

I b [`Ui V`]WXY : i bXY. '8i XYfghUXh
YbhXYW_h'Gdi fYb `VÀi Yf`]WXYb `@YVYbg j cf
&) \$\$ `>U\ fYb

5fWÀc`c [Yb`YbhXYW_Yb`i bhYf`Y]bYf`GWXi `Y`]b`8i XYfghUXhž
B]YXYfgUW_gYbž, VYffYghY`Y]bYf`j cffÒa]gWXYb`G]YX`i b [`Ui g
XYf`9]gYbnY]h"

≠b`8i XYfghUXhžB]YXYfgUW_gYbž`Uh`Y]b`Ufa `cgYf`6Ui Ui ZhfU [`Ub
Y]bYf`GWXi `Y`Y]b`i bYfk UfhYhYg` \]ghcf]gWXYg`9fY][b]g`Ubg`@WKh
[YVfUW_h"5fWÀc`c [Yb`XYf`5fWÀca YXYg; a V< `UfVY]hYhYb`j cf
?i fnYa `Ub`XYb`J cfVYfY]hi b [Yb`ZØf`Y]bYb`5bVUi `Ua `9]W_gZY`X!
; ma bUg]i a žU`g`g]Y`i bhYf`XYa `GWXi `cZVYXYi hYbXY` : i bXY`Ui g
XYf`j cffÒa]gWXYb`9]gYbnY]h`YbhXYW_hYb"8]YgY`9bhXYW_i b [
_ØbbhY`X]Y`6Y_Ubbh`Y]h`XYf`FY []cb`i bX`]\fYb` \]ghcf]gWXYb
?cbhYI h [fi bX`Y [YbX`j YfÀbXYfb"

8]Y`5i g [fUVi b [Ybž`X]Y`i fgdfØb [`]W `YX][`]W `XYf`J cfVYfY]hi b [
ZØf`XYb` [Yd`UbhYb`9fk Y]hYfi b [gVUi `X]YbhYbž`cZZYbVUfhYb
FØW_ghÀbXY`Y]bYf`Y]bgh`YI]gh]YfYbXYb`G]YX`i b ["7\ f]ghcd\
8Ò`YfYfž`Y]b`J YfhYhYf`XYf`5fWÀc`c [Ybž`Ài » YfhY`g]W`ja
; Øh]b [Yf`HU [YV`Uhh`ni `XYb` : i bXYb. `K]f`VYZ]bXYb`i bg`Ui Z
Y]bYa `6Yf [fØW_Ybž`k c`ZfØ`Yf`G]YX`i b [Yb`YI]gh]YfhYb" `8]Y
: cfgWXYf`UhhYb`VYfY]hg`j Yfa`i hYhž`XUgg`XUg; YV]Yh`UfWÀc`c []gW
j cb`6YXYi hi b [`]ghž`XcW`X]Y`U_hi Y`Yb` : i bXY`ØVYfhYZZYb`]\fY
9fk Ufhi b [Yb`Yf`YV`]W."

F Y`]_hY`XYg`VÀi Yf`]WXYb`@YVYbg

K À\ fYbX`XYf; fUVi b [Yb`gh]Y»Yb`X]Y`K]ggYbgW`UZh`Yf`Ui Z
nU`fY]WXY`Y`Y` : `YW_Yb`ja `6cXYbž`X]Y`NY]WXYb`j Yf [Ub [YbYf
a YbgW`]WXYf`5_h]j]hÀhYb`XUfghY`Yb"8]YgY` : `YW_Yb`g]bX`Ài Z][

ϕX]n]Yb`XUZ0fz`XUgg`XUg`9fXfY]W`VYUfVY]hYh`k i fXY"6YgcbXYfg
`YfUi`gfU[YbX`g]bX`j]Yf`DZcghYb`0W`Yfz`X]Y`Ui`ZX]Y` , VYffYghY
Y]bYg`_Y]bYb` ; YV`Ai`XYg`\\bXYi`hYb`z`a` 0[`]W`Yfk`Y]gY`Y]bYg
GW`i`ddYbg`cXYf`Y]bYf` : Y`XgW`Yi`bY"8`0`YfYf`Yf`_`Af`h` `8`Ug`k`AfY
Z0f`Y]b`K`c`\\b[YV`Ai`XY`j]Y`ni`_`Y]b"

