

A i h][Y`DUggUb h]b`fYhhY h b]YXYf`ÀbX]gW\Yb`i`f`Ui VYf`]b`GYygYb

↳ GYygYb`fYhhYhY`Y]bY`gW\ bY`Y`9fgh\]`ZY`Y]bYf` : fUi`XUg
@YVYb`Y]bYg`b]YXYf`ÀbX]gW\Yb`A`UbbYg`bUW\`Y]bYa`B`chZU`"

GYygYb"5a`GUa`ghU[`bUW\`a`]hhU[`žXYa`&)"5i [i gh'&\$&(ž
YfY][`bYhYb`g]W\`]b`XYf` : fUbYghfU»`Y`]b`GYygYb`XfUa`Uh]gW\`Y
9fY][`b]ggYž`X]Y`Y]b`[`ØW`_]W\`Yg`9bXY`ZUbXYb"9]b`*`-`!`À`f][`Yf
b]YXYf`ÀbX]gW\`Yf`GhUUhgVØf[`Yf`Yf`]hh`Y]bYb`a`YX]n]b]gW\`Yb`B`chZU`ž
XYf`]\`b`]b`U`_`i`hY`@YVYbg[`YZU`f`VfUW\`hY"8`Ub`_`XYf`nØ[`][`Yb
A`U»`bU`a`Yb`Y]bYf`Ui`Za`Yf`_`gUa`Yb`DUggUb h]b`_`c`b`b`hY`gY]b`@YVYb
[`YfYhhY`h`k`YfXYb"

I`a`%*`.'`\$`i` \`f`Z]Y`Y]bYf`(-`!`À`f][`Yb` : fUi`Ui`g`GYygYb`XYf
VYbca`a`YbY`A`Ubb`Ui`Z`žXYf`]b`XYb`GW\`UhhYb`Y]bYf`<`Ui`gYW`_`Y
[`YgYggYb` \`UhhY" Æ`fY` Æ`hi`]h]cb`_`]Y»`g]Y`b]W\`h`n`Ø[`Yfb`.'`G]Y`gd`fUW\
]\`b`gc`Zc`fh`Ub`ž`Xc`W\`]b`X]YgYa``A`ca`Yb`h`VfUW\`XYf`A`Ubb
ni`gUa`a`Yb`i`b`X`VYb`Øh][`hY`Xf]b[`Yb`X`<`]`ZY"

GW\`bY`Y`Y`9b`hgW\`Y]Xi`b[`Yb`i`b`hYf`8`fi`W`_`

8]Y`GYygYbYf]b` \`UbXY`hY`gc`Zc`fh` \`Yfc]gW\`i`b`X`VY[`Ubb`ž`]\`b
k`]YXYfni`VY`YVYb"8`UVY`]b`Zc`fa`]YfhY`g]Y`i`a` [`Y` \`Yb`X`XYb
F`Y`hi`b[`gX]Yb`gh" Æ`fY`5`b`ghfYb[`i`b[`Yb`k`UfYb`Yb`hgW\`Y]XYb`X`ž`XU`g]Y
V]g`ni`a``9]b`hfY`ZYb`XYg`F`Y`hi`b[`gk`U[`Yb`g`b]W\`h`Ui`Z`Ø`fhY"8`Yf
B`chZU`Y]bg`Uhn`k`Uf`gW\`bY`ž`i`b`X`X]Y`F`Y`hi`b[`g`_`f`À`ZhY`g`Y`hnhYb`X]Y
F`Y`Ub]a`Uh]cb`Yf`Zc`[`fY]W\`Zc`fh"8`i`fW\`X]Y`i`a` [`Y` \`Yb`XY`9fgh\]`ZY
_`c`b`b`hY`XYf`Ni`gh`Ub`X`XYg`A`Ubb`Yg`gh`UV`]g]Y`fh`k`Yf`XYb`ž`VYj`c`f`XYf
B`ch`Ufnh`Y]b`hf`UZ"

