

5 ha i b [ ghYWX b ]\_Yb ·ZØf ·YZZY \_h]j YfYg  
HfU]b ]b [

5 ha i b [ ghYWX b ]\_Yb ·ZØf ·YZZY \_h]j YfYg ·HfU]b ]b [ '9g ·]gh  
U`[ Ya Y]b ·VY \_Ub b hž XUgg X]Y ·5 ha i b [ 'k Á\ fYbX XYg  
HfU]b ]b [ g ·Y]b Y ·Yb hgWX Y]XYb XY ·F c ``Y ·gd]Y ·h ·8 ]Y ·f]WX h][ Y  
5 hYa hYWX b ]\_Ub b b ]WX hbi f ·X]Y ·@Y]ghi b [ gZÁ\ ][ \_Y]h  
ghY][ Yfbž gc b XYfb ·Ui WX X]Y ·9ZZY \_h]j JhÁh XYg ·K cf\_ci hg  
j YfVYggYfb " ·b ·X]YgYa ·5fh]\_Y ·k YfXYb ·k ]f ·j YfgWX ]YXYb Y  
5 ha i b [ ghYWX b ]\_Yb ·j cfghY ``Ybž X]Y ·XUni ·VY]hfU[ Yb ·\_Obb Ybž  
XUg ·HfU]b ]b [ 'YZZY \_h]j Yf ·ni ·[ YghU ·hYb ·i bX ·VYggYfY  
9f[ YVb]ggY ·ni ·Yfn]Y ·Yb " ·K Ufi a ·]gh ·X]Y ·5 ha i b [ 'k ]WX h][ 'VY]a  
HfU]b ]b [ 3 ·8 ]Y ·5 ha i b [ 'gd]Y ·h ·Y]b Y ·k ]WX h][ Y ·F c ``Y ·VY]  
\_OfdYf ·]WX Yf ·5 \_h]j JhÁhž XU ·g]Y ·XYb ·GUI Yfghc ZZhfUb gdc fh ·ni a  
A i g ·Y ·[ Yk YVY ·Yfa ·Ó[ ' ]WX h ·i bX ·X]Y ·9bYf [ ]YdfcXi \_h]cb  
i b hYfghØhnh " ·8 ]Y ·f]WX h][ Y ·5 ha i b [ '\_Ub b ·X]Y ·\_OfdYf ·]WX Y  
6Y ·Ughi b [ 'fYXi n]YfYbž X]Y ·5i gXUi Yf ·j YfVYggYfb ·i bX ·X]Y  
A i g ·Y ·b ·YZZY \_h]j Yf ·UfVY]hYb ``UggYb " ·/ Ua d ·A Y ``]d /



5 ha i b [ ghYWX b ]\_Yb ·ZØf ·YZZY \_h]j YfYg ·HfU]b ]b [

9g`]gh`U``[ Ya Y]b `VY\_Ubbhž`XUgg`X]Y `5ha i b[ `k A\ fYbX`XYg  
HfU]b]b[ g`Y]bY `YbhgWX Y]XYbXY `Fc ``Y`gd]Y`h`8 ]Y`f]WX h][ Y  
5hYa hYWb]\_`\_Ubb`b]WX h`bi f`X]Y `@Y]ghi b[ gZÀ\][ \_Y]h`ghY][ Yfbž  
gcbXYfb `Ui WX X]Y `9ZZY\_h]j ]hÀh`XYg`K cf\_ci hg`j YfVYggYfb`·=b  
X]YgYa `5fh]\_Y`k YfXYb`k ]f`j YfgWX ]YXYbY `5ha i b[ ghYWXb]\_Yb  
j cfghY`Ybž`X]Y `XUni `VY]hFU[ Yb`\_ObbYbž`XUg`HfU]b]b[ `YZZY\_h]j Yf`ni  
[ YghU`hYb`i bX`VYggYfY `9f[ YVb]ggY`ni `Yfn]Y`Yb"

