

J Yf_Y\ fgnY]W\ Yb`]b`DYhYfg_]fW\ Yb
VYgW\ ÅX][h` `Dc`]nY]`gi W\ h`NYi [Yb

I bVY_UbbhYf`HÅhYf`VYgW\ ÅX][h`J Yf_Y\ fgnY]W\ Yb`]b
DYhYfg_]fW\ Yb"8]Y`Dc`]nY]`gi W\ h`NYi [Yb`ZØf`XYb`J cfZU`"
<]bk Y]gY`V]hhY`Ub`X]Y`Dc`]nY]]bgdY_h]cb`HfcghVYf["

⊕`XYf`_Y]bYb` ; Ya Y]bXY`DYhYfg_]fW\ Yb`k i fXY`Y]b
J Yf_Y\ fgnY]W\ Yb`Ui ZY]bYf`J Yf_Y\ fg]bgY`VYgW\ ÅX][h`i bX`X]Y
Dc`]nY]]gh`bi b`Ui ZXYf`Gi W\ Y`bUW\ `XYa`J Yfi fgUW\ Yf"8 Yf`J cfZU`"
ZUbX`Ui Z< Ò\Y`XYf`Òfh]W\ Yb` ; fi bXgW\ i `Y`ghUhh`i bX`k i fXY`ni
Y]bYa`NY]hdi b`_h`fY[]ghf]Yfh`XYf`V]g`Ub[`b]W\ h`[YbUi`Y]b[Y[fYbnh
k YfXYb`_Ubb"8 Ug`GW\]X`]gh`_ca`d`Yhh`i a [Y_b]W_h`i bX`Ui g`gY]bYf
ZYghYb`J YfUb_Yfi b[` [Yf]ggYb`k cfXYb`ž`k Ug`Ui ZY]bY`YZh[Y
9]bk]f_i b[`]bXYi hYh"

8]Y`Dc`]nY]]bgdY_h]cb`HfcghVYf[`Uh`VYfY]hg`Y]bY`DfYggYa`]hhY`i b[
j YfÒZYb`h]W\ h`i a`a`Ò[`]W\ Y`NYi [Yb`ni`YffY]W\ Yb`ž`X]Y`VY]`XYf
5i Z`Àfi b[`XYg`J cfZU`g`Y`ZYb`_ÒbbYb" `Gc`W\ Y`J UbXU`]ga`i gZ`Y`Y
g]bX`b]W\ h`bi f`Àf[Yf`]W\ ž`gcbXYfb`ghY`Yb`Ui W\ `Y]bY` ; YZ`Å`fXi b[
ZØf`X]Y`J Yf_Y\ fgg]W\ Yf`Y]h`XUf"J Yf_Y\ fgnY]W\ Yb` \UVYb`Y]bY
VYXYi hYbXY`F c`Y`]b`XYf`J Yf_Y\ fg`Yb_i b[ž`i bX`]\fY
6YgW\ ÅX][i b[`_Ubb`X]fY`hY` : c` [Yb`ZØf`5i hcZU`fYf`i bX` : i » [Åb[Yf
\UVYb"

<]bk Y]gY`ni f`HUh

9g`k]fX`Ub[Ybca`a`Yb`ž`XUgg`XUg`J Yf_Y\ fgnY]W\ Yb`k`Å`fYbX
A`Å`UfVY]hYb`cXYf`a`Ò[`]W\ Yfk`Y]gY`Xi fW\ `XUg`F`Ub[]YfYb`Y]bYg
[fÒ» YfYb` : U`fnYi [g`i a [Y_b]W_h`k i fXY"8]YgY`⊕Zcfa`Uh]cbYb
_ÒbbhYb`XYb`9fa`]hh`i b[Yb`XYf`Dc`]nY]]cb`Yb`hgW\ Y]XYbXYf
6YXYi hi b[`gY]b"»XY`bcW\ `gc`_Y]bY`6YcVUW\ hi b[`_ÒbbhY`\Y`ZYbž

XYb`HÄhYf`cXYf`X]Y`I a ghÄbXYž`X]Y`ni`X]YgYa`JcfZU``[YZØ\fh
\UVYbž`ni`_`ÄfYb"

