

9]b`K c\ba cV]`Ua`K U`XfUbX.`7Ua d]b[
cXYf`[Y\Y]a Yg`@]YVYgbYgh3

9bhXYW_Yb`G]Y`X]Y`j YfVcf[YbYb` ; Y\Y]a b]ggY`XYf
/ ei ch/@cj Y!A cV]Yg/ ei ch/Ub`BcfXXYi hgW`UbXg
@UbXghfU» Yb.`7Ua d]b[`hf]Zh`Ui ZY]b`i bYfk UfhYhYg` ; YgW`ÀZh"
9]b`6`]W_` \]bhYf`X]Y`?i` `]ggYb"

9]b`i bgWY]bVUFYg`K c\ba cV]`Ua`F UbXY`Y]bYg`K U`XYg`]b
B]YXYfgUW`gYb`n]Y`h`X]Y`5i Za Yf_gUa _Y]h`Y]bYf`7Ua d]b[!
@]YV\UVYf]b`Ui Z]g]W`"5b`Y]bYa`C fh`k c`a Ub`bcfa U`Yfk Y]gY`Y]b
Zf]YX`]W`Yg`K cW`YbYbXY`]b`XYf`BUhi`f`Yfk UfhYb`k ØfXYž`_Ubb`g]W`
\]bhYf`[YgW`cggYbYb`HØfYb`Y]bY`[Ubni`UbXYfY`F`YU`]h`h
j YfVYf[Yb`"8]Y`9bhXYW_i b[`Y]bYg`gc`W`Yb`7Ua d]b[ZU`fnYi [g
k]fZh: fU[Yb`ØVYf`X]Y`FU`a YbVYX]b[i b[Yb`XYg`7Ua d]b[!i bX
: fY]nY]hj Yf`U`hYbg`]b`XYf`F`Y[]cb`Ui Z`

8]Y`9bhXYW_i b[.`9]b`K c\ba cV]`j c`Yf
, VYffUgW`i b[Yb

8]Y`: fUi ž`X]Y`XUg`K c\ba cV]`YbhXYW_hYž`a UW`hY`g]W`Gcf[Ybž`cV
\]Yf`Ya UbX`<]Z`Y`VYb`Øh][hY`"8cW`]\fY`i bg]W`Yf\Y]h`k i fXY
gW`bY`Xi fW`Y]bYb`6`]W_`Ui ZX]Y`6Y]ZU`fYfhØf`[Y_`Àfh`k c`XYf
5i ZXfi W_`GYI mi;]f`g`gUa h`Y]bYa`<Yfn`dfUb[hY`"A]h`XYf
ni g`h`n`]W`Yb`6chgW`UZh`6`UgYbž`UbZUggYbž`) \$`9i fc`k]fX`gW`bY`
_`Ufž`XUgg`Yg`\]Yf`i a`Yhk Ug`[Ubni`UbXYfYg`[Y`h`U`g`i a
a]ggfUhYbY`7Ua d]b[!5VYbhYi Yf"

9]bY`bYi Y`: UW`hhY`XYg`7Ua d]b[g

⊕B]YXYfgUW`gYb`UVYb`g]W`gc[YbUbbhY` @cj Y!A cV]Y
YhUV`Yf`h`8]YgY`: U`fnYi [Yž`X]Y`U`g`a cV]Y`6cfXY`Y`Z b[]YfYbž

ghY\Yb` \Ai Z][`Ub`@UbXghfU»Yb`i bX`g]bX`[i h`ZfYe i Ybh]Yfh" `@Ui h
dc`]nY`])WYb` `bZcfa Uh]cbYb`[]Vh`Yg`U`_hi Y``gW`Åhni b[gk Y]gY`%\$\$
gc`WYf`K c`ba cV]`Yž`X]Y`]\fY`8]YbghY`UbV]YhYb" `8]Yg`nY][hž`k]Y
XUg`H\Ya U`GYI UfVY]h`i bX`7Ua`d]b[`]b`XYb`YhnhYb` `U\fyb
ni bY`a YbX`a]hY]bUbXYf`j Yf`_bØdZh`k i fXYž`k Ug`]b`XYf
2 ZZYbh]W`_Y]h`ZØf`J Yfk i bXYfi b[`gcf[h"

