

I bZU``Zi Wk hz'J Yf`YhnhY`i bX
5i gY]bUbXYfgYhni b[Yb`]a `C ghU`V_fY]g

⊕`C ghU`V_fY]g. I bZU``Zi Wk hz'j Yf`YhnhYf'; `Y]hgWk]fa Z]Y[Yf
i bX`5i gY]bUbXYfgYhni b[`a]h'a Y\ fYfYb`J Yf`YhnhYb`"@YgYb
G]Y`a Y\ f`

5U`Yb`f`h`g`k`

5a `8cbbYfghU[ž`k`Ä`fYbX`]a `C ghU`V_fY]g`Y]b`Xi`fWk`k`UWk`gYbYg
K`YhhYf`YffgWk`hYž`YfY][`bYhYb`g]Wk`a`Y\ fYfY`J`cfZÄ`Yž`X]Y`gck`c`
Ui`ZXYf`GhfU»`Y`U`g`Ui`Wk`]b`XYf`B`Uhi`f`J`Yf`YhnhY`Yfj`cfVfUWk`hYb`⊕
Y]bYf`c`ZYbg]Wk`h`]Wk`gWk`]W`gU`UZhYb`5VZc`[`Y`j`cb`9fY][`b]ggYb
VYf]Wk`hYb`X]Y`6Y`ÖfXYb`j`cb`Y]bYa`J`Yf`Y\`fgi`bZU`ž`Y]bYa
a`]gg[`ØW`hYb`;`Y]hgWk`]fa`Zi`[`i`bX`Y]bYf`[`Yk`U`h`h`h][`Yb
5i`gY]bUbXYfgYhni`b[`nk`]gWk`Yb`a`Y\ fYfYb`DYfgcbYb"

8Yf`YfghY`J`cfZU``k`i`fXY`[`Y[`Yb`%&.%\$`I`f`]b`Y]bYa`DUf`_`Ui`g`]b
XYf`7`Uf`!`NY]gg!`GhfU»`Y`]b`5U`Yb`[`Ya`Y`XYh`9]b`V]g`Ub[
i`bVY`_`Ub`bhYf`5i`hc`ZU`fYf`VYgWk`ÄX][`hY`VY]a`F`Ub[`]YfYb`Y]bYb`Xcfh
[`YdUf`_`hYb`B]ggUbž`a`UWk`hY`YXcWk`_Y]bYb`<`U`h`ž`i`a`XYb`GWk`UXYb
ni`VY[`i`hUWk`hYb`cXYf`g]Wk`i`a`X]Y`5b[`Y`Y[`Yb`Y]hni`_Øa`a`Yfb"
8Yf`VY]`XYa`J`cfZU``Yb`hghUbXYbY`GUWk`gWk`UXYb`k`]fX`Ui`Zfi`bX`)`\$\$
9i`fc`[`YgWk`Ähh`8]Y`Dc`]nY]`Yfa`U`b`h`NYi`[`Yb`ž`g]Wk`ni`a`Y`XYb`ž`i`a
XYb`ZØWk`h][`Yb`:`U`fYf`ni`Z]bXYb`5`Y`<]bk`Y]gY`_ØbbYb`VY]a
Dc`]nY]fYj`]Yf`5U`Yb`i`bhYf`XYf`HY`YZcbbi`a`a`Yf`\$`+`*`%)`&`(!`\$
Y]b[`YfY]Wk`h`k`YfXYb"

;`Y]hgWk`]fa`i`bZU``]b`B`YfYg`Y]a

Ni`f`[`Y]Wk`Yb`NY]hž`]b`XYb`ÄbX`]Wk`Yb`;`YV]YhYb`i`a`B`YfYg`Y]a`ž
YfY][`bYhY`g]Wk`Y]b`k`Y]hYfYf`J`cfZU``ž`XYf`Ui`Z`XfUa`Uh]gWk`Y`K`Y]gY

nY][hž'k]Y'f]g_UbhXYf'; `Y]hgWk]fa gdcfh'gY]b'_Ubb"; Y[Yb'%*.))
I \f`UbXYhY`Y]b') *!`A\ f][Yf'; `Y]hgWk]fa Z]Y[Yf'VY]a
GY[Y`Zi [[Y`AbXY`]b': `Y]bYfg`c`i` bgUbZhi` bX`nc[`g]Wk`XUVY]`Y]bY
: i » j Yf`Yhni b[`ni " `8Yf`A` Ubb`ghØfnhY`U`Y]bVYhY]`][hž'k Ug
a Ò[`]WkYfk Y]gY`XUfUi Z`\]bXYi hYhž`XUgg`Yf`_Y]bY
: fYa XY]bk]f_i b[`ni `VYZØfWk hYb` \UhhY" `8Yf`F`Yhni b[gX]Ybgh
VfUWk hY`]\b`i a [Y\YbX`]b`Y]b`bU\Y[Y`Y[YbYg`?fUb_Yb\Ui gž`i a
X]Y`J`Yf`Yhni b[`ZUWk [YfYWk hni `VY\UbXY`b" `Gc`WkY`i bZ`Y`Y
Yf]bbYfb`XUfUbž`k]Y`k]Wk h][`G]WkYf\Y]hi bX`J`cfVYfY]hi b[`]a
Ci hXccf!Gdcfh'g]bX"

