

< UVYW_.; fØbY'DUfhY]gc``'A Yf_Y`g
J U_i i a 'a]h'VØf[Yf`]W\ Yf`GhÀf_Y`ZØ`Yb

6i bXYgk]fhgW\UZhga]b]ghYf`< UVYW_`ghfYVh'Ubž'XUg'dc`]h]gW\Y
J U_i i a 'bUW\`A Yf_Y`ni `ZØ`Yb`i bX`K À\`Yf`ni `[Yk]bbYbž
k À\fybX`Yf`X]Y'; fØbYb`U`g`_cbghfi _h]j Y`?fUZh'dfÀgYbh]Yfh"

÷`Y]bYf`fY`Yj UbhYb`ÿi »Yfi b[`U`h'6i bXYgk]fhgW\UZhga]b]ghYf
F cVYfh`< UVYW_`fi fØbYf`_`Uf`Ufh]_i `]Yfhž'XUgg`Yf`Y]bYf`dc`]h]gW\Yb
@ØW_Yž'X]Y`bUW\`XYf`?Ubn`YfgW\UZhj cb`5b[Y`U`A Yf_Y`YbhghUbbXYb
]ghž`Ybh[Y[Ybk]f_Yb`a ØW`hY"" ÆW`a ØW`hY`Y]bY`DUfhY]`Ui g`XYf
A]hhY`YfUi gž`X]Y`X]YgYg`J U_i i a `bUW\`5b[Y`U`A Yf_Y`b]W\h
Y]bZUW\`YYf`Àggh ž`Yf`_`ÀfhY`< UVYW_`]b`Y]bYa `÷bhYfj]Yk`a]h`XYa
5F8!<Ui dhghUXhghi X]c""GY]bYf`A Y]bi b[`bUW\`]gh`Yg`YbhgW\Y]XYbXž
XUgg`X]Y'; fØbYb`g]W\`U`g`U`hYfbUh]j Y`?fUZh'dcg]h]cb]YfYbž
]bgVYgcbXYfY`]b`Y]bYa `dc`]h]gW\Yb`?`]a Už'XUg`j cb`XYf`5b[ghj cf
Yi hfYa]gh]gW\Yb`DUfhY]Yb`k]Y`XYf`5Z8`Xca]b]Yfh`k]fX"

8]YgY`5i ggU[Y`]ghj cb`6YXYi hi b[ž`XU`g]Y`X]Y`5a V]h]cbYb`XYf
; fØbYb`k]XYfgd]Y[Y`hž`b]W\h`bi f`U`g`i a k Y`hgW\i hndUfhY]ž`gcbXYfb
Ui W\`U`g`5_hYi f`]a `_'Ugg]gW\Yb`dc`]h]gW\Yb`GdY`hfi a
k U\`f[Ybca`a Yb`ni `k YfXYb""< UVYW_`Yf_Yb`bh`X]Y
<YfUi gZcfXYfi b[Ybž`X]Y`g]W\`Ui g`XYb`VYj cfghY`YbXYb
@UbXhU[gk U`Yb`]a `C ghYb`8Yi hgW\`UbXg`Yf[YVYb""8]YgY`K U`Yb
g]bX`_f]h]gW\Y`DfØZghY]bY`ZØf`X]Y'; fØbYbž`Ui Z`X]Y`a Ub`VYgcbXYfg
UW\hYb`gc``hY"" 8]Y`VYj cfghY`YbXYb`K U`Yb`VYfY]hYb`a]f[fc»Y
Gcf[Yb`ž[YghUbX`Yf`Y]bž`k À\fybX`Yf`[`Y]W\`nY]h][`X]Y
Bch`k YbX][_Y]hi bhYfghf]W\ž`g]W\`b]W\`hij cb`XYf`5b[ghj cf`XYf`5Z8
`Y]hYb`ni `UggYb"

