

A YhUa Ug_ 'ghUfhYh'9h\ YfYi a 'GhU_]b[
GYfj]Wg'ØVYf'@]Xc'i bX'FcW_Yhdcc` `` '8YZ]

5a ' : fY]hU['[UV'X]Y'K YV' !K U`Yh! :]fa U'A YhUa Ug_ž'Y]bY
HcW hYf[YgY`gW UZh'XYg'9h\ YfYi a !nYbhf]YfhYb
I bhYfbY\ a Ybg'7cbgYbgmgž'VY_Ubbhž'XUgg'XYf'6YhU!GhUfh
XYf'9h\ YfYi a !GhU_]b[!: i b_h]cbYb'ØVYf'X]Y '@ei]X'GhU_]b[!
8]YbghY'j cb '@]Xc'cXYf'FcW_Yhdcc`j YfZØ[VUf'gY]b'k]fX"
6Ybi hnYfž'X]Y'9h\ YfYi a 'ghU_Yb'i bX'GhU_]b[!6Y'c\bi b[Yb
j YfX]YbYb'a ÒW hYbž'_ÒbbYb'Y]bYb'XYf'GhU_]b[!5bV]YhYf
]bbYf\U'V'XYf'6Ybi hnYfcVYfZÅW Y'XYf'A YhUa Ug_
K YV' !6f]YZhUgW Y'Ui gk Å\`Yb"'8Ug'bYi YghY'I dXUhY'j cb
7cbgYbgmg!Y][YbYa 'A YhUa Ug_ Yfa Ò[`]W h'Yg'6Ybi hnYfbž
9h\ YfYi a 'a]h'@]Xc'i bX'FcW_Yhdcc`ni 'ghU_Yb'8Yf
K YV' !K U`Yh!5bV]YhYf'A YhUa Ug_ Ub[Y_ØbX][h'XUgg'XUg
I bhYfbY\ a Yb'9h\ YfYi a '\]bni [YZØ[h'\Uh'f9H< Ě'GhU_]b[!
8]YbghY'ZØf'X]Y'Hcc`g'XYg'K U`Yhg"' K]f'žFYi Yb'i bg'gY\ fž
⇒bYb'a]hY]Yb'ni '_ÒbbYbž'XUgg'G]Y'Yhnh'ghU_Yb'_ÒbbYb
9H< 'a]h'@]Xc'cXYf'FcW_Yhdcc`ØVYf'/ Ua d^Y``]d/

5a : fY]hU['[UV`X]Y`K YV' !K U`Yh! :]fa U`A YhUa Ug_ž`Y]bY
HcW hYf[YgY`gW UZh`XYg`9h\YfYi a !nYbhf]YfhYb
I bhYfbY\ a Ybg`7cbgYbgmgž`VY_Ubbhž`XUgg`XYf`6YhU!GhUfh
XYf`9h\YfYi a !GhU_]b[!: i b_h]cbYb`ØVYf`X]Y`@]ei]X
GhU_]b[!8]YbghY`j cb`@]Xc`cXYf`F cW_Yhdcc`j YfZØ[VUf`gY]b
k]fX``6Ybi hnYfž`X]Y`9h\YfYi a `ghU_Yb`i bX`GhU_]b[!
6Y`c\bi b[Yb`j YfX]YbYb`a ØW hYbž`_ØbbYb`Y]bYb`XYf
GhU_]b[!5bV]YhYf`]bbYf\ U`V`XYf`6Ybi hnYfcVYfZ`ÅWY`XYf
A YhUa Ug_`K YV' !6f]YZhUgWY`Ui gk Å\`Yb"

8 Ug`bYi YghY`I dXUhY`j cb`7cbgYbgmg!
Y][YbYa`A YhUa Ug_`Yfa Ø[`]W h`Yg
6Ybi hnYfbž`9h\YfYi a`a]h`@]Xc`i bX
F cW_Yhdcc`ni`ghU_Yb

