

7cWłbi h'F cUX' 'Gc '[ Y`Ub[ Yb`G]Y`ni f  
VYfØ\ a hYb`DU`a`HfYY`F cUX`Ui Z`G]Uf[ Uc

9]b`gWłbY`Yf`i bX`Y]bZUWłYf`F Y]gYZØ\ fYf`ni f`VYfØ\ a hYb  
DU`a YbghfU» Y`Ui Z`XYf`ϕgY`G]Uf[ Ucž`Ui Wł`VY`Ubbh`U`g  
6i f[ cg`7cWłbi h'F cUX"GY`Vgh`Ui Z`XYa` :`i [ `bUWł`G]Uf[ Uc  
k ]fX`≠bYb`k U\fgWłY]b`]Wł`U`g`YfghYg`Ui ZU`Ybž`k ]Y  
j c`gh`bX][ `X]YgY`ϕgY`a ]hj`YfgWł]YXYbYb`5fhYb`j`cb  
DU`a Yb`VYXYW`h]gh"8]Y`DU`a`HfYY`F cUX`G]Uf[ Uc`]gh`Y]bYf  
XYf`VY`UbbhYghYb`C fhYž`b]Wł`h`X]Y`ϕgY`ž`i`a`hc`Y`F Y]gYZc`hc`g  
ni`a`UWł`Yb"9g`]gh`Ui Wł`Y]bY`k ]f`\_]Wł`U`bXgWł`UZh`]Wł`fY]nj`c`Y  
GhfU» Yž`X]Y`G]Y` \ ÕWł`ghk`U\fgWłY]b`]Wł` \]bi`bhYfZU`fYb  
k`YfXYbž`k`Ybb`G]Y`VYfY]hg`X]Y`ϕgY`a ]h`XYa` :`U\ffUX  
Yf`\_i`bXYb`a` ÕWł`hYb"ϕ`X]YgYf`?`i`fnUb`Y]hi`b[ `VYgWł`fY]VY`]Wł  
U`Ygž`k`Ug`G]Y`ØVYf`X]Y`VYfØ\ a hY`DU`a`YbghfU» Y`k ]ggYb  
a`ØggYbž`Y]bgWł`]Y»`]Wł`XYf`5bfY]gYž`k`Ug`/`Ua`d`^Y`d`/

9]b`gWłbY`Yf`i bX`Y]bZUWłYf`F Y]gYZØ\ fYf`ni f`VYfØ\ a hYb  
DU`a YbghfU» Y`Ui Z`XYf`ϕgY`G]Uf[ Ucž`Ui Wł`VY`Ubbh`U`g`6i f[ cg  
7cWłbi h'F cUX"

GY`Vgh`Ui Z`XYa` :`i [ `bUWł`G]Uf[ Uc`k ]fX`≠bYb`k U\fgWłY]b`]Wł`U`g  
YfghYg`Ui ZU`Ybž`k ]Y`j`c`gh`bX][ `X]YgY`ϕgY`a ]hj`YfgWł]YXYbYb  
5fhYb`j`cb`DU`a`Yb`VYXYW`h]gh"

8]Y`DU`a`HfYY`F cUX`G]Uf[ Uc`]gh`Y]bYf`XYf`VY`UbbhYghYb`C fhYž  
b]Wł`h`X]Y`ϕgY`ž`i`a`hc`Y`F Y]gYZc`hc`g`ni`a`UWł`Yb"9g`]gh`Ui Wł`Y]bY  
k ]f`\_]Wł`U`bXgWł`UZh`]Wł`fY]nj`c`Y`GhfU» Yž`X]Y`G]Y  
\ ÕWł`ghk`U\fgWłY]b`]Wł` \]bi`bhYfZU`fYb`k`YfXYbž`k`Ybb`G]Y`VYfY]hg  
X]Y`ϕgY`a ]h`XYa` :`U\ffUX`Yf`\_i`bXYb`a` ÕWł`hYb"

