

: Yfa Ybh]YfhYf`K Y]» Yf. `9]bV`]W_Y`]b`X]Y
VYj c fghY\YbXY`K Y]bgU]gcb`]b : fUb_Yb

9fZU\ fYb`G]Y`U`Yg`ØVYf`X]Y`9fbhY`XYg`VY`]YVhYb
: Yfa Ybh]YfhYb`K Y]» Yb`]b : fUb_Yb. `E i U`]h`hž`9fhfU[`i bX`X]Y
< YfUi gZcfXYfi b[Yb`ZØf`K]bnYf"

⊕`XYf`a U`Yf]gWYb`F Y[]cb : fUb_Ybž`X]Y`U`g`< Yfng`hØW`XYg
VUmYf]gWYb`K Y]bVUi g[]`hž`g]bX`X]Y`J cfnY]WYb`ZØf`X]Y`K Y]b`YgY
]b`X]YgYa`⊕\f`b]W`h[Ubni b[YhfØVh"⊕`XYb`Yh`hYb`K cWYb`\Uh
X]Y`< Y[k Y]b`K]bYfm]b`A Uf`_h`9]bYfg\Y]a`X]Y ; Y`Y[Yb\Y]h
[Ybi h`hž`i a`U`g`Y]bY`XYf`YfghYb`6Yhf]YVY`X]Y`C fhY[U!HfUi VYb`ZØf
XYb`VY`]YVhYb : Yfa Ybh]YfhYb`K Y]» Yb`ni`YfbhYb"K]bnYf`A UfW`g
< Y[k Y]b`gdf]W`hj cb`Y]bYf`ZfØ\Yb`9fbhYž`X]Y`Ui`Z`X]Y`j`c`fhY`]`U`ZhY
@U[Y`gY]bYf`K Y]bVYf[Y`ni`fØW`ni`ZØ\Yb`]gh" Hfchn`XYf`dcg]h] Yb
5gdY`_h`Y]g]bX`X]Y`< YfUi gZcfXYfi b[Yb`Xi`fW : fcghgW`ÅXYb`i`bX
i`bj`cf\YfgY\VUfYg`K`YhYf`b]W`h`ni`ØVYfgY\Yb"

5i W`k`Ybb`X]Y`HfUi VYb`a`]h`Y]bYa`CYW`g`Y!; fUX`j`cb` , , `U`g
ei U`]hU]h]`[i`h[Y`h`Ybž`]gh`XYf`9fhfU[`ghUf`_`VYY]bhf`ÅW`h][`h" < Y[k Y]b
gY`Vgh`Yf`_`Åfhž`XUgg`X]YgYf`9fhfU[`bi`f`Yhk`U`X]Y`<`Å`ZhY`XYg
J`cf`U\`fYg`YffY]W`hž`k`Ug`Ui`Z`X]Y`i`bk`Å[VUf`_Y]hYb`XYg`K`YhYfg
ni`fØW`ni`ZØ\Yb`]gh"8]Y`Zfcgh][`Yb`B`ÅW`hY`i`bX`Ub`gW`]Y» YbX
ghUf`_Y`F`Y[YbZ`Å`Y`\UVYb`j`]Y`Yb`K]bnYfb`]b : fUb_Yb`XUg`@YVYb
gW`k`Yf[Ya`UW`h"

9fgh_`Ugg][Y`9fnYi [b]ggY`i`bX`J`c`f`ZfYi`XY

9]b`VYgcbXYfYg`<][`\`][`\h`XYf`K`Y]b`YgYgU]gcb`]gh`XYf
: Yfa Ybh]YfhY`K`Y]» Yž`Y]b`gW`Ui`a`][`Yf ; Ybi`ggž`XYf`Ui`g`Y]bYf
A`]gW`i`b[`j`cb`C`fhY[U!ž`Gc`Uf]g!`i`bX`A`Ø`Yf!H\i`f[Ui`!HfUi`VYb
\Yf[YghY`h`k`]fX"8]YgYf`gdYn]Y`Y`K`Y]b`k`]fX`]b`XYf`F`Y[]cb

