

A Y\ fYfY 'D_k !5i ZVfØW X Y]b '8Y`a Yb\ c fgh. Dc`nY]`gi W X h`NYi [Yb

⊕'8Y`a Yb\ c fgh`Ua `Yg`ni `a Y\ fYfYb`D_k !5i ZVfØW X Ybž
XUfi bhYf`Y]b`Hc mchU`i bX`Y]b`F YbUi `h"<]bk Y]gY`Yfk ØbgW X h`

⊕`XYf`GhUXh'8Y`a Yb\ c fgh`_ca a h`Yg`]b`XYf`BUW X hj cb
8cbbYfghU[`Ui Z: fY]hU[`ni `Y]bYf`F Y]`Y j cb`D_k !5i ZVfØW X Ybž`X]Y
X]Y`6Øf[Yf`]b`Gcf[Y`j YfgYhmYb" `8]Y`Dc`nY]`VYgh`h][h`a Y\ fYfY
J cfZ`Yž`VY]`XYbYb`i bVY`UbbhY`H`hYf`j YfgW X]YXYbY`: U\ fnYi [Y
]bg`J]g]Yf[Ybca a Yb`UVYb"

8Yf`YfghY`J cfZU`YfY][bYh`g]W Xž`U`g`X]Y`< YW`gW X Y]VY`Y]bYg`Hc mchU
]b`XYf`GhfU» Y`@Ub[Y`K UbX`Y]b[YgW X`U[Yb`k]fX"; `ØW`]W X Yfk Y]gY
V`Y]Vh`XUg`: U\ fnYi [`i bVYfØ\ fhž`XU`Ui g`]a `b]W X hg`[Yghc`Yb
k]fX" `8]YgY`HUh`nY][h`nk Uf`_Y]bY`i ba]hY`VUfYb`Z]bUb`n]Y`Yb
GW`X`Ybž`XYb`bcW X`gcf[h`g]Y`ZØf`Y]b`; YZØ`X`XYf`I bg]W X Yf`Y]h`i bhYf
XYb`5bk c`bYfb"

K Yf_nYi [X]YVghU\` `]b`? `Y]b hfUbgdc fhYfb

⊕`i ba]hY`VUfYa `Ni gUa a Yb\ Ub[`a]h`X]YgYf`GYf]Y`j cb
9]bVfØW X Yb`ghY`Yb`k Y]hYfY`8Y`_]hYž`VY]`XYbYb`X]Y
: YbghYfgW X Y]VYb`j cb`? `Y]b hfUbgdc fhYfb`nYfgh`Øfh`k i fXYb" `9]b
I bVY`UbbhYf`gW X`Ä[h`nk Y]: YbghYfgW X Y]VYb`Y]bYg`F YbUi `h
? `Y]b hfUbgdc fhYfg`Y]b`i bX`Yb`hk YbXYh`a Y\ fYfY`K Yf_nYi [Y" `8Yf
K Yfh`X]YgYf[Yghc`YbYb`; Y[Ybgh`Äb`XY`]gh`XYfnY]h`bcW X`i b`_Ufž
k Ug`XUfUi Z`\]bk Y]ghž`XUgg`Ui W X`X]Y`A Ò[`]W X`_Y]hYb`XYf`k Y]hYfYb
9fa]h`i b[Yb`Y]b[YgW X f`Äb`_h`g]bX"

9]b`Ä`b`]W X Yf`: U`YfY][bYh`g]W X`a]h`Y]bYa `: cfX`? `Y]b hfUbgdc fhYfž
XYggYb`: YbghYfgW X Y]VY`YVYbZU`g`Y]b[YgW X`U[Yb`k i fXY" `5i g

X]YgYa : U\fnYi [j YfgWk]bXYb'nU\`fY]WkY`K Yf_nYi [Yž`k Ug`XYb
GWUXYb`ZØf`XYb : U\fnYi [VYg]hnYf`Yf\YV`]Wk`ghY][Yfb`XØfZhY""9g
V`Y]Vh`UVni k UfhYbž`cV`X]Y`Dc`nY]`Ui Z[fi bX`j cb`NYi [Yb\]bk Y]gYb
ni f`5i Z_`Àfi b[`X]YgYf`GhfUZhUhYb`[Y`Ub[Yb`_Ubb"