ϕ`X]YgYf`?`i`fnUb`Y]hi`b[ `VYgWł`fY]VY`]Wł`U`Ygž`k`Ug`G]Y`ØVYf`X]Y  
VYfØ\ a hY`DU`a`YbghfU» Y`k ]ggYb`a`ØggYbž`Y]bgWł`]Y»`]Wł`XYf  
5bfY]gYž`k`Ug`G]Y`Yfk`UfhY`hi`bX`Y]b`dUUF`H]ddgž`k ]Y`G]Y`Y]b

i bj Yf[ Ygg]WXYg': chc'a UWXYb'\_ÖbbYb"

<Yfj cf[ Y\cVYb'b. 'G]Uf[ Uc'g`UbX'HfUj Y'; i ]XY  
U'h1 DU`a YbghfU»Y'G]Uf[ Uc 2

„ VYf`X]Y`VYfØ\ a hY`DU`a YbghfU» Y`Ui Z  
G]Uf[ Uc

C\_Umž`X]Y`G]Uf[ Uc`DU`a`HfYY`F cUX`cXYf`6i f[ cg`7cWc`bi h`F cUX`]gh  
b]W`h[ YfUXY`Y]b`<][ \`][ \`h`cXYf`Y]bY`\YfUi`gfU[ YbXY`5hfU\_h]cb"  
9g`]gh`YXcW`Y]W`hY]bYf`XYf`VY`]YVhYghYb`C fhYž`i a` : chc`g`ni  
a UWXYb"

K Ybb`G]Y`Y]b` : chc[ fUZ`k ]Y`]W`g]bXž`XUbb`k YfXYb`G]Y`X]YgYb`C fh  
k ]f\_]W`ni`gW`ÄhnYb`k ]ggYb`"8]Y`Ub[ Yž[ `UhhY`6Yhc`bghfU»Y`ZØ\ fh  
a ]h`ZUgh`dYfZY`hYf`Gma` a Yhf]Y`X]fY`\_h`Ub`Y]bYa` : Y`X`j`cb  
?c`\_cgdU`a Yb`j`cfVY]"`æ`<]bhYf[ fi`bX`gY`Yb`G]Y`k`Y]hYfY  
XgW`i`b[ Y`VYXYW`\_hY`6Yf[ Y`"9g`]gh`Y]b`k ]f\_]W`Zchc[ YbYf`C`fh`i`bX  
XYZ]b]h]j`Y]bYfž`Ub`XYa`G]Y`Δ`fY`8`fc`bY`Z]Y[ Yb`gc`hYbž`k`Ybb`G]Y  
Y]bY`\UVYb"

U'h1 G]Uf[ Uc`A`chc`ffUX`DU`a YbghfU»Y` 2  
U'h1 2

Gc`\_ca`a`Yb`G]Y`ni`f`DU`a`YbghfU»Y`

æ` : c`[ YbXYb`g\_]nn]YfY`]W`X]Y`VY]XYb`A`Ö[`]W`\_Y]hYbž`i`a`ni  
X]YgYf`Y[ YbXÄfYb`DU`a`HfYY`F cUX`Ui`ZG]Uf[ Uc`ni`[ Y`Ub[ Yb"

C dh]cb`%. 'G]Uf[ Uc!@UbXhci`f

K Ybb`G]Y`k`Yb][ `NY]h`\UVYb`cXYf`Ub`Y]bYa`Y]bn][ Yb`HU[ `Y]bY  
F Y]\Y`j`YfgW`]YXYbYf`<][ \`][ \`hg`Ui`ZG]Uf[ Uc`Yf`\_i`bXYb`a`ÖW`hYbž  
]gh`Yg`Y]bY[ [ i`hY`K`U\`ž`X]Y`G]Uf[ Uc`@UbX`Hci`f`ni`Vi`WXYb"

8]Yg`]gh`X]Y`VY`]YVhYghY`Hci`f`Ui`Z`XYf`æ`gY`i`bX`i`a`ZUggh`Y]b][ Y  
i`bj`Yfn]W`hVUfY`5\_h]j`]h`ÄhYbž`XUfi`bhYf.

