

8]Y`i bYfhfÀ[`]W\Y`GhUV]`hÀh`j`cb`6]hWc]b

6]hWc]b`[Y\hYg`[i hžXUb_Y`XYf`B UW\ZfU[Y" `ba]hhYb`Y]b][Yf`k`UW_Y`][Yf`A`cbUhY`ZØf`X]Y`A`Àf`_hY`k`Uf`X]Y`VY`YVhYghY`?fmdhc`k`À\fi`b`[`XYf`K`Y`h`VYa`Yf`_Ybgk`Yfh`ghUV]`i`bX`k`i`fXY`gY]h`9bXY`&\$&\$]b`XYf`Yb`[ghYb`GdUbbY`[Y\UbXY`h`G]Y`_`ÒbbYb`X]Yg`Y`b`UW`J`cf`[YgW\]W\hY`i`bhYfgW\]YX`]W`gY\Ybž`n`"6" `cV`G]Y`[Y`_Ui`Zh`\UVYbž`k`Ubb`i`bX`]b`k`Y`W`Yf`<`Ò\Y`"DYfgdY`_h]j`Yb`_`ÒbbYb`gY]b.`9g`]gh`Ui`W`a`Ò[`]W\ž`XUgg`G]Y`X]Y`hÀ[`]W\Yb`GW\k`Ub`_i`b`[Yb`j`cb`6]hWc]b`b]W\h`[YbUi`j`YfZc`[h`\UVYbž`k`Y`]G]Y`Y]b`9fk`UW\gYbYf`g]bXž`XYf`]b`gc`]XY`J`Yfa`Ò[Yb`gk`YfhY`k`]Y`Vf]h]gW\Y`GhUUhgUb`Y]\Yb`]bj`Ygh]Yfh`K`]Y`Ui`W`]a`a`Yf`G]Y`Yg`Ub`[Y\Ybž`ZØf`Y]bY`K`À\fi`b`[ž`X]Y`X]Yg`k`À\fybX`XYf`DUbXYa`]Y`[YhUb`\Uh`'`/`Ua`d`^Y`]d/`

6]hWc]b`[Y\hYg`[i hžXUb_Y`XYf`B UW\ZfU[Y"

ba]hhYb`Y]b][Yf`k`UW_Y`][Yf`A`cbUhY`ZØf`X]Y`A`Àf`_hY`k`Uf`X]Y`VY`YVhYghY`?fmdhc`k`À\fi`b`[`XYf`K`Y`h`VYa`Yf`_Ybgk`Yfh`ghUV]`i`bX`k`i`fXY`gY]h`9bXY`&\$&\$]b`XYf`Yb`[ghYb`GdUbbY`[Y\UbXY`h`

G]Y`_`ÒbbYb`X]Yg`Y`b`UW`J`cf`[YgW\]W\hY`i`bhYfgW\]YX`]W`gY\Ybž`n`6" `cV`G]Y`[Y`_Ui`Zh`\UVYbž`k`Ubb`i`bX`]b`k`Y`W`Yf`<`Ò\Y`"DYfgdY`_h]j`Yb`_`ÒbbYb`gY]b.`

9g`]gh`Ui`W`a`Ò[`]W\ž`XUgg`G]Y`X]Y`hÀ[`]W\Yb`GW\k`Ub`_i`b`[Yb`j`cb`6]hWc]b`b]W\h`[YbUi`j`YfZc`[h`\UVYbž`k`Y`]G]Y`Y]b`9fk`UW\gYbYf`g]bXž`XYf`]b`gc`]XY`J`Yfa`Ò[Yb`gk`YfhY`k`]Y`Vf]h]gW\Y`GhUUhgUb`Y]\Yb`]bj`Ygh]Yfh`

K`]Y`Ui`W`]a`a`Yf`G]Y`Yg`Ub`[Y\Ybž`ZØf`Y]bY`K`À\fi`b`[ž`X]Y`X]Yg`k`À\fybX`XYf`DUbXYa`]Y`[YhUb`\Uh`

8]Y':`UX\Y]h'XYf`Yhnyb`A`cbUHy`]gh`Y]b`k`Yb][`i`b\Y]a`]W`"

