

## 5bU`mgY`XYg`Dcgh!G\UdY``U!I d[ fUXYg`j`cb` 9h\YfYi a . `B`UbgYb`

⇒ JcfZY`X`XYf`G\UdY``U!I d[ fUXYg`j`a`YhnhYb`A`cbUh`gdY`\_i`YfYb`j`j`Y`Y`?`fmdhc!9I`dYfhYb`ž`XUgg`X`Y`5`\_hj`j`Yfi`b`j`cb`GhU`\_YX!9h\Yf!5V\YVi`b`[`Yb`XYb`DfY]g`XYg`bUh]j`Yb`J`Yfa`Ò[`Ybgk`Yfhg`bUW`i`bhYb`XfØW`\_Yb`\_`ÖbbhY`"8]Y`bYi`YghYb`8`UhYb`XYi`hYb`YXcW`XUfUi`Z`\]bž`XUgg`XYf`J`Yf`\_Ui`ZgXfi`W`\_Ui`ZX]Y`9H<`bUW`XYa`FØW`\_ni`[`gc`Yhk`Ug`k`j`Y`Y]b`B`]W`h!`9fY][`b]g`k`Uf`"8]Yg`k`j`fX`Xi`fW`X]Y`HUhgUW`Y`i`bhYfa`Ui`Yfhž`XUgg`X]Y`9]b`U[`Yb`ZUgh`XYf`A`Yb`[`Y`XYf`]a`i`a`\_Ui`Z`VYZ]bX`]W`Yb`9H<`Ybhgd`fUW`Yb`"Ni`ghUbX`j`cb`9h\YfYi`a`.`Dcgh`G\UdY``U`8]Y`G\UdY``U!⇒`d`Ya`Ybh]Yfi`b`[`k`Uf`j`cb`YbhgW`Y]XYbXYf`6YXYi`hi`b`[`ž`XU`g]Y`XYb`5Vni`[`XYf`UV[`YghYW`\_hYb`9H<`j`ca`6YUW`cb`Yfa`Ò[`]W`hY`7\U]b`Ni`a`U`Yf`YfghYb`a`U`"8`Ug`9fY][`b]g`ÒghY`YXcW`\_Ui`W`6YXYb`\_Yb`Ui`gž`XUgg`X]Y`b]W`h/`Ua`d`^Y``]d/`

⇒ JcfZY`X`XYf`G\UdY``U!I d[ fUXYg`j`a`YhnhYb`A`cbUh`gdY`\_i`YfYb`j`j`Y`Y`?`fmdhc!9I`dYfhYb`ž`XUgg`X]Y`5`\_hj`j`Yfi`b`j`cb`GhU`\_YX!9h\Yf!5V\YVi`b`[`Yb`XYb`DfY]g`XYg`bUh]j`Yb`J`Yfa`Ò[`Ybgk`Yfhg`bUW`i`bhYb`XfØW`\_Yb`\_`ÖbbhY`"

8]Y`bYi`YghYb`8`UhYb`XYi`hYb`YXcW`XUfUi`Z`\]bž`XUgg`XYf`J`Yf`\_Ui`ZgXfi`W`\_Ui`ZX]Y`9H<`bUW`XYa`FØW`\_ni`[`gc`Yhk`Ug`k`j`Y`Y]b`B`]W`h!9fY][`b]g`k`Uf`"8]Yg`k`j`fX`Xi`fW`X]Y`HUhgUW`Y`i`bhYfa`Ui`Yfhž`XUgg`X]Y`9]b`U[`Yb`ZUgh`XYf`A`Yb`[`Y`XYf`]a`i`a`\_Ui`Z`VYZ]bX`]W`Yb`9H<`Ybhgd`fUW`Yb`"

## Ni`ghUbX`j`cb`9h\YfYi`a`.`Dcgh`G\UdY``U`

8]Y`G\UdY``U!⇒`d`Ya`Ybh]Yfi`b`[`k`Uf`j`cb`YbhgW`Y]XYbXYf`6YXYi`hi`b`[`ž`XU`g]Y`XYb`5Vni`[`XYf`UV[`YghYW`\_hYb`9H<`j`ca`6YUW`cb`

