

? fmdhc Z]b Ub n. '5i Z'XYb 'Gdi fYb 'j cb 'GUa 6Ub_a Ub!: f]YX 'Ui Z'XYb '6U\Ua Ug

K]`_ca a Yb'ni a 'X]Ygk ÖW][Yb': H'7fmdhc Z]bUbW!
BYk g`YhhYfžXYf'j cb'XYb'6U\Ua Ug'ni 'AbYb'_ca a hžk c']W
a]h@Yi hYb'ØVYf': HL '[YgdfcWYb'\UVY": HL 'k Uf'XYf'[fc»Y
:]gWžXYb'X]Y'6U\Ua Ug'Y]b\c'hYbž'U`g'g]Y'j Yfgi W'hYbž'Y]b
ZØ\ fYbXYf'A Uf_h'ZØf'X][]hU'Y'J Yfa Ö[Ybgk YfhY']a '<YfnYb
XYf'?Uf]V]_ni 'k YfXYb"'8Yf'D'Ub'k i fXY'Xi fW'X]Y'6`ck ci h!
?cbZYfYbn'j cb': HL 'ja '5df]'j Yf_ÖfdYfhž'VY]'XYf'XYf
DfYa]Yfa]b]ghYf'XYf'6U\Ua Ugž'D\]'d'8Uj]gž'Hcbmi'6'U]fž'6]'`
7']bhcbž'?Uhm'DYffmi bX'B: @GhUf'Hca '6fUXmigck]Y
Gi dYfa cXY`';]gY'Y'6ØbXWYb'fXUa U`g'bcW'ni gUa a YbŁ
Ui ZhfUhYb"'BUWXYa 'XUg'?fmdhc!ā dYf]i a 'j cb'GUa
6Ub_a Ub!: f]YX'YI d`cX]Yfh']ghž'\Uh'g]W'Y]b'XÅa dZYbXYf
BYVY`XYf'Gh]'Y'ØVYf'X]Y'ābgY`[Y'Y[hž/ Ua d^Y`d/

*K]`_ca a Yb'ni a 'X]Ygk ÖW][Yb': H'7fmdhc Z]bUbW!BYk g`YhhYfžXYf
j cb'XYb'6U\Ua Ug'ni 'AbYb'_ca a hžk c']W'a]h@Yi hYb'ØVYf': HL
[YgdfcWYb'\UVY"*

: HL 'k Uf'XYf'[fc»Y':]gWžXYb'X]Y'6U\Ua Ug'Y]b\c'hYbž'U`g'g]Y
j Yfgi W'hYbž'Y]b'ZØ\ fYbXYf'A Uf_h'ZØf'X][]hU'Y'J Yfa Ö[Ybgk YfhY']a
<YfnYb'XYf'?Uf]V]_ni 'k YfXYb"

8Yf'D'Ub'k i fXY'Xi fW'X]Y'6`ck ci h'?cbZYfYbn'j cb': HL 'ja '5df]'
j Yf_ÖfdYfhž'VY]'XYf'XYf'DfYa]Yfa]b]ghYf'XYf'6U\Ua Ugž'D\]'d
8Uj]gž'Hcbmi'6'U]fž'6]'`7']bhcbž'?Uhm'DYffmi bX'B: @GhUf'Hca
6fUXmigck]Y'Gi dYfa cXY`';]gY'Y'6ØbXWYb'fXUa U`g'bcW
ni gUa a YbŁ'Ui ZhfUhYb"

BUWXYa 'XUg'?fmdhc!ā dYf]i a 'j cb'GUa '6Ub_a Ub!: f]YX
YI d`cX]Yfh']ghž'\Uh'g]W'Y]b'XÅa dZYbXYf'BYVY`XYf'Gh]'Y'ØVYf'X]Y

ϕgY`[Y`Y[hž`k]Y`]W`k`Ä`fYbX`a`Y`]bYg`5i`ZYbh`U`hg`\]Yf`]b`X]YgYf`
K`c`W`Y`ZYghghY`Y`b`a`i`gghY`"

