

G]W\ `Ub `XUg`@YVYb`]b`Y]bYa `k]bn][Yb
ZfUbnØg]gW\ Yb`8cfZ`[Yk Ò\ bYb

K]f`Yf`YVYb`XUg`Y]bZUW\Y`@YVYb`]b`Y]bYa `k]bn][Yb
ZfUbnØg]gW\Yb`8cfZ`XYa `dYfZY`_hYb`J Yfa]hh`Yf`nk]gW\Yb`XYb
< Ò\YbZØ[Yb`XYg`F Y]gYbg`i bX`XYb`hÀ[`]W\Yb
< YfUi gZcfXYfi b[Yb`XYg`GhUXh`YVYbg`A]h`XYa `@UbX`YVYb
g]bX`VYgh]a a hY`?cbbchUh]cbYb`j YfVi bXYb`"9g`]gh`Ybhk`YXYf
VØf[Yf`]W\`i bX`Ub[k Y]] [`fk Ybb`a Ub`Yg`Ubb]a a h`cXYf
UV[YgW\chhYhi bX`dfcj]bn]Y`fk Ybb`a Ub` \]bY]b[YVcfYb
k i fXY`"J cf`ZØbZ`_hYb`_hY`a]W\`XYf`; YXUb`_Y
VYi bfi \][h`a Y`fYfY`A cbUhY`]b`Y]bYa `k]bn][Yb
ZfUbnØg]gW\Yb`8cfZ`a]h`b]W\hg`UbXYfYa `U`g`Y]bYf`6ÅW`_YfY]
i bX`Y]bYa `HUbhY!9a a U!@UXYb`ni`j YfVf]b[Yb`"BUW\`Y]bYa
_hYf`i bhYfk Y[g`gW\]Yb`Yg`YXcW\`XYf`dYfZY`_hY`J Yfa]hh`Yf
nk]gW\Yb`XYb`< Ò\YbZØ[Yb`XYg`F Y]gYbg`i bX`XYb
< YfUi gZcfXYfi b[Yb`XYg`GhUXh`YVYbg`ni`gY]b`"I bX`gc
dUW`_hYb`/ Ua d`^Y`d/

K]f`Yf`YVYb`XUg`Y]bZUW\Y`@YVYb`]b`Y]bYa `k]bn][Yb`ZfUbnØg]gW\Yb
8cfZ`XYa `dYfZY`_hYb`J Yfa]hh`Yf`nk]gW\Yb`XYb`< Ò\YbZØ[Yb`XYg`
F Y]gYbg`i bX`XYb`hÀ[`]W\Yb`< YfUi gZcfXYfi b[Yb`XYg`GhUXh`YVYbg

A]h`XYa `@UbX`YVYb`g]bX`VYgh]a a hY`?cbbchUh]cbYb`j YfVi bXYb`
9g`]gh`Ybhk`YXYf`VØf[Yf`]W\`i bX`Ub[k Y]] [`fk Ybb`a Ub`Yg
Ubb]a a h`cXYf`UV[YgW\chhYhi bX`dfcj]bn]Y`fk Ybb`a Ub
 \]bY]b[YVcfYb`k i fXY`"J cf`ZØbZ`_hYb`_hY`a]W\`XYf`; YXUb`_Y
VYi bfi \][h`a Y`fYfY`A cbUhY`]b`Y]bYa `k]bn][Yb`ZfUbnØg]gW\Yb
8cfZ`a]h`b]W\hg`UbXYfYa `U`g`Y]bYf`6ÅW`_YfY]i bX`Y]bYa `HUbhY!
9a a U!@UXYb`ni`j YfVf]b[Yb`"

BUW\`Y]bYa `_hYf`i bhYfk Y[g`gW\]Yb`Yg`YXcW\`XYf`dYfZY`_hY
J Yfa]hh`Yf`nk]gW\Yb`XYb`< Ò\YbZØ[Yb`XYg`F Y]gYbg`i bX`XYb
< YfUi gZcfXYfi b[Yb`XYg`GhUXh`YVYbg`ni`gY]b`"I bX`gc`dUW`_hYb`k]f

bUW`Y]bYa`ZØW`h][Yb`6Ygi`W`]b`XYf`<Y]a`Uhi`bgYfY`?cZZYf`i`bX
nc[Yb`ZØf`Y]b`dUUF`A`cbUhY`bUW`:`fUb`_fY]W`"

