

%- `]bhYfYggUbhY : U_hYb`ØVYf ? Ua VcXgWU

K]f`k UfYb`&\$%%`ni a `YfghYb`A U`]b`?Ua VcXgWU`i bX`Yg
k i fXY`gcZcfh`ni `Y]bYa `i bgYfYf`@]YV`]b[g`ÀbXYf" `?]U`_Y`fhY`
X]YgYg`&]f`ni fØW`_i bX`j Yf`]YVhY`g]W`YfbYi h"8]Yga U`
i bhYfbU`a `g]Y`Y]bY`A Y`_cb[!?fYi nZU`fh`i bX`gU`XUg`@UbX
Ui g`Y]bYf`UbXYfYb`DYfgdY`_hj Y`j cfVY]n]Y`Yb"G]Y`VYgi W`hY
Ui W`X]Y`_]cb]gW`Yb`Gh`hYb`j cb`5b[_cf`K Uh`i bX`XYa
G&%!; YZ`Ab[b]gž`nk Y]`F Y]gYn]Y`Yž`X]Y`nk Y]`ni h]YZgh
[Y[Ybg`Ah`n`]W`Y`J Yf[Ub[Yb`Y]hYb`Yfj cf`YVYb.`Y]bY`j cb
Fi `a `i bX`C di `Ybnž`X]Y`UbXYfY`j cb`9fb]YXf][i b[`i bX
; fUi gUa `Y]h"5b[Yg]W`hg`XYf`Xi b`_Yb`J Yf[Ub[Yb`Y]h
? Ua VcXgWUg`k `AfY`Yg`Y]bZUW`ž`g]W`bi f`Ui Z`X]Y
gW`fYW`_]W`Yb`9fY][b]ggY`fi bX`i a `XUg` &]f`Bi` `` `ni
_cbnYbhf]YfYb"9VYbgc`k `AfY`Yg`i bdUggYbXž`g]Y`ni
ØVYf`_YVYb" `a `: c`[YbXYb`/ Ua d`^Y``]d/

K]f`k UfYb`&\$%%`ni a `YfghYb`A U`]b`?Ua VcXgWU`i bX`Yg`k i fXY
gcZcfh`ni `Y]bYa `i bgYfYf`@]YV`]b[g`ÀbXYf" `?]U`_Y`fhY`X]YgYg`&]f`
ni fØW`_i bX`j Yf`]YVhY`g]W`YfbYi h"

8]Yga U`i bhYfbU`a `g]Y`Y]bY`A Y`_cb[!?fYi nZU`fh`i bX`gU`XUg
@UbX`Ui g`Y]bYf`UbXYfYb`DYfgdY`_hj Y`j cfVY]n]Y`Yb"G]Y`VYgi W`hY
Ui W`X]Y`_]cb]gW`Yb`Gh`hYb`j cb`5b[_cf`K Uh`i bX`XYa
G&%!; YZ`Ab[b]gž`nk Y]`F Y]gYn]Y`Yž`X]Y`nk Y]`ni h]YZgh`[Y[Ybg`Ah`n`]W`Y
J Yf[Ub[Yb`Y]hYb`Yfj cf`YVYb.`Y]bY`j cb`Fi `a `i bX`C di `Ybnž`X]Y
UbXYfY`j cb`9fb]YXf][i b[`i bX`; fUi gUa `Y]h"

5b[Yg]W`hg`XYf`Xi b`_Yb`J Yf[Ub[Yb`Y]h`? Ua VcXgWUg`k `AfY`Yg
Y]bZUW`ž`g]W`bi f`Ui Z`X]Y`gW`fYW`_]W`Yb`9fY][b]ggY`fi bX`i a `XUg
&]f`Bi` `` `ni ` _cbnYbhf]YfYb"9VYbgc`k `AfY`Yg`i bdUggYbXž`g]Y`ni
ØVYf`_YVYb"

