

9]bVfi W\`b`?]fW\`Yb[Yfb.`K Yf_nYi [Y i bX`F UgYba A\Yf`Ybhk YbXYh

I bVY_UbbhY`VfYW`Yb`b`?]fW\`Yb[Yfb`Y]b`i bX`ghY\`Yb
K Yf_nYi [Y`gck]Y`Y]bYb`5i Zg]hna A\Yf`<]bk Y]gY`Ub`X]Y
? f]dc`YfVYhYb"

⊕`?]fW\`Yb[Yfb`k i fXY`]b`XYf`YhYb`K cW\Y`Y]b`9]bZJa]`Yb\Ui g
]b`XYf`E i Yfb\Y]a Yf`GhfU»Y`ni a`N]Y`Y]bYg`9]bVfi W`g"
I bVY_UbbhY`HÅhYf`bi hnhYb`X]Y`5Vk YgYb\Y]h`XYf`9][YbhØa Yf
nk]gW\Yb`8cbbYfghU[`i bX`A cbhU[a cf[Ybž`i a`]b`XUg`<Ui g
Y]bni Xf]b[Yb`i bX`k Yfhj c`Y` ; Y[YbghÅbXY`ni`ghY\`Yb`"8Yf`J cfZU`
k]fZh: fU[Yb`Ui ZØVYf`X]Y`G]W\Yf\Y]h`XYf`K c\ b[Y[YbXYb`i bX`X]Y
ni bY\ a YbXY`NU\`j cb`9]bVfØW\Yb`]b`XYf`FY[]cb"

8]Y`9]bVfYW\Yf`VY[UbbYb`]fYb`D`Ubž`]bXYa`g]Y`XUg`8UW\`XYg
<Ui gYg`Ub[Y[f]ZYb`i bX`8UW\ dZUbbYb`j cb`Y]bYf` :`ÅW\Y`j cb`Yhk U
nk Y]E i UXfUha YhYfb`YbhZYfbh`UhhYb`"8]YgY`DZUbbYb`U[Yb`cgY
]b`XYf`8UW\ f]bbY`i bX`Yf`Ui VhYb`XYb`HÅhYfbž`Ui ZX]Y`XUfi bhYf
`Y[YbXY`<c`nj YfgW\U`i b[`ni ni [fY]ZYb`Hfch`Yf\YV`W\Yf
; Yk U`hY]bk]f_i b[`]Y`h`X]Y`<c`nj YfgW\U`i b[`YXcW\`ghUbX"
: fi ghf]Yfh`gi W\hYb`X]Y`HÅhYf`Y]bYb`U`hYfbUh]j Yb`Ni [Ub[`i bX
YbhgW\]YXYb`g]W\ž`Y]bY`HØf[Yk U`hgUa`ni`ØZZbYb"

8 YhU]`g`ni a`9]bVfi W\`

B UW\XYa`Yg`XYb`HÅhYfb`gW\`Y]»`]W\`[Y`i b[Yb`k Ufž`X]Y`HØf`ni
VfYW\Ybž`XfUb[Yb`g]Y`]b`XUg`⊕bYfY`XYg`<Ui gYg`Y]b`"8cfh
Ybhk YbXYhYb`g]Y`Y]bY`J]Y`nU\`j cb`K Yf_nYi [Yb`gck]Y`Y]bYb
5i Zg]hmfUgYba A\Yfž`XYf`k U\fgW\Y]b`]W\`Y]bYb`\c\Yb`K Yfh`\UhhY"
8]Y`[YbUi Y`GW\UXYbg\Ø\Y`]gh`XYfnY]h`bcW\`i bVY_Ubbhž`YXcW\`]gh
_`Ufž`XUgg`gc`W\Y`9]bVfØW\Y`b]W\h`bi f`a UhYf]Y`Y`J Yf`i ghYž

gcbXYfb`Ui`W`Y]bY`6YY]bhfÅW`h][i b [`XYg`G]W`Yf\Y]hg[YZØ\`g`XYf`
6Yk c\`bYf`a`]h`g]W`Vf]b [Yb"

8]Y`?f]a`]bU`dc`nY]`U`h`X]Y`9fa`]hh`i` b [Yb`ni` `X]YgYa` `J`cfZU`
ØVYfbca` a` Yb`i` bX`]gh`U`_h]j` `Ui` Z`XYf`Gi` W`Y`b`UW` `NYi` [Yb`"G]Y`
UddY`YfYb`Ub`U`Y`ž`X]Y`nk`]gW`Yb`XYa` `j` Yf [Ub [YbYb`8`cbbYfghU [
i`bX`A`cbhU [a`cf [Yb`]a` `6YfY]W`X`Yf`E`i` Yfb`Y]a` Yf`GhfU»`Y`Yhk` Ug`
5i`Z`Å`][Yg`VYa` Yf`_h`\UVYbž`g]W` `i` bhYf`XYf`HY`Y`Zcbbi` a` a` Yf`
\$) &&%# , , \$`ni` `a` Y`XYb`"»XY`bcW`gc`_`Y]bY`6YcVUW`hi` b [`_ØbbhY`
ni`f`5i` Z`_`Å`fi` b [`X]YgYg`J`YfVfYW`Ybg`VY]hfU [Yb"