Yfa Ò[ `]Wk hY `7 \ U]b `Ni a `U`Yf`YfghYb`a U`"8 Ug`9fY][ b]g`ÒghY  
`YXcWk`Ui Wk`6YXYb`\_Yb`Ui gž`XUgg`X]Y`b]Wk`h`UV[ Yg]Wk`YfhY`9H< `]b  
l a `Ui Z[ YVfUWk`h`k YfXYb`\_ÒbbhYž`k Ug`ni `Ub`U`hYbXYa  
J Yf`\_Ui ZgXfi W`ZØ`fYb`\_ÒbbhY`"8 Yf`c`dh]a `]gh]gWk`Y`5i gV`]W`  
`]b[ Y[ Yb`VYgU[ hž`XUgg`XUg`F]g]\_cž`b]Wk`h`UV`YVYb`ni `\_ÒbbYbž  
VYgY]h][ h]ghž`k Ug`ni `a Y`f`9]bnU`i`i b[ Yb`ZØ`fh"

@Ui`h`BUbgYbg`Øb[ ghYa`6Yf]Wk`hž`XYf`XYb`Ni ghUbX`j`cb`9h`YfYi`a  
bUWk`G`UdY`U`U`UbU`mg]YfhYž`k`i`fXY`VYc`VUWk`hYhž`XUgg`X]Y  
9`]a`]b]Yfi`b[ `j`cb`B]Wk`hY]bnU`i`i`b[ gf]g]\_Yb`V]g`Yf`XYb  
J Yf`\_Ui ZgXfi W`Xi`fWk`5V`YVi`b[ Yb`Ui`g[ Y[ `]Wk`Yb`U`h`8 UfØVYf  
`]bUi`g`]gh`Y]b`Yf`YV`]Wk`Yf`HY]`XYf`UV[ Y`c`VYb`Yb`9H<  
k`U`fgWk`Y]b`]Wk`b]Wk`h`ZØf`XYb`J Yf`\_Ui Z`VYgh]a`a`h"

⊕`XYa`6Yf]Wk`h`Y]»`h`Ygž`XUgg`XUg`l`d[ fUXY`BYhkc!Bi`i`i`  
5i`gk`]f`\_i`b[ Yb`Ui Z`XYb`9H<!9]bgUhn`UhhY"

9g[ `]Vh`%-`ž`A`]c`"9H<ž`Y]bgWk`Y]»`]Wk`6Y`c`b`i`b[ Ybž`Ui Z`XYa  
6YUWk`b`7`U]b`Yb`hgd]Wk`h`Yi`hY`XYf`A`Yb[ Y`Ub`9H<`Ui Z`XYa  
6YUWk`b`7`U]b`k`À`fYbX`XYg`G`UdY`U`!`d[ fUXYgž`k`Ug`VYXYi`hYhž  
XUgg`Yg`V]g`Yf`\_Y]bY`BYhkc`Ui`gk`]f`\_i`b[ Yb`Ui Z`XUg`BYhkc`Yf`  
`UhhY"

8]Y`5i`gnU`i`i`b[ gUbZfU[ Yb`k`i`fXYb`j`cb`nYb`hfU`]g]YfhYb`?`fmdhc!  
6ØfgYb`Xca`]b]Yfh`?`fU`\_Yb`i]Y[ h`a`]h`Y]bYa`5V`YVi`b[ gj`c`i`a`Yb  
j`cb`a`Y`f`U`g`&`\*`i`i`U`Yf`9H<!5V`YVi`b[ Yb`gY]h`XYa`l`d[ fUXY`Ub  
XYf`Gd]hnY`"8]Yg`À`b[ h`k`U`fgWk`Y]b`]Wk`a`]h`XYa`Øb[ ghYb  
VY`ØfX`]Wk`Yb`J`cf[ Y`Yb`[ Y[ Yb`XYb`5VghYW`X]Ybgh`XYf`l`G!6ØfgY  
ni`gUa`a`Ybž`XYf`g]Y`[ Ynk`i`b[ Yb`U`hž`X]Y`UV[ YghYW`hY`9H<`Ub`X]Y  
9]b`Y[ Yf`]fYf`D`UhhZcfa`ni`fØW`\_ni`[ YVYb"

5bXYfY`VYa`Yf`\_Ybgk`YfhY`<`Ui`dh!9H<!5V`YVi`b[ Yb`g]b`X`6]bUbWk`ž  
7c]bVUgY`i`bX`Df]j`UhY`HfUb`gUWh]cbg`A`]bYf.`\$l`ZZXž`k`cVY]`%`ž`i`ž  
%&ž) `i`Vnk`"`)`ž`(`i`XYg`5b`hY]`g]j`cb`Df]bW]dU`9H<  
ni`fØW`\_Ync[ Yb`k`i`fXYb`" `i`Y]»`h`Yg]a`6Yf]Wk`h"