hfUX]h]cbY``ni`Nk]YVY`_i WXYb`gYfj]Yfh"5`g`Y]bY`5fhJ c fghi ZY`ni a
_`Ugg]gWXYb`K`Y]b`]gh`Yf`Øb[Yf`i bX`bcW`i bZYfh][ž`k Ug`?YbbYf
i bX`@]YV\UVYf`X]YgYf`NY]h`XYg`š\`fYg`gY\bgØW`h][`Yfk UfhYb"8]Y
<YfghY``i b[`YfZc`[h]bbYf\U`V`k`Yb][Yf`HU[Y`bUW`XYf`@YgYž
k Yg\U`V`XYf`hfØVYž`Y]W`h`a`]W`][Y`8f]b`_`gW`bY``Ui Z`XYb`A`Āf`_hYb
YfgW`Y]bh"

8]Y`K`]bnYf[Ya`Y]bgW`UZh: fUb`_Yb`fi`K`: Ě`n`Ā`\`h`ni`XYb`[fØ» hYb
DfcXi`nYbhYb`XYg: Yfa`Ybh]YfhYb`K`Y]» Yb`i bX`dfcXi`n]Yfh`Ā`\`]W`
nk`]gW`Yb`-`\$`\$`\$`\$`i`bX`%`%`\$`\$`\$`@]hYfb"8]Yg`k`]fX`j`cb`;`K`:`!
J`c`f`g`h`Ub`X`A`Ufh]b`;`Y]»`Yf`VYghĀ]h][hž`XYf`X]Y`GhY``Y`]a`K`Y]bVUi`U`g
Y]bYb`XYf`nYbhU`Yb`DfcXi`_h]cbgghUbXcfhY`ZØf`X]YgYb`[Ub`n
gdYn]Y``Yb`K`Y]b`\Yfj`cf\YVh"

≠`XYb`_ca`a`YbXYb`K`cW`Yb`k`]fX`X]Y`<Ui`dh`YgY`XYf``U[YfZĀ\][Yb
K`Y]bY`VY[]bbYb"8Yf`cZZ]n]Y``Y`@YgVYV[]bb`k`]fX`Ua``%&"
GYdhYa`VYf`a`]h`@UbXk`]fhgW`UZhga`]b]ghYf]b`A`]W`UY`U`?Ub]VYf`]b
<Ua`a`Y`Vi`f[`Y]b[Y`Āi`hYh"8]Y`K`]bnYf`\cZZYbž`hfc`h`XYf
gW`k`]Yf][Yb`6YX]b[i`b[Ybž`X]Y`9fbhY`XYbb`cW`YfZc`[fY]W`ni
[YghU`hYb"

< YfUi`gZc`fXYfi`b[Yb`ZØf`XYb`K`Y]bVUi

8]Y`6YhfUW`hi`b[`XYf`X]Yg`Ā`\][Yb`9fbhYgW`Ā`hni`b[Yb`nY][hž`XUgg
hfc`h`U``Yf`J`c`f`Z`f`i`XY`Ui`W`6Ygc`f[b]g`VYghY`\h"8]Y`Øb[ghYb
K`YhhYfg]hi`Uh]cbYbž`j`cf`U``Ya`X]Y`:`fc`ghgW`Ā`XYb`]a`:`fØ`U\`fž
Yf\`Ø\`Yb`X]Y`I`bg]W`Yf\Y]h`ØVYf`X]Y`_ca`a`YbXY`K`Y]bgU]gcb" ;`K`:`!
J`c`f`g`h`Ub`X`;`Y]»`Yf`Āi`»`Yfhž`XUgg`a`Ub`a`]h`Yhk`U`,`\$`Dfc`nYbh`XYf
9fhfU[gYfk`Ufh]b[Yb`Y]bYf`bcfa`U`Yb`9fbhY`fYW`bYb`_ØbbY"9g
[]Vh`Y]b][Y`K`]bnYfž`X]Y`ghĀf`_Yf`VYhfc`ZZYb`g]bX`i`bX`a`]h`bcW`
[Yf]b[YfYb`9fhfĀ[Yb`fYW`bYb`a`ØggYb"