9]bVfØW`Y`]b`K` c\`b [YV]YhYb`g]bX`Y]XYf`Y]b`k`]YXYf`_`Y`fYbXYg`
DfcV`Ya` ž`XUg`j`]Y`Y`A` YbgW`Yb`VYhf]Z`h`"6Yhfc`ZYbY`ZØ\`Yb`g]W` `c`Zh`
i`bg]W`Yf`]b`]fYb`Y][YbYb`j`]Yf`K` Å`bXYb`"8]Y`Dc`]nY]j` YfghÅf`_h]`fY`
DfÅgYbn`]b`gc`W`Yb`;` Y [YbXYbž`i` a` `dchYbn]Y`Y`H`Å`hYf`
UVni`gW`fYW`_Yb`i` bX`X]Y`6Yj` Ø`_Yfi` b [`ni` `Yfa` i`h] [Ybž`k` UW`gUa` `ni`
gY]b"

8]Y`6Øf [Yf`k` YfXYb`XU`Yf` [YVYhYbž`VY]j` YfX`ÅW`h] [Yb`5`_h]j`]h`Å`hYb`
gc`Zcfh`ni` `U`bXY`b`i` bX` [Y [YVYbYbZU`g`X]Y`Dc`]nY]`ni` `]bZcfa`]YfYb`
9g`]gh`k`]W`h] [ž`XUgg`g]W`X`Y];` Ya` Y]bgW`UZh`ni`gUa` a` YbgW` `Y]»`hž`
i` a` gc`W`Y`J`cfZ`Å`Y`ni` `j` Yf\]bXYfb`i` bX`X]Y`G]W`Yf\Y]h`ni` `Yf\`Ø\`Yb`"

5i`gV`]W`_`Ui`Z`X]Y`9fa`]hh`i` b [

8]Y`9fa`]hh`i` b [Yb`XYf`?f]a`]bU`dc`nY]`ghY`Yb`bcW`Ua` `5bZUb [ž`
UVYf`g]Y` `c`ZYbž`Xi`fW`X]Y`6YfU [i` b [Yb`j`cb`NYi` [Yb`i`bX`X]Y`
5i`gk`Yfhi`b [`a` Ø [`]W`Yf`Gdi`fYb`]a` `HUhc`fh`ni` `ni` `k`]W`h] [Yb`
<]bk`Y]gYb`ni` `_ca` a` Yb`"8]Y` :` UW` `Yi` hY`gYhYb`a` cXYfbY`
9fa`]hh`i` b [ga` Yh`cXYb`Y]bž`i` a` `X]Y`Gdi`fYb`ni` `j` YfZc` [Yb`i`bX`
j`]Y`Y]W`h`gc [Uf`X]Y`H`Å`hYf`ni` `ZUggYb"

9]bVfØW`Y` \UVYb`]b`XYb`Y`h`hYb`»\`fYb`]b`j`]Y`Yb`C`fhYb`
ni` [Ybca` a` Ybž`k` Ug`X]Y`8]g`_i` gg]cb`ØVYf`G]W`Yf\Y]h`i` bX`
DfÅj`Ybh]cbga` U»`bU`a` Yb`bYi` `YbhZUW`h`\Uh`"9g`]gh`YbhgW`Y]XYbXž`
XUgg`X]Y`6Øf [Yf`ØVYf`a` Ø [`]W`Y`G]W`Yf\Y]hgj`cf`_`Y`fi` b [Yb`
]bZcfa`]Yfh`g]bXž`i` a` `]f`9] [Ybhi` a` `VYggYf`gW`ØhnYb`ni` `_ØbbYb"

8]Y`Dc`nY]V]YhYh`H]ddg`Ubž`k]Y`a Ub`9]bVfØWXY`j Yf\]bXYfb`_Ubbž
k]Y`X]Y`ϕghU`U]cb`j cb`6Yk Y[i b[ga Y`XYfb`i bX`5`Ufa Ub`U[Ybž
gck]Y`XUg`GW`Y]» Yb`j cb`: YbghYfb`i bX`HØfYbž`k Ybb`a Ub`XUg
<Ui`g`j Yf`Àggh`8Yf`: U`b`?]fW`Yb[Yfb`]gh`Y]b`Y]bXf]b[`]WXYf
<]bk Y]g`XUfUi`Z`k]Y`k]W`h[`Yg`]ghž`XUg`Y][YbY`Ni `Ui`gY`ni
g]WXYfb`i bX`VY]`5i`Z`A`][_Y]hYb`gW`bY`ni `UbXY`b"

