GWk YfYf`J Yf_Y\ fgi bZU``]b`A Yhh]b [Yb.
DYXY`YW: U\ fYf]b`j Yf`Y hnh

GWk YfYf`J Yf_Y\ fgi bZU``]b`A Yhh]b [ Yb. `DYXY`YW: U\ fYf]b`VY]
?c``]g]cb`a ]h`5i X]j Yf`Y hnhž`F Yhi b[gX]Ybgh]a `9]bgUhn"

&&"\$, "&\$&(` ` \$, . ' (

Dc`]nY]`GhY]bZ` fh

5a `A ]hkh cWk ž`XYb`&%"`5i [i gh`&\$&( ž`YfY][bYhY`g]Wk` [Y[Yb`%' "" \$
I \f`Y]b`gWk YfYf`J Yf_Y\ fgi bZU``]b`A Yhh]b [ Ybž`XYf`X]Y`Öfh]Wk Y
; Ya Y]bgWk UZh`YfgWk ØhYfh`\Uh`9]bY` () !`Å\ f][ Y`5i hcZU\ fYf]bž`X]Y
a]h`Y]bYa `5i X]`5`" `i bhYfk Y[ g`k Ufž`VYŽ \f`X]Y`B]YfYbVi f[Yf
GhfU» Y`i bX`k c``hY`Ub`XYf`9]ba ØbXi b[ `ni f`6U\ b\cZghfU» Y`bUWk
`]b\_g`UVV]Y[Yb`" `b`X]YgYa `f]h]gWk Yb`A ca Ybh`ØVYfgU\`g]Y`Y]bY
) *!`Å\ f][ Y`: fUi ž`X]Y`Ui ZY]bYa `DYXY`YWž`Y]bYa `Y`Y`_hf]gWk
i bhYfghØhnhYb`: U\ ffUXž`XYb`F UXk Y[ `Ybh`Ub[ `Z \f``9g`\_Ua `ni f
?c``]g]cbž`X]Y`ZØf`X]Y`F UXZU\ fYf]b`gWk Yfk ]Y[ YbXY`: c`[ Yb`\UhhY"

8]Y`DYXY`YW: U\ fYf]b`Ui g`A Yhh]b [Yb`ghØfnhY`VY]a `5i ZdfU``i bX
nc[`g]Wk`XUVY]`gWk YfY`J Yf`Y hni b[ Yb`ni " ; `ØW`_]Wk Yfk Y]gY`k i fXY
g]Y`i a [ Y\YbX`a]h`Y]bYa `F Yhi b[gk U[Yb`]b`Y]b`bU\Y[ Y`Y[YbYg
?fUb_Yb\Ui g`[ YVfUWk hž`k c`g]Y`VY\UbXY`h`k YfXYb`_Ubb``8]Y
5i hcZU\ fYf]b`V`]YV`VY]`XYa `J cfZU``i bj Yf`Y hnhž`YXcWk`k Uf`gck c\`
XYf`5i X]`5`" `U`g`Ui Wk`XUg`DYXY`YWYf\YV`]Wk`VYgWk`ÅX][hž`k Ug`ni
Y]bYa `[ YgWk`ÅhnhYb`GUWk`gWk`UXYb`j cb`Yhk U`%"`%\$`\$`9i fc`ZØ\ fhY"

I bZU``UbU`mgY`i bX`YfghY`9fa]hh`i b[Yb

@Ui h`YfghYb`9fa]hh`i b[ Yb`XYf`Dc`]nY]`\_ØbbhY`X]Y

I bUi Za Yf_gUa _Y]h`XYf`5i hcZU\ fYf]b`Y]bY`Yb`hgWk`Y]XYbXY`F c``Y

VY]X]YgYa i bZU`[ Ygd]Y`h\UVYb"9g'k]fX j Yfa i hYhžXUgg'g]Y
df]cf]g]YfhY'6`]W\_Y`Ui ZXYb`GhfU» Ybj Yf\_Y`f'j cf']\f`UhhYž`c\`bY
XYb`dUfU`Y`j Yf`Ui ZYbXYb`F UXk Y[ `ni`VYUW`hYb"8]Yg'k]fZh]Y]b
@]W`h`Ui Z]X]Y`\`Ài Z][i bhYfgW`ÀhnhYb` ; YZU`fYbž`XYbYb`F UXZU`fYf
i bX`]bgVYgcbXYfY`DYXY`YWB i hnYf`]b`gh`Xh]gW`Yb` ; YV]YhYb
Ui g[YgYhnh'g]bX"