Dc`]h]gW\Y`< YfUi gZcfXYfi b[Yb`i bX`X]Y`F c``Y
XYf`; fØbYb

⊕X]YgYa Ni gUa a Yb\Ub[]ghYg]bhYfYggUbhžXUgg < UVYW_X]Y
; fØbYb`U`g`J`YfZYWXhYf`Y]bYf`VYfU`Yb`8Ya c_fUh]Y`d`f`gYbh]Yfh"
K]f`ghY\Yb`ni`XYa ž`k`Ug`Y]bY`VYfU`Y`8Ya c_fUh]Y`VYXYi`hYhž
]b`_i`g]Y`XYf`I`bhYfghØhni`b[`XYf`I`_fU]bY`]b`]\fYa`?`Ua`d`Z`Øf
: fY]\Y]h`ž`Ø\fhY`Yf`k`Y]hYf`Ui`g`"8]YgY`Dc]g]h]cb`_ØbbhY`Øf`X]Y
K`À\`Yfž`X]Y`g]W`b`UW`Y]bYf`ghUV]`Yb`dc`]h]gW`Yb`: Ø\fi`b[`gY\`bYbž
VYgcbXYfg`Ub`gd`fYW`Yb`X`gY]b"

8]Y`; fØbYb`gY\Yb`g]W`]b`Y]bYa`YbhgW`Y]XYbXYb`A`ca`Ybhž]b
XYa`g]Y`a`Ø[`]W`Yfk`Y]gY`X]Y`A`Ø[`]W`_Y]h`\UVYbž`g]W`]cb`XYf
C`ddc]g]h]cb`ni`f`?`cU`]h]cb`g_fUZh`ni`Ybhk`]W`Y`b`"a`<`]bV`]W`_Ui`Z`X]Y
I`b]cb`i`bX`XYfYb`a`Ø[`]W`Y`Ni`gUa`a`YbUfVY]h`a`]h`XYb`; fØbYb
a`Yf`_hY`<`UVYW`_Ub.`J`Y`Y`W`h`Yfb`h`X]Y`I`b]cb`ž`XUgg`b]W`h`X]Y
; fØbYb`]\fY`<`Ui`dh[`Y[`bYf`g]bX`"8]YgY`5i`ggU[`Y`_ØbbhY`U`g`5i`Zfi`Z
Ub`X]Y`I`b]cb`]bhYfd`fYh]Yfh`k`YfXYbž`g]W`b`Yi`Ui`gni`f]W`hYb`i`bX`X]Y
[`Ya`Y]bgUa`Y`6Ug]g`ni`gi`W`Yb`UbghUhh]b`?`cbZ]_hYb`ni`j`Yf`UffYb"

8]Y`VYj`cfghY\YbXYb`K`U\`Yb`g]bX`b]W`h`bi`f`Y]b`HYgh`Øf`X]Y
; fØbYb`ž`gcbXYfb`Ui`W`Øf`X]Y`[`YgUa`hY`dc`]h]gW`Y`@UbXgW`UZh]b
8Yi`hgW`_UbX`"8Yf`K`]XYfghUbX`XYf`I`b]cb`_ØbbhY`XYb`9ZY`_h
\UVYbž`XUgg`g]W`Y]b][`Y`K`À\`Yf`ni`f`5Z8`\]b[`Ync[`Yb`Ø\`Ybž`i`bX
XUg`k`ØfXY`X]Y`dc`]h]gW`Y`@U[`Y`Øf`U`Y`DUfhY]Yb`k`Y]hYf
_ca`d`]n]YfYb`"8U\Yf`a`ØW`hY`<`UVYW`_Y]bYb`8]U`c[`Ø\`fYbž`XYf`Ui`Z
;`Ya`Y]bgUa`_Y]hYb`VUg]Yfh`i`bX`b]W`h`Ui`Z`gW`UfZYb`HØbYb"

