

F i gg]gW\ Yf '@i ZhUb [ f]ZZ'Ui Z'? fmk m^F ]\ .  
HÖX`]W\ Yf`HfY ZZY f`]a `< c hY`

þ'? fmk m^F ]\ `hfUZhY`Y]bY`fi gg]gW\ Y`F U\_YhY`Y]b`< chY`ž`Yg`[ ]Vh  
Y]b`HcXYgcdZYf`i bX`a Y\ fYfY`J Yf`YhnhY`"F Yhhi b[ g\_fÄZhY`g]bX  
]a `9]bgUhn"

? fmk m^F ]\ ]gh`YfbYi h]a `: UXYb\_fYi n`fi gg]gW\ Yf`5b[ f]ZZY`"þ`XYf  
i \_fU]b]gW\ Yb`GhUXh`\ Uh`Y]b`@ ZhUb [ f]ZZ`X]Y`N]j ]`VYj Ö`\_Yfi b[  
YfgW\ ØhhYfhž`bUW\ XYa `Y]bY`F U\_YhY`]b`Y]b`< chY`Y]b[ YgW\`U[ Yb`]gh`  
BUW\`6Yf]W\ hYb`j cb`Öfh]W\ Yb`6Y\ ÖfXYb`[ UV`Yg`a ]bXYghYbg`Y]b  
HcXYgcdZYf`i bX`j ]Yf`J Yf`YhnhY`VY]`X]YgYa `J cfZU`"GYf\ ]^@mgU\_ž  
XYf`J Yfk U`hi b[ gW\ YZ`XYg`8b]dfcdYhfck g\_!; YV]Yhgž`VYghÄh[ hYž  
XUgg`XUg`VYhfcZZYbY`; YVÄi XY`Y]b`n]j ]`[ Ybi hnhYg`CV`Y`\_h`k Ufž`XUg  
i bhYf`XYb`HfØa`a Yfb`a Ö[ `]W\ Yfk Y]gY`bcW\`a Y\`f`j YfgW\ ØhhYhY  
DYfgcbYb`V]f[ h"

8]Y`Öfh]W\ Yb`9]bgUhn\_fÄZhY`g]bX`i a [ Y\YbX`a`cV]`]g]Yfh`k`cfXYbž  
i a`A`YbgW\ Yb`ni`fYhhYb`i bX`X]Y`@U[ Y`ni`ghUV]`]g]YfYb`"þ`]\`fYf  
A`]hY]`i b[ `Yf`\_ÄfhYb`X]Y`6Y\ ÖfXYbž`XUgg`X]Y`5b[ fY]ZYf`a ]h`Y]bYf  
VU`"]gh]gW\ Yb`F U\_YhY`ni [ YgW\`U[ Yb`\UVYb`"8]Yg`ghY`h`Y]bYb  
k Y]hYfYb`VYXUi Yf`]W\ Yb`< Ö\Ydi b\_h]b`XYf`; YgW\ ]W\ hY`XYf`GhUXh  
XUfž`X]Y`VYfY]hg`c`Zhi bhYf`XYa`6YgW\ i gg`fi gg]gW\ Yf`GhfY]h\_fÄZhY  
[ Y`]hhYb`\Uh"

F Y [ Y`a`Ä» ] [ Y`5b [ f]ZZY`Ui Z'? fmk m^F ]\

? fmk m^F ]\ ž`Y]bY`GhUXh]a`gØX`]W\ Yb`HY]`XYf`i \_fU]bYž`\ Uh]g]W\`ni  
Y]bYa`k ]YXYf`\_Y\`fYbXYb`N]Y`X]YgYf`6fi hU`]hÄh`Yb`hk ]W\_Y`h`"8]Y  
GhUXh]gh`b]W\ h`bi`f`X]Y`; YVi fhgghUXh`XYg`i \_fU]b]gW\ Yb  
DfÄg]XYbhYb`K`c`c`Xma`mf`GY`Ybg`\_mž`gcbXYfb`Ui W\`Y]b  
]bXi ghf]Y`Yg`NYbhfi a`ž`XUg]b`XYb`YhnhYb`nk Y]Y]b\U`V`ž\`fYb`XYg

fi gg]gWYb`5b[ f]ZZg\_f]Y[ g]j Yf\YYfYbXY`GW`AXYb`Yf`hYb`\Uh"  
5i » Yf`X]YgYa`U\_hi Y`Yb`J cfZU``g]bX`a Y\fyfY`ZfØ\YfY`5b[ f]ZZY  
Xc\_i a Ybh]Yfhž`VY]`XYbYb`X]Y`N]j ]`VYj Ø`\_Yfi b[ `nU`\fY]WY`C dZYf  
ni`VY`\_U[ Yb`\UhhY"