: Øf`NYi [Ybž`X]Y`gUW`X]Yb`]W`Y`<]bk`Y]gY`\UVYbž`\Uh`X]Y`Dc`nY]
Y]bY`HY`Yzcbbi`a`a`Yf`Y]b[Yf]W`hYh`\$, * &%# , (&!\$" `8]Y`Dc`nY]
k`ØbgW`h`g]W`F`ØW`_a`Y`Xi`b[Ybž`X]Y`ni`f`5i`Z`Äfi`b[`XYf`GUW`U[Y
VY]hfU[Yb`_`ØbbYb``5i`W`k`Ybb`XYf`J`cfZU``_`Y]b`YfgW`Y]bYb`a`U[ž
hfÄ[h`YXY`5`_h]cb`ni`f`U``[Ya`Y]bYb`G]W`Yf\Y]h`Ui`Z`XYb`GhfU» Yb`VY]"

8]Y`;`Ya`Y]bXYj`Yfk`U`hi`b[`k`]fX`X]Y`G]hi`Uh]cb`[YbUi`VYcVUW`hYbž
[YfUXY`]b`5bVYhfUW`h`XYf`6YXYi`hi`b[`XYf`J`Yf`_`Y`fggW`]`XYf`ZØf`X]Y
G]W`Yf\Y]h`U``Yf`J`Yf`_`Y`fghY`]bY\`a`Yf``8]Y`NYfghØfi`b[`j`cb
ØZYb`h`]W`Yb`9]b]W`hi`b[Yb`k`]Y`J`Yf`_`Y`fggW`]`XYfb`]gh`b]W`h`bi`f
Y]b`fYW`h]W`Yg`DfcV`Ya`/Yg`_`Ubb`Ui`W`]b`XYf`;`Ya`Y]bgW`UZh`ni
Y]bYa`;`YZØ\`XYf`I`bg]W`Yf\Y]h`ZØ`fYb"

9g`]gh`k`]W`h][`ni`Yfk`Ä`bYbž`XUgg`gc`W`Y`HUhYb`b]W`h]gc`]Yfh
ghY\Yb``J`UbXU`YbU`hY`_`ØbbYb`Y]b[fØ» YfYg`DfcV`Ya`XUfghY`Ybž
XUg`X]Y`6Øf[Yf]bbYb`i`bX`6Øf[Yf`VYi`bfi` \][h``8i`fW`Y]bY`U`_h]j`Y
B`UW`VUfgW`UZh`g\`ZY`i`bX`XUg`HY`]Yb`j`cb`æZcfa`Uh]cbYb
i`bhYfY]bUbXYf`_`Ubb`Y`XcW`[Y\c`ZYb`k`YfXYbž`gc`W`Y`J`cfZÄ``Y`ni
a`]b]a`]YfYb"

8]Y`6Øf[Yf`g]bX`Y]b[Y`UXYbž`ghYhg`Ui`Za`Yf`_`gUa`ni`gY]b`i`bX
j`YfXÄW`h][Y`5`_h]j`]hÄhYb`ni`a`Y`XYb``»XY`[i`hY`B`UW`VUfgW`UZh`YVh
j`cb`XYf`K`UW`gUa`_`Y]hi`bX`XYa`[Ya`Y]bgUa`Yb`æhYfYggYž`X]Y
@VYbgei`U`]hÄh`ZØf`U``Y`ni`Yf\U`hYb"

8]Y`F`c``Y`XYf`?`ca`a`i`bY

8]Y``c`_`U`Y`Dc`nY]`\Uh`ØVYf`gc]U`Y`A`YX]Yb`i`bX
DfYggYa`]hY]`i`b[Yb`XUni`Ui`Z[Yfi`ZYbž`ni`gUa`a`Ybni`UfVY]hYb`i`bX
æZcfa`Uh]cbYb`ni`hY`]Yb``8Ug`9b[U[Ya`Ybh`XYf`;`Ya`Y]bgW`UZh]gh
YbhgW`Y]XYbXž`i`a`gc`W`Y`J`cfZÄ``Y`ni`j`Yf\]bXYfb`i`bX`X]Y
J`YfU`bhk`cfh]W`Yb`ni`f`F`YW`YbgW`UZh`ni`n]Y\Yb``K`Ybb`Y`XYf`gY]bYb
HY`]VY]hfÄ[hž`_`ØbbYb`k`]f`a`Ø[`]W`Yfk`Y]gY`Y]b`g]W`YfYg`i`a`ZY`X`ZØf
U``Y`gW`UZYb"