⊕Y]bYa`UbXYfYb`k`]W`h][`Yb`H\Ya`U`_ØbX][`hY`<`UVYW`_gY]bY
I`bhYfghØhni`b[`Øf`X]Y`A`YmYf!K`YfZh]b`DUdYbVi`f[`Ub`"9f`gYhnh]g]W`
Øf`ghUUh]W`Y`<`]ZYb`Y]bž`i`a`X]Y`5fVY]hgd`Àhny`]b`XYf`F`Y[`]cb`ni
g]W`Yfb`_Y]b`GW`f]hž`XYf`gck`c`\`k`]fhgW`UZh]W`_U`g`Ui`W`gc`n]U`
j`cb`[`fc»`Yf`6YXYi`hi`b[`]gh`"8]Y`A`YmYf!K`YfZh`_Ubb
?`fYi`nZU`fhgW`]ZY`VUi`Ybž`i`bX`k`]f`gc`hYb`g]W`YfghY`Ybž`XUgg`X]YgY
i`bhYf`\c\Yb`GhUbXUfXg`]b`8Yi`hgW`_UbX`[`YZYfh][`h`k`YfXYb`ž`gU[`hY
XYf`K`]fhgW`UZhga`]b]ghYf`"8]Yg`VYhf]Zh`b]W`h`bi`f`X]Y
K`YfhgW`ØdZ`b[`]b`XYf`F`Y[`]cbž`gcbXYfb`g]W`Yfh`Ui`W`fi`bX`" "\$
5fVY]hgd`Àhny"

K]fhgW`UZh`]W`Y`DYfgdY`_h]j`Yb`i`bX`gc`n]U`Y

J YfUbhk cfhi b[

8]Y`k]fhgWk UZh`]Wk Yb`F U`a YbVYX]b[i b[Yb`g]bX`j cb
YbhgWk Y]XYbXYf`6YXYi hi b[`Z0f`X]Y`dc`h]gWk Y`5i gf]Wk hi b[`XYf
; f0bYb``8i fWk `X]Y`G]Wk Yfi b[`j cb`5fVY]hgd`ÅhnYb`i bX`X]Y
I bhYfgh0hni b[`j cb`6Yhf]YVYb`k]Y`XYf`A YmYf!K YfZh`_0bbhY`g]Wk
X]Y`DUfhY]`a 0[`]Wk Yfk Y]gY`Ui Wk `]b`XYb`5i [Yb`V0f[Yf`]Wk Yf
K Å`Yf`U`g`j YfUbhk cfhi b[gVYk i gghY`?fUZh`dcg]h]cb]YfYb``8Ug
YfgWk Y]bh`VYgcbXYfg`k]Wk h[žXU`XYf`k]fhgWk UZh`]Wk Y`8fi W`_]b
j YfgWk]YXYbYb`FY []cbYb`8Yi hgWk `UbXg`k ÅWk ghi bX`X]Y
A YbgWk Yb`bUWk `ghUV]`Yb`@0gi b[Yb`gi Wk Yb"

8]Y`5fhi bX`K Y]gYž`k]Y`<UVYW`X]Y`; f0bYb`U`g`GWk `0ggY`U`_hYi fY
]a `?Ua dZ[Y[Yb`9I hfYa]ga i gi bX`Z0f`Y]bY`ghUV]Y`8Ya c_fUh]Y
dcg]h]cb]Yfž`_0bbhY`X]Y`Dc`h]`_]b`XYb`_ca a YbXYb`A cbUhYb`ghUf`
VYY]bZi ggYb``8]Y`ni _0bZh[]Y`Ni gUa a YbUfVY]h` `gck c`\`
]bbYf`U`V`XYf`FY []Yfi b[g_cU`]h]cbYb`U`g`Ui Wk `a]h`XYf`C ddcg]h]cb
`k]fX`YbhgWk Y]XYbX`Z0f`XYb`9fZc`[`XYf`; f0bYb`gY]b```b`Y]bYa
K YhhYfi a gWk `U[žXYf`Ui Z`a Y`f`8]U`c[`i bX`Ni gUa a YbUfVY]h
UVn]Y`hž`_0bbhYb`Ui Wk `bYi Y`A 0[`]Wk _Y]hYb`Z0f`Y]bY`VfY]hYfY
dc`h]gWk Y`?cU`]h]cb`Yb`hgh`Yb"

8]YgY`9fY][b]ggY`nY][Ybž`XUgg`X]Y`; f0bYb`]b`Y]bYf`]bhYfYggUbhYb
D`UgY`g]bXž]b`XYf`g]Y`g]Wk `b]Wk h`bi f`U`g`I a k Y`h`gcbXYfb`Ui Wk
U`g`K]fhgWk UZhgdUfhY]`YhUV`]YfYb`_0bbYb"