- a`đ`]`k i fXYb`bUW`Y]bYa`k Y]hYfYb`F U\_YhYbUb[ f]ZZ  
a ]bXYghYbg`%\$`HcXYgcdZYfi bX`ØVYf` \$`J Yf`YhnhY  
[ Ya`Y`XYh"
- a`A`Āfn`ZUb`X`Y]b`Ā`b`]WYf`J cfZU``ghUhhž`VY]`XYa`Y]b  
K c`b[ YVĀi XY`hfUZi bX`8i hnYbXY`j cb`A YbgWYb`j Yf`Yhnh  
k i fXYb"

8]Y`k ]YXYf\c`hYb`5b[ f]ZZY`Ui Z`X]Y`GhUXhj YfXYi h]WYb`X]Y  
Ub\U`hYbXY`6YXfc`i b[ ž`XYf`X]Y`9]bk c`bYf`Ui g[ YgYhnh]g]bX``J]Y`Y  
A YbgWYb`a ØggYb`]b`ghĀbX][ Yf`5b[ gh`YVYbž`XU`g]Y`X]fY`\_h]b  
Y]bYa`?cbZ]\_h[ YV]Yh`k c`bYb``8Yf`@ ZhUb[ f]ZZUi Z`XUg`<c`hY`nY][ h  
XYi h]W`ž`XUgg`gY`Vgh`n]j ]`Y`9]b]W`hi b[ Yb`b]W`hj cf`XYf  
NYfghØfi b[ `g]WYf`g]bX"

8]Y`@U[ Y`]b`?fmk m^F ]\`]gh`b]W`h`bi f`hfU[ ]gW`ž`gcbXYfb`gd]Y[ Y`h  
Y]b`k Y]h[ fØ» YfYg`DfcV`Ya`]b]bYf\U`V`XYg`?cbZ]\_hg`k ]XYf``8]Y  
Ub\U`hYbXYb`5b[ f]ZZY`Ui Z`K c`b[ YV]YhY`i bX`n]j ]`Y`bZfUghfi`\_hi f  
ghY`Yb`Y]bYb`gW`k Yfk ]Y[ YbXYb`]fi bX`ni f`6Ygcd[ b]g`ZØf  
\i a Ub]hĀfY`G]WYf\Y]h`i bX`]b]hYfbUh]cbU`Y  
A YbgWYb`fYW`hgghUb`XUfXg`XUf``8Yf`9]bgUhn`j cb`VU``]gh]gWYb  
F U\_YhYbž`X]Y`j cf`U`Ya`[ Y[ Yb`a`]hĀf]gWY`N]Y`Y`[ Yf]W`hY`h`gY]b  
gc``hYbž`f]W`hY`hj Yf\YYfYbXY`GW`AXYb`Ub`i bX`gYhnh`i bgW`i`X][ Y  
]b`@YVYbg[ YZU`f"

K ]W`h][ Y`bZcfa Uh]cbYb`i bX`a YbgW`]W`Y  
GW`]W`\_gU`Y

8Yf`J cfZU``nY][ hž`k ]Y`gY\`f`XYf`?f]Y[ ]b`XYf`i`\_fU]bY`h]YZ]b`XUg  
n]j ]`Y`@YVYb`Y]b[ fY]Zh``b`Y]bYf`GhUXhž`X]Y`j cb`]bXi ghf]Y`Yf  
6YXYi hi b[ ]gh`i bX`Y]bY`nYbhfU`Y`F c``Y`]b`XYb`fY[ ]cbU`Yb  
K ]fhgW`UZhghfi`\_hi fYb`gd]Y`hž`V`Y]VYb`X]Y`ĀW`nYbXYb`K i bXYb`XYg  
?f]Y[ Yg`cZhi b[ Y\Øfh``ž`bYž`X]Y`i bhYf`XYb`HfØa`a Yfb`[ YZUb[ Yb  
g]bX`cXYf`X]Y`GW`fYW`\_Yb`X]YgYf`5b[ f]ZZY`a ]hYf`YVYb`a ØggYbž