: Øf`XYb`DfYa`]Yfa`]b]ghYf`]gh`XYf`Ni`gUa`a`YbVfi`W`j`cb`:`HL`Y`]bY`
Yfbgh`U`ZHY`<`YfUi`gZcfXYfi`b[`ž`XU`Yf`gY]bY`Df`Ä`gYbn`Ui`Z`XYf`ϕgY`
U`g`HY`Y`XYf`9f`\c`i`b[`XYg`@UbXYg`j`ca`<`i`ff`_Ub`8cf]Ub`]a`>U`f`
&\$%-`i`bX`XYf`7cj`]X!%-`!DUbXYa`]Y`VYhfUW`hYhY`"K`Ug`6Ub`_a`Ub`!
:`f]YX`VYhf]Zž`gc`gU[`Yb`Y]b][`Yž`Yf`\UVY`g]W`ZØf`g]W`VY\U`hYb`"9f`
]gh`bi`f`Y]b`_Y]bYf`ž`b[`Yž`XYf`g]W`]b`5`VUbmi`j`YfghYW`_h`ž`gU[`hY`a`]f`
Y]b`HUI`]ZU`fYf`"

5`VUbmi]gh`Y]bY`@`I`i`gfYgc`fh[`Ya`Y]bgW`U`Zž`X]Y`g]W`]a`
[`Ya`Y]bgUa`Yb`6Yg]m`j`cb`H][`Yf`K`cc`Xgž`9fb]Y`9`gž`ž`gh]b`
H]a`VYf`U`_Y`i`bX`εY`@Yk`]gž`XYa`Vf]h]gW`Yb`I`bhYfbY`a`Yfž`
VYZ]bXYh`"

9]b`9]b`Y]a`]gW`Yf`gU[`hY`a`]fž`5`VUbmi`gY]`Y]bY`ϕgY`Ui`Z`XYf`
ϕgY`ž`Y]b`C`fhž`Ub`XYa`X]Y`A`]h[`]YXYf`]f`[`UbnYg`@YVYb`
j`YfVf]b[`Yb`_ØbbYb`i`bX`ZUgh`b]Y`j`Yf`UggYb`a`ØggYb`"9g`[`]Vh`gc[`Uf`
Y]bY`<][`\`GW`cc`ZØf`?]bXYf`"9]bY`*`\$\$`<Y`_hUf`[`fc»Y`;`Ya`Y]bXYž`
XUg`;`Y`Y]a`b]g`]Y[`h`k`Y]h`YbgY]hg`XYggYbž`k`Ug`XUg`5i`[`Y`gY`Yb`
_Ubbž`gY`Vgh`k`Ybb`G]Y`k`]Y`]W`bYi`[`]Yf][`[`Ybi`[`g]bXž`
i`bUb[`Ya`Y`XYh`Ub`XYb`G]W`Yf`Y]hggW`Yi`gYb`Ui`Zni`hUi`W`Yb`"

9g`hi`h`a`]f`Y]Xž`XUgg`G]Y`XYb`[`UbnYb`K`Y[`]Ui`g`@cbXcb`
[`Y`_ca`a`Yb`g]bXž`UVYf`]W`_Ubb`≠`bYb`_Y]bY`ϕZcfa`Uh]cbYb`
[`YVYb`ž`gU[`hY`XYf`K`Ä`fhYf`"

:`HL`[`]b[`]bW`5`VUbmi`ž`k`Y`]g]Y`Df]j`Uhgd`\Ä`fY`k`c`hYbž`i`bX`g]Y`
k`i`gghYbž`XUgg`5`VUbmi[`YbUi`XUg`V]YhYh`ž`Yfn`Ä`\`hY`a`]f`Y]b`
9]b`Y]a`]gW`Yf`"8i`VU`]gh`XYf`C`fhž`Ub`XYa`X]Y`@Yi`hY`a`]h`]fYa`
;`Y`X`Ub[`YVYb`"5`VUbmi]gh`XYf`C`fhž`Ub`XYb`X]Y`@Yi`hY`[`Y`Ybž`i`a`Yg`
[`Y`Y]a`ni`U`hYb`"

8Ug`]gh`Y`Yf`]b`Y]bYa`b]W`h`Ui`Zxf]b[`]W`Yb`U`g`]b`Y]bYa`
gW`Ä`bX`]W`Yb`G]bbY`[`Y`Y]a`"Hfc`mXYa`Zi`b`_h]cb]Yfh`Yg`k`]Y`Y]b`
NUi`VYfž`k`Ybb`Y]b`Ghi`fa`ni`gW`Ä`[`h`K`]YXYf`\c`hY`j`Yfgi`W`Yž`\]bhYf`
5`VUbmi`HØfYb`j`cfni`Xf]b[`Ybž`V`]YVYb`YfZc`[`cg`"DÄggY`ZØf`"