8]Y`5bdUggi`b[`Ub`XUg`@YVYb`]b`i`bgYfYa`k`]bn][Yb`ZfUbnØg]gW`Yb
8cfZ`k`Uf`Y]bZUW`Yf`U`g`]W`VYZØfW`hYh`Uhh`" `<]Yf`[`]Vh`Yg`k`Yb][Yf`
A`YbgW`Yb`ž`k`Yb][Yf`@`À`fa`ž`k`Yb][Yf`I`a`k`Y`h`j`YfgW`a`i`hni`b[`i`bX
VYggYfYg`9ggYb`" `≠W` `]YVY`@`cbXcb`ž`UVYf`GU]bh`×`i`]b`XY`A`UfbYg`U`h
Y]bYb`9]bV`]W`_`]b`XUg`Y]bZUW`Y`@YVYb`[`Y[`YVYb` `k`c`\\`Y]b
VYggYfYg`@YVYb`":`c`[`YbXYg`U`UVYb`k`]f`]b`i`bgYfYa`YfghYb`A`cbUh
\\]Yf`[`Ya`UW`h"

A`]h`X]YgYf`5i`gg]W`h`Ui`Z[`Yk`UW`h

×XYb`A`cf[`Yb`k`UW`Yb`k`]f`a`]h`X]YgYa`6`]W`_ØVYf`XUg`8cfZ`Ui`Z`

`U`h1` 2`5h`Ug`/`6c`chg

J`Yf[`Y]W`Yb`G]Y`Yg`a`]h`X]YgYa`6`]X`ž`XUg`]W`]a`5i`[`i`gh`&`\$`%(`j`cb
a`Y]bYa`6`U`_`cb`]b`@`cbXcb`Ui`Z[`Ybca`a`Yb`U`UVY`ž`Y]bYb`HU[`VY]`cf
k`]f`ni`i`bgYfYf`K`Y`hfY]gY`Ui`ZVfUW`Yb`";`i`hYg`K`Y`hYf`a`UW`h`gc
Y]bYb`I`b`hYfgW`]YX"

`U`h1` 2`5h`Ug`/`6c`chg

<`UVY`a`]W`Ub`XYb`a`cf[`YbX`]W`Yb 6ci`Ub[`Yf]Y!`@Ui`Z[`Yk`Ø`b`h

`U`h1` K`UbXYfb`]b`Y]bYa`k`]bn][Yb`ZfUbnØg]gW`Yb`8cfZ`2`5h`Ug`/
6c`chg

≠`@`cbXcb`]gh`Zf]gW`Yg`ž`bcW`k`Ufa`Yg`6fch`Y]b`;`Ybi`gg`" `<]Yf`]gh`Yg
Y]bY`B`cfa`U`]h`À`h`"HUhg`À`W`]W`_`Ubb`g]W`Y]bY`6`À`W`_YfY`]b]W`h
6`À`W`_YfY`]f`c`XYf`6ci`Ub[`Yf]Y`E`b`Ybb`Yb`ž`Yg`gY`]X`Ybb`ž`g]Y`gh`Y`h`]f
6fch`j`cb`;`fi`bX`Ui`Z`bYi`\\`Yf`"I`bg`k`]fX`Ui`W`[`YgU[`h`ž`XUgg`XYf
Ni`[`Ub[`XYf`8cfZ`Yk`c`b`Yf`ni`6fch`[`YgY`h`]W`j`cf[`YgW`f]YVYb`]gh"

A Y\ f'; YVÀW_ [Y[YggYb`U`g`Ya dZc\`Yb

`U`h1 ?cbX]hcfY]Yb`Ui g`Y]bYa `ZfUbnÒg]gWYb`8cfZ 2 5h`Ug/`6cchg

8]YgY`8]b[Y`g]bX`k]Y`XYf`<]a a Y``]b`Y]bYf`?]ghY""DYhYf`a U[`XYb
A c__UžUVYf`]WY`VYj cfnl [Y`GWc_c`UXY""K]f`j Yfgi WYbž`i bg`Ui Z
Y]bYb`dfc`K cWY`ni `VYgWfÀb_Ybž`UVYf`YhnhY`K cWY`\UhhYb`k]f
j]Yf"

;]b[`ZØf`Ub[Y` : U\ fhYb`ØVYf`[Y`VY` : Y`XYf

- `U`h1 2
- `U`h1 2

F]WYh][Yg` : U\ ffUXZU\ fYb` \ UVY`]WY`Yfgh`k À\ fYbX`i bgYfYf
Y]b`À\ f][Yb`5Vk YgYb\Y]h[Y`Yfbh""8]Y`@UbXghfU»Yb`j cb`GU]bh
æi]b`XY`A UfbYg`\UVYb`a]f`X]Y`A Ò[`]WY_Y]h[Y[YVYbž`bYVYb`XYa
JYf_Y\ f`ni `ZU\ fYbž`XUg`G][bU`]g]YfYb`ni `ØVYb`i bX`XUg`U``[Ya Y]bY
6Yk i gghgY]b`ni `j YfVYggYfbž`c\ bY`a Y]b`@YVYb`Ui Z`XYb`GhfU»Yb
j cb`@cbXcb`]b`; YZU\ f`ni `Vf]b[Yb"