8]Y`[YgY``gW`UZh`]W`Y`K U`fbY`a i b[`i bX
]\fY`< YfUi`gZcfXYfi b[Yb`

: Øf`X]Y`5bk c`bYf`i bX`X]Y` ; YgY``gW`UZh`YbhghY\Yb`Xi fW`X]YgY
D\`Abca YbY`bYi Y`< YfUi`gZcfXYfi b[Yb" ` `b`gVYgc bXYfY`X]Y`9`hYfb
ghY\Yb`j cf`XYf` : fU[Yž`k]Y`g]Y`]\fYb`?]bXYfb`XUg`D\`Abca Yb
Yf`_`ÅfYb`gc``Yb" `J`c`fgW`Å[Y`k]Y` D]nVYfUhYf]bbYb` `cXYf
6Yk UWYf]bbYb`XYg`K U`XYg` `nY][Yb`XYb`J Yfgi W`ž`XUg
I b[Yk Ø`b`]W`Y`a]h`<i a cf`ni `bY`a Yb" `8YbbcW`V`Y]Vh`X]Y
I b[Yk]gg\Y]h`ØVYf`X]Y`5`_hj]h`ÅhYbž`X]Y`g]W` `]\bhYf`XYb
[YgW` `cggYbYb`HØfYb`UVgd]Y`Yb"

F YW`h`]W`Y`F U`a YbVYX]b[i b[Yb.`5``Yg
`Y[U`3

8 Ug` ; Yk YfVY`]gh]b`8Yi hgW`UbX``Y[U`ž`gc`Ub[Y`VYgh]a`a`hY
6YX]b[i b[Yb`YfZØ``h`g]bX" `8 Ug`b]YXYfg`ÅW`g]gW`Y
Gcn]U`a`]b]ghYf]i`a` `U`h`_`Uf[YghY``hž`XUgg`X]Y`dUf`_YbXYb
K c`ba cV]`Y`k YXYf`XYb`GhfU»Ybj Yf`_Y`f`ghØfYb`bcW`UbXYfY
J Yf`_Y`fghY`]bY`a Yf`VY`Ågh][Yb`XØfZYb" `8]Y`fYW`h`]W`Yb`J`cf[UVYb
gcf[Yb`XUZØfž`XUgg`X]Y`6YhfY]VYf`]b`XYf`F Y[Y``_Y]bY`GhfUYZb
VYZØfW`hYb`a ØggYbž`k Ug`XUg`D\`Abca Yb`XYf` `@j Y!A cV]`Y` `bcW`
j Yfgh`Åf`_h"

8]Y`F c``Y`XYf`Dc`]nY`]i bX`XYf`6Y`ØfXYb

8]Y`Dc`]nY`]g]Y`h`g]W` `]b`XYf`J YfUbhk cfhi b[ž`gck c` ``ØVYf`X]Y
`Y[U`Yb`U`g`Ui W` `ØVYf`X]Y`dchYbn]Y``Yb`F]g]_Yb`X]YgYf
9]b]W`hi b[Yb`ni `]bZcfa]YfYb" `8Yf`I a [Ub[`a]h`X]YgYb
: U`fnYi [Yb`YfZcfXYfh`Y]b[Yk]ggYg`A U» `Ub`GYbg]V`]h`Åhž`i`a` `X]Y

G]WYf\Y]h'XYf'VYhY']][hYb'DYfgcbYb'ni '[Yk Å\`Y]ghYb'i bX
[`Y]WnY]h][`X]Y' ðhYfYggYb'XYf'5bk c\bYf'ni `k U\`fYb"

ðg[YgUa h'gd]Y[Y`h'X]Y'9fgWY]bi b[`X]YgYf'i b[Yk Ò\b`]WYb': cfa
XYg'7Ua d]b[g'b]W'h'bi f'[YgY``gWUZh]WY'9bhk]W`i b[Yb'k]XYfž
gcbXYfb'ZcfXYfh'Ui W`Y]b'l a XYb_Yb']b'XYf'?ca a i b]_Uh]cb'i bX
XYa `l a [Ub[`]bbYf\U`V`XYf'; Ya Y]bXYb""8 Ug'H\Ya U']gh'gYbg]VY`
i bX'j YfX]Ybh'5i Za Yf_gUa _Y]hž'gck c\`j cb'XYb'VYhfcZZYbYb
J Yf_Y\`fghY]'bY\`a Yfb'U`g'Ui W`j cb'XYb'6Y\`ÖfXYb"

8YhU]`g

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