9]b`F`Y`hi`b[`g`i`V`gW\`fUi`VYf`k`i`fXY`Ub[`Y`Zc`fXY`fh`ž`i`a`

gWk bY`gha Ò[`]Wk `Y]bYb`5fnh`ni f`9]bgUhnghY`Y`ni `Vf]b[Yb``8]Yg
k Uf`bchk YbX][žXU`XYf`DUh]Ybh`]b`Y]bYa ` _f]h]gWk Yb`Ni ghUbX`k Uf
i bX`gWk bY`Yg`< UbXY`b`YfZcfXYf`]Wk `k Uf``8]Y`Dc`]nY]`GYgYb
i bhYfghØhnh`XUg`HYUa `VY]`XYf`gWk bY`Yb`5b_i bZh`XYg`BchUfnhYg`

5bgWk `]Y» YbXY`6Y\ UbX`i b[

8Yf`* - !`Å\ f][Y`A Ub`k i fXY`gWk`]Y»`]Wk`]bg`?fUb`_Yb`Ui g`GYgYb
hfUb`gdcfh]Yfh`ž`k c`Yf`Ub`k Y]hYfY`a`YX]n]b]gWk`Y` : UWk`_f`ÅZhY
ØVYf[YVYb`k i fXY``8]Y`VY\UbXY`bXYb`Y`fnhY`\cVYb`X]Y
\Yfj`c`ffU[YbXY`Ni`gUa`a`YbUfVY]h`U`Yf`F`Y`hi b[g`_f`ÅZhY`i bX`XYf
9fgh\Y`ZYf]b`_Yfj`c`f`K]Y`Y]bY`F`ØW`gd`f`UWk`Y`a`]h`XYa` `5g`_Yd]cg!
?`]b]_i a` `Ua` `GcbbhU[`nY][hYž`_c`bbhY`XYf`DUh]Ybh`a`]h`Yfk`Y]`Y`j`cb
XYf`ϕ`hYbg]j`ghUh]cb`]b`Y]bY` , VYfk`UWk`i b[gghUh]cb`j`Yf`Y[h`k`YfXYbž
k Ug`Y]b`Åi »Yfgh`d`cg]h]j`Yg`NY]Wk`Yb`k Uf`

8]Y`6YXYi hi b[`XYg`gWk`bY`Yb`i bX`ØVYf`Y[hYb`< UbXY`bg`X]YgYf
DUggUbh]b`_Ubb`b]Wk`h[Ybi [` [Yk`ØfX][h`k`YfXYb```≠`f`fUgWk`Yg
9]b[fY]ZYb`]`i`ghf]YfhY`Y]bXfi`W`_gj`c`ž`k]Y`k`]Wk`h][`XUg`K`]ggYb`i`a
9fghY!<]`ZY!A`U»`bU\`a`Yb`]gh``ϕ`Y]bYf`gc`Wk`_f]h]gWk`Yb`G]hi`Uh]cbž
X]Y`c`b`Y`gWk`bY`Yg`< UbXY`b`a` Ò[`]Wk`Yfk`Y]gY`hfU[]gWk`[Y`YbXYh
\`Å`hYž`k i fXY`YfbYi`h`XYi`h]Wk`ž`k]Y`Yb`hgWk`Y]XYbX`Y`XY`GY`_i bXY
]gh`

8Yf`J`c`f`ZU``]gh`b]Wk`h`bi`f`Y]bY`A`U\`bi`b[`ZØf`U`Y`6Øf[Yfž`gcbXYfb
nY][h`Ui`Wk`X]Y`Gh`Å`_Y`XYf` ; Ya`Y]bgWk`UZh`ž`X]Y`]b`A`ca`YbhYb`XYf
?f]gY`ni`gUa`a`YbghY`\h`8Ug`6Y]gd]Y`XYf`GYgYbYf]b`Yf]bbYfh`i`bg
XUfUbž`k]Y`k`]Wk`h][`Yg`]ghž`]a` `i`a [Ub[`a`]h`B`chZ`Å`Yb`[`i`h
j`c`f`VYfY]hYh`ni`gY]b`i`bX`K`]ggYb`ØVYf`9fghY`<]`ZY`ni`VYg]mYb`

