

DUF_dfcV`Ya Y`Ua `: `i [\ UZYb
A Ya a]b[Yb. `5VgW`YddU_h]cbYb
bY\ a Yb`ni

I f`Ui VYf`b`A Ya a]b[Yb`j Yf`YfYb`cZi]\f`5i hc`bUW`XYa
7\YW`!Ci h"5VgW`Ydda U»bU\ a Yb`[Y[Yb`K]`XdUf_Yf`g]bX
ghfYb["

⊕`YmhYf`NY]h`\UVYb`nU\`fY]WY`I f`Ui VYf`Ua `: `i [\ UZYb
A Ya a]b[Yb`\`fY: U\`fnYi [Y`U`g[Yghc`\`Yb`[Ya Y`XYh`bUW`XYa
g]Y`bUW`XYa `7\YW`!Ci hini `]\`fYa `DUF_d`Uhn`ni fØW`_Y\`fhYb"
<Äi Z][`ghY`h`g]W`YXcW`\`YfUi gž`XUgg`X]Y: U\`fnYi [Y`Y`X][`]W
UV[YgW`Yddh`k i fXYb"8]Y`Øfh]W`Yb`6Y\`ØfXYb`fi bX`i a
A Ya a]b[Yb`gYmYb`gY]h`Y]bYa `X\`f`ghfYb[Y`A U»bU\ a Yb`[Y[Yb
K]`XdUf_Yf`i a ž`X]Y`g]W`Xi fW`i bVYZ [hYg`DUF_Yb`]b`VYgh]a a hYb
NcbYb`XYf`i a `]Y[YbXYb`; Ya Y]bXYb`\`Yfj`cfhi b"

⊕gVYgcbXYfY`]b`XYb`; Ya Y]bXYb`A Ya a]b[YfVYf[ž`Hfi b_Y`gVYf[
i bX`i b[Yf\`Ui gYb`k i fXYb`6YX]b[i b[Yb`ZØf`XUg`DUF_Yb
Y]b[YZØ\`fhž`X]Y`j`cb`, `V]g`%, `I \`f[Y`hYb" <]Yf`XUFZ`a Ub`a]h`Y]bYf
DUF_gW`Y]VY`V]g`ni `(`Ghi bXYb`_cghYb`cg`dUf_Yb"K Yf`YXcW`gY]b
: U\`fnYi [`Äb[Yf`UV[YghY`h`\`Uhž`_Ubb`a]h`Y]bYf`J Yfk Ufbi b[`cXYf
]a `gW`]a a ghYb: U`a]h`XYa `5VgW`YddYb`fYW`bYb"5i W`Ui Z`XYf
K YVg]hY`XYg: `i [\ UZYbg`k]fX`XUfØVYf`]bZcfa]Yfhž`XUgg`XUg
DUF_Yb`]b`XYb`Ub[fYbnYbXYb`; Ya Y]bXYb`b]W`h[YghUhhYh]ghž`i a
X]YgY`DfcV`Ya Uh]_`ni `a]b]a]YfYb"

5VgW`YddU_h]cbYb`i bX`]`fY`I fgUW`Yb

@Ui hiA UfW`5fc`Xž`Dc`nY]cVYfa Y]ghYf`Ub`XYf`; fYbndc`nY]`XYg
: `i [\ UZYbgž`k i fXYb`nk]gW`Yb`5i [i gh&\$&`i bX`9bXY`ž` `]&\$&(
ØVYf`%) \$: U\`fnYi [Y`UV[YgW`Yddhž`k cVY]j]Y`Y`X]YgYf: U\`fnYi [Y