æ : c` [YbXYb`ZØ [Y`jW`Y`bY`A`]gW`i` b [`Ui`g`]bhYfYggUbhYb` : U_hYb
ØVYf`?Ua` VcXgW`U` \]bni` ž`X`Y`gck` c` \ `X`Ug` ; i` hY`U`g`Ui` W`X`Ug`
GW`Y`W`hY`Ui`g`XYf`Ui` » Yf [Yk` Ò` \ `b`]W`Yb` ; YgW`]W`hY`XYg`@UbXYg`
k`]XYfgd`Y [Y`b`"

⇒bhYfYggUbhY` : U_hYb`ØVYf`?Ua` VcXgW`U`

% " 8 Ug` [fÒ » hY`fY`] []ÒgY`6Ui`k`Yf`_ž`XUg`Ya`U`g` [YVUi`h`k`i`fXYž`
]gh`5b [_cf`K`Uh`f`GhUXhYa`dY`Ł`]b`?Ua` VcXgW`U`" 8 Ug`
; Y`ÀbXY`a`]ggh` [Yk`U`h`] [Y`%`*`&`*`\$\$\$`a`&`f%`*`&ž`*`<`Y`_hUfŁ`
i`bX`k`i`fXY`j`cb`?` \ a`Yf`!`?`Òb`] [`Gi`fmUj`Ufa`Ub`" =`j`cb`%`%`%`
V`]g`%`%)` \$`ni` `9` \ fYb`XYg` \]bXi`]gh`]gW`Yb` ; chYg`J`]g\bi`
YfVUi`h`fE`i`Y`Y` . ; i`]bbYgg`K`cf`X`F`YWcfXgŁ`

&" 8]Y`_Ua` VcXgW`Ub`]gW`Y` : `U [[Y`nY`] [h`XUg`<`Ui`dh [YVÀi`XY`
j`cb`5b [_cf`K`Uh`Ni`gUa`a`Yb`a`]h`XYf` : `U [[Y`5Z` \ Ub`]gh`Ub`g`
]gh`g`]Y`Y`]bY`j`cb`bi`f`nk`Y`]GhUUhgZU [[Yb`a`]h`Y`]bYa`
; YVÀi`XY`" fE`i`Y`Y` . `6f`]h`Ubb`]WŁ`

`U`h1`]bhYfYggUbhY`!ZU_hYb`!i`VYf`!_Ua` VcXgW`U`!` 2`5`h`Ug`/` `6`c`ch`g`
8]Y`_Ua` VcXgW`Ub`]gW`Y` : `U [[Y`

% " 5b [_cf`K`Uh`k`Uf`Ui`W`X`Yf`<`Ui`dh`X`fY` \ cf`h`ZØ`f`XYb` :]`a`
Hca`V`F`U`]XYf`f`&`\$`\$`%`Ł`a`]h`5b [Y`]b`U` `œ`]Y`" fE`i`Y`Y` . `A`8`6`Ł`

&" ⇒XYf`i`a` [YVi`b [j`cb`5b [_cf`K`Uh` []Vh`Yg`i`bhYf`XYa`
hfcd`]gW`Yb`K`U`X`VcXYb`a`Y` \ fYfY`V`]g\Yf`b`]W`h`
Xc`_i`a`Ybh`YfhY`a`]hY`U`hYf`]W`Y`Gh`X`hY`ž`X`Y`nk`]gW`Yb` -` \$\$`
i`bX`%`" (\$\$` \ fY`U`h`g`]bX`" `9`]b`] [Y`X`]YgYf`i`bYbhXYW`_hYb`
Gh`X`hY` \ UVYb`X`Y` ; fÒ » Y`j`cb`?`Ua` VcXgW`Ug`<`Ui`dhghUXh`
D` \ bca` `DYb` \ " `8`]Y`9`bhXYW`_i`b [Yb`k`i`fXYb`]a` `ž`b`]X`]YgYg`
 \ fYg`a`]h`@UgYfhYW`bc`c []Y` [Ya`UW`h`" fE`i`Y`Y` . ; i`UfX`]UbŁ`