< Y`XYb`XYg`5`hU[g

8Ug` ; YgWk`Y\Yb`]b`GYgYb`Y[h`XYb` : c`_i`g`Ui`Z`X]Y`gc`c`Zh
i`b`VYUWk`hYhYb`<Y`XYb`XYg`5`hU[g` . X]Y`9fgh\Y`ZYf`.]bbYbž`X]Y`]b
_f]h]gWk`Yb`A`ca`YbhYb`ni`dUW`_Yb``8]Y`5`_h]cbYb`XYf`(-!`Å\ f][Yb
: fUi`g]bX`Y]b`Y]bXfØW`_]Wk`Yg`6Y]gd]Y`XUZØfž`XUgg`Y`XYf`j`cb`i`bg`]b
XYf`@U[Y`]ghž`@VYb`ni`fY`hYb```≠`fY`F`YU`_h]cb`nY][hž`XUgg`Yg`]a
B`chZU``c`Zh`X]Y`U`h`Å[`]Wk`Yb`A`YbgWk`Yb`g]bXž`X]Y`a`]h`A`i`hi`b`X

9bhgW\`cggYb\Y]h'gcZcfhY]b[fY]ZYb"8]YgYf'JcfZU``_ÖbbhY'j]Y`Y
XUni`UbFY[Ybž'gY`VghY]bYb'9fghY!<]`ZY!?! fg'ni`VYgi W\Yb`i bX`gc
VYggYf'jcfVYfY]hYh'ni`gY]bž'i a`ja`BchZU``gW\ bY``i bX`YZZY_h]j
\UbXY`b`ni`_ÖbbYb"

8]Y`gW\ bY``Y`FYU_h]cb`XYf`DUggUbh]b`]b`GYYgYb`nY][h`X]Y
6YXYi hi b[`j cb`9fghY!<]`ZY`A U» bUa`Yb`i bX`XYf`BchZU``j Yfgcf[i b[
]b`_f]h]gW\Yb`G]hi`Uh]cbYb"BYVYb`XYf`gcZcfh][Yb`FYUb]a`Uh]cb`XYg
DUh]YbhYb`Xi fW\`X]Y`DUggUbh]b`_Ua`Ui W\`X]Y`I bhYfghØhni b[`Xi fW\
X]Y`FYhhi b[gX]YbghY`i bX`Bch`fhnY`gW\ bY``i bX`YZZY_h]j`ni a
9]bgUhm"8]YgY`_ccfX]b]YfhY`FYhhi b[gU_h]cb`i bhYfghfY]W\hž`k`jY
k`jW\h][`Yg]ghž`XUgg`gck c\``@U]Yb`U`g`Ui W\`: UW\`_f`ZhY`[i h`Ui Z
BchZ`Y`j cfVYfY]hYh'g]bX"

⊕`8Yi hgW\`UbX`[]Vh`Yg`nU\`fY]W\Y`⊕]h]Uh]j`Ybž`X]Y`9fghY!<]`ZY!
?i fgY`UbV]YhYbž'i a`XUg`K`jggYb`ØVYf``YVYb`gfYhhYb`XY
A U» bU\`a`Yb`ni`j`YfVfY]hYb"8Yf`8Yi hgW\Y`FchYb`?fYi n
VY]gd]Y`gk`Y]gY`V]YhYh`fY[Y`a`Å»][`GW\i`i`b[Yb`Ubž`X]Y`A`YbgW\Yb
XUni`Yfa`i`h][Ybž`]b`BchZ`Y`b`U_h]j`ni`k`YfXYb"8]YgY`GW\i`i`b[Yb
j`Yfa`]hY`b`b]W\h`bi`f`[fi bX`Y[YbXY`HYW\ b]_Ybž`gcb`XYfb`Ui W\`X]Y
bØh][Y`G]W\Yf\Y]h]a`i`a`[Ub[`a`]h'gc`W\Yb`_f]h]gW\Yb`G]hi`Uh]cbYb"

6YXYi hi b[`j cb`9fghYf`<]`ZY

8]YgY`JcfZ`Y`g]bX`b]W\h`bi`f`9]bnY`Z`Y`/g]Y`k`YfZYb`Y]b`@]W\h`Ui`Z
X]Y`U``[Ya`Y]bY`FY`Y]Ubn`j`cb`9fghY!<]`ZY!?! Ybbhb]ggYb`]b`XYf
;`YgY``gW\UZh"X`XYg`X\`f`Yf`Y]XYb`HUi`gYbXY`j`cb`A`YbgW\Yb`]b
8Yi hgW\`UbX`<Yfng]h`gh`Ab`XYž`k`cVY]`X]Y`,`VYf`YVYb`gfUhY`ghUf`_j`cb
XYf`GW\ bY``][`_Y]h`XYf`Y]b[Y`Y]hYhYb`A U» bU\`a`Yb`UV\`Åb[h``@Ui`h
XYa`8Yi hgW\Yb`FUhg`ZØf`K`jYXYfVY`YVi b[`g]bX`bi`f`Yhk`U`\$`i`XYf
6Yhfc`ZYbYb`ja`ØZYbh]W\Yb`FUi`a`j`cb`Ya`UbXYa`a`]h`9fghY!<]`ZY!
?Ybbhb]ggYb`i`a`[YVYb"