8]Y`J`c`Uh`]h`h`]gh`YVYbZU`g`[`YX`A`a`d`Zh`

K`Ug`]gh`cg3`8]Y`A`cf`[`Ub`!`Gh`Ub`Y`m`Ghf`Uhy`[`Yb`G`YYbU`G`U`U`i`b`X`
?`]b`f`GhY]ba`Y`h`\`UVYb`Y]b`Yb`6`]W`_`]b`Y]b`Y`Ua`8`c`b`b`Y`f`gh`U`
j`Yf`OZYb`h`]W`hY`B`ch]n`[`Yk`c`f`ZYb`"

⇒fY`k`]W`h][`ghY`9f`_Yb`b`hb]g`]ghž`XUgg`X]Y`a`Y]ghYb`j`cb`XYb`Ybž`X]Y`
gY]h`5b`ZUb`[`&`\$`&`%`a`]h`6]hWc]b`ni`hi`b`\`UVYbž`XYfnY]h`X]Y`HUg`W`Y`
\`U`h`Yb`f`c`X`Y`f`<`C`8`@`Y`f`b`Ł`i`b`X`X`Ugg`g]W`X]Y`Hc`_Yb`g`Y`V`gh`b]W`h`
j`]Y`V`Y`k`Y`[`Y`b`.

:`Ugh`Y]b`f`b`UW`6Y`[`]bb`XYg`6]hWc]b!`6`Å`f`Y`ba`Uf`_`h`Y`g`
gY\`Yb`g]W`X]Y`a`Y]ghYb`6]hWc]b!`?`Å`i`Z`Y`f`]a`f`&`\$`&`%`a`]h`
g`W`k`Y`f`Y`b`J`Y`f`i`ghYb`_`cb`Z`f`c`b]h]Y`f`h`i`b`X`g`W`Y]b`Yb`Ui`Z`
F`U`m`Y`g`ni`k`U`f`h`Y`b`ž`i`a`]\`f`Y`D`c`g]h]c`b`ni`g`W`]Y`»`Y`b`"9]b`Y`
F`Y`_`c`f`X`n`U`\`j`cb`6]hWc]b!`9]b\`Y]h`Y`b`k`i`f`X`Y`]b`XYb`Y`h`h`Y`b`*`
A`cb`U`h`Y`b`Z`Ø`f`_Y]b`Y`H`f`U`b`g`U`_h]c`b`j`Y`f`k`Y`b`X`Y`hž`X`Y`f`n`Y]h`V`Y]`+`,`
i`X`Y`f`;`Y`g`U`a`h`n`U`\`ž`i`b`X`X]Y`g`Y`N`U`\`ghY][`h`k`Y]h`Y`f`
f`B`V`V]`X`i`b`[`%`Ł`"

K`Y`b`b`k`]f`Y`g`Y`h`k`U`g`ni`gh`U`f`_`j`Y`f`Y]b`Z`U`W`Y`b`ž`V`Y`X`Y`i`h`Y`h`X]Y`g`ž`
X`U`g`g`X]Y`Y`b][`Y`b`ž`X]Y`6]hWc]b`j`c`f`a`Y`f`U`g`*`A`cb`U`h`Y`b`
[`Y`_`Ui`Z`h`f`U`h`Y`b`\`UVYbž`Ub`]f`Y`b`D`c`g]h]c`b`Y`b`Z`Y`g`h`U`h`Y`b`
i`b`X`Y]b][`Y`k`U`f`g`W`Y]b`]W`Ui`Z`Y]b`Y`D`f`Y]g`Y`f`c`i`b`[`k`U`f`h`Y`b`"
:`Ø`f`X]Y`j`Y`f`V`Y]V`Y`b`X`Y`b`&`&`i`X`Y`f`6]hWc]b!`9]b\`Y]h`Y`b`ž`X]Y`
j`cb`XYb`_i`fn`Z`f]gh][`Y`f`Y`b`5`b`Y`[`Y`f`b`[`Y`U`h`Y`b`k`Y`f`X`Y`b`ž`X]Y`]b`
X`Y`b`Y`h`h`Y`b`*`A`cb`U`h`Y`b`a`]h`6]hWc]b`[`Y`U`b`X`Y`h`\`UVYbž`]Y`[`h`
X`Y`f`X`i`f`W`g`W`b]h`h]W`Y`6`f`Y`U`_Y`j`Y`b`!`D`f`Y]g`G`W`Å`h`ni`b`[`Y`b`
ni`Z`c`[`Y`V`Y]`_`b`U`d`d`Ø`V`Y`f`&`&`ž`"\$`\$`\$`~`f`Ž`+`i`[`Y`[`Y`b`Ø`V`Y`f`
X`Y`a`_`U`_`h`i`Y`Y`b`k`Y`f`hž`U`V`Y`f`V`Y]Y]b][`Y`b`k`Y`b][`Y`b`V]g`ni`&`\$`
i`Ł`j`c`f`H`U`[`Y`b`ž`g]Y`Y`5`b`U`[`Y`&`Ł`"

