

A ]YhYf`]b`XYf`@[ Uf]i gghfU» Y. `9]b`5i gni [ ž  
XYf`b]W\ h`YbXYb`k ]`

↳ `9a XYb`j Yfk Y`Yb`A ]YhdUfhY]Yb`]b`XYf`@[ Uf]i gghfU» Y`hfc hn  
?ØbX][ i b[ "K Y`W\Y`<YfUi gZcfXYfi b[ Yb`ghY\Yb`] \bYb  
VYj cf3

⇒ `NYbhf i a `Y]bYf`Ub\U`hYbXYb`8YVUhhY`ghY\Yb`X]Y`A ]YhYf`XYf  
\]ghcf]gW\Yb` ; YVÄi XY`]b`XYf`@[ Uf]i gghfU» Y`]b`9a XYb`"GYW\g  
K c\bi b[ Yb`g]bX`bUW\`Y]bYf`?ØbX][ i b[ gZf]ghž`X]Y`VYfY]hg`9bXY  
† b]`UV`]YŽ`k Y]hYf\]b`VYgYhnhž`k Ä\fybX`XYf`9][ YbhØa Yfž`XYf  
9a XYf`6YUa hYb!6Ui !i bX`K c\bi b[ gj YfY]bž`Y]bYb`5Vf]gg`d`Ubh"  
8 Ug`GW]W\_gU`X]YgYf`A ]YhYf`nY][ h`X]Y`<YfUi gZcfXYfi b[ Ybž`X]Y`a ]h  
XYf`Gi W\Y`bUW`VYnU\`VUFYa `K c\b fUi a `j YfVi bXYb`g]bXž`i bX  
k ]fZi: fU[ Yb`ØVYf`X]Y`i bhYfghØhni b[ `XYf`VYghY\YbXYb`A ]YhYf`Ui Z`

6`Y]VYbXY`<YfUi gZcfXYfi b[ Yb`ZØf`X]Y  
A ]YhYf[ Ya Y]bgW\ UZh

8]Y`j YfV`]YVYbYb`A ]YhYf`]b`XYf`@[ Uf]i gghfU» Y`gY\Yb`g]W\`]b`Y]bYf  
\Y]\_`Yb`@U[ Y`"Hfc hn`Y]bYf`fYW\ha Ä» ][ Yb`?ØbX][ i b[ `UVYb`g]Y  
g]W\`YbhgW\]YXYbž`] \fy`Kc\bi b[ Yb`j cfYfgh`b]W\h`ni `j Yf`UggYb"  
K ]f`g]bX`\_Y]bY`<Ui gVYgYhnyf`ž`VYhcbYb`X]Y`A ]YhYf`i bX`Yf`\_ÄfYbž  
XUgg`g]Y`k Y]hYf\]b`dØb`\_h]W\`] \fy`A ]YhY`nU\`Yb`"8]Yg`ghY`h`Y]bY  
k ]W\h][ Y`HUhgUW\Y`XUf`"8]Y`5`\_nYdhUn`XYf`A ]YhYb`Xi fW\`XYb  
9][ YbhØa Yf`\_ØbbhY`X]Y`fYW\h`]W\Y`@U[ Y`XYf`A ]YhYf`ghÄf`\_Yb`i bX  
nY][ hž`XUgg`Yg`a Ò[ `]W\Yfk Y]gY`Y]bYb`A Ub[ Y`Ub`[ YY][ bYhYb  
K c\bi b[ gU`hYfbUh]j Yb`[ ]Vh"

8Yf`8fi W`\_XYf`6Ui d`ÄbY

8]Y`G]hi Uh]cb`k ]fX`ni gÄh`]W\`j cb`XYb`ZcfhXUi YfbXYb`6Ui d`ÄbYb

XYg'9][ YbhØa Yfg'VY`UghYh"8Yf'6Ui nUi b`]gh'VYfY]hg'Ui Z[ YghY`hž  
XcW`XYf'5Vf]gg'XYf'; YVÀi XY`ghY`h'bcW`Ui g"9g'[ ]Vh'XYfnY]h  
\_Y]bY`\_UfYb`ϕZcfa Uh]cbYb`XUfØVYfž'k ]Y`Ub[ Y`XYf'NY]hfUi a`V]g  
ni`Y]bYf'a Ø[ `]W`Yb`F`Ài a i b[ `hUhg`W`]W`gY]b`k ]fX"8]Y  
6Yk c`bYf`c`ZZYb`Ui Z`Yhk Ug'a Y`f'NY]hi bX`ZØ`Yb`g]W`i bg]W`Yf  
ØVYf`X]Y`VYj c fghY`YbXY`9bhk ]W`i b[ `]`fYf`K c`bg]hi Uh]cb" K ]Y  
\_Y]b`X]YgYg' \_Y]bY`NY]hZYbghYf`k ]f`\_]W`]ghž'k Y]» `b]Ya UbX ž  
Yf`\_`ÀfhY]bYf`XYf'5bk c`bYf"