8]Y`[fØ» hYb`6YXfc\i`b[Yb`ZØf`X]Y`HfUi`VYb`g]bX`D]n`_fUb`_\Y]hYb
k`]Y`:`U`g`W`Yf`i`bX`9W`hYf`A`Y`\`hUi`gck`]Y`:`fUi`gW`]a`a`Y``I`a`X]Y
HfUi`VYb`ni`gW`Ø`h`nYbž`gY`h`nYb`X]Y`K`]bnYf`Ui`Z
DZUb`nYbgW`i`hna`]hY``B`Yi`YfYž`k`]XYfghUbXgZĀ\][Y`F`YVgc`fhYb`g]bX
XUVY]`]a`?`ca`a`Ybž`XU`X]YgY`k`Yb][Yf`UbZĀ``][`ZØf`gc`W`Y
?fUb`_\Y]hYb`g]bX`i`bX`gca`]h`Y]bY`i`a`k`Y`hžfYi`bX`]W`YfY

5bVUi k Y]gY`Yfa Ò[`]WXYb"

: fUb_Yb`V`Y]Vh`YXcW`U`g`Xca]b]YfYbXY`K Y]bVUi fY[]cb`]b
6UmYfb`VYghY\Yb`i bX`YfÖZbYh`a]h`Y]bYf`:`ÀWXY`j cb`fi bX`*"" \$\$
<Y_hUf`K Y]bVYf[Yb`i bX`Yhk U`&"- \$\$`K]bnYfZJa]`Yb`X]Y
A Ò[`]WXY`Y]hž`X]Y`HfUX]h]cb`XYg`K Y]bVUi g`ni `dZY[Yb`" `>À\`f`]W
k YfXYb`\]Yf`i b[YZÀ\`f`(\$\$\$`\$\$\$`<Y_hc`])hYf`K Y]b`dfcXi n]Yfhž`k Ug
X]Y`[fc>Y`6YXYi hi b[`X]YgYf`F Y[]cb`ZØf`X]Y`VUmYf]gWXY
K Y]bk]fhgWUZh`Y]bXfi W_gj c``i bhYfghfY]W`h"

8 Yf`:` Yfa Ybh]YfhY`K Y]» Y`i bX`gY]bY`J]Y`ZU`h

8]Y`6Y`]YVh\Y]h`XYg`:` Yfa Ybh]YfhYb`K Y]» Ybž`XYf`b]W`h
Ui ggW`]Y» `]W`Ui g`C fhY[U!HfUi VYb`\Yf[YghY`h`k]fXž`a UW`h`X]Y
J]Y`ZU`h`XYf`VUmYf]gWXYb`K Y]bdfcXi _h]cb`Ui g`"5i W`UbXYfY
GcfhYb`k]Y`Gc`Uf]g`i bX`A Ø`Yf!H\i f[Ui ` _ØbbYb`ZØf`gY]bY`?fYUh]cb
j Yfk YbXYh`k YfXYb" `>X]YgYa `>À\`f`_ØbbYb`X]Y`K]bnYf`]b`:` fUb_Yb
a]h`@Y]XYbgWUZh`i bX`9b[U[Ya Ybh[Y[YbØVYf`XYb`k]Xf][Yb
K YhhYfVYX]b[i b[Yb`XYbbcW`Y]bY`\Y]a]gWXY`GdYn]U`h`Àh
UbV]YhYbž`X]Y`b]W`h`bi f`9]b\Y]a]gWXYž`gcbXYfb`Ui W`6Ygi W`Yf
i bX`K Y]b`]YV\UVYf`]b`]\fYb`6Ubb`n]Y`h"