- ?c\_cgghfU»Y
- A U[ di di b[\_c!: Y`gVYW\_Yb
- ; YVc[ YbY`DU`a YbgW\Ui \_Y`

9fZ\`fYb`G]Y`a Y\`f. `G]Uf[ Uc!@UbXhci f  
U`h1 ?c\_cgdU`a YbghfU»Y 2

C dh]cb `&. `I bUV\`Åb [ ][

A ]YhYb`G]Y`ZØf`X]Y`i bUV\`Åb [ ][ Yb`9bhXYW\_Yf`Y]b`i: U\`ffUX`]b  
; YbYfU``@ bU`ZØf`nk ]gW\Yb`&) \$`i bX`` ) \$`DYgcg`dfc`HU[ ``5i Z`X]YgY  
K Y]gY`\UVY`]W\`k Å\`fYbX`a Y]bYf`6Ygi W\Y`Y]bYb`; fc»hY`]j cb  
G]Uf[ Uc`Yf`\_i bXYh"

8Yf`K Y[ `ni f`?c\_cgdU`a YbghfU»Y`Ui Z`G]Uf[ Uc`]gh`Y]bZUW\`i bX`X]Y  
GhfU»Yb`Ui Z`X]YgYf`GhfYW\_Y`j cb`; YbYfU``@ bU`g]bX`[ i h[ YdZY[ h`  
5a `Y]bZUW\ghYb`[ Y`Ub[ Yb`G]Y`\]Yf\Yfž`]bXYa`G]Y`Y]bZUW\`X]Y  
?ccfX]bUhYb`]b`X]Y`?UfhY`i bhYb`Y]b[ YVYb"

5VYf`k Ug`G]Y`hi b`a ØW\hYbž`]ghni a`VYfØ\`a hYb`DU`a Yb!  
5i gg]W\hgdi b\_hini `[ Y\Yb`i bX`Y]bZUW\`Yhk U`Y]bYb`?]`ca YhYf`XYb  
<Ø[ Y``\]bi bhYf`ni `[ Y\Yb"

`U`h1 A chc`ffUX`Ui Z`G]Uf[ Uc 2

K c`]gh`Yg3

8Ug`DU`a`HfYY`F cUX`G]Uf[ Uc``]Y[ h`bi f`Y]bY`\_i fnY`&) !a`]bØh[ Y  
: U\`fh]j cb`; YbYfU``@ bU`fXYa`k ]W\h[ ghYb`Hci f]ghYbnYbhf`i a`Ł  
YbhZYfbh``G]Y`Z]bXYb`Yg`nk ]gW\Yb`UbXYfYb`5hhfU\_h]cbYb`k ]Y`XYa  
DU`a`HfYY`@cc`\_ci hi bX`XYf`VYfØ\`a hYb`6Ybh`DU`a`HfYY`Ua  
A UUg]b`F ]j Yf"

8]Y`VYgcbXYfY`?c\_cgdU`a YbghfU»Yž`bUW\`XYf`G]Y`gi W\Ybž`]gh`bi f  
Y]b`5VgW\`b]hh`XYf`G]Uf[ Uc`7]fW`a ZYfYbh]U`F cUXž`X]Y`g]W\`i a`X]Y  
⇒bgY`k ]bXYh"

⇒W\`UVY`XYb`[ YbUi Yb`C`fh`Ub[ Y\YZhYhž`XUa`]h`G]Y`]\`b``Y]W\hYf

Z]bXYb`\_ÖbbYb"