ghY\Yb`ja : c\_i g`XYf`6Yf]W\hYfghUhi b[ ž`UVYf`Ui W`X]Y  
6Yj Ò`\_Yfi b[ `Uh]`fY`Y][ YbYb`<YfUi gZcfXYfi b[ Yb`ja `5`hU[ ž  
k A\fybX`g]Y`i a `g` , VYf`YVYb`\_Aa dZi"

9]bY`ghAbX][ Y`]bghUV]`Y`G]hi Uh]cb`YfZcfXYfhj cb`XYb`6Yk c`bYfb  
Ybcfa Y`F`Yg]`Ybn"G]Y`g]bX`[ Ynk i b[ Ybž]`fY`hA[ `]W\Yb`F`ci h]bYb  
a ]hY]bYa : ; YZØ\`XYf`I bg]W\Yf\Y]h`ni `bUj ][ ]YfYbž`k A\fybX`X]Y  
; YZU\`fghYh][ `dfAgYbh`V`Y]Vh"8]Y`]bhYfbUh]cbU`Yb`6Ya Ø\i b[ Ybž  
X]Y`I \_fU]bY`ni `i bhYfghØhnYb`i bX`XYb`8fi W`\_Ui ZX]Y`5b[ fY]ZYf`ni  
Yf\Ø\Ybž`g]bX`j cb`YbhgW\Y]XYbXYf`6YXYi hi b[ ž`i a `XYb`?fY]g`Ui Z  
XYf` ; Yk U`h`ni `Xi fW\VfYW\Yb"8YbbcW`g]bX`X]Y` ; YXUb`\_Yb`XYf  
6Yj Ò`\_Yfi b[ `cZi`Ui ZX]Y` ; Y`]YVhYb`[ Yf]W\hYhž`X]Y`Y]bYa `ghAbX][ Yb  
F ]g]\_c`Ui g[ YgYhnh`g]bX"

8]Y`9fY][ b]ggY`]b`?fmk m^F ]\`g]bX`b]W\h`bi f`Y]bY`V`c» Y`NU\`]b  
Y]bYa `a ]]hA]g]W\Yb`?cbZ]\_hž`gcbXYfb`g]Y`ghY\Yb`ghY`j YfhfYhYbX  
ZØf`X]Y` ; YgW\]W\hYb`j cb`A`YbgW\Ybž`XYfYb`@YVYb`Xi fW  
i bj cf\Yf[ YgY\YbY` ; Yk U`h`]b`A ]hY]XYbgW\UZh[ Ync[ Yb`k YfXYb"  
8Yf`K ]YXYfUi ZVUi `i bX`X]Y`<Y]`i b[ `X]YgYf` ; Ya Y]bgW\UZhYb  
\_ØbbhY`>\fnY\`bhY`]b`5bgdfi W`bY\`a Ybž`gY`Vgh`k Ybb`XYf`?cbZ]\_h  
Y]bYg`HU[ Yg`YbXYh"