Ni`g`A`h`n`]W`Y`b`h`XY`W`_`h`Y`b`X]Y`5`f`W`A`c`c`[Yb` ; fi`VY`b`z`X]Y
k`U`\\fg`W`Y]b`]W`U`g`d`f]a`]h]`Y`?`ca`dc`g`h`\\`Ui`Z`Y`b`X]Y`b`h`Y`b"ϕ`X]Y`g`Y`b
6`Y`f`Y]W`Y`b`k`i`f`X`Y`b`H]Y`f`X`i`b[`i`b`X`U`b`X`Y`f`Y`5`V`Z`A``Y`[Y`g`U`a`a`Y`h`i`b`X
a`]h`9`f`X`Y`V`Y`X`Y`W`_`h`z`Y]b`Y`Z`f`0`\\`Y` : c`f`a` `X`Y`f`8`0`b[i`b[z`X]Y`X`Y`b
X`U`a`U`][Y`b`6`U`i`Y`f`b`\\`U`Z`z`]`\\`f`Y` : Y`X`Y`f`Z`f`i`W`h`V`U`f`ni` `\\`U`h`Y`b"8`0`Y`f`Y`f
Z`0[h`Y`\\]b`ni`z`X`U`g`g`c`W`Y` : c`f`a` Y`b`X`Y`f`6`c`X`Y`b`V`Y`U`f`V`Y]h`i`b[
Y`b`h`g`W`Y]X`Y`b`X`Z`0f`X`U`g`U`b`X`k`]f`h`g`W`U`Z`h]W`Y` , V`Y`f`Y`V`Y`b`j`c`f`&) `\$\$
ϕ`\\`f`Y`b`k`U`f`Y`b"

C`V`k`c`\\`X]Y`9`b`h`XY`W`_`i`b[Y`b`U`i`Z`X`Y`b`Y`f`g`h`Y`b`6`]W`_`g`d`Y`_`h`U`_`i` `Af
Y`f`g`W`Y]b`Y`b`z`Z`Y`\\`h`Y`g`U`b`[f`Y]Z`V`U`f`Y`b`5`f`h`Y`Z`U`_`h`Y`b"9`g`[]V`h`\\`U`h`b]W`h`g
ni`a`5`b`Z`U`g`g`Y`b`z`X`U`g`]g`h`g`W`U`X`Y`z`V`Y`X`U`i`Y`f`h`8`0`Y`f`Y`f"8`]Y` : i`b`X`Y
V`Y`g`W`f`A`b`_`Y`b`g]W`U`i`Z`X]Y`H`U`h`g`U`W`Y`z`X`U`g`g`X`U`g` ; Y`A`b`X`Y`Y]b`a`U`Y]b
5`W`_`Y`f`U`b`X`k`U`f`z`a`]h`U`b`X`k`]f`h`g`W`U`Z`h]W`Y`b`i`b`X`V`U`i`_]W`Y`b
<]b`k`Y]g`Y`b"