5a `5VYbX`gd]hnhY`g]Wk`X]Y`@U[Y`XUbb`Ub`Y]bYa `; f]`d`Uhn`bU\Y
XYf`@%\$+* `VY]`6Yf[\Y]a `ni " <]Yf`\UhhY`g]Wk`Y]bY`; fi ddY`j`cb
A`YbgWk`Yb`j`YfgUa`a`Y`hž`XcWk`XYf`[YgY`][Y`F`U\`a`Yb`k`UbXY`hY
g]Wk`gWk`bY`][b`Y]bY`?cbZ]_hg]hi Uh]cb" `a` `NYbhfi a`X]YgYg`GhfY]hg
gc``c`ZYbVUf`Y]bY`5Z`fY`[YghUbXYb`\UVYb" `8]Y`9a`ch]cbYb
_cWk hYb`ØVYfž`i bX`Yg`_Ua` `ni`Y]bYf`\UbXZYghYb
5i gY]bUbXYfgYhni b[" `9]b`9]bgUhnž`XYf`XYi`h]Wk`nY][hž'k]Y`gWk`bY`
Ui`g`Y]bYa` \Ufa` `cgYb`HfY`ZYb`Y]bY`YfbghY`G]hi Uh]cb`Yb`hghY\Yb
_Ubb"

J Yf`YhnhY`i bX`9fa]hh`i b[Yb

8]Y`Dc`nY]`VYf]Wk hYhž`XUgg`a`]bXYghYbg`j`]Yf`A`ÀbbYf`i bX`j`]Yf
: fUi`Yb`]b`X]YgYb`?cbZ]_hj`Yfk`]W_Y`h`k`UfYb" `HfU[]gWkYfk`Y]gY
k`i`fXY`Y]bY`%, !`A\ f][Y`gWk`Yf`j`Yf`Yhnhž`k`À\ fYbX`nk`Y]`k`Y]hYfY
: fUi`Yb`i`bX`XfY]`A`ÀbbYf`Y]Wk hY`J`Yf`Yhni b[Yb`XUj`cbhfi [Yb"
Gck`c`\`X]Y`gWk`Yf`j`Yf`YhnhY`↑ b[Y: fUi`U`g`Ui`Wk`Y]bY`k`Y]hYfY
%, !`A\ f][Y`k`i`fXYb`YVYbZU`g`]b`Y]b`?fUb_Yb\Ui`g`[YVfUWk`h" `8]Y
UbXYfYb`6YhY]`][hYb`Yf`]hYb`ni`a`; `ØW`_`Y]bY`[fUj`]YfYbXYb
J`Yf`Yhni b[Yb" `8]Y`9fa`]h`i b[Yb`Ui`ZYb`Ui`Z`<cWk`hci`fYbž`i`a`X]Y
[YbUi`Yb`<]b`hYf[fØbXY`XYg`GhfY]hg`ni`_`ÀfYb`i`bX`a`Ò[`]Wk`Y
fYWk`h]Wk`Y`?cbgYei`YbnYb`ni`n]Y\Yb"

8]YgY`XfY]`J`cfZ`Y`Y`Ui`ZY]bUbXYfZc`[YbX`Ub`Y]bYa`Y]bn][Yb`HU[
k`YfZYb`Y]b`GWk`U[`]Wk`h`Ui`ZX]Y`i`bhYfgWk`]YX`]Wk`Yb`; YZU\ fYbž`X]Y`]b
U`hÀ[`]Wk`Yb`G]hi Uh]cbYb`j`YfVcf[Yb`gY]b`_ØbbYb" `GY]`Yg`Xi`fWk`XUg
J`Yf`U`hYb`]a`GhfU`Ybj`Yf`_Y\`f`c`XYf`]b`nk`]gWk`Yba`YbgWk`]Wk`Yb

6Yn]Y\i b[Yb' XUG; YgWXY\Yb'ja CghU`V_fY]g]ghY]b
Y]bXf]b[`]WXYg'6Y]gd]Y`XUZØfž'k]Y'k]W]h[`F ØW_g]W]hbU\ a Y'i bX
J YfU bhk c fhi b[gVYk i gghgY]b'g]bX"9g`V`Y]Vh`UVni k UfhYbž'k Y`WXY
9f[YVb]ggY`X]Y`9fa]h'i b[Yb`XYf`Dc`nY]`nY]h][Yb`k YfXYb"