8]Y`G]W\Yf\Y]hg`U[ Y`]b`XYf`I \_fU]bY`\Uh`g]W`]b`XYb`YhnhYb  
A cbUhYb`XfUa Uh]gW`j YfgW`ĀfZhž`k Ug`ni `Y]bYf`Ub`U`hYbXYb  
\i a Ub]hAfyb`?f]gY`ZØ\fh"≠Zc`[ Y`XYf`Zcfhk A\fybXYb`5b[ f]ZZYž  
]bgVYgcbXYfY`]b`ghAXh]gW\Yb` ; YV]YhYb`k ]Y`?fmk m^F ]\`ž`Yf`YVYb  
X]Y`N]j ]]ghYb`Bchi bX`5b[ gh"8]Y`NU\`XYf`N]j ]`cdZYf`]gh`gY]h  
6Y[ ]bb`XYg`?cbZ]\_hg`YI dcbYbh]Y``[ Ygh]Y[ Yb"j YfgW\]YXYbY  
Cf[ Ub]gUh]cbYb`gW`ĀhnYbž`XUgg`nY\`bhUi gYbXY`N]j ]]ghYb`gY]h  
5bZUb[ `&\$&&i a `g`@YVYb`[ Y`\_ca`a Yb`g]bXž`k A\fybX`A ]`]cbYb`]b  
]\fyf`<Y]a Uh]j Yfhf]YVYb`k i fXYb"8]YgY`5b[ f]ZZY`ghY`Yb`b]W\h`bi f  
Y]bY`6YXfc\i b[ `ZØf`XUg`@YVYb`XYf`A`YbgW\Yb`XUfž`gcbXYfb`Ui W  
ZØf`X]Y`k ]fhgW\UZh]W\Y`GhUV]`]hA`h`XYf`F`Y[ ]cb"

8]Y`k ]YXYf\`c`hYb`5b[ f]ZZY`Ui Zn]j ]`Y`≠ZFUghfi \_hi f`\UVYb`Ub`j ]Y`Yb  
CfhYbž`Y]bgW`]Y» `]W`?fmk m^F ]\`ž`Yf\YV`]W\Y`GW`ĀXYb  
Ub[ Yf]W\hYh"8]Y`NYfghØfi b[ `j`cb`K`c`b[ YVĀi XYbž`GW`i `Yb`i bX  
?fUb`\_Yb`\Āi gYfb`\Uh`XUg`hA[ `]W\Y`@YVYb`ZØf`j ]Y`Y`A`YbgW\Yb

i bYfhfÅ[ `]WÅ [ Ya UW h" < ]Zgcf[ Ub]gUh]cbYb`i bX`X]Y`i \_fU]b]gWÅY  
FY[ ]Yfi b[ `UfVY]hYb`ni gUa a Ybž`i a `XYb`CdZYfb`< ]ZY`ni `Y]ghYbž  
XcWÅ`X]Y`FYggci fWÅb`g]bX`VY[ fYbnh`i bX`X]Y`< YfUi gZcfXYfi b[ Yb  
[ fc»"

< i a Ub]hÅfY`A U» bU\ a Yb`i bX`I bhYfghØhni b[

8]Y`]bhYfbUh]cbU`Y` ; Ya Y]bgWÅ UZh`Uh`Ui Z`X]Y` \i a Ub]hÅfY`? f]gY`]b  
XYf`I \_fU]bY`fYU[ ]Yfhž`]bXYa `g]Y`j YfgWÅ]YXYbY  
I bhYfghØhni b[ ga U» bU\ a Yb`VYfY]hghY`h" C f[ Ub]gUh]cbYb`k ]Y`XUg  
FchY`? fYi n`i bX`X]Y`I B`ghY`Yb`< ]Zg[ ØhYf`ni f`J YfZØ[ i b[ žk Å\ fYbX  
@ÅbXYf`k ]Y`X]Y`I G5`i bX`A ]h[ `]YXYf`XYf`9i fcdÅ]gWÅYb`I b]cb  
Z]bUbn]Y`Y`A ]hY`ni f`J YfZØ[ i b[ `ghY`Ybž`i a `X]Y` \i a Ub]hÅfY`@U[ Y  
ni `ghUV`]g]YfYb" 8]Y`< ]ZY`i a ZUggh`B U\ fi b[ ga ]hY`ž`a YX]n]b]gWÅY  
J Yfgcf[ i b[ `i bX`j c fØVYf[ Y\ YbXY`I bhYf\_ØbZhY`ZØf`X]Y  
J Yfhf]YVYbYb"