B]W\ha]h[`]YXYf`k UfYb`Y]ba U`]a `5b[YVc hž`UVYf`Y]b`A]hUfVY]hYf
j cb`5`VUbm`igU[hY`a]fž`XUgg`Yhnh`_Y]bY`a Y`f`Yf`À`h]W\`gY]Yb``9]b
5i hcZU`fYfž`XYf`XUg`5bk YgYb`j Yf`Y» ž[UV`[Y[YbØVYf`XYf`DfYggY
_Y]bY`?ca`a YbhUfY`UV`/]b`gY]bYf`9]`Y`ni` [Y`Yb`Z` \f`Yf`ZUgh`ØVYf`
a Y]bYb`:`i`»``9]b`UbXYfYf`A]hUfVY]hYf`gU[hY`a]f`_bUdd.`5`VUbm
UfVY]hYh`Ui ZJ YfhfUi `]W\`_Y]h"

GhYZb`8Y`Yj YUi`I`ž; YgW\`À`ZhgZØ`fYf`XYf`7Uf]VVYUb`6`c`W`W`U]b
5``]UbW\ž`gU[hY`VY]a`A]hU[YggYbž`XUgg`X]Y`@i`hY`Y]bZUW\`b]W\`h
k]f`_]W\`Ub`5`VUbm`XYb`_Yb` ``K]f`k YfXYb`b]W\`h`XUg`; Y`X`\UVYbž
i`a`Xcfh`ni` ``YVYbž`]W\` \UVY`V]g`ni`X]YgYf`K`c`W`Y`b]Y`k]f`_]W\
XUfØVYf`bUW\ [YXUW\`h"

9g`]gh`b]W\`h`bi`f`X]Y`K`c`b`Ub`U[Y`j`cb`6Ub`_a`Ub!:`f]YXž`X]Y
j Yfgi`W\`hž`XUg`F`Ua`dYb`]W\`h`ni`j`Yfa`Y]XYb``8fØVYb`]a`6U`U`A`Ufž
XYa`@`I`i`gfYgc`fh`ZØf`X]YgY`Y`fU`XYZ]b]YfYbXY`?cbZYfYbnž`gU[hY`a]f
X]Y`ØVYfk]Y[YbXY`A`Y`f`Y]h`XYf`A]hUfVY]hYfž`XUgg`Yg`]bYb`b]W\`h
ZfY]ghY`Y`ž`ØVYf`:`HL`c`XYf`gY]bYb`]b`I`b[bUXY`[YZU`YbYb
Y`Y`a`U`] [Yb`J`c`f`gh`Ub`X`gj`c`fg]h`nYb`XYb`ni` `gdfYW\`Yb`"

5VYf`Y]b`5fVY]hYf` `XYb`]W\`]a`?cbZYfYbnnYbhfi`a`j`cb`:`HL
[YZ`bXYb`\UVY` `gU[hY`a]fž`U`Y`k`UfYb`Ui`Z[YfY[h`ž`U`g`X]Y
?fmdhc!`?Øb][Y`]b`X]Y`GhUXh`_Ua`Yb`"

8Yf`XnnWi`V`]a`6U`U`A`Uf`|`G`W`c`h`7`\]dc`]bU

8Yf`XnnWi`Vž`gc`k`i`fXY`a`]f`[YgU[hž`k`Uf`Y]bYf`XYf`:`Uj`cf]hYb`XYf
:`HL!7fYk``5VYf`U`g`Yg`\Ufh`Ui`Z`\Ufh`_Ua`ž`nc[`6U`U`A`Uf`Ui`W\`X]Y
Ni`[VfØW`_Y`"

