

6 ÒfgYb ghUfh'&\$&' . ; fY]ZZ'7 Ud]hU`'ZØ\ fh'X]Y
: cbXga Y]ghYfgWÅ UZh'Ub

; fY]ZZ'7 Ud]hU`'ZØ\ fh'X]Y'H]5A : cbXga Y]ghYfgWÅ UZh'bUWÅ
Y]bYa 'ghUf_Yb'6 ÒfgYb\U'V'U\ f'Ub" 'K Y'WÅ Y'GhfUhY []Yb'g]Y
YfZc` [fY]WÅ 'a UWÅ Ybž YfZU\ fYb'G]Y '\]Yf"

8]Y':]bUbna Àf_hY '\UVYb'ja 'YfghYb'<U'V'U\ f'&\$&' 'Y]bY
VYa Yf_Ybgk YfhY'9bhk]W_i b['Xi fWÅ'YVhž'X]Y'gck c'\'']bX]j]Xi Y''Y
5b`Y [Yf'U'g'Ui WÅ [fc» Y' ðgh]hi h]cbYb' ['Y]WÅ Yfa U» Yb'VYhf]Zzh" '8 Yf
85L 'j YfnY]WÅ bYhY'Y]b'VYY]bXfi W_YbXYg'D'i g'j cb'fi bX'nY\ b
DfcnYbhž'k À\ fYbX'XYf'G/ D'i) \$\$'gc [Uf'ØVYf'&\$'DfcnYbh'ini 'Y [hY"
<]YfVY]'nY][Yb'g]WÅ 'YXcWÅ 'Ui WÅ 'i bhYfgWÅ]YXY']b'XYf
<YfUb [Y\Yb'gk Y]gY'j cb': cbXghYUa g'VY]'XYf' l a gYhni b ['\]YfYf
5b`U [YghfUhY []Yb"

@Y]ghi b ['XYf': cbXga Y]ghYfgWÅ UZh

⇒ 'FU\ a Yb'XYf': cbXga Y]ghYfgWÅ UZh'j cb'H]5A : i bXF YgYUfWÅ
\YVh'g]WÅ 'XUg'HYUa 'j cb'; fY]ZZ'7 Ud]hU`'A UbU [Ya Ybh'5; 'Ui g
: fY]Vi f ['U'g'ZØ\ fYbXYg'HYUa '\Yfj cf" '5b'nk Y]hYf'GhY''Y''Y [h'E 6G
ðj Ygh'Ui g'; Y'gYb_]fWÅ Ybž'k À\ fYbX'D'Ub': 'Ui g'Ghi hh [Ufh'XYb
Xf]hhYb'D'Uhn'Y]bb]a a h" '8]YgY'F Ub [Zc` [Y''Àggh'XUfUi ZgWÅ'Y]» Ybž
XUgg'j YfgWÅ]YXYbY'GhfUhY []Yb']b'XYf'? Ud]hU`Ub`U [Y
i bhYfgWÅ]YX']WÅ Y'9fZc` [Y '\UVYb' _ÒbbYb"

GhfUhY []Yb']a '8 YhU]' . ; c`X'j g" 'HYWÅ bc`c []Y

8]Y'\YfUi gfU [YbXY '@Y]ghi b ['j cb'; fY]ZZ'7 Ud]hU`']gh'j cf'U''Ya 'Ui Z
XYfYb' ðj Ygh]h]cbYb']b'; c`X' i bX'A]bYbU_h]Yb'gck]Y'Ui Z: fcbh]Yf
A Uf_Yhg'ni fØW_ni ZØ\ fYb" ⇒ ; Y [YbgUhn'XUni '\UVYb'X]Y
K YhhVYk YfVYf'E 6G'ðj Ygh'i bX'D'Ub': '\]Yf'9fZc` [Y'j cf'U''Ya

Xi fW\`HYW\bc`c[]Yb`i bX`K UW\ghi a gZcbXg`Yfn]Y`h`8]YgY
8]j Yfg]h`h`XYf`5bg`h`nY`nY][hz`XUgg`Yg`j]Y`Y`K Y[Y`ni a `Z]bUbn]Y`Yb
9fZc`[`[]Vh`