; cc[ `Y`A Udg!D]b.` ?c\_cgbi gg!GY`Z]Y`j %

A Y\ f.`8]Y`VYghYb`Hci f]ghYbUhhfU\_h]cbYb`]b`G]Uf[ Uc

H]ddg`ni a `5i ZbY\ a Yb`Y]bYg`Yd]gW\ Yb` : chc g

G]Y`\UVYb`U`gc`XUg`VYfØ\ a hY`DU`a `HfYY`F cUX`G]Uf[ Uc` [ YZ] bXYb3  
NY]hžY]b`dUUF` : chc g`ni `a UW\ Yb`" < ]Yf`g]bX`Y]b][ Y`H]ddgž`X]Y` ð bYb  
\Y`ZYbž`Y]bY` [ fc» Ufh][ Y`5i ZbU\ a Y`ni `a UW\ Yb

- J Yfgi W\ Yb`G]Yž`ZfØ\ `]Yf\Yf`ni `\_ca a Ybž`XU`X]Y`VYghY  
6Y`Yi W\ hi b[ `\_i fn`bUW\ `GcbbYbUi Z[ Ub[ `]gh`5i ZX]YgY  
K Y]gY`\_ÖbbYb`G]Y`Ua `DU`a `HfYY`@cc\_ci hi`\_i fn`j cf`XYf  
GhfU» Y`Ub\U`hYbž`i a `Xcfh`Ui W\ `XYb`GcbbYbUi Z[ Ub[ `ni  
Yf`VYb`"
- 6f]b[ Yb`G]Y`Y]bY`8fc\bY`a ]h` `X]Y`a Y]ghYb`X]YgYf  
[ fc» Ufh][ Yb`5i ZbU\ a Ybž`X]Y`G]Y`cb`]bY` [ YgY\Yb`\UVYbž  
k i fXYb`Ui g`XYf`@ Zhi`Ui Z[ Ybca a Yb`"8]Yg` [ ]Vh`X]Y`VYghYb  
DYfgdY\_h]j Yb`Ui Z`X]Y`Gma a Yhf]Y`i bX` [ YfUXYb`@]b]Yb`j cb  
?c\_cg dU`a Yb`"
- K YfXYb`G]Y`\_fYUh]j ` `X]Y`a Y]ghYb` : chc gž`X]Y`]W\ `]Yf  
\cW\ [ Y`UXYb`\UVYž`k i fXYb`j cf`Y]bYf` [ Ub`nYb`K Y`Y  
Ui Z[ Ybca a Yb`"GY]hXYa ` [ ]Vh`Yg`ZUgh`Y]bY`A `]`cb  
j YfgW\ ]YXYbY` : chc g`Ui g` [ YbUi `XYa gY`VYb`K ]b`\_Y`"  
: cfXYfb`G]Y`g]W\ `gY`Vgh`\YfUi g`i bX`k YfXYb`G]Y`U`g  
: chc [ fUZ`\_fYUh]j ž`i a `X]YgYb`ZUbhUgh]gW\ Yb`Cfh`ni `bi hnYb`  
K Ybb`]W\ `XUg`b`ÅW\ ghY`A U`X]Y`G]Uf[ Uc`DU`a `HfYY`F cUX  
VYgi W\ Yž`k YfXY`]W\ `Ui Z`YXYb` : U`j Yfgi W\ Ybž`Y]b][ Y  
Y]bn][ Ufh][ Y`K ]b`\_Y`Y]bni ZUb[ Yb`"
- GY]Yb`G]Y`j cfg]W\ h][ ` `]W\ `V]b`b]W\ h`\]Yfž`i a `G]Y`ni  
VY`Y\ fYbž`i bX`XUg`j YfghY`h`g]W\ `Ui W\ `j cb`gY`Vgh`"8]Yg`]gh  
Y]bY`< Ui dhghfU» Y`Ui Z`G]Uf[ Uc`i bX`G]Y`gc`hYb  
g]W\ YfghY`Ybž`XUgg`G]Y`\_Y]bYb`J Yf`\_Y\ f`gh`ØfYbž`gY]Yb`Yg  
A chc ff`ÅXYfž`5i hc g`cXYf`6ØZY`\_UffYb`°

