h][ Yb`ZcfYbg]gWk Yb`HYghg`XYb`VY]XYb
: fUi Yb`ni [ YcfXbYh`k YfXYb`\_`cbbhYb"8]YgYf`a mghYf]ÖgY` : U` ` \Uh
g]Wk`U`g`Y]bYf`XYf`a Y]ghX]g`_i h]YfhYb`7c`X`7UgYg`XYg`]f`i bXYfhg
YhUV`]Yfh`i bX`n]Y`h`k Y]hYf`]b`h`YfYgg]YfhY`]b`gY]bYb`6Ubb"

8Yf`K Y[ `ni f`5i Z`_`Äfi b[

⇒]`fYa`bYi Yb`6i W` J YfgWk c`Yb`]b`DUbUa U` `X]Y`k U`fY
HfU[ÖX]Y`j ca`D]Ub]ghU`HfU` ` \UVYb`X]Y`XYi hgWk Yb`xi fbU`]ghYb
7`f]gh]Ub`<UfX]b[\Ui g`i bX`5bbYhhY`BYbbYf`XYb` : U`nY`b`]fY
bUWk`XYa` J YfgWk k]bXYb`XYf`VY]XYb`↑ b[ Yb` : fUi Yb`YfbYi h
Ui Z[Y[f]ZYb" `A`f`N]Y`]gh`Yg`Z`Y]bYb`_`UfYb`i bX`U`_f]V]gWk Yb
, VYfV`]W`_ØVYf`X]Y` ; YgWk Y`b]ggY`fi bX`i a`XYb` 9`D]Ub]ghU`HfU`
ni` [ YVYb`Z`Y]bYb`C`fh`Z`XYf`j cb`A`m`Yb`i bX`i b`Y]a` `]Wk Yb
9fn`Ä`i b[Yb`i a`fUb`\_h]gh"K A`fYbX`g]Y`XYf` : fU[ Y`bUWk`XYa
GWk]W`gU`XYf`Ghi XYbh]bbYb`bUWk [Y`Yb`Z`k ]fX`_`Uf`Z`XUgg`X]Y`Gi Wk Y
bUWk`5bhk`cfhYb`c`Zhj cb`GdY`_i`Uh]cbYb`i bX` : U`gWk]bZcfa`Uh]cbYb

ØVYfgW UhhYh]gh"

5i Z'XYb 'Gdi fYb 'XYf'K U\ f\ Y]h

B YbbYf'fY]ghY'X]fY_h'bUW' DUbUa Už'k c'g]Y'g]W'Ui Z'X]Y': Å\fhY'XYf
J Yfa]gghYb'VY[UV''8i fW'; Ygd fÅWY'a]h'NY]mYi [Yb'i bX'Y]bYa
<Ui dhj YfXÅW h][Yb']b'XYf'7ca a i b]hmž'XYa 'Hci f[i]XY': Y'W]Ubc
; cbnU'Ygž'_Ua 'g]Y'ni 'XYa ': Un]hž'XUgg'j]Y'Y'XYf'j cf[YVfUW'hYb
H\Ycf]Yb'ØVYf'Y]b'a Ø[']WYg'J YfVfYWYb'b]W'h'U'hVUf'g]bX'' ÆfY
9f_i bXi b[Yb'nY][Ybž'XUgg'; cbnU'Yg'b]W'h]b'X]Y'; YgWY\ b]ggY
j Yfk]W_Y'h]ghž'k Ug'X]Y'cZh'gYbgUh]cbY''Yb'5bbU\ a Yb'j cb
gY'VghYfbUbbhYb'9I dYfhYb']b': fU[Y'ghY''h"

8 Yf'9]bZ'i gg'j cb'GdY_i 'Uh]cbYb'Ui Z'X]Y 7ca a i b]hm

8]Y'5i hc fYb'VYhcbYb'X]Y': YZU\ fYbž'X]Y'a]hi bØVYfd fØZhYb
; YfØW'hYb'i bX'k]'XYb'GdY_i 'Uh]cbYb'j YfVi bXYb'g]bX'' Æ'XYf
K Y'h'XYg'Hfi Y'7f]a Y'j YfVfY]hYb'g]W' i bVY[fØbXYhY'H\Ycf]Yb'i bX
ZU'gWY' ÆZcfa Uh]cbYb'fUgYbX'gW'bY'' <UfX]b[\Ui g'i bX'BYbbYf
\UVYb'Yg'g]W'ni f'5i Z[UVY' [Ya UW'hž'X]YgY'A]ggj YfghÅbXb]ggY'ni
YbhUfj Yb'i bX'XYb': U''Ui g'Y]bYf'gUW']WYb'DYfgdY_h]j Y'ni
VY'Yi W'hYb''8YhU]''YfhY'5bU'mgYb'XYf'; Yf]W'hgU_hYb'i bX'XYf
a mghYf]ØgYb'B UW'hZc hc gž'X]Y'X]Y'Ghi XYbh]bbYb'_i fn'j cf[\ fYa
J YfgW'k]bXYb'j cb']\fYb'< UbXmg'Ui Z[Ybca a Yb'\UVYbž'Vf]b[Yb
bYi Y'9]bg]W'hYbž'X]Y'j]Y'Y'XYf'j cfUb[Y[Ub[YbYb'5bg]W'hYb
fY'Uh]j]YfYb"

9]bY'< ca a U[Y'Ub'nk Y]j Yf'cfYbY'@YVYb

J YfgW'c''Yb']b'DUbUa U'k]fX'b]W'h'bi f'U'g]bZcfa Uh]j Y
: U''UbU'mgY'VYhfUW'hYhž'gcbXYfb'Ui W'U'g'Y]bY'< ca a U[Y'Ub'X]Y
VY]XYb'† b[Yb': fUi Ybž'XYfYb'@YVYb'j]Y'ni 'ZfØ\ 'YbXYhYb''8]Y
5i hc fYb'gW'UZZYb'Ygž'Ui Z'Y]bXf]b[']WY'K Y]gY'ni 'j YfXYi h]WYbž
XUgg']b'Y]bYf'K Y'hž']b'XYf'GYbgUh]cbg'i ghi bX'cZha U'g'Z'\ 'Yf\UZhY
ÆZcfa Uh]cbYb'Xca]b]YfYbž'X]Y'Gi WY'bUW'XYf'K U\ f\ Y]h'k]W'h][
V'Y]Vh''8 Ug'6i W']gh'Y]bY'gdUbbYbXY'@Y_hØfY'ZØf'U''Yž'X]Y'g]W'ZØf

k U\fy' ? f]a]bU`ZÄ`Y`]bhYfYgg]YfYb`i` bX`XYfYb`i` bg]WXYfY
K U\f\Y]hYb`\"]bhYfZfU[Yb"

6i WXYhU]`g

J YfgWxc`Yb`]b`DUbUa U` `X]Y`k U\fy`HfU[ ÒX]Y`j ca `D]Ub]ghU`HfU`

6cc_g`cb`8Ya UbX

' &&`GY]hYbž`DUdYfVUW_

=G6B.`- +, !' !+) , ' &!%- (!,

·`B 5;

8YhU]`g

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