8]Y`F c``Y`XYf`K]bnYf`]b`XYf`ZfÀb_]gWXYb
K Y]bdfcXi _h]cb

8]Y`K]bnYf`]b`:` fUb_Yb`gd]Y`Yb`Y]bY`YbhgWXY]XYbXY`F c``Y`]b`XYf
fY[]cbU`Yb`K]fhgWUZh`" >Y]bYf`NY]hž`]b`XYf`E i U`h`Àh`i bX
B UW`\U`h][_Y]h`a a Yf`k]W`h][Yf`k YfXYbž`VYa Ø\Yb`g]W`X]Y
K]bnYfž`hfUX]h]cbY`Y`A Yh\cXYb`a]h`a cXYfbYb`5bVUi a Yh\cXYb
ni `_ca V]b]YfYb"8]Y`K Y]bdfcXi _h]cb`]gh`b]W`h`bi f`Y]bY`:` fU[Y`XYg
<UbXY`gž`gcbXYfb`Ui W`Y]bY`_i `hi fY`Y`DfUI]gž`X]Y`Yb[`a]h`XYf
=>Ybh]h`Àh`XYf`F Y[]cb`j YfVi bXYb`]gh"

B UW`5b[UVYb`XYg`:
K]bnYf`j]Y`ZÀ`h][Y`<YfUi gZcfXYfi b[Yb`ni `a Y]ghYfb"8Uni `nÀ\`Yb
b]W`h`bi f`K YhhYfVYX]b[i b[Ybž`gcbXYfb`Ui W`XYf`K YhhVYk YfV`Ui Z
XYa `]bhYfbUh]cbU`Yb`K Y]ba Uf`h"8Yf`fY[]cbU`Y`K Y]bVUi j YfVUbX

gYhnh'g]W\`XUZØf`Y]bž`X]Y`E i U`]h`h`X`Y`g` : fUb`_`Y`b`k` Y]bg`Xi` fW
[`Y`n]Y`h`Y`G`W`i` `i` b[`Y`b`i` b`X`J`Y`fa` Uf`_`hi` b[`g`gh`f`U`h`Y[`]Y`b`ni` `Z`Ø`f`X`Y`fb`" `G`c`
k`]f`X`V`Y]g`d]Y`g`k` Y]g`Y`K` Y`fh`Ui` Z`X]Y`D`Z`Y[`Y`U`h`Y`f`F`Y`V`g`c`f`h`Y`b`i`[`Y`Y`[`h`ž`
X]Y`g`d`Y`n]Y`Y`5`f`c`a` Y`b`i` b`X` ; Y`g`W`a` Å`W`_`Y`f`i`b`X]Y`K` Y]b`Y`V`f]b[`Y`b`"

F`Y`[`]c`b`U`Y`K` Y]b`V`U`i` [`Y`b`c`g`g`Y`b`g`W`U`Z`h`Y`b`

≠` : fUb`_`Y`b`i`g]b`X`a` Y`f`Y`f`Y`K` Y]b`V`U`i` [`Y`b`c`g`g`Y`b`g`W`U`Z`h`Y`b`_`U`_`h]j` ž`X]Y`
X`Y`b`K`]b`n`Y`f`b`i`Y`Z`Y`b`ž`]\`f`Y`D`f`c`Xi` _`h`Y`Y`Z]n]Y`b`h`ni` `j` Y`fa` Uf`_`h`Y`b`" `8`]Y`g`Y`
?`c`c`d`Y`f`U`h]c`b`Y`b`Y`fa` Ò[`]W`Y`b`Y`g`X`Y`b`A`]h[`]Y`X`Y`fb`ž`F`Y`g`g`c`i` f`W`b`ni`
V`Ø`b`X`Y`b`i` b`X`g]W` [`Y`[`Y`b`g`Y]h[`]ni` `i` b`h`Y`f`g`h`Ø`h`n`Y`b`ž`]b`g`V`Y`g`c`b`X`Y`f`Y`]b`
g`W`k` Y`f`Y`b`i`Y`f`Y`b`" `8` Y`f`5`i` g`h`U`i` g`W`j` c`b`K`]g`g`Y`b`i` b`X`H`Y`W`b]_`Y`b`
i` b`h`Y`f`X`Y`b`K`]b`n`Y`f`b`i`h`Å[`h`X`U`n`i` `V`Y]ž`X]Y`E`i`U`]h`h`X`Y`g`K` Y]b`g`i`b`X`Y`f`
F`Y`[`]c`b`_`c`b`h]b`i`]Y`f`i`W`ni` `j` Y`f`V`Y`g`g`Y`f`b`"

