

Gi W\Yb`NYi [Yb.`K Yf`_Ybbh`XYb`A Ubb
a]h`XYf`6Ub__UfhYbXi V`YhhY`]b
6cfb\Y]a 3

8]Y`6cbbYf`Dc`]nY]`gi W\h`bUW\`Y]bYa`A Ubbž`XYf`a]h`Y]bYf
[Yghc`\`YbYb`6Ub__UfhY`]b`Y]bYa`6Ui`a Uf`h`Y]b`Ui ZhY"
<]bk Y]gY`YfVYhYb`

8]Y`6cbbYf`Dc`]nY]`g]Y\`h]g]W\`Y]bYa`]bhYfYggUbhYb` : U`
[Y [YbØVYfž`XYf`U`Y`NY]W\Yb`XYf`< Ufhb`ÅW_] [_Y]h`hf`Å [h`B`Yi YghYb
6Yf]W\hYb`ni Zc`[Y`]gh`XUg`?`f]a]bU`_ca`a]ggUf]Uh`&(`Ui Z`XYf`Gi W\Y
bUW\`Y]bYa`I bVY`_UbbhYbž`XYf`j YfX`ÅW`h][h`k]fXž`Ua`&(`" `ž`b]
&\$&(`]b`Y]bYa`6Ui`a Uf`h`Y]b`6cfb\Y]a`Y]bYb`8]YVghU\`VY[Ub[Yb
ni` \UVYb`"8Yf`A Ubb`gc``a]h`Y]bYf`j Yfa`Y]bh]W\Yb`?`cd]Y`XYf`
6Ub__UfhY`Y]bYg` ; YgW\`ÅX][hYb`K UfYb`Yfk`cfVYb`\UVYbž`k Ug`j]Y`Y
: fU[Yb`Ui Zk]fZhi`bX`U`Y`f]W\h][Yb`5`Ufa [`cW`_Yb``Åi hYb``Åggh"

8]Y`I`a`gh`ÅbXY`XYg`J`cfZU`g`g]bX`gck`c`\`VYi`bfi`\][YbX`U`g`Ui`W\`
Ui`ZgW\`i`ggfY]W\`"8Ug`J`YfVfYW\Yb`k`i`fXY`j`cb`Y]bYf`
,`VYfk`UW`i`b[`g`_Ua`YfU`Xc`_i`a`Ybh]Yfhž`k`Y`W\Y`X]Y`HUh\`UbX`i`b[`Yb`
XYg`a`i`ha`U»`]W\Yb`H`ÅhYfg`Ui`ZnY]W\`bYhY`"8]YgY`5i`ZbU`a`Yb`g]bX`
bi`b`Y]b`YbhgW\Y]XYbXYg`Di`nn`YghØW`_]b`XYf` : U\`bXi`b[`XYf`Dc`]nY]"
5b[`Y\`Øf][`Y`XYf`GhfUž`YfZc`[`i`b[`gVY\`ØfXYb`\`c`ZYb`XUfUi`Zž`XUgg`
X]Y`6]`XYf`XYg`J`YfX`ÅW`h][`Ybž`X]Y`]a` : U\`bXi`b[`gdcfhU`XYf`Dc`]nY]"
B`cfXf\Y]b!`K`YghZU`Yb`VYfY]h[`YghY``h`k`i`fXYbž`XUni`VY]hfU[`Ybž`X]Y`
⇒Ybh]h`Åh`XYg`I`bVY`_UbbhYb`ni`_`ÅfYb"

: U\`bXi`b[`gUi`Zfi`Z`XYf`Dc`]nY]"

8]Y`Dc`]nY]`\`Uh`Y]bYb`i`a`ZUb[`fY]W\Yb`5i`Zfi`Z[`YghUfhYhž`i`a`X]Y`
I`bhYfghØhni`b[`XYf`6Yj`Ø`_Yfi`b[`ni`i[`Yk`]bbYb`"8Yf`5i`Zfi`Zni`f`
A`h\]`ZY`VYhc`bh`X]Y`K`]W\h][`_Y]h`YXYf`bc`W\`gc`_`Y]bYb``Zcfa`Uh]cbž`

X]Y`XUni`VY]hfU[Yb`_ÖbbhYž`XYb`HÄhf`ni`]XYbh]Z]n]YfYb"NYi [Ybž
X]Y`Yhk Ug`ØVYf`XYb`J cfZU``k]ggYb`cXYf`XYb`A Ubb`Ui Z`XYb`6]XYfb
Yf_YbbYbž`k YfXYb`Xf]b[YbX`[YVYhYbž`g]W`i a [Y\YbX`VY]`XYf
Dc`]nY]`ni`a Y`XYb"8]Y`?cbhU`_ha Ö[`]W`_Y]hYb`g]bX`Y]bZUW.
5bfi ZYf`_ÖbbYb`g]W`i bhYf`XYf`HY`YZcbbi a a Yf`\$&&, %) !\$`cXYf
dYf`9!A U]`Ub`__&("Vcbb4 dc`]nY]"b fk "XY`k YbXYb"