9]bVfi`W`gghU]gh]_`]b`8Yi`hgW`UbX

ϕ`XYb`Y`hnhYb`ϕ\`fYb`]gh`X]Y`5bnU\`XYf`9]bVfØWXY`]b`8Yi`hgW`UbX
gW`k Ub`_YbX`[YV`]YVYbž`a`]h`Y]b][Yb`g][b]Z]_UbhYb`J`Yf`ÀbXYfi`b[Yb
]b`XYb`GhU]gh]_Yb`"@Ui`h`XYf`Dc`nY`]WXYb`?f]a`]bU`ghU]gh]_`fD?`GŁ
k`i`fXYb`]a`ϕ\`f`&\$`%`Y`k`U` , +"\$`\$`\$`K`c`\`bi`b[gY]bVfØWXY
fY[]ghf]Yf`hž`k`Ug`Y]bYb`F`ØW_]`Ub[`]a`J`Yf[`Y]W`ni`ZfØ\`YfYb`ϕ\`fYb
XUfghY`h`: Øf`XUg`ϕ\`f`&\$`&`[UV`Ygž`hf`ch`XYf
7C`J`ϑ`!`%`!DUbXYa`]Y`i`bX`XYfYb`5i`gk`]f`_i`b[Yb`Ui`ZX]Y
; YgY`gW`UZh`Y]bYb`Y]W`hYb`5bgh]Y[`XYf`9]bVfi`W`gnU\`Yb"

8]Y`A`Y`f`Y]h`X]YgYf`9]bVfØWXY`[YgW]Y`h`Xi`fW`[Yk`U`hgUa`Y
Ni`[f]ZYž`k`cVY]`HØfYb`i`bX`: YbghYf`c`Zi`Ui`Z[Y`YVY`h`k`YfXYb`8]Y
Dc`nY]`Yfa`i`h][h`9][YbhØa`Yfž`\`fY`G]WXYf\Y]hgj`cf`_Y`fi`b[Yb`ni
Yf\`Ø\`Ybž`i`a`9]bVfØWXY`ni`j`Yf\]bXYfb`"G]WXYf\Y]hggmghYa`Y`k`]Y
5`Ufa`Ub`U[Yb`i`bX`?`Ua`YfUg`g]bX`YZZY`_h]j`Y`A`U»`bU\`a`Ybž`X]Y
\`Y`ZYb`_ØbbYbž`9]bVfYWXYf`UVni`gW`fYW`_Yb`8]Y`Dc`nY]`ZØ\`fh
fY[Y`a`À»][ϕ`Zcfa`U]cbg`_Ua`dU[bYb`Xi`fW`ž`i`a`XUg`6Yk`i`gghgY]b
ZØf`9]bVfi`W`ggW`i`h`ni`gW`ÀfZYb`i`bX`ni`Y]bYf`k`Y]hYfYb`GYb`_i`b[
XYf`9]bVfi`W`gnU\`Yb`VY]ni`hfU[Yb`"K`Y]hYfY`ϕ`Zcfa`U]cbYb`i`bX
GhU]gh]_Yb`Z]bXYb`G]Y`Ui`Z`XYf`GY]hY`XYg`6i`bXYg`_f]a`]bU`Ua`hg`6?`5
"

; YgY`gW`UZh`]W`Y`5i`gk`]f`_i`b[Yb`j`cb

9]bVfØWXYb

9]bVfØWXY`\UVYb`b]W`h`bi`f`a`U]hYf]Y`Y`: c`[Ybž`gcbXYfb`Ui`W
k`Y]hfY]WXYbXY`[YgY`gW`UZh`]W`Y`i`bX`dgmW`c`c`[]gW`Y
5i`gk`]f`_i`b[Yb`Ui`ZX]Y`VYhf`c`ZYbYb`DYfgcbYb`"J]Y`Y`A`YbgW`Yb
ZØ\`Yb`g]W`b`UW`Y]bYa`9]bVfi`W`i`bg]WXYf`]b`]\`fYb`Y][YbYb`j`]Yf