B]Ya`UbX`k`]fX`≡`bYb`Yhk`Ug`ØVYf`]f[YbXYhk`Ug`Yfn`À`\`Yb`ž`gU[hY
a`]f`Y]b`A]hUfVY]hYf`Ub`XYf`F`YnYdh]cb``≡`W\`Xf`À`b[hY`Ui`ZY]b
≠`hYfj`]Yk`a`]h`XYa`A`UbU[Yfž`g]Y`gU[hYb.`G]Y`k`c``Yb`Y]bY`Y`f`]W\`Y
5bhk`c`fh3`A`Y]b`J`cf[YgYhnhYf`\U`h`a`]W\`[YVYhYbž`Yg`≡`bYb`VY]
;`cc[`Y`ni`gU[Yb`"

HUhgUWkY`]ghž`XUgg`X]Y`6U\Ua Ug`Y]b`_Y]bYf`Cfh`g]bXž`i bX`X]Y
a Y]ghYb`A YbgWkYb`g]bX`Y]bZUWk`b]Wkh`VYfY]hž`VY]` \Y]_`Yb
H\Ya Yb`k]Y`X]YgYa`]\fYb`<U`g`\YfUi gni ghfYW`Yb`"B]Wkh`Y]ba U`
X]Y`F`Y[]Yfi b[.`Wk` \UVY`k]YXYf`c`h`i a`Y]b`ϕhYfj]Yk`a]h`XYa
DfYa]Yfa]b]ghYf`[YVYhYbž`UVYf`a Y]bY`5bZfU[Yb`k i fXYb
UV[Y`Y`b`h`" 8]Y`@Yi hY`k c`Y`b`g]Wk`_Y]bYf`i bYfk ØbgWk`hYb
ÖZYbh`]Wk`Yb`?cbhfc`Y`Ui ggYhnYb ž`gU[hY`a]f`Y]b`6U\Ua UYf`"

K Ä`fYbX`Y]b][Y`\YhnYbž`i a`i bUb[YbY`a Yb`i: fU[Yb
Ui gni k Y]Wk`Ybž`j Yf`]YfYb`]b`XYb`DU`a Yb`i bX`GhfÄ`bXYb`a]h`_`UfYa
K UggYfž`X]Y`X]Y`ϕgY`i a [YVYbž`X]Y`Y]bZUWk`Yb`A YbgWk`Yb`"9]b
HUI]ZU`fYf`gU[hY`a]fž`X]Y`6U\Ua Ug`gY]Yb`Yb`h`Ä`i gWk`h`ØVYf`XYb
Ni gUa a YbVfi Wk`j cb`i: HL ž`k Y]`gY]bY`5b`_i bZn` [i hY`8]b[Y
j YfgdfYWk`Y`k]Y`5fVY]hgd`Ä`hnY`ZØf`X]Y`K]fhgWk`UZh`"

K]Y`i bgYf`J]XYc`nY][hž`_ØbbhY`XYf`Ni gUa a YbVfi Wk`j cb`i: HL`b]Y
VYggYf`gma Vc`]g]Yfh`k YfXYb`U`g`Xi fWk`XUg`hfcgh`c`gY`i bX
ØVYfk i Wk`YfhY`; Y`Ä`bXYž`XUg`XUg`ni _ØbZh][Y`<Ui dhVØfc`XYf`6ØfgY
Ui ZXYf`ϕgY`VY`YfVYf[Yb`gc`hY`"

8cWk`hfchn`XYf`A Ui Yf`XYg`GWk`k Y][Ybg`k ØfXY`]Wk`bUWk`Ä`gg][`gY]bž
X]Y`GnYbY`Ui Z`XYa`i`i [\UZyb`j cb`B`UggUi`b]Wk`h`ni`Yfk Ä`bYbž`Ui Z
XYa`i bYf`_`Ä`f`]Wk`Yfk Y]gY`]a a Yf`bcWk`K YfVi b[`ZØf`i: HL
[YgWk`U`hYh`k i fXYž`U`g`]Wk`_Ub`_Ua`"K]Y`Y]b`VYghØfnhY`g`DUUf`VY]`XYf
DUgg`cbhfc`Y`VYa Yf`_hY`." 8Ug`YfghYž`k Ug`g]Y`X]f`gU[Ybž`]ghž`i: HL
ni`j YfhfUi Yb`°

:`i [\UZyb`]b`B`UggUi`K YfVi b[`ZØf`i: HL`i` `GWk`h`h`7`\]dc`]bU

≠[YbXk Y`Wk`Y`H]ddg`ZØf`a]Wk`ž`k Ä`fYbX`]Wk`Ui Z`XYb`6U\Ua Ug`V]b3
GYbXYb`G]Y`a]f`Y]bY`9!A U]`Ub`gWk`h`h`Wk`]dc`]bU4 Zh`Wk`a`"

