

B UWX 'Dc_U`g]Y[. '6]Y`YZY`XYf`C fXbYf`VY]
5 b [f]ZZ`gWk Yf`j Yf`Yhnh

B UWX `XYa `Dc_U`g]Y[`j cb`5fa `]b]U`6]Y`YZY`X`j Yf`YhnhY`Y]b
' (!Å\`f][Yf`Y]bYb`C fXbYf`gWk Yf`"Dc`]nY]`Yfa `]hhY`h`k Y[Yb
? ÒfdYfj Yf`Yhni b["

5a `GUa ghU[UVYbXž`XYb`%+"`5i [i ghž`_Ua `Yg`bUWX `XYa `Dc_U`gd]Y`
XYf`5fa `]b]U`6]Y`YZY`X`[Y[Yb`<Ubbcj Yf`- *`ni `Y]bYa `J cfZU`ž`XYf
ZØf`5i ZgY`Yb`gcf[hY`"9]b`' (!Å\`f][Yf`A Ubb`Ui g`6]Y`YZY`X`ghY`h`]a
J YfXUWX`hž`Y]bYb`C fXbYf`k Å\`fYbX`XYf`": Y]Yf`]WX`_Y]hYb`]b`Y]bYf`J`Ð!
6cl `gWk Yf`j Yf`Yhnh`ni `\"UVYb"

@Ui h`Y]bYa `6Yf]Wk`h`XYf`Dc`]nY]ž`XYf`Ua `8]YbghU[ž`XYb`&\$"5i [i ghž
VYghÅh][h`k i fXYž`Y]XYh`XYf`) `!Å\`f][Y`C fXbYf`i bhYf`Yf\`YV`]Wk`Yb
J Yf`Yhni b[Yb`"6Y]`XYf`i bhYfgi Wk`i b[`k i fXY`ZYgh[YghY`hž`XUgg`Yf
g]Wk`gck c`\"XUg`B UgYbVY]b`U`g`Ui Wk`XUg`æ`Wk`VY]b`[YVfc`Wk`Yb`\"Uh`
8]YgY`J Yf`Yhni b[Yb`g]bX`Yfbghi bX`YfZc`fXYfb`a Ò[`]Wk`Yfk`Y]gY
Y]bY`a YX]n]b]gWk`Y`6Y`UbX`i b[`ØVYf`Y]bYb`Åb[YfYb`NY]hfUi`a`"

8 YhU]`g`ni`a` `J`cfZU`

8]Y`[YbUi`Yb`l`a`ghÅb`XYž`X]Y`ni`X]YgYa` `J`cfZU`"ZØ\`fhYbž`g]bX
XYfnY]h`bc`Wk`i`b`_Uf`"8]Y`Dc`]nY]`\"Uh`Y]b`J`YfZU`\`fYb`k`Y[Yb
? ÒfdYfj Yf`Yhni b[` [Y[Yb`XYb`hUj`YfXÅ`Wk]h[Yb`6]Y`YZY`XYf
Y]b[Y`Y]hYh`"8]Y`9fa`]h`i`b[Yb`"Ui`ZYbž`i`a`\"YfUi`gni`Z]bXYbž`k`Ug
[YbUi`dUgg]YfhY`i`bX`k`Ug`X]Y`6Yk`Y[[fØbXY`ZØf`XYb`5b[f]ZZ
[Yk`YgYb`gY]b`_Öbb`hYb"

8Yf`VYgWk`i`X][hY`A Ubb`]gh`bUWX`5b[UVYb`XYf`Dc`]nY]
dc`]nY]VY`_Ubbh`"8]Yg`_Öbb`hY`Ui`ZY]bY`J`cf[YgWk]Wk`hY`\"]bXYi`hYbž
X]Y`a`Ò[`]Wk`Yfk`Y]gY`]a`?`cbhYi`h`X]YgYf`5i`gY]bUbXYfgYhni`b[

fY`Yj Ubh`]gh"9g`V`Y]Vh`UVni k UfhYbž`cV`ZfØ`YfY`J cfZ`Ä`Y`]a` `@YVYb
XYg`J YfX`ÄW`h][Yb`Y]bY`F c`Y`gd]Y`Yb`cXYf`cV`X]Yg`Y]b`Y]ba`U`][Yf
J cfZU`k`Uf"