..

fG\U\`i`b`X`GhY]ba`Y`h`ghY`Y`b`Z`Y`ghž`X`U`gg`Y`g`\]Y`f`Y]b][`Y`k`]W`h][`Y`

JcfVY\U`hY`[]Vh`8Yf`YfghY`]ghž`XUgg`Ub[Ybca`a`Yb`k`]fXž`XUgg`YXY`
6f]YZhUgWXY`Y]bYf`UbXYfYb`9bh]hÅh`[Y\`Øfhž`XYf`nk`Y]hY`]ghž`XUgg`
HfUbgU_h]cbYb`Ui`»Yf\U`V`XYf`6`cW`W`U]b`b]W`h`VYfØW_g]W`h][`h`
k`YfXYb`_`ØbbYb`Ł

K`]Y`ni`Yfk`UfhYb`k`Ufž`Z]Y`X]YgYf`A`Ub[Y`Ub`6Yk`Y[i`b[`a`]hY]bYa`
FØW_[Ub[`XYf`5_h]j`]hÅh`Ub`XYb`a`Y]ghYb`6ØfgYb`ni`gUa`a`Ybž`a`]h`
5i`gbU\`a`Y`XYg`A`Uf_hZØ`fYfg`6]bUbW`ž`XYf`X]Y`;`YVØ`fYb`[`YgYb_h`
\`Uhž`i`a`a`Y`f`;`YgW`Å`Zi`Ubni`_i`fVY`bž`i`bX`bi`b`Yhk`U`Y]b`:`ØbZ`hY`
XYg`[`YgUa`hYb`J`c`i`a`Ybg`VY`YfVYf[`h`

..

8Yf`9`YZUbh]a`F`Ui`a`]gh`b`UhØf`]W`9h\`YfYi`a`ž`XUg`Y`hnhYb`A`cb`Uh`
Y]bYb`K`YfVYgW`i`V`Yf`YVhYž`U`g`gY]bY`6`cW`W`U]b`Y]b`l`d`X`U`h`Y`
ØVYf`YVhY`"B`Y`h`9`H<`j`YfZc`[`h`X]Y`5_h]Yba`Åf`hY`Y`hnh`[`Yb`Ui`Yf`U`g`
6]hW`]bž`Y]bY`8`mb`Ua`_]ž`X]Y`X`Uf`Ui`Z`\]bXYi`hYhž`XUgg`Yg`g]W`i`a`X]Y`
bcfa`U`]g]YfhYfY`F`]g]_c`Ub`U[`Y`XYf`VY]XYb`\`UbXY`b`_`ØbbhY`"9]b][`Y`
Ui`Z`XYa`A`Uf`_h`_`ØbbhYb`Y`hnh`UbZUb[`Ybž`X]Y`<`UbXY`g`X`mb`Ua`_]`
]b`:`fU[`Y`ni`ghY`Y`b`ZØf`6]hW`]bž`U`g`:`c`[`Y`XYf`l`a`ghY`i`b[`XYf`9`H<`
Ui`Z`Y]b`Df`cc`Z`c`Z`GhU`_Y!`A`c`XY`ž`gU[`h`A`cf[`Ub`Gh`Ub`Y`m`

8]Y`5`b`U`mghYb`ghY`Y`b`ZY`ghž`XUgg`6]hW`]b`hYb`XYbn]Y`Y]bY`ghUf`_Y`
l`bhYfghØ`hni`b[`VY]`_b`Udd`ØVYf`%,`"%%`\$`\$`~`Z]bXYhž`k`Ug`X`Uf`Ui`Z`
\]bXYi`hYhž`XUgg`<`Å`b`X`Yf`9]bVfØW`Y`i`bhYf`X]YgYg`B`j`Y`Ui`_`Ui`Z`Y`b`.