9]bY`ZfØ\`nY]h][Y`FYUb]a`Uh]cb`_Ubb`X]Y`,`VYf`YVYb`gfUhY`Yf\YV`]W\
Yf\Ø\Ybž`k`Ug`Ui`ZX]Y`Bch`k`YbX][`_Y]h`\]bXYi`hYhž`XUg`6Yk`i`gghY]b
ZØf`9fghY`<]`ZY`ni`gW\`ÅfZYb" GhUh]gh]_Yb`nY][Ybž`XUgg`VY]Y]bYa
<Yfng]h`gh`Ub`X`X]Y`,`VYf`YVYb`gfUhY`i`a`XUg`Nk`Y]!`V]g`8fY]ZUW\Y
ghY][hž`k`Ybb`]bbYf\U`V`XYf`YfghYb`XfY]V]g`ZØb`ZA`]bi`hYb`a`]h`XYf

K]YXYfVY`YVi b[`VY[cbbYb`k]fX" `b`Y]bYf`gc`WXYb`G]hi Uh]cb`]gh
`YXY`GY_i bXY`YbhgWXY]XYbX"

? c ``UVcfUh]cb`XYf`F Yhhi b[gX]YbghY

9]b`k Y]hYfYf`5gdY_hž`XYf`]b`X]YgYa `: U``VYgcbXYfg
`Yfj`cfni `YVYb`]ghž`]gh`X]Y`?ccfX]bUh]cb`nk]gWXYb`XYb
j`YfgWXY]XYbYb`F`Yhhi b[g_f`Ä`ZhYb" `J`cb`XYf`9fgh`Y`ZYf]b`V]g`]\b`ni
XYb`F`Yhhi b[gX]YbghYb`i`bX`B`ch`Ä`fn`hYb`a`i`gg]b`Y]bYa`B`chZU``U``Yg
<UbX`]b`<UbX`[`Y`Yb" `b`X]YgYf`G]hi Uh]cb`k`i`fXY`XYf`DUh]Ybh
]bbYf`U`V`_`ØfnYghYf`NY]h`]bg`?`fUb`_Yb`Ui`g`hfUb`gd`cfh]Yfhž`k`Ug
YbhgWXY]XYbX`ZØf`gY]bY`;`YbYgi`b[`k`Uf" `8`Ub`_`XYf`gWXYbY``Yb
A`U»`bU`a`Yb`_`cbb`hY`XYf`*`-`!`Ä`f][`Y`B`]YXYf`Ä`bXYf`ghUV`]g]Yfhi`bX
j`Yf`Y[`h`k`YfXYbž`k`Ug`Y]b`d`c`g]h]j`Yg`NY]WXYb`ZØf`gY]bYb
;`Ygi`bX`Y]hgni`ghUbX`]gh"

8]Y`Ni`gUa`a`YbUfVY]h`nk`]gWXYb`XYb`F`Yhhi b[g_f`Ä`ZhYb`gck`]Y`X]Y
A`Ö[`]WXY`hž`XUgg`<`i`VgWXYfUi`VYf`gWXYbY``Y]b[`YgYhnh`k`YfXYb
_`ÖbbYbž`nY][`h`X]Y`c`Y`9ZZ]n]Ybn`XYg`F`Yhhi b[ggmg`hYa`g`]b
8Yi`hgWXY`UbX" `Gc`WXY`9]bg`Ä`hnY`YfZcfXYfb`b]WXYh`bi`f`HfU]b]b[`i`bX
9fZU`fi`b[ž`gcbXYfb`Ui`WXY]b`Y]b[`Ygd]Y`hYg`Gmg`hYa`ž`XUg`ja
9fbghZU``YZZY`_h]j`Z`b`_h]cb]Yfh"

8YhU]`g

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