Dc`h]gWk Yf`?cbhYI hi bX`<YfUi gZcfXYfi b[Yb

8]Y`dc`h]gWk Y`@UbXgWk UZh]b`8Yi hgWk `UbX`U`h]g]Wk `]b`XYb`Y`hnhYb
`U`fYb`Yf`YV`]Wk `j YfÅbXYfh`A]h`XYa `9bXY`XYf`Y`fU`A Yf`Y`gh`Yb
]bgVYgcbXYfY`X]Y`; f0bYb`j cf`XYf`<YfUi gZcfXYfi b[ž]\fY`⇒Ybh]hÅh
i bX`dc`h]gWk Y`FY`Yj Ubn`]b`Y]bYa `g]Wk `k UbXY`bXYb`I a ZY`X`ni
XYZ]b]YfYb``8]Y`6i bXYghU[gk U`\`&\$\$%Z0`fhY`ni `Y]bYf`?cU`]h]cb
Ui g`GD8ž; f0bYb`i bX`: 8Dž`X]Y`j YfgWk]YXYbY`dc`h]gWk Y
Ghf0a i b[Yb`j YfY]bh``8UVY]`a 0ggYb`X]Y`; f0bYb`b]Wk h`bi f`]fY
Y][YbY`dc`h]gWk Y`5[YbXU`Xi fWk gYhnYbž`gcbXYfb`Ui Wk `XYb
?ca dfca]gg`a]h`XYb`UbXYfYb`?cU`]h]cbgdUfhbYfb`Z]bXYb"

8]Y`@UbXhU[gk U\`Yb`]a`C ghYb`8Yi hgW\`UbXg`\UVYb`ni gÅhn`]W\Y
F`Y`Yj Ubn"G]Y`_ÒbbhYb`Y]b`≠X]_Uhc`f`ZØf`X]Y`Vi bXYgk`Y]hY
5_nYdhUbn`XYf`; fØbYb`i bX`XYfYb`7\`UbW\`b`VY]`ni _ØbZh][`Yb
K U\`Yb`gY]b`"8]Y`k UW\gYbXY`I bhYfghØhni b[`XYf`5Z8`]b`X]YgYb
F Y[]cbYb`ghY`h`Y]bYb`8fi W`di b`h`XUfž`XU`Y]bY`dc`Uf]g]Yfhy
K Å\`YfgW\UZh`VYXYi hYb`_Ubbž`XUgg`X]Y`; fØbYb`g]W\`ghÅf`_Yf`j`cb
]\fYb`hfUX]h]cbY`Yb`H\Ya`Yb`UVk`YbXYb`a`ØggYbž`i`a`X]Y`K`Å\`Yf
Ui`g`XYa`_VØf[`Yf`]W\Yb`i`bX`_cbgYfj`Uh]j`Yb`GdY`_hfi`a
Ubni`gdfYW\Yb`"

K]fhgW\UZh`]W\Y` , VYf`Y[i b[Yb`i bX
ghfi _hi fY`Y`I bhYfghØhni b[

<UVYW_g`I bhYfghØhni b[`ZØf`X]Y`A`YmYf!K`YfZh]b`DUdYbVi`f[`nY][`hž
k`]Y`k`]fhgW\UZh`]W\Y` , VYf`Y[i b[Yb`]b`X]Y`dc`]h]gW\Yb
9bhgW\Y]Xi`b[Yb`Y]bZ]Y»`Yb`"8Yf`GW\]ZV`Ui`ž`]bgVYgcbXYfY`]a
6YfY]W\`XYf`?`fYi`nZU\`fhgW\]ZY`ž`]gh`Y]b`VYXYi`hYbXYf
K]fhgW\UZh`gZU`_hc`f`ZØf`X]Y`F`Y[]cb`"GhUUhg\`]ZYb`ni`f`G]W\Yfi`b[`j`cb
5fVY]hgd`ÅhnYb`g]bX`b]W\h`bi`f`Y]b`k`]fhgW\UZh`]W\Ygž`gcbXYfb`Ui`W\
Y]b`gcn]U`dc`]h]gW\Yg`H\Ya`U`"≠`8Yi`hgW\`UbX`[]Vh`Yg`XYfnY]h`Y]bY
\c\Y`I`bg]W\Yf\Y]h`Ui`Z`XYa`_5fVY]hga`Uf`_hž`X]Y`Xi`fW\`X]Y
BUW\k`]f`_i`b[Yb`XYf`7`cfc`bU`_f]gY`i`bX`X]Y`[`Ycdc`]h]gW\Yb
GdUbbi`b[Yb`j`YfghÅf`_h`k`]fX`"