K ÅbXYb"8]YgY'cZi'hfUi a Uh]gWXY'9fZU\fi b['_Ubb'ni
5b[ghni ghÅbXYb'i bX'Y]bYa 'j Yfa]bXYfhYb'G]WXYf\Y]hg[YZØ\`
ZØ\ fYb" ð'a Y\ fYfYb'Ghi X]Yb'k i fXY'\YfUi g[YZi bXYbž'XUgg
9]bVfØWXY'XUg'U``[Ya Y]bY'K c\`VYZ]bXYb'XYf'6Yk c\`bYf'Yf\YV`]W
VYY]bhfÅW h][Yb'_ØbbYbž'cZij YfVi bXYb'a]h'Y]bYa ' ; YZØ\`XYf
J Yf'Yhn`]W_X]hi bX'XYg'A]gghfUi Ybg[Y[YbØVYf'UbXYfYb"

Ni gÅhn`]W'_ØbbYb'9]bVfØWXY'Ui W'XUg'bUWVUfgWUZh]WXY
Ni gUa a Yb`YVYb`VYY]bZi ggYbž'XU'X]Y'6YhfcZZYbYb'XUni `bY][Ybž
XYb'?cbhU_h'ni `BUWVUfb'ni `]bhYbg]j]YfYb'i bX
G]WXYf\Y]hga U» bU\`a Yb'ni `X]g_i h]YfYb" ; Ya Y]bgWUZh]WXY
5i Z_`Åfi b[gU_h]cbYbž'k]Y`BUWVUfgWUZhgk UWXYbž`\UVYb'g]WXY'U`g
bØh`]WXYf'k]YgYbž'i a `XUg'G]WXYf\Y]hg[YZØ\``]b'Y]bYf
BUWVUfgWUZh'ni `ghÅf_Yb" ð]h]Uh]j Ybž'X]Y'Ui Z'ghÅf_YfY
BUWVUfgWUZhgV]bXi b[Yb'gYhnYbž'_ØbbYb'b]W'h'bi f'ni f
J Yf\]bXYfi b['j cb'9]bVfØWXYb'VY]hfU[Ybž'gcbXYfb'Ui W'XYb
gcn]U`Yb'Ni gUa a Yb\U`h'ZØfXYfb"

DfÅj Ybh]c bga U» bU\`a Yb'`i bX'H]ddg

I a `XUg'F]g]_c`Y]bYg'9]bVfi W'g'ni `a]b]a]YfYbž'[]Vh'Yg'nU\`fY]WXY
dfÅj Ybh]j Y`A U» bU\`a Ybž'X]Y`<Ui gVYg]hnYf'i bX`A]YhYf'Yf[fY]ZYb
_ØbbYb"Ni `XYb'Ya dZc\`YbYb'G]WXYf\Y]hgj cf_Y\fi b[Yb'nÅ\`Yb.

- ðghU``]YfYb'j cb'g]WXYf\Y]hg[YdfØZhYb'HØfYb'i bX': YbghYfb"
- J Yfk YbXi b['j cb'6Yk Y[i b[ga Y`XYfb']a `5i » YbVYfY]WXY"
- 9]bf]WXYhi b[`Y]bYf'5`Ufa Ub`U[Y'cXYf'Y]bYg
J]XYcØVYfk UWxi b[ggmghYa `g"
- 6Y`Yi WXYhi b['j cb'9]b[Ub[gVYfY]WXYb'a]h'NY]hgWU`hi `fYb"
- HY]`bU\`a Y`Ub`BUWVUfgWUZhgk UWXYb'i bX'5i ghUi gW
ØVYf'G]WXYf\Y]hgYfY][b]ggY"

8UfØVYf`\]bUi g'gc``hY'a Ub'Ui W'XUfUi ZUWXYbž'_Y]bY'k Yfhj c``Yb
; Y[YbghÅbXY'ja `G]WXYhVYfY]WXY'ni ``UggYb'i bX'Y]bYb'ni j Yf`Ågg][Yb
BUWVUfb'cXYf': fYi bX'a]h'XYf'?cbhfc``Y`XYg`<Ui gYg'ni
VYUi ZhfU[Ybž'k Ybb'a Ub'j YffY]gh'gh"8i fWXY]bZUWXYž'UVYf
YZZY_h]j Y`A U» bU\`a Yb'_Ubb`YXYf'9]bnY`bY`XUni `VY]hfU[Ybž'X]Y
G]WXYf\Y]h]b'gY]bYf'I a [YVi b[`ni `Yf\Ø\Yb"K Y]hYfY`\]ZFY]WXY

⊖Zcfa Uh]cbYb`i bX`F UhgWΛ`À[Y`V]YhYh`X]Y`Dc`]nY]`8 Yi hgWΛ`UbX"

8YhU]`g

6Ygi WΛYb`G]Y`i bg`Ui Z.`X]Y!bUWΛf]WΛhYb"bYh