9]b`X`f`i`W`_`Y`j`c`b` ; Y`g`W`]W`h`g`V`Y`[Y]g`h`Y`f`h`Y`b

6`Y`g`i`W`Y`f`X`Y`f`5`i`g[f`U`V`i`b[Y`b`z`Y]b`g`W`Y]Y`»`]W` ; Y`g`W`]W`h`g`Y`\\`f`Y`f`6`Y`b
H`\\`i`g`h`Y`_`i`b`X`G`W`0`Y`f]b`b`Y`b`i`b`X`G`W`0`Y`f`g`Y]b`Y`g`@Y]g`h`i`b[g`_`i`f`g`Y`g`z
n`Y][h`Y`b`g]W`V`Y`Y]b`X`f`i`W`_`h`j`c`b`X`Y`b`\\]g`h`c`f]g`W`Y`b
Ni`g`U`a`a`Y`b`\\`A`b[Y`b" `H`\\`i`g`h`Y`_`V`Y`a`Y`f`_`h`Y` . 9`g`]g`h`g`W`c`b`g`d`U`b`b`Y`b`X
ni`g`Y`\\`Y`b`z`X`U`g`g`Y`g`\\]Y`f`j`c`f`n`k`Y]Y]b`\\`U`V`h`U`i`g`Y`b`X`ϕ`\\`f`Y`b
G]Y`X`i`b[g`g`h`f`i`_`h`i`f`Y`b`[U`V" `G`c`W`Y`9`f`Y`V`b]g`g`Y`Z`0f`X`Y`f`b`X`U`g
 ; Y`g`W`]W`h`g`V`Y`k`i`g`g`h`g`Y]b`↑`b[Y`f`@Y`i`h`Y`i`b`X`U`g`g`Y`b`g]Y`f`Y`Z`Y`_`h]Y`f`Y`b`z
k`]Y`g]W`X`U`g`@Y`V`Y`b`j`a` `@`U`i`Z`Y`X`Y`f`ϕ`\\`f`\\`i`b`X`Y`f`h`Y`j`Y`f`A`b`X`Y`f`h`\\`U`h"

8]Y`g`Y`9`b`h`XY`W`_`i`b[Y`b`k`Y`f`Z`Y`b`b]W`h`i`b`i`f`Y]b`@]W`h`U`i`Z`X`U`g`@Y`V`Y`b
X`Y`f`A`Y`b`g`W`Y`b`]b`X`Y`f`9]g`Y`b`n`Y]h`z`g`c`b`X`Y`f`b`g]Y`\\`Y`Z`Y`b`U`i`W`z`X]Y
\\]g`h`c`f]g`W`Y`@U`b`X`g`W`U`Z`h`B]Y`X`Y`f`g`U`W`g`Y`b`g`V`Y`g`g`Y`f`ni`j`Y`f`g`h`Y`\\`Y`b"8`]Y
Z`f`0`Y`b`G]Y`X`Y`f`\\`U`h`h`Y`b`X]Y` : A`\\][_Y]h`z`]`\\`f`Y`i`a`[Y`V`i`b[`ni
V`Y`k`]f`h`g`W`U`Z`h`Y`b`i`b`X`Y]b`Y` ; Y`a`Y]b`g`W`U`Z`h`U`i`Z`h`V`U`i`Y`b`z`k`U`g`n`Y][h`z

k]Y`Ub[Y`X]YgY`DfU_h]_Yb`VYfY]hg`]b`9i fcdU`j YfUb`_Yfh`g]bX`"

9]b`gc`WXYf`i bX`]gh`j cb`[fc»Yf`6YXYi hi b[ž`b]W`h`bi f`ZØf`X]Y
K]ggYbgW`UZh`gcbXYfb`Ui W`ZØf`XUg`_c`Y`_h]j Y` ; YX`W`hb]g`XYf
FY[]cb`"8]Y`A`Ò[`]W`_Y]hž`Xi fW`gc`W`Y`5i g[fUVi b[Yb`Y]b`GhØW`
XYf`J Yf[Ub[Yb`Y]h`k]YXYfni VY`YVYbž`Vf]b[hgck c`
<YfUi gZcfXYfi b[Yb`U`g`Ui W`7`UbW`b`a]h`g]W`ž`XUg
; YgW`]W`hgj Yfgh`AbXb]g`ni `j Yfh]YZb`i bX`X]Y`J YfV]bXi b[Yb
nk]gW`Yb`XYf`J Yf[Ub[Yb`Y]h`i bX`XYf` ; Y[Ybk Ufh`ni `j YfghY`Yb`"