' " GUa`dYU` \]gh`X`]Y`_Ua` VcXgW`Ub`]gW`Y`5fhž`A`YbgW`Yb`ni`
VY [fÒ » Yb`i`bX`g`]W`j`cb` \ bYb`ni`j`YfUVgW`]YXYb`" `9`g` []Vh`
ZØbZj`YfgW`]YXYbY`A` Ò [`]W`_Y`]hYbž`Ya`UbXYa`ž`XYf`
GUa`dYU` \ j`Yfk`YbXYhž`F`YgdY`_h`ni`Yfk`Y`]gYbž`Y`bUW` `5`hYfž`
6Yn`]Y \ i`b [`ni` `À`bYb`i`bX`gcn`]U`Ya` `Gh`U`h`g`" fE`i`Y`Y` .]]g`h`
5b [_cfŁ`

U`h1]bhYfYggUb
hY!ZU_hYb!i VYf!_Ua VcXgWU!& 2 7U`]cdY^Yb#7fYUh]j Y`7ca a cbg
#U`Yb`Z0bZGUa dYU\g'g]bX`X]Y`DU`a Yb`k]Y`Y]bY`@chi gV`i a Y
UbY]bUbXYf[Y`Y[h`9]b][Y`GUa dYU\`Ybh\U`hYb`Y]bY`_`Y]bY
GW`Y]ZY"

% 8Yf`?0b][j cb`?Ua VcXgWU`]gh`Ui g[YV]`XYhYf
6U`Yhh`AbnYf``?0b][`G]\Ua cb`k i fXY`Ua `&- ``C_hcVYf
&\$\$(`U`g`A cbUfW`j YfY]X][hz`bUW`XYa `gY]b`J UhYf`Ui g
[Ygi bX\Y]h]W`Yb` ; f0bXYb`UVXUb_hY``fE i Y`Y. `667Ł

&" 9]bY`Hc]YhYž`X]Y`GW`Ami b[Yb`ni Zc`[Y`V]g`ni `("\$\$\$\$`I G!
8c``Uf`[Y_cghYh`\Uhž`k i fXY`Z0f`XYb`dYfg0b`]W`Yb
; YVfUi W`j cb`Df]bnYgg]b`A U\U`7\U_f]`G]f]bX\cfb`Ui g
H\U]`UbX`[YVUi hz`U`g`g]Y`5bZUb[`XYg`d\`fYg`?Ua VcXgWU
VYgi W`hY``fE i Y`Y. ; i UfX]UbŁ

' " ?Ua VcXgWU`k Uf`j cb`%` *` `V]g`%-)`' `-\$`d\`fY`Ub[`Y]bY
?c`cb]Y` : fUb_fY]W`g``I bhYf`?0b][`G]\Ubc`i _`k i fXY`Yg`Y]b
i bUV\`Ab [] [Yg`@UbX`bUa Ybg`?0b][fY]W`?Ua VcXgWU``9g
k i fXY`k `A\`fYbX`XYg`Nk Y]hYb`K Y`h_f]Y[g]j cb`%-` (%`V]g
%-`) `j cb`dUb`VYgYhh``fE i Y`Y. `667Ł

(" :`i ggXY`Z]bY`g]bX`ja `cVYfYb`A Y_cb[`]b`?Ua VcXgWU`ni
Z]bXYb``9hk U`+`\$!`%\$`\$`#X]j]Xi Yb`YVYb`]b`Y]bYa `%-`\$`_a
`Ub[Yb`5VgW`b]hh`XYg`A Y_cb[``fE i Y`Y. `K K : Ł

) " 8]Y`I G5`Vca VUfX]YfhYb`?Ua VcXgWU`UV`%-`*`-` \Y]a `]W`ž
k Y]`XUg`@UbX`k `A\`fYbX`XYg`J]YhbUa _f]Y[g
bcfXj]YhbUa Yg]gW`Yb`GhfY]h_f`AžhYb`Ui ZgY]bYa `6cXYb
GW`i hn`Vch``fE i Y`Y. `667Ł