; YgWYb_Y`Ui Z`i bgYfYf` : YbghYfVUb_
[YZi bXYb

`U`h1 @c_U`Yg`CVgh]b`i bgYfYa `ZfUbnÒg]gWYb`8cfZ 2 5h`Ug/
6cchg

A UXUa Y`6fcUX`k c\ bh`k Ygh]WY`j cb`i bg`i bX`DUhf]W_`i bX`Gmj]Y
Ògh]WY""G]Y`\]bhYf`UggYb`i bg`\Ài Z][; YgWYb_Y`Ui Z`XYf
: YbghYfVUb_""K]f`\UhhYb`5df]_cgYbž`6]fbYbž`gWUfZYg`5dZY`a i g
i bX`gc[Uf`nk Y]`f]Yg][Y`?ØfV]ggY"

6Ygi WY hY`Y]b`8cfZZYgh

`U`h1 8cfZZYgh]b`i bgYfYa `ZfUbnÒg]gWYb`8cfZ 2 5h`Ug/`6cchg

DYhYf`bU\ a `XUg; `Ug`5dZY`k Y]b`Ybh[Y[Yb""7 Ygh`Wca V]Yb3`ZfU[hY

Yf'i bX' [f]Z' bUW' gY]bYf'6f]Y ZhUgW' Y''8 Yf'À`hYfY' < Yff'k]b_hY'UV
i bX'Yf_`ÀfhYž'XUgg'XYf'5dZY`k Y]b'Ui g'XYf'F Y[]cb'_cghYb`cg'gY]"
K]f'j YfvfUW'hYb'XYb'B UW'a]hhU['XUa]hž'i bg'i bhYfvfcW'Yb'a]h
XYb'9]b\Y]a]gW'Yb'ni 'i bhYf\U`hYbž'X]Y'ZfYi bX`]W'Yfk Y]gY
'Ub[gUa 'gdfUW'Ybž'XUa]h'k]f']\fY': fU[Yb'j YfghY\Yb'_cbbhYb"

; Y_Ui ZhYg'; Ya ØgY'VY]' A C B G⇒I F'Dc]fch

- 'U'h1 2
- 'U'h1 2

›XYb'GUa ghU[a cf[Yb'ZÀ\fh' A cbg]Yi f'Dc]fch 'a]h'Zf]gW'Ya 'C Vgh
i bX'; Ya ØgY'ni a ' < Ui dhd`Uhm''9f'k Y]› ž'XUgg'k]f'9b[`ÀbXYf'g]bXž
U`gc'_ca a Ybh]Yfh'Yf']a a Yf'XUg'K YhhYf"

5» Yb'ja ': fY]Yb'i bhYf'I B G9F 9A 'DUj]`cb

'U'h1 9ggYb'ja ': fY]Yb']b'i bgYfYa 'ZfUbnØg]gW'Yb'8cfZ 2 5h'Ug/
6cchg

DYhYf'\Uh'Y]bYb'ž `]U!6U`_cb]b'@cbXcbž'XU\Yf']gh'Xcfh'_Y]b'9ggYb
a Ø['W'"A Y]bg'ØVYfV`W_h'X]Y'5%&'i bX']gh'XU\Yf'bi f
Z b_h]cbgZÀ\][ž'k Ybb'G]Y'≠f'9ggYb'a]h'8Àa dZYb'a Ø[Yb''<]Yf
\UVYb'k]f'Y]bYb'gW'ØbYb'DUj]`cbž'k Ybb'G]Y'g]W'Ub'X]Y'6]YbYb
[Yk Ø\bh'\UVYbž'X]Y'ja '@Uj YbXY`Vi gW']b'XYf'BÀ\Y'gi a a Yb"

7\Ufa UbhY'HUV`YUi g'Ub'YXYf'GhfU» YbYW_Y
[YZi bXYb

- 'U'h1 2
- 'U'h1 2
- 'U'h1 2
- 'U'h1 2

8]Y'5VhY]_]fW'Y'GU]bh'œi]b'XY'A UfbYg']gh'ZØbZ; Y\ a]bi hYb'X]Y
GhfU» Y'\]bi bhYf''9fvUi h'ja '%%'i bX'%&'i ›J\ f\i bXYfhž']gh'Yg'Y]b
a ÀfW'Yb\UZhYf'@Yi W'hi fa 'Ui Zi bgYfYb'F UXFY]gYb'bUW' < Ui gY"