9]bY`9bhXYW`_i b[ž`X]Y`V`Y]Vh

C V k c`X`Ug`7ca]b[!VUW`_XYf`5fhY ZU`_hY`Ui g`XYf`9]gYbnY]h`b]W`h
a`Ò[`]W`_Y]ghž`V`Y]Vh`XUg`K]ggYb`i bX`X]Y`5i Z`_`Àfi b[`ØVYf`XUg
@YVYb`X]YgYf`ZfØ`Yb` ; Ya`Y]bgW`UZhYb`VYghY`Yb`"8]Y` ; i bXY`i bhYf
XYf`8i XYfgh`A`XhYf`GW`i`Y`nY][Yb`Y]bXfØW`_]W`ž`XUgg`YXYf`HY`
i bgYfYg`@UbXYg` ; YgW`]W`hYb`Yfn`A`hž`X]Y`Yg`k Yfh`g]bXž`YbhXYW`_h
i bX`VYk U`fh`ni`k YfXYb`"8]Y`6Y[Y]ghYfi b[`ZØf` ; YgW`]W`hYž`X]Y
Xi fW`gc`W`Y`5i g[fUVi b[Yb`YbhZUa`a`h`k]fXž`gh`Y]b`k Yfhj c`Yf
6Y]hfU[`ni f`_i`hi f`]ghcf]gW`Yb`6]`Xi b[`i bX`k]fX`Ui W`]b`Ni`_i bZh
j cb`6YXYi hi b[`gY]b`"

8]Y`9bhXYW`_i b[`XYf` , VYffYghY`Y]bYf`G]YX`i b[`]b`8i XYfghUXh`k]fZh
Y]b`@]W`h`Ui ZX]Y`@YVYbgk Y]gY`i bX`Cf[Ub]gUh]cb`XYf`XUa`U`][Yb
; YgY`gW`UZh`5b`UbX`XYf`[YZi bXYbYb`Ghfi`_hi fYb`_ØbbYb
5fW`Àc`c[Yb`F`ØW`_gW`_ØggY`Ui ZX]Y`UbXk]fhgW`UZh]W`Yb`DfU_h]_Yb
XYf`A`YbgW`Yb`]b`XYf`j cffÒa`]gW`Yb`9]gYbnY]h`n]Y`Yb`"8]Y`FY[]cb
B]YXYfgUW`gYb`k Uf`ni f`XUa`U`][Yb`NY]h`ghUf`_`UbXk]fhgW`UZh]W`
[Ydf`À[hž`a`]h`Y]bYf`6Yj`Ò`_Yfi b[ž`X]Y`j cb`5W`_YfVUi`i bX`J]Y`ni W`h
`YVhY`"

8]Y`9bhXYW`_i b[`XYf`DZcghYb`ØW`Yf`i bX` ; fi VYb`XYi hYh`XUfUi Z`]bž
XUgg`X]Y`A`YbgW`Yb`]b`X]YgYf` ; Y[YbX`ZcfhgW`f]h`]W`Y`A`Yh`cXYb
ni f`8Øb[i b[`]`fYf` : Y`XYf`Ubk YbXYhYb`"8]YgY`DfU_h]_Yb`_ØbbhYb
Ui ZY]bY`VYfY]hg`Ybhk]W`_Y`hY`@UbXk]fhgW`UZh`]b`k Y]gYbž`X]Y`ZØf
XUg` , VYf`YVYb`i bX`X]Y`5bY][bi b[`j cb`FYggci fW`b`YbhgW`Y]XYbX
k Uf`"Gc`W`Y` : i bXY`g]bX`VYgcbXYfg`k Yfhj c`ž`XU`g]Y`XUg
J Yfgh`AbXb]g`XYf`gc`n]U`Yb`i bX`k]fhgW`UZh]W`Yb`Ghfi`_hi fYb`X]YgYf`

NY]h'Yfk Y]hYfb"