6Y[`Y]hYb`G]Y`a]W\`VY]`XYb` : Hg`7fmdhc`UbX`8][]hU`5ggYhg
Gi a a]h`K]bhYfUi g[UVY`Ua` &, "Bcj Ya VYfž`k c` : H!`?c`Y[Yb`i bX
]W\`X]g_i h]YfYbž`k c\]b`X]Y`FY[i`]Yfi b[`[Y\h`"9g`i a ZUggh`5i Zhf]hhY
XYg`7: H7!J cfg]hnYbXYb`Fcgh]b`6Y\`bUa` i bX`XYf`9ga U!
J cfg]hnYbXYb`J YfYbU`Fcgg`"5`g` : H!DfYa]i a`!5VcbbYbh`_ÖbbYb`G]Y
XYb`Dfca c`!7cXY`DF 9A ≠ A &\$&&`j Yfk YbXYbž`i a` _cghYb`cg`X][]hU`
ni`gWUi Ybž`cXYf` : H&) `j Yfk YbXYbž`i a` &) `i` FUVUhh`Ui Z`=fYb
dYfgÖb`]W\`Yb`DUgg`ni`Yf\`U`hYb`"

K Ug`k]f`Yb hXYW`h`\ UVYb

- ✘XY`< Ui dhghUXh`\Uh`Y]b`7UZĀ`cXYf`FYghUi fUbhž`XUg`j cb
XYb`a` ĀW\h][ghYb`@Yi hYb`XYg`@UbXYg`VYgi W\h`k]fX`" `⊖
BUggUi`]gh`XUg`XUg`7UZĀ`A Uh]ggYž`i bX`Yg`Yfk]Yg`g]W\
k Ā\`fYbX`a` Y]bYg`5i ZYbh\`U`hg`U`g`Y]bYb`6Ygi W\`k`Yfh`"9]b
5V[YcfXbYhYf`gU[hY`a`]fž`X]Y`6U\`Ua` Ug`k`ØfXYb`6Ub`_a` Ub!
: f]YX`b]f[YbXk c\]b`[Y\Yb`"UggYbž` V]g`X]Y`I` G5
YbhgW\]YXYb`\UVYbž`k Ug`g]Y`hi`b`k`c`Yb` ""
- A Y]bY`?c`Y[]b`A UX]gcb`8 UfVmg\]fY`gW\`i` []j`cfž`XUgg`]W\
a`]W\`]b`Y]bY`VY`]YVhY`VU\`Ua` U]gW\`Y`9ggYbg`]YZf!5dd
bUa` Ybg`?fUj`Yb`j`Yfh]YZb`gc`hY`" =W\`ZFU[hY`XYb` : U\`fYfž`cV
X]Y` : HL!7fYk`Y`Ya` U`g`XYb`GYfj`]W\`[Ybi`hnh`\UVYž`i bX`a`]f
k`i`fXY`[YgU[hž`XUgg`g]Y`bcfa` U`Yfk`Y]gY`9ggYb`]a` `K`Yfh
j`cb`Yhk`U`)` \$\$`8c`Uf`dfc`Dcd`VYghY`hYb`"J`]Y`Y]W\`h
YbhgdfUW\`Yb`5`VUbmg`F`YghUi`fUbhg`b]W\`h`XYb`GhUbXUfXg
j`cb` : HL`"
- 8Yf`Ni`gUa` a` YbVfi`W\`XYg` : HL`fc`h`k`Y]hYf`Xi`fW\`XYb
A`Uf`_h`";` YbYg]g`ghcddhY`X]Y`5i`gnU\`i`b[`Yb`j`cb`gY]bYf
D`UhhZcfa`i`bX`a` UW\`hY`VY]gd]Y`cgY`A`Uf`_hVYX]b[i`b[`Yb
XUZØf`j`YfUbhk`cfh]W\`" `?ca`]gW\`ž`k`]Y`k`Yb][`Y`i`bhYfbY\`a` Yb
VY]gd]Y`cgY`A`Uf`_hVYX]b[i`b[`Yb`bYbbYbž`k`Ybb`Yg`]\`bYb
[i`h[`Y\`h`"
- 8Yf`bYi`Y` : HL!7\YZ`∞\`b`F`Umi`=`Y[`hY`a`]h`k`]X\Y]h`i]b` : HL
`cg`" `⊖`Y]bYa`i`G!;` Yf]W\`hgUbhfU[`gU[`hY`F`Umž`Yf`\UVY`bcW\
b]Y`Y]b`gc`j`c`ghĀ`bX][`Yg`J`YfgU[`Yb`XYf`