GhUX]cbcfXbYf`g]bX`ZØf`X]Y`G]W`Yf`Y]hi` bX`CfXbi` b[`k`Ä`fYbX`XYf
J YfUbghU`hi` b[Yb`j`YfUbhk`cfh]W`i` bX`hfU[Yb`XUni`VY]ž`XUgg`Gd]Y`Y
i`bX`J`YfUbghU`hi` b[Yb`fY]Vi` b[g`cg`UV`Ui`ZYb`" `X]YgYa` :`U`nY][h
XYf`J cfZU`ž`k`]Y`Y]bY`gdcfh]W`Y` :`Y]Yf`gW`bY`"b` ;` Yk`U`h
i`a`gW`U[Yb`_`Ubb`"8]Yg`k`]fZh` :`fU[Yb`ni`G]W`Yf`Y]hga`U»`bU`a`Yb
VY]`Gdcfh]Y`Ybhg`Ui`Zi`bX`k`Y`W`Y`J cf`_`Y`fi`b[Yb`[Yhfc`ZYb`k`YfXYb
_`ÖbbYbž`i`a` `gc`W`Y`J cfZ`Ä`Y`]b`Ni`_i`bZh`ni` `j`Yfa`Y]XYb"

G]W`Yf`Y]hgj`cf`_`Y`fi`b[Yb`]a` `GhUX]cb

8Yf`J cfZU`k`U`h`b]W`h`bi`f`X]Y`i`ba`]hhY`VUfYb`6YhY]`][hYb`VYhfc`ZYbž
gcbXYfb`_`ÖbbhY`Ui`W`5i`gk`]f`_i`b[Yb`Ui`ZX]Y`K`U`fbY`a`i`b[`XYf
G]W`Yf`Y]hg`U[Y`]b`GhUX]Yb`Ä`UVYb`"J]Y`Y`6Ygi`W`Yf`_`ÖbbhYb`g]W`
ZfU[Ybž`cV`X]Y`G]W`Yf`Y]hga`U»`bU`a`Yb`Ui`gfY]W`YbX`g]bXž`i`a` `g]Y
j`cf`XYfUfh][Yb` ;` Yk`U`hhU`hYb`ni` `gW`Ø`hYb`"9g`]gh`YbhgW`Y]XYbXž
XUgg`G]W`Yf`Y]hg`_`f`Ä`ZhY`[i`h`Ui`g[YV]`XYh`i`bX`Ui`Z`gc`W`Y`J cfZ`Ä`Y`
j`cfVYfY]hYh`g]bX"

`X`Yb`Y`h`hYb` `Ä`f`Yb`[UV`Yg`]a`a`Yf`k`]YXYf`6Yf]W`hY`ØVYf
[Yk`U`hh`Ä`h][Y`5i`gY]bUbXYfgYhni`b[Yb`k`Ä`f`YbX`cXYf`bUW`
Gdcfhj`YfUbghU`hi`b[Yb`"8]YgY`J cfZ`Ä`Y`bY`a`Yb`]b`[Yk`]ggYf`K`Y]gY
ni`ž`i`bX`X]Y`J`YfUbhk`cfh]W`Yb`g]bX`[YZcfXYfhž`dfÄj`Ybh]j`Y
A`U»`bU`a`Yb`ni`Yf[fY]ZYb`"9]b`j`Yfgh`Ä`f`_`hYf`8]U`c[`nk`]gW`Yb` :`Ubgž
CfXbYfb`i`bX`G]W`Yf`Y]hg`_`f`Ä`ZhYb`_`ÖbbhY`XUni`VY]hfU[Ybž`Y]bY
?i`hi`f`XYf`G]W`Yf`Y]hi`bX`XYg`f`YgdY`_`hg`ni`ZØfXYfb"

8]Y`Dc`nY]`Ä`U`h`VYfY]hg`]`f`Y`9fa`]h`i`b[Yb`Ui`Z[Ybca`a`Yb`i`bX`k`]fX
U`Y`f`Y`Yj`UbhYb` :`U`_`hYb`i`bX`6Yk`Y]gY`dfØZYbž`i`a` `XUg` ;`YgW`Y`Y`bY
Ui`Zni`_`Ä`f`Yb`"8]Y`²`ZYbh]W`_`Y]h`k`]fX`bUW`XYb` :`cfhgW`f]hhYb`XYg
 :`U`g`5i`ggW`Ui` `U`hYbž`XU` ;`Yk`U`h`i]a` `Gdcfh]a`a`Yf`Y]b`_`f]h]gW`Yg
H`Y`a`U`V`Y]Vh"