* " #`?Ua VcXgWU`[]h`Yg`U`g`i b\0Z]W`ž`a]h`XYf` : i »gc`\Y`Ui Z
Ya UbXYb`ni `nY][Yb``5i »YfXYa `k `Afy`Yg`j 0``][
]bU_nYdhUVY`ž`a]h`XYb` : 0»Yb`Ui Z]f[YbXYhk Ug`<Y]][Yg`ni
nY][Ybž`k]Y`ni a `6Y]gd]Y``Ui ZY]b`6i XX\U!6]`X``fE i Y`Y.
@cbY`m`D`UbYhŁ

+ " Nk]gW`Yb`%-`+) `i bX`%-`+-`k UfYb`Dc``Dchg` ; i Yf]``Ug`XYf
FchYb`?`a Yf`i bX`]\`fY`Vfi hU`Y` : cfa `XYg`fUX]_U`Yb
?ca`a`i`b]ga`i`g`Z0f`XYb`HcX`j`cb`V]g`ni`nk`Y]`A`j``cbYb
?Ua VcXgWU`bYfb`j`YfUbhk`cfh]W``fE i Y`Y. `7`5`K`cf`X` : UW
6cc_Ł

'U`h

1]bhY

fYggUbhY!ZU_hYb!i VYf!_Ua VcXgWU!a UggYb[fUV!% 2 ; !5VYbhYi Yf 8Yf`GhUbXcfh`Y]bYg`A UggYb[fUVYg`]b`?Ua VcXgWU

8Yf`Cfh`Y]bYf`A YggY`]b`?Ua VcXgWU`fb`@8.; `5Xj Ybhi fYgk

% " K Å\fybX`X]YgYf`[UbnYb`NY]h`k i fXYb`GhUXhVYk c`bYf`Ui Zg @UbX`[Yhf]YVYbž; Y`X`k i fXY`k Yfh`cgž; fi bXZfY]`Y]hYb k i fXYb`VYgWb]hhYb`i bX`FY`][]cb`k i fXY`j YfVchYb" `8]Y FchYb`?`a Yf`dfÅ[hYb`XYb`5i gXfi W_` MUF`NYfc ži a Y]bY`FØW__Y`f`ni` VYggYfYb`NY]hYb`XUfni ghY`Yb" <i bXYfhhUi gYbXY; YV]`XYhY`k i fXYb`]b`GdYn]U`nYbhfYb [YZc`hYfh`i bX`\]b[Yf]W`hYh" `5bXYfY`j Yf\i b[YfhYb`cXYf ghUFVYb`Ub`?fUb`\Y]h`cXYf`9fgW`ÒdZi b["fE i Y`Y. 6f]hUbb]WUk

&" <Yi hY`k]fX`XYf`Vfi hU`Yb`NY]h`Ua`HU[`XYg; YXYb_Ybg [YXUW`hž`XYf`ZfØ`Yf`BUh]cbU`hU[`XYg`< UggYg`[YbUbbh k i fXY" `8Yf`HU[`k]fX`YXYg`š\`f`Ua` `&\$" `A U]VY[Ub[Yb" fE i Y`Y. `667k

' " š\`fnY`b`hY`XYg`?`f]Y[Yg`\UVYb`Y]bYb`gW`k YfYb`Hf]Vi`hj`cb ?Ua VcXgWU`[YZc`fXYfh" `8Ug`@UbX`\Uh`ØVYf`(` "\$\$\$ 5a`di`h]YfhY.`Y]bYf`j`cb`&`-\$`?Ua VcXgWUbYfbž`k Ug`Y]bY XYf`\ØW`ghYb`FUhYb`XYf`K`Y`h`XUfghY`h" `9g`]gh`Ui`W`Y]bYg XYf`Ua`ghÅf`ghYb`j`Yfa`]bhYb`@ÅbXYf`XYf`K`Y`h" `fE i Y`Y. <i ZZ]b[hcb`Dcghk