9]b`6`]W_`Ui Z`G]WXYf\Y]hgUgdY_hY

æ Ni gUa a Yb\Ub[`a]h`X]YgYb`J c fZ`Yb`k]fX`XYi h`]W]ž'k]Y
YggYbn]Y`G]WXYf\Y]h`]b`j YfgW]YXYbYb`@YVYbgVYfY]WXYb`]ghž'gY]
Yg`ja `Gdcfž`a `GhfU»Ybj Yf_Y\`f`cXYf`]b`gcn]U`Yb`æhYfU_h]cbYb"
8]Y`9fY][b]ggY`Yf]bbYfb`i bg`XUfUbž`XUgg`l bUW]hgUa _Y]h`cXYf
æ di`g]j]h`h`gW]bY`ni`i bYfk UfhYhYb`i bX`VYXUi Yf`]WXYb
?cbgYei YbnYb`ZØ\Yb`_ØbbYb"8Yf`5ddY`U`b`U`Y`Ui hYh`XU\Yf.
GY]Yb`G]Y`UW]hgUa`gck c\`]a`l a [Ub[`a]h`g]W]gY`Vgh`U`g`Ui W
a]h`UbXYfYb"

I fgUWXYb`i bX`5i gk]f_i b[Yb`j cb

I bZU`Z`i W]hYb

æ XYb`YhnhYb`X\Yb`]ghY]bY`ghY][YbXY`NU\`j cb`l bZU`Z`i W]hYb
]b`8Yi hgW`UbX`ni`VYcVUW]hYb"8]YgY`9bhk]W_`i b[`k]fZi: fU[Yb
Ui Z`]bgVYgcbXYfY]b`6Yni [`Ui ZX]Y`dgmW]c`c[]gWXYb`i bX`gcn]U`Yb
: U_hcYfbž`X]Y`ni`Y]bYa`i bYf`Ui VhYb`9bhZYfbYb`j ca`l bZU`c`fh
ZØ\Yb" `C Zh`g]bX`5b[gh]j c f?cbgYei YbnYbž`5`_c\c`!`cXYf
8fc[Yb`cbgi a`gck]Y`X]Y`Gcf[Y`i a`Z]bUbn]Y`Y`B UW]hY]Y`; fØbXYž
k Ufi a` : U\YfY`g]W]j cb`XYf`l bZU`ghY`Y`Yb`hZYfbYb" @Ui h`Y]bYf
Ghi X]Y`XYg`8Yi hgWXYb`ægh]hi hg`ZØf`B cfa i b[`_ØbbhY`X]Y
i bni fY]WXYbXY`5i Z_`Àfi b[`ØVYf`X]Y`fYW]h`]WXYb` : c` [Yb`Y]bYf
I bZU`Z`i W]h`VY]a`U`[Ya`Y]bYb`J Yf_Y\`fghY]bY\ a Yf`ni`X]YgYf
DfcV`Ya`Uh]_`VY]hfU[Yb`f8`B`Ł"

8]Y`fYW]h`]WXYb`?cbgYei YbnYb`ZØf`l bZU`Z`i W]h`_ØbbYb`Yf\YV`]W
gY]b" `BYVYb`n]j]fYW]h`]WXYb`5bgdfØWXYbž'k]Y`XYf`9fghUhi b[`j cb
F YdUfUhi f`cghYbž`_Ubb`X]Y`GhUUhgUbk U`hgW]UZh`Ui W
ghfUZfYW]h`]WXY`A U»bU\ a Yb`Yf[fY]ZYbž`X]Y`j cb`; Y`XghfUZY`V]g`\]b
ni` : fY]\Y]hgghfUZYb`fY]WXYb`_ØbbYb" æhYfYggUbh`]ghž`XUgg`j]Y`Y
XYf`ZØW]hYbXYb` : U\YfY`_Y]bY`J c fghfUZYb`\UVYbž'k Ug`Ui ZY]bYb

\c\Yb`GhfYggdY[Y`cXYf`i bVYXUW hY`9bhgWXY]Xi b[Yb`]a `A ca Ybh
XYg`l bZU`g`\\]bXYi hYh"