8]Y` ; Y`b`c`g`g`Y`b`g`W`U`Z`h`Y`b`i`U`V`Y`b`i`c`Z`h`Y][`Y`b`Y`K` Y]b`Z`Y`g`h`Y`i` b`X`
J`Y`f`U`b`g`h`U`hi` b[`Y`b`ž`X]Y`b]W`h`b`i` f`X`Y`b`J`Y`f`_`Ui` Z`Z`Ø`f`X`Y`fb`ž`g`c`b`X`Y`fb`
U`i` W`6`Y`g`i` W`Y`f`U`b`n]Y`Y`b`ž`X]Y`X]Y`K` Y]b`_`i` `hi` f`Y`f`Y`V`Y`b`a` Ò`W`h`Y`b`"
8]Y`g`Y` : Y`g`h`Y`g]b`X`U`i` W`Y`]b`Y` ; Y`Y`[`Y`b`Y`]h`Z`Ø`f`X]Y`J`Y`f`V`f`U`i` W`Y`f`ž`a`]h`
X`Y`b`K`]b`n`Y`f`b`i`b`?`c`b`h`U`_`h`ni` `h`f`Y`h`Y`b`i` b`X`X]Y`J`Y`Z`U`h`X`Y`f`Z`f`Å`b_]g`W`Y`b`
K` Y]b`Y`ni` `Y`b`h`X`Y`W`_`Y`b`"

2` _`c`b`c`a`]g`W`Y`6`Y`X`Y`i` hi` b[`]X`Y`g`K` Y]b`V`U`i` g`i`b` : fUb`_`Y`b`

8`Y`f`K` Y]b`V`U`i` `U`h`Y]b`Y`Y`f`Y`V`]W`Y`Ò`_`c`b`c`a`]g`W`Y`6`Y`X`Y`i` hi` b[`]Z`Ø`f`
: fUb`_`Y`b`" `8`]Y`F`Y`[`]c`b`[`Y`b`Y`f]Y`f`h`Xi` f`W`X`Y`b`K` Y]b`V`U`i` `9`]b`b`U`a` Y`b`i`b`
A`j`]c`b`Y`b`i`Ø`Y`ž`X]Y`g`c`k`c`i`j`c`b`X`Y`f`D`f`c`Xi`_`h]c`b`U`g`U`i` W`j`c`b`X`Y`f`
K`Y]b`h`c`i`f]g`a`i`g`V`f`U`b`W`Y`_`c`a`a`Y`b`" `Å`f`i`W`n]Y`Y`b`n`U`f`Y]W`Y`
H`c`i`f]g`h`Y`b`U`b`X]Y`Z`f`Å`b_]g`W`Y`b`K`Y]b`U`[`Y`b`ž`i`a` `U`b`K`Y]b`d`f`c`V`Y`b`
h`Y]ni` b`Y`a` Y`b`i` b`X`i`c`_`U`Y`K`Y]b`Y`ni` `[`Y`b]Y`»`Y`b`" ; Y`a` Å`»`8`U`h`Y`b`X`Y`g`
6`U`m`Y`f]g`W`Y`b`@`U`b`X`Y`g`U`a` h`g`Z`Ø`f`G`h`U`h]g`h_]`Y[`h`X`Y`f`i`a` g`U`h`n`U`i` g`X`Y`a`
K`Y]b`h`c`i`f]g`a`i`g`i`b` : fUb`_`Y`b`V`Y]f`i`b`X`%)` \$`A`j`]c`b`Y`b`i`9`i`f`c`i`Å`f`i`W`"