(" Jc[Y`gd]bbYb`k YfXYb`]b`?Ua VcXgWU`U`g`GbUW_ [Y[YggYb" `K Å\fybX`XYf`FY[]Yfi b[gnY]hj`cb`Dc`Dch`U» Yb X]Y`?Ua VcXgWUbYf`c`U`[YZi bXYbY`Jc[Y`gd]bbYbž`XU UbXYfY`@YVYbga`]hhY`c`Zh`_bUdd`k UfYb" `J]Y`Y ?Ua VcXgWUbYf`\UVYb`Y]bY`Jcf`]YVY`ZØf`X]Y`f]Yg][Yb Gd]bbYbh]YfY`Ybhk]W`Y`h`i bX`g]Y`k YfXYb`bcW`\Yi hY \Åi Z][`_cbgi`a]Yfh" `5bgW`Y]bYbX`g]bX`X]Y` `6Y]bY Ub[YbY`a` `_bUW_]["fE i Y`Y. `HY`Y[fUd`k

'U`h1]bhYfYggUbhY!ZU_hYb!i VYf!_Ua VcXgWU!% 2 A Uh

7cbbc`Ym#7fYUh]j Y`7ca`a`cbg; Y_cW`hY`Jc[Y`gd]bbYb`k YfXYb cZh]cb`GhfU» Yb`ÅbX`Yfb`j Yf`Ui`Zh

% " H][Yf`k i fXYb`X]YgYg`š\`f`]b`?Ua VcXgWU`ZØf` Zi b_h]cbU` Ui g[YghcfVYb`Yf`_`Åfh" `8Yf`Y`h`hY`H][Yf`k i fXY`&\$\$+`]b

XYf`Ògh]WXYb`Dfcj]bn`A cbXi`_]f]`[Yg]W hYh" `b`XYb
K `À`XYfb`? Ua VcXgWUg`YVhYb`ZfØ\Yf`]bXcW]bYg]gWY
H][Yfž`UVYf`X]Y`]bhYbg]j Y`K`]XYfY]`j cb`H][Yfb`i bX`] \fYf
6Yi hY` \Uhj Yf\YYfYbXY`NU\`Yb`ni f` : c`[Y" `fE i Y`Y.
; i UfX]UbŁ

&" 8]Y`9bhk U`Xi b[gfUhY`]b`? Ua VcXgWU`]gh`Y]bY`XYf
\ÒW ghYb`XYf`K` Y`h` >XYg` > \f`[Y\Yb`fi bX`&"\$\$\$
E i UXfUh_]`ca YhYf`f(- ("&%\$`5WfYgŁ`K U`X`j Yf`cfYb" `b`XYb
%- - \$Yf` > \fYb`k i fXYb`<c`n`cbnYgg]cbYb`j cb`XYf
FY[]Yfi b[]`[Yk `À\fhž`i bX`Yg`Zc`[hY`Y]bY`fUgWXY
9bhk U`Xi b[]`gc`ghUf`ž`XUgg`XUg`@UbX`&\$)\$`X]Y
Xf]h\ÒW ghY`9bhk U`Xi b[gfUhY`XYf`K` Y`h`\UhhY" `fE i Y`Y.
667Ł

' " 9]bY`XYf`V]nUffYfYb`HUhgUWXYb`ØVYf`? Ua VcXgWU`]gh`X]Y
VYgcbXYfY`6Yn]Y\i b[]`XYg`@UbXYg`ni`BcfX`cfYU" `8 Ug
hcHU`]hÀfY`FY[]a Y`Yf`ÒZbYhY`_Øfn`]W`XUg`' \$`A`]`cbYb
8c`Uf`hYi fY`5b[_cf`DUbcfUa U`A`i`gYi`a`]b`G]Ya`fYUd`U`g
; YgWXYb`_`Ub`? Ua VcXgWU" `fE i Y`Y. `b`XYdYbXYbŁ

@cbY`m`D`UbYh`7 Ua VcX]U`]gh`Y]b`i`a`ZUggYbXYf`FY]gYZØ\`fYf`ZØf`XUg
@UbXž`]XYU`ZØf`X]Y`Yb][Ybž`X]Y`gck`c`\`X]Y`k`]W h][ghYb
GY\Ybgk`ØfX][_Y]hYb`Yf`_i`bXYb`U`g`Ui`W`k`Yb][Yf`VYZU\`fYbY
GhfU» Yb`bY\`a`Yb`a`ÒW`hYb"

@Y]hV]`X.`5hUg`/`6cchg

8YhU]`g

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