Ui g`UbXYfYb`FY []cbYb`ghUa`a`Yb"8Yf`8fi`W`Ui`Z`K`]XdUf`_Yf`]b
XYf`FY []cb`gW`Y]bh`XUa`]h`ni`k`UW`gYb`ž`Ui`W`k`Ybb`g]W`
6Øf []Yfa`Y]ghYf`5`k`]b`@]W`hYb`ghY] []Yf`XUf`ØVYf`Z`FYi`hž`XUgg`X]Y
5VgW`Y`dda`U»`bU`a`Yb`Y]bY`UVgW`fY`W`_Yb`XY`K`]f`_i`b []nY] []Yb`
8Yb`bcW`V`Ya`Å`b []Y`h`5`fc`X`ž`XUgg`g]W`X]Y`G]h`Uh]cb`b]W`h
g] []b]Z]_Ub`h`j`YfVY`ggY`fh`\`Uh"8]Y`_cb`gYe`i`Yb`hY`8`i`fW`gY`hni`b []XYf`
DUf`_d`U`h`fY []Y`b`]gh`Y]b`X]fY`_h`Yf`J`Yf`g`i`W`ž`X]Y`C`f`X`bi`b []a`6`Y`fY]W`
XYg`:`i []\`UZ`Y`b`g`ni`k`U`f`Y`b"

GhÅ`b`X] []Y`i`a`ghY`i`b []Yb`VY]`XYb`DUf`_d`U`h`Ub []YV`ch`Yb`g`W`Y]b`Yb`
V]g`Y`f`_Y]b`Yb`d`c`g]h]j`Yb`9`ZY`_h`Ui`Z`X`U`g`DUf`_j`Yf`\`U`h`Yb`XYf`
5`i`hc`ZU`f`Y`f`ni` \`UV`Y`b"8`Y`f`:`i []\`UZ`Y`b`\`U`h`nk`U`f`Ub []Y`_Ø`b`X] []hž`Y]b`
ni`g`Å`h`m`]W`Y`g`DUf`_`U`i`g`ni`V`U`i`Yb`ž`X`c`W`F`U`Z`G`W`a`]X`ž`
;`Y`g`W`Å`ž`g`Z`Ø`f`Y`f`XY`g`:`i []\`UZ`Y`b`g`ž`Å`i`»`Y`f`h`6`Y`X`Y`b`_`Y`b"9`f`Y`f`_`Å`hž`
X`U`g`g`X]Y`6`Y`X`U`f`Z`Ub`DUf`_d`Å`h`m`Y`b`_`Ui`Z`f`i`b`X`XY`g`gh`Å`b`X] []Y`b`
K`i`bg`W`Y`g`XY`f`K`]`X`d`U`f`_`Y`f`b`U`W`_`c`g`h`Y`b`c`g`Y`b`DUf`_a`Ø []`W`_Y]h`Y`b`
b]W`h`g]b`_Y`b`k`]f`X"9`g`]gh`Y`j`]X`Y`b`hž`X`U`g`g`X]Y`DUf`_ []YV`Ø`f`Y`b`]b`XY`f`
<`ch`Y`Y`f`]Y`Ua`:`i []\`UZ`Y`b`ž`X]Y`Y`b`U`W`G`U]g`c`b`i`b`X`6`i`W`i`b []gn`Y]h`
i`bh`Y`fg`W`]Y`X`]W`g`]b`X`ž`b]W`h`UV`g`W`f`Y`W`_Y`b`X` []Y`bi` []k`]f`_Y`b"

K`Y`f`gh`U`h`ni`n`U`\`Y`b`ž`g`Y]b`5`i`hc`c`\`b`Y`9`f`Ui`V`b]g`UV`gh`Y`hž`g]Y`\`h`g]W`
g`W`b`Y`a`]h`\`c`\`Y`b`?`c`g`h`Y`b`_`c`b`Z`f`c`b`h]Y`f`hž`k`Y`bb`Y`g`ni`f`
5`V`g`W`Y`dd`U`_h]cb`_`ca`a`h`B`Y`V`Y`b`XY`b`V]g`ni`)`\$\$`9`i`fc`Z`Ø`f`XY`b`
5`V`g`W`Y`dd`X]Y`b`gh`_`Ø`b`Y`b`ni`XY`a`k`Y]h`Y`f`Y`%`\$`\$`9`i`fc`Z`Ø`f`6`i`» []Y`XY`f`
i`b`X`D`c`n`Y]!`?`c`g`h`Y`b`Ub`ZU`Y`b"9]b`j`Y`f`\`Å`h`b]ga`Å`» []\`c`\`Y`f`D`f`Y]g`ž`i`a`
Y]b`d`U`U`f`9`i`fc`DUf`_ []YV`Ø`f`Y`b`ni`gd`U`f`Y`b"