A Uf`_hi`bg]W\Yf`Y]hYb`i bX`dc`]h]gW\Y
9]bZ`ØggY

5`YfX]b[g`V`Y]Vh`X]Y`@U[Y`i bg]W\Yf`" `ϕ`XYb`Y`h`hYb`HU[Yb`UVYb
hYW\bc`c[]gW\Y`K YfhY`Ub`K Yfh`j Yf`cfYb`ž`k Ug`hY`]k Y]gY`Ui Z
dc`]h]gW\Y`GdUbbi b[Yb`ni fØW`ni ZØ`fYb`]gh`" `ϕgVYgcbXYfY`X]Y
5i ggU[Yb`j cb`8cbU`X`Hfi a d`VYnØ[`]W\`HU]k Ub`i bX`7`]\bU`UVYb
Ua`A Uf`_h`Gdi fYb`]\bhYf`UggYb`"8]YgY`9bhk]W`i b[Yb`g]bX`Y]b
YfghYg`G][bU`XUZØfž`XUgg`g]W\`X]Y`A Uf`_hVYk Y[i b[Yb`]a`?cbhYI h
XYg`VYj cfghY`YbXYb`I G!K U\`_Ua`dZg`bcW\`j Yfgh`f`_Yb`_ØbbhYb`

DfchY`_h]cb]ga`i`g`i`bX`Yi`fcd`À]gW\Y
F`YU`_h]cbYb

I bUV`Àb[] [`j`ca`5i`g[Ub[`XYf`I G!K U\`Yb`V`Y]Vh`ni `VYZØfW\hYbž
XUgg`X]Y`GdUbbi b[Yb`nk]gW\Yb`XYb`I G5`i bX`7`]\bU`k Y]hYf`]\b
VYghY`Yb`V`Y]VYb`k YfXYb`"8]Y`9I`nY][h`YVYbZU`g`Gh`f`_Y
[Y[YbØVYf`7`]\bUž`Yhk U`Xi fW\`X]Y`_Øfn`]W\`Y]b[YZØ`fhYb
GhfUZnØ`Y`Ui Z5i hcgž`X]Y`nk]gW\Yb`%+ž(`i`bX`" +ž*`DfcnYbh`]Y[Yb`"
8]YgYg`J cf[Y`Yb`_ØbbhY`g][b]Z`_UbhY`5i`gk]f`_i b[Yb`Ui ZX]Y
Yi fcd`À]gW\Yb`A`Àf`_hY`UVYbž`XU`Y]b`K]fhgW\UZhg`_f]Y[`nk]gW\Yb
X]YgYb`A`ÀW\hYb`Xfc`h`

: Un]h.`9]b`k`Y]hYfYg`gd`Ub`b`Yb`XYg`<`U`V`^U`f
ghY`h`VYj`cf

Ni`gUa`a`YbZUggYbX`"Àggh`g]W\`gU[Ybž`XUgg`XUg`YfghY`<`U`V`^U`f
&\$&`j]Y`Y`@Y`fYb`i`bX`9]bV`]W`_Y`]b`X]Y`i`bhYfgW\]YX`]W\Yb
5b`U[YghfUhY[]Yb`XYf`:`cbXga`Y]ghYfgW\UZhi[YVfUW\h`h`Uh`"8]Y
I`bg]W\Yf`Y]hYbž`X]Y`Xi`fW\`dc`]h]gW\Y`9fY][b]ggY`i`bX
k]fhgW\UZhi]W\Y`GdUbbi b[Yb`YbghY`Ybž`k YfXYb`XYb`k Y]hYfYb
J`Yf`Ui`Z`XYg`&]\fYg`ghUf`_df`À[Yb`"Gck`c`\`5b`Y[Yf`U`g`Ui`W\

: cbXghYUa g'g]bX' [i h'VYfUhYbž'k UW'gUa 'ni 'V`Y]VYb'i bX']\fY
GhfUhY []Yb' [Y [YVYbYbZU`g'Ubni dUggYbž'i a 'Ui ZX]Y
< YfUi gZcfXYfi b [Ybž'X]Y'XUg'nk Y]hY' < U`V`U`f`VYfY]h\`À`hž
j cfVYfY]hYh'ni 'gY]b"

' B 5;

8YhU]`g

6Ygi W'X'Yb'G]Y'i bg'Ui Z.'b!U["XY