K]f`]YVYb`Ui W`XUg`<Ui g`i a`X]Y`9W_Y`"K]f`k]ggYb`b]W`hž`k Yf
Xcfh`k c`b`hž`UVYf`k]f`j Yfa`i hYbž`XUgg`Yg`Y]bY`_`Y]bY`U`hY`8Ua`Y
]ghž`X]Y`i bg`j]Y`Y]W`h`Ui ZY]bYb`8f]b`_`Y]b`ÀXhž`k Ybb`k]f`g]Y`Ya`U`g
hfYZZYb`gc`hYb`"

GY`Vgh[Ya UW`hY`GhfYi gY`[Ya UW`h

- `U`h1 2
- `U`h1 2
- `U`h1 2
- `U`h1 2

K]f`dZØW_Yb`HfUi VYb`i bX`Y`dZY`]b`i bgYfYa`<]bhYf`cZ`DYhYf
`UhhY`X]Y`j YffØW_hY`≠Y`Yž`gY`Vgh[Ya UW`hY`GhfYi gY`ni`a UW`Yb`
Yhk Ugž`XUg`_`Y]bYf`j cb`i bg`Y`ni j cf`[Ya UW`h`UhhY`"9g`U`h`gY`f
[i h[YgW`a`YW`h`"

9]bY`ZUb`hUgh]gW`Y`G`c`k`j`c`b`Y]bYf j`c`f`V`Y]ZU`f`Y`b`X`Y`b`6`U`b`X`Y`f`k`]g`W`h`

5`g`]W`X]Y`D`U`_`U`hY`ZØf` Bi`]hg`F`ca`UbYg`g`U`ž`Y`fk`UfhY`hY`]W`
`c`W`b`Åg][`Y`hk`Ug`DUbhca`ja`Y`U`Z`h`Y`g`" `K]f`_]W`_`Y]h`U`h`X]Y`6`U`b`X
Y]bY`ZUb`hUgh]gW`Y`@] Y!DYfZcfa`UbW`_`]b[`Y`Y[`h`fU`YfnY`Y`b`G]Y
a`Y]bY`g`W`f`Y`W`_]W`Y`?`Ua`Y`f`U`ZØ`fi`b[`" `≠W`g`U[`Y`DY`hY`f`ž`Y`f`gc`a`]W`
b]W`h]b`X]Y`B`À`Y`X`Y`g`8]b[`g`U`gg`Y`b`Ł`

J`c`f`:`f`Y`i`X`Y`[`Y`h`U`b`n`h`]b`X`Y`f`5`b[`U]g!GY`_`h]c`b`

`U`h1 @YVYbga`]hY`]b`Y]bYa`Gi`d`Y`fa`Uf`_`h`_`Ui`ZYb`2`5`h`U`g`/`6`c`c`h`g`

I`bgYf`b`ÅW`ghYf`Gi`d`Y`fa`Uf`_`h`]gh`Y]bY`&\$`_`a`"Ub[`Y`<]b!`i`b`X
F`ØW`ZU`f`hž`k`Ug`_`Y]bY`Y]W`hY`5i`Z[`UVY`]ghž`XU`k`]f`_`Y]b`5i`hc`U`VY`b`"
I`bgYf`Y`6`Ya`Ø`i`b[`Y`b`Ui`Z`X`Ya`:`U`ff`UX`k`i`f`X`Y`b`X`i`f`W`X]Y
9`b`h`X`Y`W`_`i`b[`Y]bYg`5`b[`U]g!5`V`g`W`b]h`g]b`X`Y`b`≠`h`Y`f`A`U`f`W`Y
VY`c`b`h`"Di`XX]b[`W`f`Ya`Y`g`fi`b`Xi`a`°`

J`Y`f`gi`W`hž`g]W`h`U`b`X]Y`9]b`Y]a`]g`W`Y`b`

Ubni dUggYb

Bi bž'Xi 'a i ggh'Yg'j Yfgi WYbž'cXYf3

'U'h1 @YVYb']b'Y]bYa 'ZfUbnÒg]gWYb'8cfZ 2 5h'Ug/ '6cchg

: Øf'Y]bYb'Ua ØgUbhYb'6'W_'Ui Z'XUg'9I dUh!@YVYb']b': fUb_fY]Wž
'YgYb'G]Y'5'M'Uf']b'h\Y'A YfXY'j cb'GhYd\Yb'7'Uf_Y"

@Y]hV]'X: '5h'Ug/ '6cchg

.

8YhU]`g

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