8]Y`F`Y`U`_h]cb`Y`b`XY`f`5`bk`c`\`b`Y`f`

8]Y`9`f`ZU`f`i`b []Yb`XY`f`5`bk`c`\`b`Y`f`g]b`X`]a`:`;`fc`»`Y`b`i`b`X`:`;`U`b`n`Y`b`
d`c`g]h]j`"J]Y`Y`j`cb`]\`b`Y`b`Ya`d`Z]b`X`Y`b`X]Y`5`V`g`W`Y`dda`U»`b`U`a`Y`b`
U`g`b`c`h`k`Y`b`X] []ž`i`a`]\`f`Y`Y] []Yb`Y`b`DUf`_a`Ø []`W`_Y]h`Y`b`ni`g]W`Y`fb`
8]Y`UV`g`W`f`Y`W`_Y`b`XY`K`]f`_i`b []XY`f`_U`_hi`Y`Y`b`FY []Y`i`b []Z`Ø`f`h`X`Uni`ž`
X`U`g`g`X]Y`B`U`W`V`U`f`g`W`U`ž`h`k`Y`b] []Y`f`a`]h`k`]X`UV []Y`gh`Y`h`Y`b`
:`U`\`fn`Y`i []Yb`V`Y`U`gh`Y`h`k`]f`X`ž`Y]b`i`a`gh`Ub`X`ž`X`Y`b`X]Y`5`bk`c`\`b`Y`f`g`Y`\`f`
ni`g`W`Å`h`m`Y`b`k`]gg`Y`b"8]Y`gh`Y] []Yb`XY`5`bn`U`\`Ub`A`Y`X`i`b []Yb`Ø`V`Y`f`
UV []Y`gh`Y`h`Y`5`i`hc`g`ž`X]Y`X`U`bb`]a`5`bg`W`i`gg`U`g` []Y`gh`c`\`Y`b` []Ya`Y`X`Y`h`
k`Y`f`X`Y`b`ž`n`Y] []h`Y`X`c`W`ž`X`U`g`g`j`]Y`Y`i`f`Ui`V`Y`f`g]W`b]W`h`Ui`g`f`Y]W`Y`b`X`

ØVYf`X]Y` [Y`hYbXYb`J Yf_Y\fgfY [Y`b`]bZcfa]YfYb"

; YfUXY`]b`Y]bYf`NY]hž`]b`XYf`FY]gYb`Vcca Ybž`a U[`Yg`a UbW`a U`
_ca]gW` YfgW`Y]bYbž`k]Y`A YbgW`Yb`j Yfgi W`Ybž`X]Y
DUF_[YVØ`fYb`Ua` :`i` [\UZyb`ni`i`a` [Y`Yb`"8YbbcW`nY][h`X]Y
G]hi Uh]cb`Ua` :`i` [\UZyb`A Ya`a`]b[Ybž`XUgg`XUg`6Yk`i`gghgY]b`ZØf
J Yf_Y\fgfY [Y`b`i` bX`Øfh`]W`Y`J`c`fgW`f]ZhYb`i` bVYX]b[h`[YgW`ÅfZh
k YfXYb`a`i`gg`i`b]W`h`bi`f`ni`a`i`GW`i`hn`XYf`i`f`Ui`VYf`gY`Vghž
gcbXYfb`Ui`W`]a`i`G]bbY`XYf`5bk`c`bYf`i`bX`XYf`[YgUa`hYb
; Ya`Y]bgW`UZh"