B Yi Yb hk]W_`i b[Yb`]b`XYf`5fWÅAc`c[]Y

8]Y`Øb[ghYb`5i g[fUVi b[Yb`]b`B]YXYfgUWÅgYb`ghY\Yb`]a
 9]b`_Ub[`a]h'Y]bYf`k UWÅgYbXYb`NU\`j cb`9bhXYW_i b[Ybž`X]Y`]b
 XYb`YhnhYb`đ\`fYb`]b`8Yi hgWÅ`UbX`[Ya UWÅh`k i fXYb`"
 5fWÅAc`c[]gWÅY`i bXY`Ui g`XYf`j cff`Øa]gWÅYb`9]gYbnY]h`\UVYb`]b
 j]Y`Yb`HY]Yb`8Yi hgWÅ`UbXg`ni [Ybca`a Ybž`j cb`XYf`9bhXYW_i b[
 Y]bYg`i fÅVYfZY`XYg`]b`H\Øf]b[Yb`V]g`ni `G]YX`i b[gfYghYb`]b
 6UmYfb`"8]YgY`9bhk]W_`i b[Yb`fYZY`_h]YfYb`Y]b`ni bY\`a YbXYg
 6Yk i gghgY]b`i bX`đhYfYggY`Ub`XYf`6YXYi hi b[`XYf`5fWÅAc`c[]Y`]b
 XYf`9fgWÅUZZi b[`Y]bYg`i a ZUggYbXYfYb`i YgWÅ]WÅhgj YfghÅbXb]ggYg"

9]b`k Y]hYfYf`gdUbbYbXYf`5gdY`_hX]YgYf`i bXY`]gh`X]Y`HYWÅb]_ž`X]Y
]b`XYf`a cXYfbYb`5fWÅAc`c[]Y`j Yfk YbXYh`k]fX`"A]h
 ZcfhgWÅf]hh]WÅYb`A Yh\cXYb`k]Y`[Ycd`mg]_U`]gWÅYb`A Yggi b[Yb
 i bX`X][]hU`Yb`FY`_cbghfi`_h]cbYb`_ØbbYb`5fWÅAc`c[Yb`_ca`d`YI`Y
 G]YX`i b[gghfi`_hi`fYb`Ui ZgdØfYbž`c`bY`XYb`6cXYb`i a ZUggYbX
 Ui Z[fUVYb`ni`a`ØggYb`"8]Yg`U`h`X`Uni`VY][YhfU[Ybž`X`Ugg`a`Y`f
 ØVYf`i bgYfY`ZfØ`YghYb`J`cfZU`fYb`VY`_Ubbh`k]fX`i bX`X]Y
 \]ghc`f]gWÅYb`B`UffU]j`Y`ni bY\`a YbX`d`f`Ån]g]Yfh`k YfXYb`_ØbbYb`"

8]Y`6YXYi hi b[`XYf`i bXY`ZØf`X]Y`F`Y[]cb

8]Y`5i g[fUVi b[Yb`]b`8i XYfghUXh`_ØbbhYb`b]WÅh`bi`f`X]Y`c`_U`Y
 ; YgWÅ]WÅhY`VYfY]WÅYfbž`gc`bXYfb`UVYb`Ui WÅ`X`Ug`Dc`hYb`h]U`ž`X`Ug
 _i`hi`fY`Y`9fVY`B]YXYfgUWÅgYbg`ni`ZØfXYfb`"<]ghc`f]gWÅY`GhÅ`hY`b
 n]Y\`Yb`c`Z`h`Ci`f]ghYb`Ubž`k`Ug`d`c`g]h]j`Y`k`]fhgWÅU`Z`h]WÅY`9`ZY`_hY`a`]h
 g]WÅ`V`f]b[Yb`_Ubb`"đ`Y]bYa`i`6i`bXYg`UbXž`X`Ug`fY]WÅ`Ub
 ; YgWÅ]WÅhY`i`bX`_i`hi`fY`Y`b`F`Yggci`fWÅb`]ghž`_ØbbhY`XYfUfh][`Y
 UfWÅAc`c[]gWÅY`i`c`fgWÅi`b[`ni`f`i`ØfXYfi`b[`Y]bYg`VYggYfYb
 J`YfghÅ`b`X`b]ggYg`i`bX`đhYfYggYg`Ub`XYf`fY[]cb`U`Yb`i`YgWÅ]WÅhY
 VY]hfU[Yb`"