8]Y`G]W\Yfi`b[`j`cb`"``"``\$\$`5fVY]hgd`ÅhnYb`]gh`Y]b`X]fY`_hYg`6Y]gd]Y`
ZØf`X]Y`J`YfUbhk`cfhi`b[`XYf`Dc`]h]_ž`c`_U`Y`K`]fhgW\UZh`gnk`Y][`Y`ni
i`bhYfghØhnybž`i`a`ghfi`_hi`fY`Y`_5fVY]hg`cg][`_Y]h`ni`j`Yfa`Y]XYb`"8]Y
:`ØfXYfi`b[`bUW\`U`h][`Yf`DfU`_h]_Ybž`Yhk`U`Xi`fW\`X]Y`I`bhYfghØhni`b[
\cW\`[`fUX][`Yf`I`a`k`Y`hghUbXUfXgž`_ØbbhY`ni`XYa`_XUg`_a`U[`Y`XYf
XYi`hgW\Yb`K`YfZhYb`ghÅf`_Yb`i`bX`]bhYfbUh]cbU`
k`YhhVYk`YfVgZÅ\][`Yf`a`UW\Yb`"

5`_hi`Y`Y`Y`I`a`ZfU[`Yb`i`bX`K`Å\`Yfgh]a`a`i`b[`Yb

5`_hi`Y`Y`Y`I`a`ZfU[`Yb`nY][`Yb`Y]b`[`Ya`]gW\hYg`6`]X`XYf`K`Å\`YfgW\UZh`
@Ui`h`Y]bYf`I`a`ZfU[`Y`XYg`A`Y]bi`b[`gZc`fgW\i`b[`g]bgh]hi`hg`≠ZfUhYgh
X]a`Ud`Ui`g`XYa`_≠\`f`&\$&`_`\Uh`X]Y`I`bhYfghØhni`b[`ZØf`X]Y`; fØbYb

]b`XYb`YhnhYb`A cbUhYb`ghU[b]Yfhž`k Å\fybX`UbXYfY`DUfhY]Ybž
]bgVYgcbXYfY`X]Y`5Z8ž`Ub`Ni`gd fi`W`[`Yk`]bbYb`_cbbhYb``Gc`WXY
8UhYb`j`YfXYi`h]WXYb`X]Y`8f]b[`]W`_Y]hž`a`]h`XYf`< UVYW`_i`bX`X]Y
; f0bYb`K`Å\`Yf`Ui`g`XYa``V0f[`Yf`]WXYb`A`]`Yi``Ub`gdfYWXYb`k`c``Yb`"

⇒`XYb`gcn]U`Yb`A`YX]Yb`i`bX`dc`h]gWXYb`8]g_i`fgYb`g]bX`H\Ya`Yb
k`]Y`?`a`UgW`i`hnž`A`][`fUh]cb`i`bX`gcn]U`Y`;`YfYW`h][`_Y]h`bUW`k`]Y
j`cf`nYb`hfU`ž`UVYf`Ui`W`X]Y`k`]fhgW`UZh]WXY`GhUV`]h`Åh`f0W`h]b`XYb
J`cfXYf[`fi`bX``8]Y`K`Å\`YfVYhY`][`i`b[`ž`]bgVYgcbXYfY`VY]`XYb
@UbXhU[`gk`U\`Yb`]a``C`ghYbž`_0bbhY`Yb`hgWXY]XYbX`XUZ0f`gY]bž`k`]Y
X]Y`;`f0bYb`]b`XYf`Ni`_i`bZh`k`U\`f[`Ybca`a`Yb`k`YfXYb``5bghY\YbXY
K`U\`Yf[`YVb]ggY`k`YfXYb`Yb`hgWXY]XYbX`gY]bž`i`a`X]Y`ghfUhY[`]gWXY
5i`gf]W`hi`b[`XYf`;`f0bYb`i`bX`XYf`[`YgUa`hYb`FY[`]Yfi`b[`g_cU`h]cb
ni`VYY]bZi`ggYb`"

8YhU]`g`

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