K Ufi a `]gh`X]Y `5ha i b[ `k ]WX h][ `VY]a  
HfU]b]b[ 3

8 ]Y `5ha i b[ `gd]Y`h`Y]bY `k ]WX h][ Y`Fc ``Y`VY]`\_OfdYf]WX Yf`5\_h]j ]hÀhž  
XU`g]Y`XYb `GUi Yfghc ZZhfUbfdc fh`ni a `A i g\_Y`[ Yk YVY`Yfa `Ó[ `]WX h  
i bX`X]Y `9bYf[ ]YdfcXi \_h]cb`i b hYfghØhnh`8 ]Y`f]WX h][ Y`5ha i b[ `\_Ubb  
X]Y `\_OfdYf]WX Y`6Y`Ughi b[ `fYXi n]YfYbž`X]Y `5i gXUi Yf`j YfVYggYfb  
i bX`X]Y `A i g\_Y`b`YZZY\_h]j Yf`UfVY]hYb `UggYb"

K A\ fYbX`XYg`HfU]b]b[ g`dfcXi n]Yfh`XYf`? OfdYf`a Y\ f`? c\`YbX]cl ]Xž  
XUg`Ui g`XYa `? OfdYf`YbhžYfbh`k YfXYb`a i ggž`i a `Y]bY`gUi fY  
I a [ YVi b[ `]a `6`i h`ni `j Yfa Y]XYb`9]bY`h]YZY `5ha i b[ ``]Zh`XUVY]ž  
? c\`YbX]cl ]X`UVni ZØ\ fYb`i bX`Ui gfY]WX YbX`GUi Yfghc Z  
ni ni ZØ\ fYbž`k Ug`ni `Y]bYf`VYggYfYb`@Y]ghi b[ `ZØ\ fYb`\_Ubb`

8 ]Y`f]WX h][ Y`5hYa hYWXb]\_

9g`[ ]Vhj YfgWX ]YXYbY `5hYa hYWXb]\_Ybž`X]Y `Y`bUWX `5fh`XYg  
HfU]b]b[ g`Ub[ Yk YbXYh`k YfXYb`\_ObbYb`<]Yf`g]bX`Y]b][ Y  
[ fi bX`Y[ YbXY `5hYa hYWXb]\_Ybž`X]Y `ZØf`j YfgWX ]YXYbY `5\_h]j ]hÀhYb  
\`ZFY]WX`gY]b`\_ObbYb.

%`·6Ui WX Uha i b[

8 ]Y`6Ui WX Uha i b[ `]gh`Y]bY`[ fi bX`Y[ YbXY `5hYa hYWXb]\_ž`X]Y `\\Ai Z|[  
VY]a `HfU]b]b[ `Y]b[ YgYhnh`k ]fX`8UVY]`k ]fX`h]YZ`Xi fWX`X]Y`B`UgY

Y]b[ YUha Yh'i bX'XYf'5hYa 'Z]Y» h]b'XYb'6Ui W fUi a žUbghUh'b i f  
]b'X]Y'6fi gh"8]Y'6Ui W Uha i b[ 'Yfa Ò[ ']W h'Y]bY'a UI ja U'Y  
GUI Yfghc ZZUi ZbU\ a Y'i bX'i b hYfghØhnh'Y]bY'VYggYfY'9bhgdUb b i b[  
k Å\ fYbX'XYg'HfU]b]b[ g"

I a 'X]Y'6Ui W Uha i b[ 'ni 'ØVYbžgYhnY'X]W 'Ui ZfYW h'\ ]b' i bX'`Y[ Y  
Y]bY'< UbX'Ui ZXYb'6Ui W "5ha Y'`Ub[ gUa 'Xi fW X]Y'B UgY'Y]bž  
k Å\ fYbX'Xi 'XUfUi Z'UW hYghž'XUgg'g]W 'XYf'6Ui W fUi a 'Ui gXY\bh"  
5ha Y'XUbb'`Ub[ gUa 'Xi fW XYb'A i bX'Ui g'i bX'`UggY'XUVY]XYb  
6Ui W 'k ]YXYf'Y]bg]b\_Yb"K ]YXYf\c`Y'X]YgY', Vi b[ 'a Y\fa U'gž'i a  
X]Y'6Ui W Uha i b[ 'ni 'dYfZY\_h]cb]YfYb"

&"'F \ mh\ a ]gW Yg'5ha Yb

F \ mh\ a ]gW Yg'5ha Yb' ]gh'Y]bY'HYW b]\_ž'VY]'XYf'XYf'5hYa 'Ub'X]Y  
6Yk Y[ i b[ 'XYg'?ÒfdYfg'Ub[ YdUggh'k ]fX"8]YgY'HYW b]\_`k ]fX  
\Ai Z[ 'VY]a '5i gXUi YfhfU]b]b[ 'k ]Y'@Ui ZYbžF UXZU\fYb'cXYf  
GWk ]a a Yb'j Yfk YbXYh"