B]W\ hij YfdUggYb.`G]Uf[ Uc`\_g`UbX`<cdd]b[

U`h1 6i f[ cg'7cWcbi h'F cUX'G]Uf[ Uc 2

K Y]hYfY`5\_h]j ]hÀhYb`]b`XYf`BÀ\Y`XYf`G]Uf[ Uc  
DU`a`HfYY`F cUX

K ]Y`]W`VYfY]hg`Yfk`À\bh`\UVYž[ ]Vh`Yg`]b`X]YgYa`6YfY]W`bcW`gc  
j ]Y`a`Y`f`ni`hi`b`"K`À\fybX`k`]f`VY`]XYf`9f\_i`bXi`b[ `XYf`ϕgY`  
hUhgÀW`]W`i`bnÀ`\][ Y`A`U`Y`X]YgY`GhfU»Y`\]bi`bhYf[ YZU`fYb`g]bXž  
Z]bXYb`G]Y`\]Yf`Y]bY`i`bUV`Àb[ ][ Y`F`Y]gYfci`hYž`i`a`Y]bYb`i`hYb  
9f\_i`bXi`b[ ghU[ `UVni`fi`bXYb"

- GcbbYbUi Z[ Ub[ .`DU`a`HfYY`@cc\_ci`h
- ;`c`XYbY`Ghi`bXY.`G]Uf[ Uc`DU`a`HfYY`F cUX
- J`cfa`]hhU[ .`.;`Y`\_fØa`a`hY`DU`a`YbgW`Ui`\_Y`
- HU[ .`A`U[ di`di`b[ \_c`F`cW`Dcc`g`cXYf`HUmJb[ VUb`7Uj`Yg
- BUW`a`]hhU[ .`HU`hU`\_`K`UggYfZU`"/`DUW]Z]Wc`6YUW`
- GdÀhbUW`a`]hhU[ .`6Ybh`DU`a`HfYY`Gk`]b[
- 5VYbX.`9bhgdUbbYb`G]Y`g]W`VY];`YbYfU`@`bU

U`h1 7cWcbi h'DU`a`HfYY`F cUX`Ui`Z`G]Uf[ Uc 2

ϕ`XYf`BÀ\Y.`DU`a`HfYY`J`]Yk`dc]bh

„ VYfbUW`hi`b[ ga`Ò[ `]W`\_Y]hYb`Ui`Z`G]Uf[ Uc

K`Ybb`G]Y`Y]bY`i`bhYf\_i`bZi`Ui`Z`G]Uf[ Uc`d`UbYbž`gc`hYb`G]Y`k`]ggYbž  
XUgg`XUg`k`]W`h][ ghY`Hci`f]ghYbnYbhfi`a`.;`YbYfU`@`bU`\Y]»h`<]Yf  
[ ]Vh`Yg`Y]bY`gc`]XY`hci`f]gh]gW`Y`ϕZfUghfi`\_hi`f`k`]Y`<c`hY`gž`F`Ygc`fhgž  
DYbg]cbYbž`FYghUi`fUbhgž`7`i`Vgž`6Ufg`i`bX`F`Y]gYVØfcg`i`bhYb`g]bX  
a`Y]bY`@YV`]b[ gh]ddg`ZØf`„ VYfbUW`hi`b[ ga`Ò[ `]W`\_Y]hYb"

H]dd.`W`UVY`Ui`W`Y]bYb`i`a`ZUggYbXYb`G]Uf[ Uc!