8]Y`DfcV`Ya`Uh]_`XYg`K`]`XdUf`_Ybg`Ua` :`i` [\UZyb`A Ya`a`]b[Yb`U`h
b]W`h`bi`f`c`_U`Y`5i`gk`]f`_i`b[Ybž`gcbXYfb`]gh`HY]`Y]bYg`[fØ`YfYb
HfYbXgž`XYf`X]Y`DUF`fUi`a`VYk`]fhgW`UZh`i`b[`]b`j`]Y`Yb`XYi`hgW`Yb
Gh`X`hYb`d`f`Å[h`i`b`XYb`Y`mhYb`d`X`fYb`UVYb`]a`a`Yf`a`Y`f`
: `i` [\ÅZYb`A U`»`bU`a`Yb`Yf`[f]ZYbž`i`a`i`bYf`Ui`VhYg`DUF`_Yb
Y]bni`X`Åa`a`Ybž`i`a`i`gck`c`X`]Y`G]W`Yf`Y]h`U`g`Ui`W`XYb
J Yf_Y\fgZi`gg`ni`i`[Yk`Å`f`Y]ghYb`"9]b`6Y]gd]Y`XUZØf`]gh`XYf`
: `i` [\UZyb`Ghi`hh[Ufhž`XYf`YVYbZU`g`FY [Y`b`ni`f`FYXi`n]Yfi`b[`j`cb
K`]`XdUf`_Yfb`Y]b[YZØ`fh`U`h"

8]Y`i`fgUW`Yb`ZØf`XUg`K`]`XdUf`_Yb`g]bX`j`]Y`Z`h[`i`bX`fY]W`Yb`j`cb
i`bni`fY]W`YbXYb`DUf`_a`Ø[`]W`_Y]hYb`ØVYf`c`Y`; YVØ`fYb`V]g`l`]b
ni`Y]bYa`5bgh]Y [`XYg`i`i`[fY]gYbg`"K`Ybb`g]W`X]Y
DUggU[]YfnU`Yb`Yf`Ø`Ybž`ghY][h`Ui`W`XYf`6YXUfZ`Ub`DUf`_d`ÅhnYb`
: `i` [\ÅZYb`ghY`Yb`i`bhYf`XYa`i`8fi`W`ž`]fYb`GYfj`]W`ni`cdh]a`]YfYbž
k`Å`fYbX`g]Y`[`Y]W`nY]h[`X]Y`ØZYbh`]W`Y`G]W`Yf`Y]h`i`bX`XYb
K`c`b`_ca`Zcfh`XYf`5bk`c`bYf`[Yk`Å`f`Y]ghYb`a`ØggYb`"8]Yg`ZØ`fh
ni`Y]bYa`GdUbbi`b[gZY`Xž`XUg`]b`A`Ya`a`]b[Yb`i`bX`UbXYfgk`c`ni
VYcVUW`hYb`]gh"

F YU`_h]cbYb`XYf`5bk`c`bYf`i`bX`c`_U`Y`Dc`]h]_

8]Y`F`YU`_h]cbYb`XYf`5bk`c`bYf`Ui`Z`XUg`5VgW`YddYb`j`cb
: U`fnYi`[Yb`g]bX`[Ya`]gW`h`K`Å`fYbX`j`]Y`Y`5bk`c`bYf`X]Y
f][cfcgYb`FY [Y`i`b[Yb`VYZØfk`cfhYbž`k`Y]`g]Y`X]Y`Ni`ZU`fh`ni`i`fYb
K`c`b[YV]YhYb`Yb`h`UghYbž`[]Vh`Yg`Ui`W`Gh]a`a`Ybž`X]Y`X]Y
A U`»`bU`a`Yb`U`g`ØVYfhf]YVYb`Ya`dZ]bXYb`"6Øf[Yfa`Y]ghYf`5`k`]b

@]W\ hYbghY][Yf`Yfk Å\ bhYž`XUgg`j]Y`Y`g]W\YfYf`ZØ\`Ybž`gY]h`X]Y
6Y\ØfXYb`U_hj] Yf`[Y[Yb`XUg`K]`XdUf`_Yb`j cf[Y\Yb``8]YgY
[YhY]`hY`A Y]bi b[`nY][hž`k]Y`k]W\h][`Y]b`Ui g[Yk c[YbYg`J Yf\Å`hb]g
nk]gW\Yb`J Yf`_Y\fgg]W\Yf\Y]h`i bX`XYf`@YVYbgei U`]hÅh`XYf
5bk c\`bYf`]gh"