6Y]a 'f\mh\ a ]gW Ya '5ha Yb'k ]fX'XYf'5hYa f\mh\ a i g'Ub'X]Y  
GWf]hhY'cXYf'X]Y'6Yk Y[ i b[ 'Ub[ YdUggh'Ni a '6Y]gd]Y'`\_Ubb'a Ub  
VY]a '@Ui ZYb'U'`Y'nk Y]'GWf]hhY'Y]bUha Yb'i bX'U'`Y'nk Y]'GWf]hhY  
Ui gUha Yb"8i fW X]YgY'HYW b]\_`k ]fX'XYf'5hYa Zi gg  
gmbWfc]g]Yfh'i bX'XYf'?ÒfdYf'\_Ubb'VYggYf'a ]h'GUI YfghcZZ  
j Yfgcf[ h'k YfXYb"

' " 'U'hYb'XYf'@i Zh

8Ug'< U'hYb'XYf'@ Zh]gh'Y]bY'HYW b]\_ž'X]Y'`\Ai Z[ 'VY]a  
?fUZhffU]b]b[ 'Y]b[ YgYhnh'k ]fX"8i fW XUg'\_i fnnY]h][ Y'5b\U'hYb  
XYg'5hYa g'\_Ubb'XYf'8fi W\_]a '?ÒfdYf'Yf\ Ø\h'k YfXYbž'k Ug'ni  
Y]bYf'j YfVYggYfhYb'GhUV]'jhAh'i bX'?fUZh'ZØ\fYb'\_Ubb"

6Y]a '< U'hYb'XYf'@ Zh'k ]fX'h]YZ'Y]b[ YUha Yh'i bX'XYf'5hYa 'ZØf'Y]bY  
\_i fnY'NY]h'Ub[ Y\U'hYbž'k Å\ fYbX'Y]bY'\_fUZh'c`Y'6Yk Y[ i b[  
Ui g[ YZØ\fh'k ]fX"Ni a '6Y]gd]Y'`\_Ubb'a Ub'VY]a ' ; Yk ]W h\YVYb

XYb`5hYa`Ub\U`hYbžk Á\fYbX'a Ub'XUg'; Yk ]W h\YVh'i bX'XYb  
5hYa`XUbb`VY]a ``Ub[ gUa Yb`5VgYb\_Yb`XYg'; Yk ]W hg'k ]YXYf  
ZFY][ YVYb"

<Ái Z][ ` [ YghY``hY` : fU[ Yb

%"·K Y`W Y`5hYa hY W b]\_`gc``hY`k Á\fYbX`XYg  
? fUZhhfU]b]b[ g`Ub[ Yk YbXYh`k YfXYb 3

6Y]a`?fUZhhfU]b]b[ ` \_Ubb`XUg`<U`hYb`XYf`@ Zh`Y]bY`YZZY\_h]j Y  
5hYa hY W b]\_`gY]b``8i fW XUg`\_i fnnY]h][ Y`5b\U`hYb`XYg`5hYa g  
\_Ubb`XYf`8fi W\_]a`?ÓfdYf`Yf\Ó\h`k YfXYbžk Ug`ni `Y]bYf  
j YfVYggYfhYb`GhUV]`]hÁh'i bX`?fUZhYbhk ]W`i b[ `ZØ\fYb`\_Ubb"

&"·K Y`W Y`5hYa hY W b]\_`gc``hY`VY]a  
5i gXUi YfhfU]b]b[ `k ]Y`@Ui ZYb`Ub[ Yk YbXYh  
k YfXYb 3

6Y]a`5i gXUi YfhfU]b]b[ ` \_Ubb`X]Y`f\mh\ a ]gW Y`5ha i b[ `VYgcbXYfg  
\]ZfY]W`gY]b``8i fW XUg`5bdUggYb`XYg`5hYa f\mh\ a i g`Ub`X]Y  
6Yk Y[ i b[ Yb`XYg`?ÓfdYfg`\_Ubb`Y]bY`VYggYfY`J Yfgcf[ i b[ `a ]h  
GUI YfghcZZ`YffY]W h`k YfXYb"