GW`k`YfY` :`c`[Yb`ZØf`U`Y`6YhY]`][hYb

8]Y': c`[Yb`Y]bYg'gc`W`Yb', VYf[f]Zg`_`ObbYb`[fUj]YfYbXY
5i gk]f_i b[Yb`Ui Z`XUg`@YVYb`XYf`6YhfcZYbYb`\UVYb``8Yf
j Yf`YhhY`CfXbYf`a i gg`b]W`h`bi f`a]h`d`mg]gW`Yb`G`W`a YfnYb`i bX
a O[`]W`Yb`C`dYfUh]cbYb`fYW`bYb`z`gcbXYfb`Ui W`a]h`d`gmW`]gW`Yb
6Y`Ughi b[Yb``: Øf`XYb`' (!`Å`f)[Yb`J YfX`ÅW`h][Yb`VYXYi hYh`X]YgYf
JcfZU``YVYbZU``g`k Y]hfY]W`YbXY': c`[Yb``B`YVYb`XYb`fYW`h]W`Yb
?cbgYei YbnYb`_`ObbhY`Yf`Ui W`a]h`Y]bYa`_`a U[Yj Yf`i gh
_cbZfcbh]Yfh`k YfXYb`z`k Ug`a O[`]W`Yfk Y]gY`gY]b`gcn]U`Yg`@YVYb
i bX`gY]bY`VYfi Z]W`Yb`A O[`]W`_Y]hYb`VYY]bhf`ÅW`h][h`

⊕`XYf`[YgUa hYb`8]g_i gg]cb`[]Vh`Yg`Y]bYb`_`UfYb`5i Zfi Z`X]Y
J YfUb`hk c`fhi b[`ZØf`XUg`Y][YbY`J Yf`U`hYb`ni`ØVYfbY`a Yb``9g`]gh
Y]bY`9f]bbYfi b[`XUfUb`z`XUgg`; Yk U`h`b]Ya U`g`Y]bY`@Øgi b[`]ghi bX
XUgg`XUg`J Yf`Ub[Yb`bUW`Y]bYa`Zf]YX`]W`Yb`A]hY]bUbXYf`]b`Gdcfh
i bX`; YgY``gW`UZh`ghYhg`[Yk U`f`h`V`Y]VYb`gc``hY``Gc`W`Y`JcfZ`Å`Y
gc``hYb`i bg`XUni`UbfY[Yb`z`X]Y`VYghY`YbXYb`Ghfi`_hi`fYb`ni
`]bhYfZfU[Yb`i bX`J YfVYggYfi b[Yb`j cfUbni hfY]VYb`z`XUa]h`XUg
9f`YVb]g`GdcfhZØf`U`Y`6YhY][]hYb`g]W`Yf`i bX`YfZfYi`]W`V`Y]Vh`

F YU_h]cbYb`Ui Z`XYb`JcfZU``

8Yf`JcfZU``\Uh]b`XYf`: i » VU``[Ya`Y]bgW`UZh`i bX`XUfØVYf`\]bUi g
[fc»Y`K`Y``Yb`[YgW`U[Yb``Gck`c`\`: Ubgi`U`g`Ui W`Gd]Y`Yf`i bX
J YfY]bgj YfhfYhYf`nY][hYb`g]W`gW`cW_]Yfh`ØVYf`X]Y`; Yk U`h`h`Uh`
J]Y`Y`Åi » YfhYb`g]W`Ui Z`GcW]U`A`YX]U`i bX`ZcfXYfhYb`Y]b
YbhgW`cggYbYg`Jcf[Y`Yb`[Y[Yb`; Yk U`h]a`GhUX]cb`
: i » VU``j YfY]bY`\UVYb`cZh`VYhcbh`z`XUgg`G]W`Yf`Y]h`i bX`: U]fd`Um]a
A]hY`di b_h`XYf`: UbgnYbYb`ghY`Yb`gc``hYb`

J YfV`ÅbXY`k]Y`XYf`8: 6`fB`Yi hgW`Yf`: i » VU``!6i bX`E`\UVYb`VYfY]hg
; Ygd`f`ÅW`Y`ni`X]YgYa`JcfZU``Y]b[Y`Y]hYh`z`i a`ni`_ØbZh][Y`; Yk U`h
ni`j Yf`\]bXYfb`i bX`X]Y`G]W`Yf`Y]hgj cf`Y`\fi b[Yb`]b`GhUX]Yb`ni
ØVYfd`f`ØZb``8]Y`[YbUi`Y`F`YU_h]cb`XYg`J YfY]bg`5fa`]b]U`6]Y`YZY`X
ghY`h`bcW`Ui`g`z`Y`XcW`]gh`_Uf`z`XUgg`XUg`H`Y`a`U`G]W`Yf`Y]h]b`XYb
GhUX]Yb`j Yfgh`Åf`_h]b`XYb`: c_i`g`f`ØW`_h`