8]Y`i \_fU]b]gWÅY`FY[ ]Yfi b[ `Uh`Ui WÅ`Dfc[ fUa a Y`]b]h]YfYbž`i a  
X]Y` ðZfUghfi \_hi f`k ]YXYf`Ui Zni VUi Yb`i bX`XYb`A YbgWÅYbž`X]Y` \fY  
< Åi gYf`j Yf`cfYb`UVYbž`Y]bY`F ØW\_\_Y\ f`]b`Y]b`bcfa U`Yg`@YVYb`ni  
Yfa Ø[ `]WÅYb" 8]Yg`YfZcfXYfh`YXcWÅ`Y]bY`VYhfÅWÅh`]WÅY`A Yb[ Y`Ub  
Z]bUbn]Y`Yb`A ]hY`b`i bX`NY]hž`k cVY]`X]Y` ; YZU\ f`ni gÅhn`]WÅYf  
5b[ f]ZY`]a a Yf`dfÅgYbh`]gh"

⇒ bhYfbUh]cbU`Y`FYU\_h]cbYb`i bX`dc`]h]gWÅY  
? cbhYI hY

8]Y`]bhYfbUh]cbU`Yb`FYU\_h]cbYb`Ui Z`X]Y` 5b[ f]ZY`]b`? fmk m^F ]\ `i bX  
UbXYfgk c`]b`XYf`I \_fU]bY`j Uf]]YfYb`j cb`J Yfi fhY`]i b[ Yb`V]g`\]b`ni  
\_cb\_fYhYb`A U» bU\ a Yb`k ]Y`GUb\_h]cbYb`[ Y[ Yb`Fi gg`UbX"  
K Å\ fYbX`X]Y`B 5HC! GhUUhYb`i bX`X]Y`9I `XUg`I \_fU]bY`! Dfc[ fUa a  
i bhYfghØhYbž`[ ]Vh`Yg`Ui WÅ`Gh]a a Ybž`X]Y`ni f`8YYg\_U`Uh]cb  
Ui Zfi ZYb" 8]Y`[ Ycdc`]h]gWÅYb`GdUbbi b[ Yb`nk ]gWÅYb`Fi gg`UbX  
i bX`XYa`K YghYb`UVYb`k ]WÅh[ Y`J YfÅbXYfi b[ Yb`]b`XYf  
]bhYfbUh]cbU`Yb`Dc`]h\_`i bX`G]WÅYf\Y]hgdc`]h\_`Yfj cf[ YVfUWÅhž`X]Y  
Ui WÅ`X]Y` : Å\][ \_Y]h`XYf`I \_fU]bY`VYY]bZi ggYbž`YZZY\_h]j `Ui Z`X]Y  
5[ [ fYgg]cb`ni `fYU[ ]YfYb"

5i » YfXYa ` \Uh'X]Y`Zcfhk Å\fYbXY`l bhYfghØhni b[ `ZØf`X]Y`l \_fU]bYž  
gck c\`a `]hÅf]gW\`U`g`Ui W\`i a Ub]hÅfž`5i gk ]f\_i b[ Yb`Ui ZX]Y  
[ `cVU`Yb`k ]fhgW\UZh]W\Yb`Ni gUa a Yb\Åb[ Y`i bX`XUg  
G]W\Yf\Y]hgi a ZY`X`]b`9i fcdU""8]Y`J YfÅbXYfi b[ Yb`]b`XYb  
9bYf[ ]Ya Åf\_hYbž`X]Y`Xi fW\`XYb`?cbZ]\_h`Yfj cf[ Yfi ZYb`k i fXYbž  
VYY]bZi ggYb`X]Y`J Yfgcf[ i b[ `i bX`X]Y`DfY]gY`]b`j ]Y`Yb`@ÅbXYfb  
i bX`hfU[ Yb`ni f`l bg]W\Yf\Y]h`VY]"

8]YgY`\_ca d`YI Yb`dc`]h]gW\Yb`i bX`k ]fhgW\UZh]W\Yb`?cbhYI hY`g]bX  
YbhgW\Y]XYbX`ZØf`XUg`J YfghÅbXb]g`XYf`G]hi Uh]cb`]b`?fmk m^F ]\`i bX  
ZØf`X]Y`Dfc[ bcgY`XYf`ni \_ØbZh][ Yb`9bhk ]W\_`i b[ Yb`]b`XYf`FY[ ]cb"

8YhU]`g

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