Gc`W`Y`i bZ`Y`g]bX`b]W`h`bi f`Z`f`X]Y`X]fY`\_`hYb`6YhY`] [hYb
hfU[]gW`ž`g]Y`n]Y`Yb`Ui W`X`Y]bY`J]Y`nU`Y`j cb` : fU[Yb`b`UW`g]W`ž
]bgVYgcbXYfY`k ]Y`X]Y`J Yf\_Y`f`gg]W`Yf`Y]h`Z`f`F UXZU`fYf
j YfVYggYfh`k YfXYb`_`Ubb"8]Y`Dc`]nY`]`U`h`X]Y`9fa]hhi b[Yb
Y]b[Y`Y]hYhž`i a`X]Y[ YbUi Yb`i a`gh`AbXY`XYg`i bZU`g`ni`\_`ÀfYb"
<]YfVY]gd]Y`h`Ui W`X`X]Y`9]b`U`hi b[ ]cb`J Yf_Y`f`gfY[Y`b`Y]bY
nYbhfU`Y`F`c`Y`ž`XU`j ]Y`Y`J Yf\_Y`f`ghY]`bY`a`Yf`c`Zh`X]Y`9i]ghYbn`i bX
X]Y`J cf`fY`W`hY`j cb`F UXZU`fYf`b`]a`GhfU» Ybj Yf_Y`f`j Yf[YggYb"

- I bZU`nY]h`. `&%"`5i [i gh`&\$`&(ž`%`.'`\$`i` \f`
- C fh`. `6U`b`c`ZghfU» Yž`A`Yhh]b[ Yb`
- J Yf`Y`hnhY`. `) *!`À`f][Y`DYXY`YW: U`f`Yf]b`a`]h`gW`k`YfYb`
J Yf`Y`hni b[Yb`
- J Yfi`fgUW`Yf`. `() !`À`f][Y`5i hc`ZU`f`Yf]b`ž`V`]YV`i`bj`Yf`Y`hnh`
- GUW`gW`UXYb`. `7U"``%`%`\$`\$`9i`fc`

8]Y`6Y[ YVYb`Y]hYb`X]YgYg`J cfZU`g`VYnYi [Yb`b]W`h`bi f`X]Y
ZfU[]Yb`i a`gh`AbXY`XYg`GhfU» Ybj Yf\_Y`f`gž`gcbXYfb`Ui W`X`Y]Y
J YfU`b`hk`cfhi b[ `U`Y`f`J Yf\_Y`f`ghY]`bY`a`Yfž`X]Y`VYgcbXYfYb
J cf]g]W`h`ga`U» bU`a`Yb`hfY`ZYb`gc`h`Ybž`i a`[YZ`À`f`]W`Y`G]hi`Uh]cbYb
ni`j`Yfa`Y]XYb"9g`]gh`i`bYf`À`gg`]W`ž`XUgg`5i`hc`ZU`f`Yf`VY]a
5VV]Y[Yb`i`bX`k`À`f`YbX`XYf` : U`fh`VYgcbXYfY`5i`Za`Yf`g`Ua`_`Y]h`Ub
?fYi`ni`b[Yb`i`bX`9]ba`Ø`b`Xi`b[ Yb`g`W`Yb`\_`Ybž`]b`XYbYb` : i » [Àb[Yf
i bX`F UXZU`f`Yf`\`Ài`Z][`U[]YfYb"