I bhYfbY\ a Ybg_cbhfc`Yb'i bX'Y]b'gc'j c`ghÅbX][Yg': Y\`Yb
j YfhfUi Ybgk ØfX][Yf':]bUbn]bZcfa Uh]cbYb '[YgY\Yb"i bX
XUg.]gh'XYf'A Ubbž'XYf'X]Y'@ei]XUh]cb'j cb'9bfc b
VYUi Zg]W\h][h'\Uh°

- I bX'gW\`Y»`]W`U»`a Y]bY'?'c`Y []b'<UbbU\`A i fd\m
_Øfn`]W`a]h'XYa`]bhfcj Yfh]YfhYb'7c]bVUgY!7\YZ'6f]Ub
5fa ghfc b[]b'GUb': fUbW]gWc`ni`A]hhU[" '<]Yf']gh'XYf
6Yf]W\hž'k]Y`Yg' [Y`Ui ZYb']gh"

Gci bXV]hY`XYf`K cW\Y. `D\]`d`8Uj]gž
DfYa]Yfa]b]ghYf`XYf`6U\Ua Ug`

5a`A]hk cW`gU[hY`DfYa]Yfa]b]ghYf`8Uj]g`XYa`DUf`Ua Ybh'gY]bYg
@UbXYgžXUgg`X]Y`VU\Ua U]gW\Yb`5i Zg]W\hgVY\ØfXYb`XYb
Ni gUa a YbVfi W\`j cb': HL`Y]XYf`b]W\h'\ÅhhYb`j Yf\]bXYfb`_ØbbYb"

6Ug]YfYbX`Ui ZXYf`V]g\Yf][Yb`5bU`mgY`i bX`XYa
J YfghÅbXb]g`XYf': HL!@ei]X]hÅhg_f]gY`\UVYb`k]f`_Y]bY
A Åb[Y`]b`i bgYfYa`F Y[i`]Yfi b[gfU\`a Yb`ZYgh[YghY`hž'X]Y
X]Yg`\ÅhhYb`j Yfa Y]XYb`_ØbbYb"

A U`gY\Ybž'cV`UbXYfY`6Y\ØfXYb`ni`Y]bYa`Å\`b`]W\Yb`GW\`i gg
_ca a Yb"

8UhU`A]b]b[.`5b[gh'i bX`5VgW\Yi

8Yf`UhYa VYfUi VYbXY`Ni gUa a YbVfi W\`j cb': HL`\UhXUg
J YfhfUi Yb`]b`X]Y`ZfU[]Y`?fmdhc]bXi ghf]Y`k Y]hYf`YfcX]Yfhž'k c`X]Y
A Åf_hY`ja a Yf`bcW\`j cb`Y]bYa`f]Yg][Yb`7fUg\`ja`Gca a Yf
YfgW\ØhhYfh'k YfXYb"

8UhYb`j cb`7fmdhc7ca dUfY`nY][Ybž'k]Y`j]Y`XYf':`U[[gW\]Zi

?fmdhc k À\fi b['XYf'6fUbWXY]b'X]YgYa 'A cbUh'V]g\Yf'Ui g'Y]b][Yb
XYf' [fÒ» hYb'6ÒfgYb '[YZcggYb']gh' 'Gck Y]h'k]f'\ ÒfYbž\UbXY`b
Y]b][Y'I bhYfbY\ a Yb'Ui » YfVÒfg`W`i bX'Y]b][Y'5b`Y [Yf'j Yf_Ui ZYb
]\fY'6YghÀbXY" '5bXYfY' < C 8 @Yb'Y]bZUW`Ui Z'VYggYfY'NY]hYb"

E i Y`Y.:]bUbW]U`'H]a Yg

8YhU]`g

6Ygi WXYb'G]Y'i bg'Ui Z.'_fmdhc!bYk g"Uh