

: `]Y[YfVca VY`]b`K U`hYfg\cZ`YfZc `[fY]Wk
YbhgWk`ÄfZh` `5 + ` _i fn`[YgdYffh

9bhgWk`ÄfZ` b[`Y]bYf` : `]Y[YfVca VY`]b` < Ua Vi f[!K U`hYfg\cZ
G]WkYfYf`9]bgUhn`XYf` : Yi Yfk Y`f`c`bY`?ca d` _Uh]cbYb
UV[YgWk`cggYb"

8]Y` ; YZU`fYb`XYf` ; YgWk]Wk hY. `6YXYi hi b[
XYf`? Ua dZa]hhY`fÄi a i b[`]b` < Ua Vi f[

< Ua Vi f[`fbhgk

⇒ a `GhUXhhY]` < Ua Vi f[!K U`hYfg\cZ`k i fXY`Ua `%(" ' 5i [i gh & \$ & (
k `Ä`fYbX`6Ui UfVY]hYb`Ui Z`Y]bYa `7cbhU]bYfhYfa]bU`Y]bY
[YZ`Ä`f`]WkY : `]Y[YfVca VY`YbhXYW`h"8]YgY`9bhXYW`i b[
i bhYfghfY]Wk`hX]Y`Bchk YbX][_Y]hj cb`i a ZUggYbXYb
G]WkYf\Y]hga U»bU`a Yb`i bX`XYf`gh`ÄbX][Yb`K UWk gUa _Y]h`a
I a [Ub[`a]h ; YZU`f[i h`XYf`J Yf[Ub[Yb`Y]h"8Yf` : U`nY][h
XYi h]Wk`žk]Y`X]Y`BUWk]f`_i b[Yb`XYg`Nk Y]hYb`K Y`h`_f]Y[g`Ui Wk
`Yi hY`bcWk`X]Y`a cXYfbY`≠ZfUghfi _hi f`VYY]bZi ggYb`_ÖbbYb"

J cfZU``i bX`F YU`_h]cb

8]Y` : `]Y[YfVca VY`ž`Y]bY`Vf]h]gWkY`) \$ \$ `Vg`6ca VY`a]h
5i ZgWk`U[n0bXYfžk i fXY`Xi fWk`XYb`? Ua dZa]hhY`fÄi a X]Ybgh`XYf
: Yi Yfk Y`f` < Ua Vi f[`c`_U`]g]Yfh`i bX`]XYbh]Z]n]Yfh"8]Y`YfghY
A U»bU`a Y`bUWk`XYa ` : i bX`k Uf`X]Y` : Ygh`Y[i b[`Y]bYg
G]WkYf\Y]hgVYfY]Wk`g`a]h`Y]bYa `GdYfffUX]i g`j cb`) \$ \$ `A YhYfb
gck]Y`Y]bYa `K UfbfUX]i g`j cb`) \$ \$ `A YhYfb`i a `XYb
9bhXYW`i b[gcfh"≠bg[YgUa`h`k i fXYb`A U»bU`a Yb`Yf[f]ZYbž`i a
X]Y`G]WkYf\Y]h`XYf`5bk c`bYf`i bX`XYf`5fVY]hYf`Ui Z`XYa ` ; Y`ÄbXY

ni "[Yk Å\`f`Y]ghYb"