5i`gk`]f`\_`i`b[ Yb`Ui`Z`X]Y`J`Yf`\_`Y`f`gg]W`Yf`Y]h`

8]YgY`5fh]j`cb`J`cfZ`À`Yb`k`]fZh]Y]b`ghUf`_`Yg`@]W`h`Ui`Z]X]Y
B`ch`k`YbX][`_`Y]hž`X]Y`b`ZfUghfi`\_`hi`f`Z`f`F`UXZU`f`Yf`]b`Gh`X`h`Yb`ni
j`YfVYggYfb" `F`UXk`Y[Y`gc`h`Yb`b]W`h`bi`f`j`cf`\`Ub`XYbž`gcbXYfb`Ui`W`
g]W`Yf`[YghU`h`Y`h`g`Y]bž`i`a`i`bZ`À`Y`k`]Y`X]YgYb`ni`j`Yfa`Y]XYb"8]Y

J Yf_Y\fgg]WXYf\Y]hgVY\ÖfXYb`ghY\Yb`bi`b`]b`XYf`DZ]W hž`b]W h`bi`f
X]YgYb`l`bZU``ni`i`bhYfgi`WYbž`gcbXYfb`Ui`W`dfcU\_h]j`Y
A U»bU\`a`Yb`ni`Yf[`fY]ZYbž`i`a`[_ØbZh][`Y`?UhUghfc d\Yb`ni
j`Yf\]bXYfb`"

9g`V`Y]Vh`ni`Yfk`UfhYbž`XUgg`Ui`g`X]YgYa`J`cfZU``a`Ò[`]WXYfk`Y]gY
Y]bY`VfY]hYfY`8]g_i`gg]cb`ØVYf`J`Yf_Y\fgg]WXYf\Y]h`i`bX`XUg
Ni`gUa`a`Yb`YVYb`j`cb`F`UXZU\`fYfb`i`bX`5i`hc`ZU\`fYfb`fYgi`h]Yfh`8]Y
GhUXh`A`Yh]b[`Yb`_ØbbhY`]b`XYf`Ni`_i`bZh`Dfc[`fUa`a`Y`i`bX
≠]h]Uh]j`Yb`]bg`@YVYb`fi`ZYbž`i`a`XUg`6Yk`i`gghY]b`ZØf`X]Y
G]WXYf\Y]h`Ui`Z`XYb`GhfU»Yb`ni`gW`ÅfZYb`i`bX`Y`hnhYbX`]W`XUg
F]g]_c`gc`WXYf`l`bZ`Y`ni`j`Yff]b[`Yfb`"

<]bhYf[`fi`bX`i`bX`J`Yf_Y\fgg]WXYf\Y]h

8]Y`NU\`X`Yf`J`Yf\_Y\fgi`bZ`Y`ž`]bgVYgcbXYfY`]b`gh`Xh]gWYb
;`YV]YhYbž`[`]h`gY]h`>\`fYb`U`g`VYgcf[`]b]gYffY[`YbX`"`&`&`&`&
fY[`]ghf]YfhY`X]Y`Dc`nY]`]b`8Yi`hgW`UbX`]bg[`]YgUa`h`&ž`+`A`]`]cbYb
J`Yf\_Y\fgi`bZ`Y`ž`j`cb`XYbYb`Yhk`U`"`)`"\$`\$\$`DYfgcbYb`j`Yf`Y`hnh
k`i`fXYbž`k`Ug`Y]bYa`5bgh]Y[`]a`J`Yf[`]Y]W`ni`X`Yb`J`cf`U\`fYb
Yb`hgd]W`h`8]Yg`gd]W`h`ZØf`Y]bY`Ub`U`hYbXY`B`chk`YbX][`_Y]hž
J`Yf\_Y\fgg]WXYf\Y]hga`U»bU\`a`Yb`ni`j`Yfgh`Åf`\_Yb`"