9H<`gY]h`G`UdY`U`ni`fØW`\_Ync[ Yb`"BUbgYb

9]bYb`A cbUh`bUW`XYa`l d[ fUXY`UVYb`g]W`X]Y`5V`YVi b[ Yb  
ghUf`\_j Yf`Ub[ gUa hž`i bX`X]Y`8UhYb`j cb`B Ubgyb`XYi hYb`XUfUi Z`]bž  
XUgg`X]Y`A Y`f`Y]h`XYf`l bhYfbY`a Yb`]`f`j YfV`Y]VYbXYg`; i h`UVYb  
j cfYfgh`VY`U`hYb`"l bhYfbY`a Yb`k ]Y`@]Xcž`6]bUbW`ž`7c]bVUgY`ž`?`]`b  
i bX`GhU`\_Y]g`] YfnY]W`bYhYb`]a`j Yf[ Ub[ YbYb`A cbUh  
9]bnU`i b[ Yb`j cb`a Y`f`U`g`Y]bYf`A`]`cb`9h`Yf`"

## J Yf`U`hYb`j cb`5i gnU`i b[ Yb

B Ubgyb`VYf]W`hYhYž`XUgg`ZUgh`+`i`i`XYf`9H<`j ca`6YUW`cb  
UV[ Ync[ Yb`k i fXYb`7`U]b`k i fXYb`V]g`Yf`Ub`nYbhfU`Y`6ÖfgYb  
[ YgYbXYh`"8Yf`; fc»hY]`XUj cb`]gh`YXcW`XUfUi Z`ni fØW`ni ZØ`fYbž  
XUgg`79L`g`X]Y`9H<`Ub`g]W`gY`Vgh`UV`YVYbž`k Ug`XUfUi Z  
`]bXYi hYhž`XUgg`XYf`; fc»hY]`XYf`Ub`X]YgY`l bhYfbY`a Yb  
[ YgYbXYhYb`Hc`\_Yb`b]W`h`ni a`J Yf`\_Ui Z`VYgh]a`a`h`]gh`GhUhhXYggYb  
X]YbYb`X]YgY`Hc`\_Yb`XYa`]bhYfbYb`6Yhf]YV`XYf`6ÖfgY`"

⇒a`; Y[ YbgUhn`XUni`a`UW`h`X]Y`A Yb[ Y`XYf`9H<`ž`X]Y`j cb  
5VbY`a Yfb`Ub`XYnYbhfU`Y`6ÖfgYb`[ YgYbXYh`k ]fXž`bi f`%ž&`i`XYg  
; YgUa`hUbhY]`g`Ui`g`"@Ui`h`B Ubgyb`k i fXYb`fi bX`&\$`i`XYf  
UV[ Ync[ YbYb`9H<`Ub`U`Y`UbXYfYb`5XfYggYb`[ YgYbXYhž`X]Y`b]W`h  
U`g`79L`ž`89L`ž`GhU`\_]b[ `cXYf`8Y: ]`[ Y`\_YbbnY]W`bYh`g]bXž`i bX`Yhk`U  
\*`i`U`Yf`UV[ Ync[ YbYb`9H<`k i fXYb`ni a`YfbYi hYb`5VghYW`\_Yb  
[ YgYbXYh`"

B Ubgyb`[ Y`h`XUj cb`Ui`gž`XUgg`X]Y`K`U`fgW`Y]b`]W`\_Y]h[ Yf]b[ Yf  
]ghž`XUgg`X]YgY`?c`c`fhY`; Yk`]bbY`a`]hb]a`a`hž`XU`g]Y`]a`a`Yf`bcW`  
J`U`]XUhc`f`!`?`bchYb`VYhfY]VYb`i bX`X]Y`9]bgUhd`f`Āa`]Yb`Ui`hca`Uh]gW`  
j YfUfVY]hYh`k YfXYb`"8U`Yf`k`ØfXYb`Y]b][ Y`9H<`j cb  
HY]`UV`YVi b[ Yb`ni a`6YUW`cb`ni fØW`\_Y`fYb`7`U]b`i`a`a`Y`f`  
9fhfU[ `ni`Yfn]Y`Yb`"

...

6Ygi W\ Yb 'G]Y 'i bg 'Ui Z. '\_fmdhc!bYk g"Uh