..

8]Y`6`Yf]W`hYfghU`hni`b[`ØVYf`XYb`Gca`a`Yf`]XYb]h]Z]n]YfhY`&`\$`\$`\$`\$`~`
U`g`k`]W`h][`Yg`l`bhYfghØ`hni`b[`gb]j`Y`Ui`ž`i`bhYf\U`V`XYggYb`
Yfnk`i`b[`YbY`@]e`i`]X`U`h]cbYb`j`cb`[`Y\`YVY`hYb`Dcg]h]cbYb`
YfZcfXYf`]W`k`UfYb`"K`]f`k`ØfXYb`gdY`_i`YfYbž`XUgg`X]Y`Øb[`ghY`
8`mb`Ua`_]`X`Uf`Ui`Z`\]bXYi`hYhž`XUgg`%,`"\$`\$`\$`\$`~`Y]b`Å`b`]W`Yf`
G`W`a`Yfndi`b`_h`gY]b`_`ØbbhYb`"f`K`Y`bb`G]Y`Y]b`ghUf`_[`Y\`YVY`hYf`
6]hW`]b!`K`U`g]bXž`k`YbXYb`G]Y`g]W`V]hY`Ub`i`bg`Ł

2`ZY`bh]W`Y`6]hW`]b!`A`]bYf`gW`ØfZYb`]bnk`]gW`Yb`b]W`h`a`Y`f`gc`j`]Y`ž`
k`Ug`YVYbZU`g`Y]bY`[`Yk`]ggY`l`bhYfghØ`hni`b[`V]YhYb`gc`hY`"b`XYf`

HUh\ UVYb`g]Y`Y]b`VYgcbXYfg`Y]» Yg`J\`f`bgY`Vgh`bUW`? fmdhc!
A U» gh`VYb`L`]ba`]hYb`ghY][YbXYf`9bYf[]YdfY]gY""8]Y`5_h]Yb`_i fgY
Y]b][Yf`XYf`[f0» hYb`V0fgYbbch]YfhYb` `A UfUh`cb`8][]hU`ž`F]ch
6`cW`W`U]b`i bX`7cfY`GW]Ybh]Z]W` `k UfYb`gW`fYW`_]W`.

f7cfY`GW]Ybh]Z]W`_0bX][hY`Ubž`đgc`j Ybn`Ubni`a`Y`XYbž`k`À`fYbX
X]YgYf`5fh]_Y`[YgW`f]YVYb`k`i`fXY`Ł

9g`g]bX`i`a`gh`AbXYž`i`bhYf`XYbYb`đ\UVYf`a`]h`c`Ya` `: fYa`X`_Ud]hU`
X]YgY`5fh]j`cb`GhUV`]h`h`a` 0[`]W`Yfk`Y]gY`Xi`fW`Yfbgh`UZhYž
`Ub[Zf]gh][Y`đj`YghcfYb`i`bhYfa`Ui`Yfb`a` 0W`hYbž`X]Y`6H7`U`hYb`
GW`U`i`bX`GhY]ba`Yhn.

A]h`g]b`_YbXYb`<UbXY`gj`c`i`a`]bU`i`bX`k`Yb][Yf
A Uf`_hY]`bY`a`Yfb`UVYb`đhfUXUm`<`AbX`Yf`i`bX
A Uf`_ha` `Af`_hY`Y]bYb`ni`bY`a`YbXYb`9]bZi`gg`Ui`Z`X]Y`DfY]gY`
`fY`5_h]j`]h`hYb`k`YfXYb`k`U`fgW`Y]b`]W`Y`Y`f`j`cb
hYW`b]gW`Yb`DfY]gYb`i`bX`A`ca`Ybhi`a`VYY]bZi`ggh`U`g
VY]gd]Y`gk`Y]gY`j`cb``Ab[YfZf]gh][Yb`J`Yfa` 0[Ybgj`Yfk`U`hYfb`