I`bhYf\_i`bZhgZØ`fYf`[ YgW`f]YVYbž`XYf`j`]Y`XYhU`]YfhYf`Ui`Z

„ VYfbUW`hi`b[ ga`Ò[ `]W`\_Y]hYb`Y]b[ Y`hž`j`YfdUggYb`G]Y`]b`b]W`h`

@`I`i`gj`]Yb.`@Ug`DU`a`Ug`J`]Ug`i`bX`7Ug]hUg`G]Uf[ Uc

- Hc`Yg`\_cghYb`cgYg: fØ\ghØW\_
- %\$`\$`A`YhYf`j`ca`GhfUbX`YbhZYfbh
- GWk`k`ja`a`VUX`/`'6Uf
- GWk`ÒbY`hfgd]gWY` ;`ÀfhYb`i`bX`HYffUggY

`U`h1` @Ug`DU`a` Ug`J`j`Yb`G]Uf[` Uc` 2

@`I`i`gfYgcfh`?`U`]dUm`F`Ygcfh

- I`b[` `Ui`V`]WY`hfgd]gWY`Gi`]hYb
- Hc`Yg`GWk`k`ja`a`VUX`i`bX`'6Uf
- 6YghY`@U[`Y
- ;`Ubn`]b`XYf`B`UWk`hž`UVYf`]b`XYf`B`À`Y`j`c`b`DUfhmgd`chg
- ;`Ygi`bXYg: fØ\ghØW\_

`U`h1` 2

GhfUbX`X`Ui`g`XYf`A`]hhY`\_`UggY.`Gi`fZYbXY`7UfUVUc`6YUWk`<`ci`gYg

- Hfgd]gWY`<`ØhhYb`Ua`GhfUbX`fA`U`]bUc`6YUWk`Ł
- HYffUggY`ž`6U`\_cb`i`bX`?`^]a`UUb`U[`Y
- <Y]a`Y`][`ž`\_ca`Zc`fhUVY`i`bX`c`ZYb
- C`ZYbY`?`ØWY
- ;`Y`Yb`G]Y`ni`XYb`Gi`fZgd`chg`\\]bi`bhYf

`U`h1` Gi`fZYb`]a`7UfUVUc`6YUWk`<`ci`gY`Ui`Z`XYf`≠`gY`G]Uf[` Uc` 2

<`cghY`a`]h: `U]f.`≠`U`\_U]`<`cghY`

- 6YghY`<`cghY`!5ha`cgd`À`fY`]b`G]Uf[` Uc
- GWk`ÒbYf`C`fh
- GUi`VYfY`n]a`a`Yf
- 6]`][`°

`U`h1` ≠`U`\_U]!<`YfVYf[`Y`Ui`Z`G]Uf[` Uc` 2

H]dd.`J`Yf[`Y]WYb`G]Y`X]Y`VYghYb`i`bhYf`\_i`b`Zhga`Ò[`]Wk`\_Y]hYb`Ui`Z`G]Uf[` Uc`ž`k`]Y`g]Y`Ui`Z`6cc`\_]b[`"Wk`a`Ui`Z[`YZØ`fh`g]b`X

A`Y`f`G]Uf[` Uc`F`Y]gY`ZØ`f`Yf`i`b`X`≠`gd]f`Uh]c`b`ZØf`5`VYb`hYi`Yf

⇒W \c ZYž'XUgg' ⇒bYb'X]YgYf'gW bY`Y'i bX'Y]bZUWY'@Y]hZUXYb'ZØf  
XYb'6Ygi W'XYf'VYfØ\ a hYb'DU`a`HfYY'F cUX'G]Uf[ Uc'[ YZU`Yb'\Uh"  
K Y]hYfY'F Y]gYZØ\ fYfž'5VYbhYi Yf]bgd]fUh]cb'i bX'Y]b'dUUf  
j YfghYW\_hY'GW ÅmY'Z]bXYb'G]Y'i bhYb']b'Y]b][ Yb'a Y]bYf'UbXYfYb  
F Y]gYZØ\ fYf'i bX'6`c[ dcghg]j cb'G]Uf[ Uc'i bX'XYb'D\']dd]bYb"

"

8YhU]`g

6Ygi W'Yb'G]Y'i bg'Ui Z.'Y]bY!fY]gY"XY