' "·Gc``hY`Xi fW`X]Y`B UggY`c XYf`XYb`A i bX`[ YUha Yh  
k YfXYb 3

8]Y`B UggYbUh a i b[ ` \Uh`XYb`J c fhY`ž`XUgg`X]Y`Y]b[ YUha Yh`Y`@ Zh  
[ YZ`hYfhž`Yfk Áfa h`i bX`Ub[ YZYi W hYh`k ]fX`G]Y`\_Ubb`XU\Yf  
VYgcbXYfg`VY]a`HfU]b]b[ `]b`\_U`hYf`I a [ YVi b[ `j cb`J c fhY`gY]b``  
6Y]a`]b`hYbg]j Yb`HfU]b]b[ ` \_Ubb`X]Y`5ha i b[ `Xi fW`XYb`A i bX  
YXcW`YZZY\_h]j Yf`gY]bž`XU`a Y\`f`@ Zh`Y]b[ YUha Yh`i bX  
?c\`YbX]cl ]X`gW bY`Yf`Ui g[ YgW`YXYb`k YfXYb`\_Ubb"

( " ' ? Ub b ' Y ]b Y ' ZU`gW Y ' 5 ha i b [ ' X]Y '@Y ]ghi b [ VYY ]b hfÀW h][ Y b 3

↓Jž'Y]b Y ' ZU`gW Y ' 5 ha i b [ '\_Ub b ' X]Y '@Y ]ghi b [ gZÀ\ ][ \_Y]h  
VYY ]b hfÀW h][ Y b ' K Ybb ' b ]W h'Ui gfY ]W YbX ' GUI YfghcZZ'ni [ YZØ\ fh  
k ]fX ' c XYf ' ? c \ ' YbX ]cl ]X ' b ]W h'YZZY \_hjj ' UV[ YUhà Yh'k ]fXž \_Ubb ' Yg ' ni  
Y]b Yf ' gW b Y `` YfYb ' 9fa ØXi b [ žA i g\_Y ` \_fÀa dZYb ' i bX ' Y]b Yf  
[ Yf]b [ YfYb '@Y ]ghi b [ gZÀ\ ][ \_Y]h ' ca a Yb " ' 8 U\ Yf ' gh ' Yg ' k ]W h][ žX]Y  
f]W h][ Y ' 5 hY a hY W b ]\_ ' ni ' VY\ YffgW Yb "

: Un]h

8 ]Y ' 5 ha i b [ ' gd]Y ' h'Y]b Y ' Yb hgW Y ]XYbXY ' Fc `` Y ' VY]a ' HfU]b ]b [ " ' A ]h  
XYb ' f]W h][ Y b ' 5 hY a hY W b ]\_Yb ' \_Obb Yb ' X]Y '@Y ]ghi b [ gZÀ\ ][ \_Y]h i b X  
X]Y ' 9ZZY \_hjj ]hÀh ' XYg ' K cf\_ci hg ' j YfVYggYfh ' k YfXYb " ' 8 i fW X ' X]Y  
J Yfk YbXi b [ ' j cb ' 5 hY a hY W b ]\_Yb ' k ]Y ' XYf ' 6Ui W h a i b [ žXYf  
f\ mh\ a ]gW Yb ' 5 ha i b [ ' i bX ' XYa ' < U ' hY b ' XYf '@ zh ' \_Ubb ' XYf  
GUI YfghcZZhfUb gdcf h'ni a ' A i g\_Y ' [ Yk YVY ' j YfVYggYfh ' i bX ' X]Y  
9bYf [ ]YdfcXi \_h]cb ' i b hYfghØhnh ' k YfXYb " ' 9g ' ]gh ' k ]W h][ žX]Y ' f]W h][ Y  
5 hY a hY W b ]\_ ' ZØf ' X]Y ' Yk Y ' ] [ Y ' 5 \_hjj ]hÀh ' ni ' k À\ ' Yb ' i b X  
fY [ Y ' a À » ][ ' ni ' ØVYbži a ' cdh]a U ' Y ' 9f [ YVb ]ggY ' ni ' Yfn]Y ' Yb "

8 YhU]`g

6 Ygi W X Yb ' G]Y ' i b g ' Ui Z ' a Y]b ! Z]hb Y gg " b Yh