8]YgYf`U``k]fZh`b]W`h`bi f`fU[Yb`VYnØ[`]W`_XYf`G]W`Yf\Y]h]b
; YgW`ÄZhYb`Ui Z`gcbXYfb`Ui W`XUfØVYfž`k]Y`[i h]YfVfUi W`Yf`Ui Z
gc`W`Y`G]hi Uh]cbYb`j cfVYfY]hYh]g]bX"8 Ug`H\Ya U
6Ub__UfhYbXi V`]n]Yfi b[`]gh`b]W`h`bYi ž`YXcW`nY][h]X]YgYg
9fY][b]gž`k]Y`fUZ]b]Yfhi bX`i bYf`Ubbh`HÄhf`U[]YfYb`_ÖbbYb"9g
]gh`k]W`h][ž`g]W`_XYf`F]g]_Yb`VYk i ggh`ni`gY]b`i bX
G]W`Yf\Y]hgj cf`_Y\fi b[Yb`ni`hfYZZYbž`i a`X]Y`Y][YbY`⇒Ybh]hÄhi bX
:]bUn]bZcfa Uh]cbYb`ni`gW`ØhnYb"

8]Y`HUhgUW`Yž`XUgg`XYf`J YfXÄW`h][Y`V]g`Ub[`i bVY`_Ubbh`V`Y]Vhž`]gh
VYgcbXYfg`VYgcf[b]gYffY[YbX"8]Y`Dc`]nY]`U`h`Y]bY`X]fY`_hY
J YfV]bXi b[`ni f`² ZZYbh]W`_Y]h[Ygi W`hž`i a`k Y]hYfY`8YhU]`g`ni
gUa a Y`bž`X]Y`dchYbn]Y``XYb`9fa]h`i b[Yb`i bX`gW`i ggYbX`]W`
XYf`5i Z`Äfi b[`XYg`J YfVfYW`Yb`g`X]Yb`]W`_gY]b`_ÖbbhYb"8]Y
² ZZYbh]W`_Y]h]gd]Y`h`\]YfVY]`Y]bY`YbhgW`Y]XYbXY`Fc`Yž`XU`\Äi Z[
k Yfhj c`Y`<]bk Y]gY`_ca a Ybž`X]Y`U`bXYf`Y]bYb`GW`f]h`bÄ`Yf`Ub
X]Y`@Ögi b[`Y]bYg`i: U`g`Vf]b[Yb"

C Vk c`\`j]Y`Y`i: fU[Yb`V`Y]VYbž`]gh`Y]bYg`_`Uf. 8]YgYg`J YfVfYW`Yb
\Uh`XUg`DchYbn]U`ž`b]W`h`bi f`XYb`X]fY`_hYb`i; YgW`ÄX][hYb`ni
VYhfYZZYbž`gcbXYfb`Ui W`XUg`G]W`Yf\Y]hgYa dZ]bXYb`i bX`XUg
J YfhfUi Yb`]b`XUg`9]bnY`\UbXY`gi a ZY`X`ni`VYY]bZi ggYb"9g`]gh
gca]h]j cb`\ÖW`ghYf`K]W`h][_Y]hž`XUgg`gc`W`Y`J cfZÄ`Y`gW`bY`
Ui Z[YXYW`_h`k YfXYbž`i a`X]Y`F]g]_Yb`ZØf`U`Y`?Äi ZYf`ni
a]b]a]YfYb"

Ni gUa a Yb[YZUggh`V`Y]Vh`ni`c`ZZYbž`XUgg`X]Y`i: U`bXi b[
YfZc`[fY]W`_j Yf`Äi Zh`i bX`XYf`i bVY`_UbbhY`A Ubb`gW`bY`g`gha Ö[`]W`
XYf`š`gh]n`ni [YZØ`fh`k YfXYb`_Ubb"8]Y`Dc`]nY]UfVY]h`YfZcfXYfh
b]W`h`bi f`9Z]n]Ybnž`gcbXYfb`Ui W`_Y]bY`U`_hj`Y`i bX`Yb[U[]YfhY
² ZZYbh]W`_Y]hž`X]Y`VYfY]h]gh`ni`Y`ZYb"

8YhU]g

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