G]W`Yf`Y]h]a` : i » VU``ghUX]cb

8]Y`G]WXYf\Y]h]b` : i » VU`ghUX]Yb`]gh`Y]b`j]Y`X]g_i h]YfhYg`H\Ya Už
]bgVYgcbXYfY`]b`XYf`6i bXYg`][U`5_hi Y`Y`A U» bU\ a Yb`VY]b\U`hYb
X]Y`DfÅgYbn`j cb`CfXbYfbž`j YfghÅf_hY`J]XYcØVYfk UW`i b[`i bX
Yb[Y`Ni gUa a YbUfVY]h`a]h`XYf`Dc`nY]"`8YbbcW` []Vh`Yg`]a a Yf
k]YXYf`6Yf]W`hY`ØVYf` ; Yk U`h`i bX` , VYf[f]ZY"@Ui h`Y]bYf`I a ZFU[Y
XYg`8Yi hgW`Yb` : i » VU`!6i bXYg`Ui g`XYa `đ\ f`&\$&&Yf[UVYb`+&i
XYf`6YZFU[hYbž`XUgg`g]Y`g]W`]a`GhUX]cb`nk Uf`g]WXYf`ZØ\`Ybž`UVYf
XYbbcW`VYgcf[h`ØVYf`dchYbn]Y`Y` ; Yk U`hU_hY`g]bX"

8]Y` , VYfk UW`i b[ggmgHYa Y`i bX`G]WXYf\Y]hg_cbnYdhY`a ØggYb
ghÅbX][`U_hi U`]g]Yfh`k YfXYbž`i a`XYf`ghY][YbXYb`?ca d`YI]hÅh`j cb
G]WXYf\Y]hgVYXfc\i b[Yb` [YfYW`h`ni`k YfXYb`"9]b`6Y]gd]Y`ZØf
YfZc` [fY]W`Y`G]WXYf\Y]hg_cbnYdhY`g]bX`X]Y`]a` : i » VU`"]a a Yf
a Y\ f`i a [YgYhnHYb` : Ubdfc`Y_hYž`X]Y`XUfUi ZUVn]Y`Ybž`XYb`8]U`c[
nk]gW`Yb` : Ubgž`G]WXYf\Y]hgX]YbghYb`i bX`J YfY]bYb`ni`ZØfXYfb"

; YgYhnY`i bX`J cf[UVYb`ni f
? ØfdYfj Yf`Yhni b[`]a`Gdcfh

⇒ `XYi hgW`Yb`FYW`h`k]fX`?ØfdYfj Yf`Yhni b[`bUW`z`&&` `XYg
GhfUZ[YgYhnVi W`Yg`fGh; 6E`XYZ]b]Yfh`i bX`g]Y\h`GhfUZ]b`j cb
; Y`XghfUZ]b`V]g`\]b`ni` : fY]\Y]hgghfUZ]b`j cfž`UV\Åb[][`j cb`XYf
GW`k YfY`XYf`?ØfdYfj Yf`Yhni b["5b[Yg]W`hg`XYg`J cfZU`g`a`]h`XYa
CfXbYf`_ØbbhY`XYf`HUh] YfXÅW`h][Y`b]W`h`bi`f`n]j]`fYW`h]W`ž
gcbXYfb`Ui W`ghfUZfYW`h`]W`ni`f`J YfUbhk cfhi b[`[Ync[Yb`k YfXYb`
6YgcbXYfg]b`Gdcfhi a ZY`XYfb`g]bX`X]Y` ; YgYhnY`ni f
?ØfdYfj Yf`Yhni b[`ghfYb[ž`XU`gc`W`Y`HUhYb`b]W`h`bi`f`XYb`GW`i hn
Y]bnY`bYf`DYfgcbYbž`gcbXYfb`Ui W`X]Y`U`[Ya`Y]bY`G]WXYf\Y]h]a
Gdcfh[YZÅ\ fXYb"

; Yf]W`hY`]b`8Yi hgW`UbX`g]bX`VY_Ubbh`XUZØfž`VY]; Yk U`hXY`_hYb
]b`GhUX]Yb`f][cfcg`j cfni [Y\Ybž`i a`Y]b`_UfYg`NY]W`Yb`[Y[Yb
; Yk U`h`]a`Gdcfh`ni`gYhnYb`"9]b`6Y]gd]Y`ZØf`gc`W`Y]bY
?cbgYei Ybn`k Uf`XYf` : U`Ui`g`XYa`đ\ f`&\$%- ž]b`XYa`Y]b` : Ub
bUW`Y]bYa` , VYf[f]Z`Ui ZY]bYb`G]WXYf\Y]hgX]Ybgha`]hUfVY]hYf`ni
Y]bYf`a Y\fa`cbUh][Yb`<UZhghfUZ]`j Yfi fhY]`h`k i fXY`Gc`W`Y`I fhY]`Y
gc`Yb`gck`c\`X]Y`HÅhYf`ni`f`J YfUbhk cfhi b[`n]Y\Yb`U`g`Ui W`
dchYbn]Y`Y`BUW`U\ a Yf`UVgW`fYW`Yb"

8YhU]g

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