8]Y`Dc`nY]`8Y`a Yb\cfgh`fi ZhiU`Y`6Øf[Yf`ni f`A]h\`ZY`Ui Z`K Yf`]b
XYf`BUWkhj cb`8cbbYfghU[`Ui Z: fY]hU[`Yhk Ug`J YfX`ÅWkh][Yg
VYcVUWkhYh`Už`k]fX`[YVYhYbž`g]Wk`i bhYf`XYf`HY`YZcbbi a a Yf
\$(&&%!%)) - \$`ni `a Y`XYb""Gc`WkY`<]bk Y]gY`_ØbbhYb`YbhgWkY]XYbX
gY]bž`i a `X]YgY`GYf]Y`j cb`9]bVfØWkYb`Ui Zhi _`ÀfYb`i bX`X]Y`H`hYf
ni f`FYWkYbgWkUZh`ni `n]Y\Yb"

G]WkYf\Y]hga U» bU\ a Yb`i bX`Df`Aj Ybh]cb

8]Y`9fY][b]ggY`]b`8Y`a Yb\cfgh`g]bX`b]Wk`h`bi f`9]bnY`Z`Yž`gcbXYfb
dUggYb`]b`Y]bYb`[fØ»YfYb`HfYbX`j cb`: U\fnYi [Ui ZVfØWkYb`]b
j]Y`Yb`i fVUbYb`; YV]YhYb""Gc`WkY`GhfUZhUhYb`_ØbbYb`b]Wk`h`bi f
Z]bUbn]Y`Y`GWk`ÅXYb`j Yfi fgUWkYbž`gcbXYfb`Ui Wk`XUg
G]WkYf\Y]hg[YZØ\`XYf`6Øf[Yf`Yf\YV`]Wk`VYY]bhf`ÅWkh][Yb""8]Y
Dc`nY]`VYhcbh`X]Y`K]Wkh][_Y]hj cb`K UWkgUa _Y]h`]bbYf\U`V`XYf
; Ya Y]bgWkUZh`i bX`Yfa`i h][h`j Yf`_Y\fghY`]bY\ a Yfž`\fY : U\fnYi [Y
g]WkYf`ni `dUf`_Yb`i bX`k Yfhj c`Y`; Y [Ybgh`ÅbXY`b]Wk`h`g]Wk`hVUf`ni
`UggYb"

8 Ug`D\`Àbca Yb`XYf`5i hcUi ZVfØWkY`Y\`bh`g]Wk`cZhiUb`gU]gcbU`Y
GWk`Ub`_i b[Yb`Ub""`b`XYb`Gca`a Yfa`cbUhYbž`k Ybb`j]Y`Y
A YbgWkYb`Ui Z`FY]gYb`g]bXž`Yf`Y]XYb`Gh`ÅXhY`\`Ài Z[`Y]bYb`5bgh]Y [_f]a]bY`Yf`5_h]j]h`hYb`]b`: cfa`j cb`9]bVfØWkYb""8]Y
J YfUbnk`cfh`]WkYb`_ØbbYb`\]Yf[Y [Yb`bi f`VYX]b[h`9]bZi`gg
bY\ a Ybž`k Yg\U`V`df`Aj Ybh]j Y`A U» bU\ a Yb`Ui g`XYf`; Ya Y]bgWkUZh
\YfUi`g]j cb`[fc»Yf`6YXYi hi b[`g]bX"

8]Y`8Y`a Yb\cfghYf`Dc`nY]`k]fX`j Yfgh`Åf`h`Df`AgYbn`nY][Yb`i bX`X]Y
BUWkVUfgWkUZhYb`gYbg]V`]g]YfYbž`i a `dchYbn]Y`Y`H`hYf
UVni gWk`fYW`_Yb""8]Y`5i Z_`Àfi b[gei`chY`VY]`gc`WkYb`J YfVfYWkYb`]gh
cZhi [Yf]b[ž`k cXi`fWk`X]Y`6Øf[Yf`XUni`Ui Z[Yfi ZYb`g]bXž`Y]bUbXYf
ni`i bhYfgh`ØhnYb`i bX`Ui Za`Yf`_gUa`ni`gY]b"