8`UfØVYf`\]bUi`g`_ØbbhY`X]Y`9]bVYn]Y\`i`b[`gc`WÅYf`i`bXY`]b`X]Y
 GWÅi`V]Xi`b[ž`k`]Y`]a`i`U`X`Yg`i`YgWÅ]WÅhg`Y`fYfg`6Yb`H`i`ghY`ž
 X`Ug`i`YgWÅ]WÅhgj`YfghÅ`b`X`b]g`i`b[Yf`A`Yb`gWÅYb`ZØfXYfb`"đ`WÅ`b`h]j`Yg

ZØf`GWÅi`Ybž`b`UfWÅÄc`c[]gWÅY`Dfc`Y`hY`Y]b[YVi`bXYb`ni`k`YfXYbž`
_ØbbhYb`XUg`b`hYfYggY`XYf`GWÅØ`Yf`Ub`XYf`; YgWÅ]WÅhY`i`bX`XYf`
6YXYi`hi`b[`UfWÅÄc`c[]gWÅYf`5fVY]h`ghÅf`Yb`"Gc`WÅY`Dfc`Y`hY`
V]YhYb`dfU`h]gWÅY`@Yfba`Ø[`]WÅ`_Y]hYb`i`bX`_ØbbYb`XYb`i`b`hYff]WÅh`
`YVYbX][Yf[YghU`hYb`"

K`Y]hYfY`DYfgdY`_h]j`Yb`

9g`]gh`Ubni`a`Yf`_Ybž`XUgg`gc`WÅY`UfWÅÄc`c[]gWÅYb`9bhXYW`_i`b[Yb`
cZhi`Ui`WÅ`fYWÅh]WÅY`i`bX`Yh\]gWÅY``a`d`_]Uh]cbYb`UVYb`"8]Y`
G]WÅYfi`b[`i`bX`XYf`GWÅi`hn`XYg`_i`hi`fY`Yb`9fVYg`ghY`Yb`]a`
J`cfXYf[fi`bXž`VYgcbXYfg`VY]`6Ui`UfVY]hYbž`X]Y`dchYbn]Y`
`]ghcf]gWÅY`GhÅhhYb`[YZÅ`fXYb`"b`j`]Y`Yb`@AbXYfbž`Y]bgWÅ`]Y»`]WÅ`
8Yi`hgWÅ`UbXž[]Vh`Yg`ghfYb[Y;`YgYhnYž`X]Y`XYb`i`a`[Ub[`a`]h`
gc`WÅYb`i`bXYb`fY[Y`bž`i`bX`g]WÅYfghY`Ybž`XUgg`k`Yfhj`c`Y`
bZcfa`Uh]cbYb`ZØf`ni`_ØbZh][Y;`YbYfUh]cbYb`Yf`U`hYb`V`Y]VYb`"

b`XYf`FY[]cb`_ØbbhY`X]Y`9bhXYW`_i`b[`]b`8i`XYfghUXh`U`g`5bghc`»`
X]YbYbž`k`Y]hYfY`c`fgWÅi`b[Yb`i`bX`5i`g[fUVi`b[Yb`Xi`fWÅni`ZØ`fYbž`
i`a`X]Y;`YgWÅ]WÅhY`i`bX`X]Y`9bhk`]W`_i`b[`XYf`FY[]cb`VYggYf`ni`
j`YfghY`Yb`"5fWÅÄc`c[]Y`]gh`b]WÅh`bi`f`Y]bY`K`]ggYbgWÅUZh`XYf`
J`Yf[Ub[Yb`Y]hž`gcbXYfb`Y]b`YVYbX][Yf`Dfc`nYggž`XYf`Ui`WÅ`
U`hi`Y`Yb`i`bX`ni`_ØbZh][Yb;`YbYfUh]cbYb`VYXYi`hYbXY`@Y`fYb`
j`Yfa`]hY`b`_Ubb`"

8YhU]`g`

6Ygi`WÅYb`G]Y`i`bg`Ui`Z`b!U["XY`