8Yf`K YV' !K U`Yh!5bV]YhYf`A YhUa Ug_`Ub[Y_ØbX][h`XUgg`XUg
I bhYfbY\ a Yb`9h\YfYi a` \]bni [YZØ[h`Uhf`9H< ě`GhU_]b[!8]YbghY
ZØf`X]Y`Hcc`g`XYg`K U`Yhg`` K]f`ZfYi Yb`i bg`gY\ fž`ÀbYb`a]hhY`]Yb
ni`_ØbbYbž`XUgg`G]Y`Yhnh`ghU_Yb`_ØbbYb`9H<`a]h`@]Xc`cXYf
F cW_Yhdcc`ØVYf`XUg`DcfhZc`]c`8Udd`ž`gU[hY`A YhUa Ug_`Ua
: fY]hU[`` A YhUa Ug_`GhU_]b[`Yfa Ø[`]W h`Yg`ÀbYbž`X]fY`_h`a]h`XYb
@]Xc!`i bX`F cW_Yhdcc`!Dfchc`_c`Yb`ni`]bhYfU[]YfYb`_`_Y]bY
g_]nnYb\ UZhYb`8f]hhUbV]YhYfž`X]Y`Àf`GhU_]b[`ZØf`G]Y`Yf`YX][Yb`ž`gc
XUg`I bhYfbY\ a Yb`\]bni [YZØ[h`Ui Z`Hk]hhYf"

à`K YgYbh]WYb`[YVYb`X]Y`VY]XYb`5bV]YhYf`j cb`@]ei]X`GhU_]b[ž
@]Xc`i bX`F cW_Yhdcc`ž`nk Y]a]h`FYVUg]b[`i bX`FYdf]W]b[
j YfdUW_hY`JYfg]cbYb`j cb`9h\YfYi a`Ui g`f`9H< ě`VY_Ubbh`U`g
GH9H<`i bX`F`9H<``6Ybi hnYf`YbhgWY]XYb`g]W`Yb`hk`YXYf`XUZØfž
X]YgYb`GH9H<`#`9H<!Hc_Yb`ni`VY\U`hYbž`k`Ybb`g]Y`\fYb`9]bgUhn
ni`fØW_n]Y\Yb`a ØW hYbž`cXYf`j Yfk`YbXYb`]b`U`g`G]WYf\Y]h]b
ØXYW`bhfU`]nYX`Z]bUbW`Q`XYf`hUi`gW`Yb`G]Y`Yg`gc[Uf`[Y[Yb`Y]b
UbXYfYg`Hc_Yb`fhi`fØW`ni`9H<`cXYf`Y]b`UbXYfYg`9F`7`&`\$`ě`ž
A YhUa Ug_!8YhU]`g]b`U`6`c`[Y]bhfU[`Ua`gY`VYb`HU[
j YfØZYb`h]W`h`8Yf`6`c`[VY]hfU[`XYf`K YV' !K U`Yh! :]fa U`ZØ[h

\]bni .

≠b`X]YgYf`Dcgh!A Yf[Y!K Y`h[]Vh`Yg`Y]bY`k UWΛgYbXY
B UWΛ ZfU[Y`bUWΛ`Y]bZUWΛYb`GhU_]b[!8]YbghYbž`X]Y
9h\YfYi a ``YmhYbX`jWΛ`g]WΛYfb`k YfXYb``9[U`ž`cV`G]Y`Y]b
YfZU\YbYf`GhU_Yf`cXYf`Y]b`Ni`gWΛUi`Yf`Ub`XYf`GY]hYb`]b]Y
g]bXž`A YhUa Ug_`GhU_]b[`V]YhYh`Y]bY`]bhi`]hj`Y`A`Ò[`]WΛ`_Y]hž
Y]bni ghY][Yb`i`bX`≠fY`9]bgÅhmY`ni`hÅh][Yb`O`h\YfYi a QZØf
6Y`c`b`i`b[Yb"

@Ui`h`XYZ]`Ua U"WŁa`**GhUh]gh]_Ybž`[]Vh`Yg`Ua`%`" `>]bi`Uf`Y]bYb
[YgdYffhYb`; YgUa`hk`Yfh`fHJ`@Łj`cb`(`&ž`A`j``]UfXYb`!`G!8c``Uf`]b
XYf`XYnYbhfU`Yb`:]bUbn]Yfi`b[`fKYZ]Ł``8Yf`@]ei`]X`GhU_]b[!5bV]YhYf
@]Xc`]gh`XUg`Xca`]bUbhYghY`Dfchc`_c``]b`6Yni`[`Ui`Z`X]Y`HJ`@;`fÒ»`Y
i`bX`Xca`]b]Yfh`a`]h`*`ž`-,`A`j``]UfXYb`!`G!8c``Uf`HJ`@`i`a`%`*`ž`&`i`"
FcW_Yhdcc``fF`D@Ł`Uh`Yi`hY``Ui`h`XYZ]`Ua U"WŁa`Y]bYb`HJ`@]`cb
fi`bX`+`%-`ž`&`A`j``]cbYb`!`G!8c``Uf`**A`Yhf]_Yb`Ua`i`fY]hU[`"****