⊕`XYf`YmhYb`NY]h`UVYb`6Øf[Yf`Ui`g`j`YfgWk]YXYbYb`GhUXhhY]`Yb
VY[cbbYbž`BUWVUfgWkUZhk UWkYb`ni`cf[Ub]g]YfYb`i`bX`g]Wk
[Y[YbgY]h[`ØVYf`j`YfXÅWk]h[Y`5`_hj`]hÅhYb`ni`]bZcfa`]YfYb``8]YgY
⊕]h]Uhj] Yb`_ØbbYb`b]Wk`h`bi`f`d`f`Aj`Yb]h]`k`]f`_Ybž`gcbXYfb`gWkUZZYb
Ui`Wk`Y]b`ghÅf`_YfYg` ; Ya`Y]bgWkUZh]g[YZØ` `i` bX`Yf`Ø`Yb`XUg
G]WkYf`Y]hgVYk`i`ggHgY]b`Ui`Z`c`_U`Yf`9VYbY`"

Ni`gUa`a`YbZUggYbX`ghY`h`ZYghž`XUgg`X]Y`F`YU`_h]cbYb`XYf`Dc`nY]
i`bX`XYf` ; Ya`Y]bgWkUZh`Ui`Z`X]Y`Øb[ghYb`J`cfZÅ` `Y`]b`8Y`a`Yb`c`f`g`h`
j`cb`Yb`hgWkY]XYbXYf`6YXYi`hi`b[`g]bX`"Bi`f`Xi`fWk`[Ya`Y]bgUa`Y`
5bgHfYb[i`b[Yb`_Ubb`?`f]a`]bU`]hÅh`YZZY`_hj` `VY`_Åa`d`Zh`k`YfXYbž`i`bX
Yg`k`]fX`ni` `c`ZZYb`gY]bž`XUgg`X]Y`HÅhYf`VU`X`[YZUggh`k`YfXYb`"

<]bhYf[fi`bX]bZcfa`Uh]cbYb`ni
: U`fnYi`[X]YVghÅ` `Yb`i`bX`9]bVfØWkYb

⊕`XYb`YmhYb`⊕`fYb`UVYb` : U`fnYi`[X]YVghÅ` `Y`i`bX`9]bVfØWkYž
]bgVYgcbXYfY`]b`ghÅXh]gWkYb` ; YV]YhYbž`ni`[Ybca`a`Yb``8]Yg`_Ubb
Xi`fWk`j`YfgWk]YXYbY` : U`hc`fYb`VYX]b[h`gY]bž`XUfi`bhYf
k`]fhgWkUZh]WkY`i`bg]WkYf`Y]hYbž`X]Y`9bhk`]W`_i`b[`XYf
?`f]a`]bU`]hÅhg`f`UhYb`i`bX`XUg`J`YfZØ[VUf`_Y]h]`cb`⊕`Zcfa`Uh]cbYb`ØVYf
G]WkYf`Y]hgmgH`Ya`Yž`X]Y`j`cb`HÅhYfb`Ui`g[Ybi`mh`k`YfXYb`"@Ui`h
Y]bYf`GhUh]gh]_`XYg`6i`bXYg`_f]a`]bU`Ua`hg`f`b`?`5`Ľ`Ui`g`XYa` `⊕`f`&`\$`&&
[UV`Yg`Y]bYb`5bgH]Y[`XYf`5i`hcX]YVghÅ` `Y`]b`8Yi`hgWk`UbX`i`a` `)ž
i` `]a` `J`Yf[`Y]Wk`ni`a` `J`cf`U`f`"8]Y`[fØ»`hYb`<`YfUi`gZcfXYfi`b[Yb`ZØf
X]Y`G]WkYf`Y]hgVY`ØfXYb`g]bX`XUVY]`c`Zh`X]Y`⊕`Yb]h]Z]h]Yfi`b[`i`bX
J`Yf`UZh]b[`XYf`?`f]a`]bY`Ybž`X]Y`Åi`Z][`i`h`cf[Ub]g]Yfhi`bX`a`cV]
g]bX`"