9g`V`Y]Vh`UVni k UfhYbž`cV`k Y]hYfY`ϕZcfa Uh]cbYb`ni f`5i Z`Àfi b[
XYg`J cfZU`g`Y]b[Y`Yb`k YfXYb`i bX`cV`XYf`HÀhYf`]XYbh]Z]n]Yfh
k YfXYb`_Ubb`"8Yf`J cfZU`"b`DYhYfg_]fWXYb`gc`hY`U`g`5bghc»
X]YbYbž`XUfØVYf`bUW`ni XYb`_Ybž`k]Y`k]W`h][`Y]bY`Zi b`_h]cb]YfYbXY
BUW`VUfgW`UZh`i bX`dYfgØb`]W`Y`J YfU`b`h`k`c`f`h`i`b[`ZØf`X]Y`G]W`Yf`Y]h
]b`XYf`Y][`YbYb`;`Ya`Y]bXY`g]bX`"8Ug`;`YZØ`"XYf`G]W`Yf`Y]h]gc`hY
ZØf`YXYb`6Øf[`Yf`gY`Vghj`Yfgh`ÀbX`]W`gY]b`i bX`Xi`fW`i[`Ya`Y]bgUa`Y
5bg`hfYb[`i`b[`Yb`[`YZØfXYfh`k`YfXYb`"

8]YgYf`J cfZU`"b`DYhYfg_]fWXYb`k`]fZi: fU[`Yb`ni`f
J`Yf`_Y`f`gg]W`Yf`Y]h]g`ck`]Y`ni`XYb`a`Ø[`]W`Yb`i`fgUW`Yb`gc`W`Yf`
GUW`VYgW`ÀX][`i`b[`Yb`Ui`Z`"J`Yf`_Y`f`ggW`]XYf`gd]Y`Yb`Y]bY
Yb`hgW`Y]XYbXY`F`c`"Y`VY]`XYf`F`Y[`Y`i`b[`XYg`G`hfU»`Yb`j`Yf`_Y`f`g`i`bX
XYfYb`6YgW`ÀX][`i`b[`_Ubb`ni`[`YZÀ`f`]W`Yb`G]h`i`Uh]cbYb`ZØ`fYbž
]bgVYgcbXYfY`]b`XYf`B`À`Y`j`cb`G`W`i`Ybž`k`c`?]bXYf`Ài`Z][
i`bhYfk`Y[`g`g]bX`"@Ui`h`G`h]gh]_]Yb`XYg`G`h]gh]gW`Yb`6i`bXYgUa`hYg
[`UV`Yg`&`\$`&`%]b`8Yi`hgW`U`bX`ØVYf`&`\$`\$`\$`\$`J`Yf`_Y`f`g`i`bZÀ`Y`ž`VY]
XYbYb`J`Yf`_Y`f`gnY]W`Yb`VYhf`c`ZYb`k`UfYbž`k`Ug`X]Y`B`chk`YbX][`_Y]h
Y]bYg`[`i`h`Zi`b`_h]cb]YfYbXYb`J`Yf`_Y`f`ggmghYa`g`i`bhYfghfY]W`h`"