GhUh]gh]_`ni `; `Y]hgW]fa i bZÅ`Yb

; `Y]hgW]fa Z]Y[Yb`[]`h`U`g`Y]bY`ZUgn]b]YfYbXYž`YXcW`Ui W
f]g]_cVY\UZhYhY`GdcfhUfh" `@Ui h`8 UhYb`XYg`8 GJ`fB Yi hgW Yf
; `Y]hgW]fa j YfVUbXŁ`g]bX`]b`8 Yi hgW`UbX`X]Y`l bZU`nU`Yb`]b`XYb
`YhnhYb`đ\`fYb`ghUV]`[YV`]YVYbž`YXcW`_ca a h`Yg`Å\`f`]W`ni
a Y`fYfYb`gW`k YfYb`l bZÅ`Yb" `a `đ\`f`&\$&&k i fXYb`Ui g`Y]bYa
6Yf]W`h`XYg`8 GJ`]bg[YgUa h`%(&l bZÅ`Y`Xc`_i a Ybh]Yfhž`j cb`XYbYb
Yhk U`%) `U`g`gW`k Yfk]Y[YbX`Y]b[Yghi Zh`k i fXYb`f**B GJ** Ł"

9]b`Åi Z][Yg`l bZU`V]`X`g]bX`i bgUbZhY`@UbXi b[Ybž`cZhj Yfi fgUW`h
Xi fW`i b[Øbgh][Y`K YhhYfVYX]b[i b[Yb`cXYf`i Y`Yf`VY]`XYf
GhYi Yfi b[`XYg; `Y]hgW]fa g`k Å\`fYbX`XYf`@UbXi b["`8]Y
J Yf`Yhni b[gfUH`Y`_Ubb`XUVY]`ghUf`_j Uf]]YfYbž`k cVY]`]bgVYgcbXYfY
: i »!`i bX`? bØW`Y`j Yf`Yhni b[Yb`Åi Z][`Ui ZhfYhYb" `9g`k]fX
Ya dZc`Ybž`XUgg; `Y]hgW]fa Z]Y[Yf`fY[Y`a Å»][`Ub
G]W`Yf`Y]hgW`i `i b[Yb`hY]`bY`a Ybž`i a `]`fY`HYW`b]_Yb`ni
cdh]a]YfYb`i bX`X]Y`G]W`Yf`Y]h`ni `Yf`Ø`Yb"

; Ygi bX\Y]h`]W`Y`5i gk]f`_i b[Yb`j cb 5i gY]bUbXYfgYhni b[Yb

? ØfdYf`]W`Y`5i gY]bUbXYfgYhni b[Ybž`k]Y`g]Y`Ua `; f]`d`Uhm`]b
HUbb`Ui gYb`ghUhhZUbXYbž`_ØbbYb`Yfbgh`UZhY`[Ygi bX\Y]h`]W`Y
? cbgYei YbnYb`ZØf`U`Y`6YhY]`][hYb`UVYb" `đ`8 Yi hgW`UbX`k YfXYb
GW`Åhni b[Yb`ni Zc`[Y`Å\`f]W`nY`bhUi gYbXY`i: Å`Y`j cb
? ØfdYfj Yf`Yhni b[`fY[]ghf]Yfhž`j]Y`Y`XUj cb`g]bX`XUg`fYgi `hUh] cb
bÅW`h`]W`Yb`5i gY]bUbXYfgYhni b[Yb`]b`gcn]U`Yb`? cbhYi hYbž`k]Y
: Y]Yfb`cXYf`; f]`UVYbXYb" `@Ui h`Y]bYf`U`_hi Y`Yb`GhUh]gh]_`XYg
6i bXYg`_f]a]bU`Ua hg`g]bX`&- i `XYf`fY[]ghf]YfhYb
? ØfdYfj Yf`Yhni b[Yb`]a `đ\`f`&\$&&]a `Ni gUa a Yb`Ub[`a]h
dYfgØb`]W`Yb`GhfY]h][_Y]hYb`Yb`hghUbXYb`f**6 ? 5** Ł"

8]Y`i ba]hhY`VUFYb`i: c`[Yb`Y]bYf`_ØfdYf`]W`Yb

5i gY]bUbXYfgYhni b['g]bX'\Ài Z]['J Yf`Yhni b[Yb`Xi fW\`GW\`À[Y
cXYf`GhØfnYž`k À\fybX``Ub[Zf]gh][Y': c`[Yb`dgmW\c`c[]gW\Y
6Y`Ughi b[Yb`cXYf`HfUi a UhU`gY]b`_ÒbbYb"·5b[Yg]W\hg`X]YgYf
F YU`]hÀh`VYghY\h`Y]b`ni bY\`a YbXYf`6YXUfZ`Ub`dfÀj Ybh]j Yb
A U»bU\`a Ybž`X]Y`gck c\`@Ògi b[Yb`ni f`8YYg_U`Uh]cb`j cb
?cbZ]_hYb`U`g`Ui W\`5i Z_`Àfi b[gUb[YVchY`ni f`GYbg]V`]g]Yfi b[`ZØf
X]Y'; YZU\fyb`j cb`; Yk U`h`a `gcn]U`Yb`l a ZY`X`i a ZUggYb"

8YhU]`g

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