9]b`k`YgYb`h]WXYf`5gdY`\_h`XYf`J`Yf_Y\fgg]WXYf\Y]h`]gh`X]Y`G]WXYf\Y]h
j`cb`F`UXZU\`fYfb`i`bX`:`i`»[`]Åb[`]Yfb`";`YfUXY`]b`Gh`XhYbž`k`c`5i`hc`g
i`bX`:`U\`ff`Å`XYf`Yb[`]Y`6Y[`]Y[`]bi`b[`]Yb`\`UVYbž`]gh`Yg`Yb`hgW`Y]X`Yb`Xž
Xi`fW`[`]YY][`]bYhY`≠`ZfUghfi`\_`hi`f`i`bX`J`Yf\_Y\fgYfn]Y\`i`b[`]XUg`F]g]_c
j`cb`l`bZ`Y`b`ni`fYXi`n]YfYb`"@Ui`h`XYf`8Yi`hgW`Yb`J`Yf_Y\fgk`UW`h
g]bX`X]Y`\`Ài`Z][`ghYb`l`fgUW`Yb`ZØf`l`bZ`Y`a`]h`F`UXZU\`fYfb`i`bhYf
Ub`XYfYa`XUg`,`VYfgY\`Yb`j`cb`F`UXZU\`fYfb`Xi`fW`UVV]Y[`]Yb`XY
5i`hc`ZU\`fYf`i`bX`gW`Y`W`hY`G]W`hj`Yf`\`À`hb]ggY`8]Y`Dc`nY]`i`bX
_ca`a`i`bU`Y`6Y\`ÖfXYb`UfVY]hYb`XUfUbž`Xi`fW
5i`Z`_`Àfi`b[`]ga`U»bU\`a`Yb`i`bX`VUi`]WXY`J`Yf`Åb`XYfi`b[`]Yb`X]Y
G]hi`Uh]cb`ni`j`YfVYggYfb`"

GhUh]gh]_Yb`ni`J`Yf\_Y\fgi`bZ`Y`b`]b
8Yi`hgW`UbX

⊕`XYb`YhnhYb`⊕\fYb`\Uh]g]W`X]Y`NU\`XYf`JYf_Y\fgi bZ`Y`]b
8Yi hgW`UbX`nk Uf`fY`Uh]j`ghUV]`[YnY][hz`XcW`X]Y`5fh`i bX
GW`k YfY`X]YgYf`I bZ`Y`]gh`5b`Ugg`ni f`Gcf[ Y`@Ui h`XYf`Øb[ghYb
GhUh]gh]_`XYg`GhUh]gh]gW`Yb`6i bXYgUa hYg`\_Ua`Yg`&\$&%`ni`a`Y\`f
U`g` +`"\$\$\$\$`I bZ`Y`b`ž`VY]`XYbYb`F`UXZU\`fYf`VYhfc`ZYb`k`UfYb`
6YgcbXYfg`VYgcf[ b]gYffY[ YbX`]gh`XYf`5bgh]Y[`gW`k`YfYf
JYf`Yhni b[ Yb`]b`X]YgYf`; fi`ddY`"⊕`JYf[ `Y]W`XUni`[UV`Yg]a`⊕\`f
&\$&\$`bcW`Yhk`U`)) "\$\$\$\$`VYhfc`ZYbY`F`UXZU\`fYf`"

9]bY`XYhU]`YfhY`5bU`mgY`nY][ hz`XUgg`\*`\$`i`XYf`I bZ`Y`ž`VY]`XYbYb
F`UXZU\`fYf`j`Yf`Yhnh`k`i`fXYbž`]b`gh`Xh]gW`Yb`; YV]YhYb`ghUhhZUbXYbž
k`Ug`X]Y`B`chk`YbX][ \_Y]h`VYhcbhž`A`U»`bU\`a`Yb`ni`f`JYfVYggYfi`b[
XYf`JYf\_Y\fg]bZfUghfi`_hi`f`]b`h\`YgY`FY[ ]cbYb`ni`Yf[ fY]ZYb`
⊕]h]Uh]j`Yb`ni`f`GW`UZZ`b[`g]W`YfYf`F`UXk`Y[ Y`i`bX`ni`f
JYfVYggYfi`b[ `XYf`G]W`hVUf_Y]h`\_Øb`bYb`XUni`VY]hfU[Ybž`X]Y`NU\`
XYf`I bZ`Y`ni`gYb`\_Yb`"

A`Y\`f`⊕Zcfa`Uh]cbYb`Z]bXYb`G]Y`Ui`Z`XYf`<`ca`YdU[Y`XYf`
GhUh]gh]gW`Yb`6i bXYgUa hYg`gck`JY`XYf`8Yi hgW`Yb
JYf_Y\fgk`UW`h`"

8YhU]`g

6Ygi`W`Yb`G]Y`i`bg`Ui`Z.`X]Y`!`b`UW`f]W`hYb`"b`Y`h`