N`i`X`Y`a` `h`f`Å[`h`X`Y`f`K` Y]b`V`U`i` `ni` f`G`W`U`Z]i` b[`]j`c`b`5`f`V`Y]h`g`d`Å`h`n`Y`b`i`b`
X`Y`f`F`Y`[`]c`b`V`Y]`≠`X`Y`f`@`U`b`X`k`]f`h`g`W`U`Z`i` b`X`X`Y`b`X`U`a`]h`
j`Y`f`V`i` b`X`Y`b`Y`b`8]Y`b`g`h`Y]g`h`i` b[`]g`g`Y`_`h`c`f`Y`b`g]b`X`H`U`i` g`Y`b`X`Y`j`c`b`
A`Y`b`g`W`Y`b`h`Å]h[`]ž`j`c`a` `5`b`V`U`i` `i` b`X`X`Y`f`9`f`b`h`Y`V]g`i`b`ni` f`5`V`Z`Ø`i` b[`

i bX`XYa`J Yfhf]YV" , VYfX]Yg`V]YhYb`K Y]b[ØhYf`cZh
[Ughfcbca]gWXY`5b[YVchYž`k Ug`ni gÀhn`]WXY`5fVY]hgd`ÀhnY`]b`XYf
; Ughfcbca]Y`gWUZh"

5_hi Y`Y`< YfUi gZcfXYfi b[Yb`i bX
9bhk]W`i b[Yb`]a`K Y]bVUi

8Yf`\]Yg][Y`K Y]bVUi`ghY`h[Y[Ybk`Àfh][`j cf`a Y`fYfYb
<YfUi gZcfXYfi b[Yb`"BYVYb`k]hYfi b[gVYX]b[hYb
9fhfU[gfØW_[`Àb[Yb`a ØggYb`X]Y`K]bnYf`Ui W`Ui ZX]Y
5i gk]f_i b[Yb`XYg`?`a Uk UbXY`g`fYU[]YfYb`"8]Yg`VYhf]Zh
]bgVYgcbXYfY`X]Y`5bVUi dfU_h]_Yb`i bX`X]Y`5i gk U`\`[YY][bYhYf
F YVgcfhYb`"@Ui h`Y]bYf`Ghi X]Y`XYg`H\ØbYb!`bgh]hi hg`_ØbbhY`X]Y
k UWgYbXY`K`Àfa Y`X]Y`5bVUi [YV]YhY`ZØf`VYgh]a a h`K Y]bfYVYb
j YfgW]YVYbž`k Ug`Ub[Zf]gh][`X]Y`E i U`]h`h`i bX`J]Y`ZU`h`XYg`K Y]bg
VYY]bZi ggYb`_ØbbhY"

8]Y`K]bnYf`\UVYb`a]h`9I dYf]a YbhYb`ni f`5bdZUbni b[`fYg]ghYbhYf
F YVgcfhYb`VY[cbbYbž`k Ug`b]W`h`bi f`X]Y`9fhfÀ[Y`ghUV]`]g]YfYbž
gcbXYfb`Ui W`XYb`9]bgUhn`j cb`7\Ya]_U`]Yb`fYXi n]YfYb`_ØbbhY"
5i W`]bbcj Uh]j Y`6Yk`ÀggYfi b[g!`i bX`5bVUi hYW`b]_Yb`k YfXYb
j Yfgh`f`h`YfZcfgW`h`5i ZX]YgY`K Y]gY`_ØbbhY`XYf`Zf`Ab_]gWXY
K Y]bVUi`gck c`\`_Ø_c`c[]gW`bUW`U`h][`U`g`Ui W`_Ø_c`bca]gW
fYbhUVY`V`Y]VYb"

8YhU]`g

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