## 8]Y`Gi W`Y`bUW`bYi Yb`K c`ba Ø[ `]W`\_Y]hYb

J cb`XYb`Y]bgh%) `A ]YhdUfhY]Yb`UVYb`V]g`Yf`bi f`XfY]`Y]bY`bYi Y  
K c`bi b[ `[ YZ bXYbž'i bX`XYf`Dfc`nYgg'[ YghU`hYh'g]W`U`g`gW`k ]Yf][ "  
Nk Uf`Uh`XYf'6YUa hYbVUi `XYb`6Yhf`c`ZZYbYb`Ub[ YVchYbž'g]W`ØVYf  
Y]bYb`ϕhYfYggYbhYbVc[ Yb`ZØ`K c`bi b[ Yb`ni`VYk YfVYbž`XcW`  
j ]Y`Y`A ]YhYf`UVYb`\_Y]bY`dUggYbXYb`5`hYfbUh]j Yb`[ YZ bXYb`cXYf  
g]bX`XUfUi Z`Ub[ Yk ]YgYbž`Ui Z`X]Y`YfZc`fXYf`]W`Yb`8c`i a YbhY`ni  
k UfhYb"9]bY`A ]YhYf]b`\_ØbbhY`i a n]Y`Ybž]gh`YXcW`Ui ZY]bY  
l bhYfgW`f]Zi`Ub[ Yk ]YgYb`\_Y]bY`J YfnØ[ Yfi b[ ž`X]Y`i: fi ghfUh]cb`i bX  
l bg]W`Yf`Y]h`Vf]b[ h"

## 9]b`5i Zfi Z`ni f`l bhYfghØhni b[

8]Y`Ub[ Zf]gh][ Y`@Øgi b[ `ZØf`X]Y`K c`bg]hi Uh]cb`]b`9a XYb`a i gg`]b  
XYb`i: c`i g[ YfØW`h`k YfXYb"8Yf`ni bY`a YbXY`8fi W`Ui Z  
VYghY`YbXY`A ]Yhj Yf`À`hb]ggY`i bX`X]Y`i bni fY]W`YbXY  
6YfY]hghY`i b[ `j cb`5`hYfbUh]j Yb`nY][ Yb`X]Y`B`chk YbX][ \_Y]hj cb  
gc`n]U`Yf`l bhYfghØhni b[ " `ϕ`Y]bYf`NY]hž`]b`XYf`XYf`K c`bi b[ ga Uf`h  
]b`j ]Y`Yb`F`Y[ ]cbYb`i bhYf`8fi W`ghY`hž`\_ØbbhY`X]YgY`G]hi Uh]cb`U`g  
6Y]gd]Y`ZØf`À`b`]W`Y`<YfUi gZc`fXYfi b[ Yb`]b`UbXYfYb`Gh`XhYb  
X]YbYb"

## Ni gUa a YbZUggi b[

8]Y`U`hi Y`Yb`9bhk ]W`i b[ Yb`]b`XYf`@[ Uf]i gghfU» Y`j YfXYi h]W`Ybž  
k ]Y`g]W`J Yf`ÀbXYfi b[ Yb`]a`K c`bi b[ gk YgYb`X]fY`h`Ui Z`X]Y  
@VYbgei U`]h`h`XYf`A YbgW`Yb`Ui gk ]f`\_Yb`\_ØbbYb"9g]gh`j cb

YbhgWXY]XYbXYf'6YXYi hi b[ ž'[ YY][ bYhY'A U» bU\ a Yb'ni 'Yf[ fY]ZYbž  
i a 'A ]YhYf''b'X]YgYf'gWk ]Yf][ Yb', VYf[ Ub[ gd\ UgY'ni  
i bhYfghØhnYb'i bX'g]WXYfni ghY''Ybž'XUgg'XUg'6YXØfZb]g'bUW\ 'XYb  
bØh][ Yb'K c\bi b[ Yb'[ YXYW\_h'k ]fX"

· · B 5;

8YhU]`g

6Ygi WXYb'G]Y'i bg'Ui Z.'b!U[ "XY