Ni gÅh`n`]W\`ni`XYb`dc`]h]gW\Yb`A U» bU\`a Yb`[]Vh`Yg`ϕ]h]Uhj] Yb
]bbYf\`U`V`XYf`; Ya Y]bXYž`X]Y`U`hYfbUhj] Y`DUf`_a Ø[`]W\`_Y]hYb
VYk YfhYbž`i a`XUg`DfcV`Ya`bUW\`U`h][`ni` ``ØgYb``8 Uni`nÅ\`Yb
; YgdfÅW\Y`a]h`XYa` :`i [\UZYb`ØVYf`Y]bY`a Ø[`]W\Y`9fk Y]hYfi b[
XYf`DUf`_Ub`U[Yb`gck]Y`l bhYfgi W\i b[Yb`ØVYf`X]Y`9]bZØ\fi b[`j cb
G\i hh`Y!GYfj]W\gž`X]Y`DUggU[]YfY`X]fY`_h]j ca`DUf`_d`Uhn`ni a
HYfa]bU`Vf]b[Yb`_ØbbhYb"

9]bgW\ Åhni b[`XYf`J Yf`_Y\fgdc`]h]_

8]Y`A cV`]hÅh]b`8Yi hgW\`UbX`j YfÅbXYfh`g]W\`ghYh][ž`i bX`XUg
K]`XdUf`_Yb`Ua` :`i [\UZYb`A Ya`a]b[Yb`]gh`bi f`Y]b`6Y]gd]Y`ZØf`X]Y
<YfUi gZcfXYfi b[Ybž`a]h`XYbYb`GhÅXhY`i bX`; Ya Y]bXYb
_cbZfcbh]Yfh`g]bX``8Yf`k UW\gYbXY` :`i [j Yf`_Y\`f`Yf\`Ø\`h`XYb`8fi W_
Ui Z`X]Y`ϕZfUghfi _hi fž`k cXi fW\`Y]bY`YZY`_h]j Y`J Yf`_Y\fgdc`]h]_
k]W\h][Yf`XYbb`Y`k]fX``9g`g]bX`b]W\h`bi f`X]Y`Øfh]W\Yb`6Y\ØfXYb
[YZfU[hž`gcbXYfb`Ui W\`dchYbn]Y``Y`FY]gYbXY`a ØggYb`]\fYb
6Y]hfU[``Y]ghYbž`]bXYa`g]Y`DUf`_Yb`]a`J cfUi g`d`UbYb`i bX`X]Y
j cf\`UbXYbYb`A Ø[`]W\`_Y]hYb`VYggYf`bi hmYb"

ϕg[YgUa h`nY][h`X]Y`G]hi Uh]cb`]b`A Ya`a]b[Ybž`XUgg`X]Y
<YfUi gZcfXYfi b[Yb`XYf`DUf`_fUi a VYk]fhgW\UZh] b[`_ca`d`Yl`g]bX
i bX`Y]bY`J]Y`nU\`j cb`5bgÅhYb`YfZcfXYfbž`i a`gck c\`XYb
6YXØfZb]ggYb`XYf`FY]gYbXYb`U`g`Ui W\`XYb`5bk c\`bYfb`[YfYW\h`ni
k YfXYb``6Y]`XYf`8]g_i gg]cb`ØVYf`a Ø[`]W\Y`@Øgi b[Yb`_ØbbhY`XYf
6`]W`_Ui Z`Å\`b`]W\Y`A U» bU\`a Yb`]b`UbXYfYb`GhÅXhYb`\Y`ZYbž`X]Y
J cf!i bX`BUW\hY]Y`UVni k Å[Yb`i bX`]bbcj Uh]j Y`@Øgi b[Yb`ni
Z]bXYbž`X]Y`ZØf`U`Y`6YhY]]]hYb`j cb`J cfhY`]g]bX"

6Ygi WYb'G]Y'i bg'Ui Z'b!U["XY