F 9H<`\`Uh`Y]bY`; YgUa`ha`Uf`_`h`Ud]hU`]g]Yfi`b[`j`cb`Yhk`U`&`*(`ž`(-
A`j``]cbYb`!`G!8c``Uf`i`bX`Yg`g]bX`Yhk`U`%+`("`+`&)`F 9H<`]a`!`a`Ui`Z`
F 9H<`\`À`h`X]Y`%&(`"[`fÒ»`hY`A`Uf`_`h`Ud]hU`]g]Yfi`b[`gdcg]h]cb`]b`XYf`
?fmdhcÒ`_cbca`]Yž`k`À`fYbX`**GH9H`VYZ]Y`\`h`XYb`%&``[`fÒ»`hYb`D`Uhm`
GH9H<`\`Uh`Y]bY`A`Uf`_`h`Ud]hU`]g]Yfi`b[`j`cb`fi`bX`*`ž`)`A`j``]UfXYb`!`G!
8c``Uf`ž`i`bX`ni`a`NY]hdi`b`h`XYg`J`YfZUggYbg`X]YgYg`5fh]_Y`g`[]Vh`Yg
Y]b`n]f`_i`Y]YfYbXYg`5b[YVchj`cb`("`,`**`,`-`&`GH9H<`"**

K`j]Y`gY\`Yb`G]Y`X]Y`5i`gk`]f`_i`b[Yb`XYg`<]bni`ZØ[Ybg`j`cb
GhU_]b[!8]YbghYb`ni`A`YhUa`Ug`_`g`K`U``Yh`Ui`Z`XUg`9h\YfYi`a`!
²`_`cgmg`hYa`3`HY]`Yb`G]Y`i`bg`≠fY`A`Y]bi`b[`ni`X]YgYa
H\Ya`U`]a`?`ca`a`Yb`hUfVYfY]WΛ`i`bhYb`a`]h"

ǻJa]Y`FYXa Ub`

ǻJa]Y`FYXa Ub`]gh`XYf`B UWX f]WX hYb`Y]hYf`VY]`6]hWŁ]b"WŁa`BYk g`i bX`Y]b`]b`:`cf]XU`
`YVYbXYf`>ci fbU`]gh`ZØf`:`]bUbnhYWX bc`c[]Y`FYXa Ub`]gh`gY]h`&\$%`U_h]j Yg`A]h[`]YX`
XYf`? fmdhck À\fi b[g!7ca a i b]hm`9f`\Uh`Y]bY`@Y]XYbgWX UZh`ZØf`6]hWŁ]bž`C dYb!Gci fW!
7cXY`i bX`X`YnYbhfU`Y`5bk YbXi b[Yb`"GY]h`GYdhYa VYf`&\$%)` \Uh`FYXa Ub`a Y`f`U`g`
*"\$\$\$`5fh_]Y`ZØf`6]hWŁ]b"WŁa`BYk g`ØVYf`X]Y`Yi hY`Ui Z_ca a YbXYb`X]gfi dh]j Yb`
Dfchc_c``Y`[YgWX f]YVYb"

6]`Xb UWX k Y]g. `G\i hhYfghcW_ž`D]l UVUmž`K]_]7ca a cbg

6Y`]YVhYfY`B UWX f]WX hYb

: U`g`8i`Yg`j YfdUggh`\Ugh

f[bWh]cbfXž`gž`]XŁ`o`j Uf`^gž`Z`g`1`X"[Yh9`Ya Ybhg6mHU[B Ua YfgŁQ\$Q`
]ZfX"[Yh9`Ya Ybh6m`Xf]XŁŁ`fYhi fb/`g`1`X"WfYUhY9`Ya YbhfgŁ/`g"]X`1`
]X/`g"gfWl "`\hhdg.##WŁbbYWh"ZUWX Vcc_"bYh#YbSl G#gX_"g. l ZVa`1`%`
j Yfg]cb1`j`" "&"/Z`g"dUfYbhBcXY"]bgYfh6Y Zc fYf`gž`Z`gŁ/`qfXcW a Ybhž`
fgWf]dhfž`fZUWX Vcc_!`g`gX`fŁŁ/`

8YhU]`g

6Ygi WX Yb`G]Y`i bg`Ui Z. `_fmdhc!bYk g"Uh