9j U_i]Yfi b[`i bX`@i ZhfUi a gdYffi b[

I a `X]Y`9bhgWÅfZi b[`XYf`6ca VY`ni `Yfa Ò[`]WXYbž`k Uf`Yg
YfZcfXYf`]Wž`X]Y`5i hcVU`b`5+ `ZØf`Y]bY`\"U`VY`Ghi bXY`]b`VY]XY
F]W`hi b[Yb`ni `gdYffYb``8]Yg`j YfXYi h`]W`h`X]Y`k`Y]hfY]WXYbXYb
5i gk]f`_i b[Ybž`X]Y`Y]b`gc`W`Yf`J`cfZU```Ui Z`XUg`hÅ[`]WXY`@YVYb`]b
XYf`I a [YVi b[`\"UVYb`_Ubb``C`V`k`c`\"`bi`f`Z]fa`YbY][`YbY`; YVÅi`XY
Yj U_i]Yfh`k`YfXYb`a`i`gghYbž`g]bX`X]YgY`9fY][`b]ggY`c`Zi`a`]h[`fc»`Yb
9]bgWÅfÅb`_i b[Yb`i`bX`i`bUbbY`\"a`\"`W`_Y]hYb`ZØf`X]Y`5bk`c`b`Yf
j`YfVi`bXYb"

9fZc`[fY]WXY`9bhgWÅfZi b[

8Ub`_XYf`[`i`hYb`J`cfVYfY]hi b[`i`bX`DfcZYgg]cbU`]hÅh`XYf
9]bgUhm`_fÅZh`j`Yf`]YZ`X]Y`9bhgWÅfZi b[`c`b`Y`?`ca`d`]_Uh]cbYb`i`bX
_`c`bb`hY`VYfY]hg`b`UW`&\$`A`]bi`hYb`YfZc`[`fY]WXY`UV[`YgWÅ`c`ggYb
k`YfXYb``8]Yg`]gh`Y]b`@]W`hV`]W`_]b`XYf`gc`b`gh`c`Zi`Ub[`Ygd`Ubb`hYb
G]hi`Uh]cb`fi`bX`i`a`X]Y`6Yf[`i`b[`j`cb`?`Ua`d`Za`]hhY`b``N`Y`b`
:`Yi`Yfk`Y`f`Yi`hY`i`bX`Ub`XYfY`:`UW`_fÅZh`Y`k`UfYb`ØVYf`j`]YfY]b`\"U`V
Ghi`bXYb`]a`9]bgUhmž`i`a`X]Y`G]WXYf`Y]h`k`]YXYf`Yfni`ghY``Yb`i`bX
X]Y`;`YZU`fYbei`Y``Y`ni`bYi`hfU`]g]YfYb"

8]Y`6YXYi hi b[`ZØf`X]Y`; Ya Y]bgWÅ UZh

8]Y`9bhXYW`_i b[`j`cb`\"`]ghcf]gWXYb`?`Ua`d`Za`]hhY`b`k`]Y`X]YgYf
:`]Y[`YfV`ca`VY`ZØ`f`h`i`bg`j`cf`5i`[`Ybž`XUgg`X]Y`;`YgWÅ]W`hY`Ui`W`_]a
&%``\`f`i`bXYfh`bc`W`9]bZi`gg`Ui`Zi`bgYf`hÅ[`]WXYg`@YVYb`\"Uh``8Yf
J`cfZU```a`UW`h`XYi`h`]W`ž`k`]Y`k`]W`h][`Yg`]ghž`XUgg
G]WXYf`Y]hgVY`\"ØfXYb`i`bX`:`Yi`Yfk`Y`f`_`c`bh]bi`]Yf`]W`_`[`YgWÅ`i`h
k`YfXYb`i`bX`ØVYf`X]Y`b`ch`k`YbX][`Yb`f`Yggci`f`W`b`j`YfZØ[`Ybž`i`a
gW`bY``i`bX`YZZ]n]Ybh`fYU[`]YfYb`ni`_`Ø`b`b`Yb``8]Y`:`ØfXYfi`b[`Y]bYg
6Yk`i`gghgY]bg`ZØf`gc`W`Y`;`YZU`fYb`_`Ø`b`bhY`b]W`h`bi`f`VY]`_`Ø`b`Zh][`Yb
9]bgÅ`hmYb`\"Y`ZYbž`gcbXYfb`Ui`W`XUg`J`YfhfUi`Yb`XYf`;`Ya`Y]bgWÅ`UZh
]b`X]Y`G]WXYf`Y]hga`U»`bU`a`Yb`ghÅf`_Yb"

8YhU]g

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