9]b`k`Y]hYfYf`5gdY`_h]gh`X]Y`[Yc[fUd`_]gWkY`J`YfhY]i`b[`gc`WkYf
GhfUZhUhYb``6Ygh]a`a`hY`F`Y[]cbYbž`]bgVYgcbXYfY`gc`WkY`a`]h`c`Yf
6Yj`Ø`_Yfi`b[gX]Wk`hY`i`bX`k`Yb][Yf` ,`VYfk`UWk`i`b[`Xi`fWk
G]WkYf`Y]hg`_f`Å`Zh`ž`g]bX`VYgcbXYfg`UbZÅ`][`ZØf`X]YgY`5fh]`cb
J`YfVfYWkYb``8Y`a`Yb`c`f`ghž`U`g`HY]`XYf`A`Yhfc`dc`fY[]cb`6fYa`Yb!
C`XYbVi`f[ž`Å`Uh]b`XYf`J`Yf[Ub[Yb`Y]h`Å`b`]WkY`J`cfZÅ` `Y`Yf`YVhž
k`Ug`Y]b` ; fi`bX`a`Y`f`]ghž`XUgg`5bk`c`b`Yf`i`bX`c`_U`Y`6Y`ØfXYb
Ui`Za`Yf`_gUa` `V`Y]VYb`"

GhUh]gh]_Yb`ni` : U\fnYi [Ui ZVfØW\ Yb`]b

8 Yi hgW\`UbX

8]Y`U_hi`Y`Yb`NU\`Yb`Ui`g`XYf`?f]a`]bU`ghUh]gh]_`nY][`Ybž`XUgg`
: U\fnYi [Ui ZVfØW\Y`]b`8Yi`hgW\`UbX`Y]bYb`Yf\YV`]W\Yb`HY]`XYf`
; YgUa`h_f]a`]bU`]h`h`Ui`ga`UW\Yb`" `a` `U\`f`&\$&&`k`i`fXYb`ØVYf`
&+`\$\$\$`: `À`Y`j`cb`8]YVghU\`Ui`g`?fUZhZU\fnYi [Yb`YfZUggh`
6YgcbXYfg`k`Yfhj`c`Y` ; Y[Ybgh`AbXY`k`]Y`K`Yf_nYi [Yž`hYW\`b]gW\Y`
; Yf`Å`hY`i`bX`dYfg`Øb`]W\Y`GUW\Yb`k`YfXYb`cZ`h`U`g`6Yi`hY`Ui`g`
: U\fnYi [Yb`Yb`hbca`a`Yb`"

9]bY`I`a`ZfU[`Y`XYg`cVYfYb`6?5`Yf[`UVž`XUgg`fi`bX`(`\$`i` `XYf`
6YZfU[`hYb`]b`XYb`Y`h`hYb`ZØbZ`U\`fYb`j`cb`a`]bXYghYbg`Y]bYa`
8]YVghU\`cXYf`9]bVfi`W\`VYhf`cZYb`k`UfYb`"8]YgY`GhUh]gh]_Yb`
j`YfXYi`h`]W\Yb`X]Y`F`Y`Yj`Ubn`XYg`H\Ya`Ug`i`bX`i`bhYfghfY]W\Yb`X]Y`
6YXYi`hi`b[`j`cb`d`f`Åj`Ybh]j`Yb`A`U»`bU\`a`Ybž`i`a`X]Y`G]W\Yf\Y]hj`cb`
: U\fnYi [Yb`ni`Yf\Ø\Yb`"A`Y\`fYfY`Gh`Å`hY`\`UVYb`]b`XYb`Y`h`hYb`
U\`fYb`gdYn]Y`Y`G]W\Yf\Y]hgd`f`c[`fUa`a`Y`]a`d`Ya`Ybh]Yfhž`i`a`X]Y`
6Øf[`Yf`ni`gYbg]V`]g]YfYb`i`bX`8]YVgh`Å\`Yb`j`c`fni`VYi [Yb`"

J`Yf`Å`gg`]W\Y` `bZcfa`Uh]cbYb`ni`X]YgYf`H\Ya`Uh]_`g]bX`VY]a`
**6i`bXYg_f]a`]bU`Ua`h`ni`Z]bXYbž`XUg`fY[`Y`a`Å»][`U_hi`U`]g]YfhY`
6Yf]W\hY`ni`?f]a`]bU`]h`hgYbhk`]W_`i`b[`Yb`]b`8Yi`hgW\`UbX`
\YfUi`g[`]Vh`"**

8YhU]`g

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