8]Y`i`bhYfbY`a`Ybg[Yhf]YVYbYb`6Ya` 0`i`b[Yb`i`a` `X]Y`9]bZ0`fi`b[
j`cb`6]hW`b`[Y`Yb`k`Y]hYfž`a` 0[`]W`Yfk`Y]gY`Yfa`i`h][h`Xi`fW`XUg
J`YfY]b][hY`?`0b][fY]W`ž`XUg`gY]bYb`YfghYb`DfYa`]Yfa`]b]ghYf`a`]h
`Ug]YfYbXYb`5i` [Yb`Y]bgYhnh`8Ug`HYUa` `j`cb`A`G`]gh`Y]b`k`Yb][
g`_Ydh]gW`ž`k`]Y`k`]W`h][`XUg`U`Yg`]gh

đ`XYb`Y`h`hYb`A`cbU`hYb`UVYb`hfUX]h]cbY`Y
:]bUbni`bhYfbY`a`Yb`ni`bY`a`YbX`bYi`Y`?`fmdhcd`fcXi`_hY
Ub[Y`_0bX][hž`i`a` `]\fYb`?`i`bXYb`Ni` [Ub[`ni`XYb`A`Af`_hYb
i`bX`A` 0[`]W`_Y]hYb`ni`V]YhYbž`X]Y`ni` [fi`bXY`]Y[YbXYb
?`fmdhc`g`ni` `Ui`ZYbž`ni`j`Yf`_Ui`ZYb`i`bX`ni` `U`hYb`

8]Y`i`bhYfbY`a`Yb`gU[Ybž`XUgg`g]Y`X]Y`DfcXi`_hY`Ui`Z[fi`bX
XYf`?`i`bXYb`bUW`ZfU[Y`Y]b[YZ0`fh`UVYbž`UVYf`Ub[Yg]W`hg
XYf`0b[ghYb`Ni`!`i`bX`5VZ0ggY`j`cb`V0fgYb[Y`UbXY`hYb`

DfcXi _hYb'i bX'XYf'cVYb'VYgWk f]YVYbYb'HfYbXg'ZØf'XUg
<UbXY`gj c`i a Yb'[`Ui VYb`k]f`k Y]hYf\]bž'XUgg'X]Yg'XYf
: U``gY]b`_ØbbhYž'Yg'gY]'XYbbž'Yg'[]Vh'Y]bY`k YgYbh`]Wk Y
DfY]gj c`Uh]'hÅh'bUWk'cVYb'gWk Yf'ni`Yf_YbbYbž'XUgg'X]Y
fYU`Y`B UWk ZFU[Y`Yf\YV`]Wk`Ubn]Y\h"

8]Y`GhUV]'hÅh'g]Y\h'[i h'Ui gž'ni a]bXYgh]a`J Yf[`Y]Wk`ni`XYa žk Ug
UbXYfgk c`dUgg]Yfh"5VYf'XUg'5i gXØbbYb'XYf'J c`i a]bU`]b`Y]bYa
A Uf_hž'XYf'ØVYf'K YfhUi ZVYk U\fi b[`]bUi g`_Y]bYb`Bi hnYb`UUhž
k c`X]Y`<UbX`i b[Yb`gY]bYf`k Yb][Yb`U_h]j Yb`hÅ[`]WkYb`HY]'bY\ a Yf
j cb`hYWk b]gWkYb`K]XYfghUbXg!`i bX`l bhYfghØmi b[gb]j YUi g
VYgh]a a h`k YfXYbž']gh`_Y]b`Gma dhca`ZØf`Y]bY`fcVi ghY
; Ygi bX\Y]h"CVk c\`k]f`j]Y`ni`UV[Yghi a dZn'g]bXž'i a`ni`gU[Ybž
XUgg'XUg'6YghY`ZØf`X]Y`A i hYf`U`Yf'? fmdhc'j Yf[Ub[Yb`]ghž`_ØbbhY
\fY`5VZUWk i b[`bUWk`XYa`9]bVfi Wk`b]Wk hg'UbXYfYg`VYXYi hYbž
U`g'XUgg'g]Y`Ynh'Y]bY`YVYbgYf\U`hYbXY`5b`U[Y`_UggY`]gh"

E i Y`Y.`:]bUbW]U`H]a Yg

8 YhU]`g

6Ygi WkYb`G]Y`i bg`Ui Z.`_fmdhc!bYk g"Uh