Ni`XYa`_`ØbbhYb`gc`W`Y`J`cfZÀ`"Y`X]Y`U`"[`Ya`Y]bY`9]bghY`"i`b[`ni`f
9f`U`hi`b[`ØZYbh]W`Yf`9]b]W`hi`b[`Yb`fYZY`_h]YfYb`"ϕ`XYb`gc`n]U`Yb
A`YX]Yb`k`]fX`Ài`Z][`X]g`_i`h]Yfhž`k`]Y`k`]W`h][`F`YgdY`_h`i`bX`G`cf[`ZU`h
]a`i`a`[`Ub[`a`]h`;`Ya`Y]bgW`U`Zh]g[`ØhYf`b`g]bX`"8]Y`6YgW`ÀX][`i`b[
j`cb`J`Yf`_Y`f`gnY]W`Yb`_Ubb`b]W`h`bi`f`Z]b`Ubn]Y`"Y`?`c`ghYb
j`Yfi`fgUW`Ybž`gcbXYfb`Ui`W`X`Ug`G]W`Yf`Y]hgVYk`i`gghgY]b`]b`XYf
;`Ya`Y]bXY`VYY]bhf`ÀW`h][`Yb`"

I fgUW`Yb`ZØf`6YgW`ÀX][`i`b[`Yb`j`cb J`Yf`_Y`f`gnY]W`Yb

8]Y`i`fgUW`Yb`ZØf`X]Y`6YgW`ÀX][`i`b[`j`cb`J`Yf`_Y`f`gnY]W`Yb`g]bX
j`]Y`ZÀ`h][`"C`Zi`g]bX`i`bZÀ`Y`X]Y`<`Ui`d`hi`fgUW`Yž`k`]Y`Yg`]b`X]YgYa
:`U`"Xi`fW`i`F`Ub[`]YfYb`a`]h`[`fØ»`YfYb`i`U`fnYi`[`Yb`XYf`i`U`"gY]b
_ØbbhY`"ϕ`ÀbX`]W`YfYb`;`YV]YhYbž`k`c`X]Y`G`hfU»`Yb`k`Yb][`Yf`VfY]h
g]bXž`_Ubb`Yg`"Y]W`hYf`ni`"?"c`"g]cbYb`a`]h]g]W`VYk`Y[`YbXYb
:`U`fnYi`[`Yb`_ca`a`Yb`"8UfØVYf`"b]Ui`g`g]bX`Ui`W`
K`]hYfi`b[`gY]bZØggY`ni`VYfØW`g]W`h][`Yb`"G`hUf`_Yg`i`b`k`Y`hYf`_Ubb

X]Y`GhUV]`j]hÅh`XYf`GwX]`XYf`VYY]bhfÅwXh][Yb" `B UwX `Y]bYf`Ghi X]Y`XYg
8 Yi hgWxYb`K YhhYfX]YbghYg`g]bX`YI hfYa Y`K YhhYfYfY][b]ggY`]b`XYb
`YhhYb`š]`fYb`Ub[Ygh]Y[Ybž`k Ug`ni f`9f\`Ò\i b[`j`cb`l bZÅ``Yb`]a
GhfU» Ybj Yf_Y`f`ZØ`fYb`_Ubb" `5bV]YhYf`k]Y`XYf`5857` \UVYb
Ui Z[fi bX`gc`wX`Yf`GhUh]gh]_Yb`]a a Yf`k]YXYf`?Ua dU[bYb`ni f
J Yf_Y`f`gg]WxYf`Y]h]bg`@YVYb`[Yfi ZYb"

9]b`k Y]hYfYf`5gdY`h`g]bX`J UbXU`]ga i g`i bX`i bgUwX [Ya Å»Y
< UbX`UVi b[`Xi fWx`J Yf_Y`f`ghY]`bY`a Yf" `K Ybb`XUg`6Yk i gghgY]b
ZØf`X]Y`6YXYi hi b[`j`cb`j Yf_Y`f`gg]WxYf`Y]h]Z`hž`_`ÖbbYb`gc`wX`Y
J cfZÅ``Y`ni bY`a Yb" `8U`Yf`]gh`Yg`k]Wxh][ž`5i Z`_`Àfi b[gUfVY]h`ni
`Y]ghYbž`i a `X]Y`6Yj Ò`_Yfi b[`ZØf`XYb`j YfUbhk`cfhi b[gj`c``Yb
l a [Ub[`a]h]J Yf_Y`f`gnY]WxYb`ni `gYbg]V`]`g]YfYb"

8YhU]`g

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