

Gca a Yf`]WXY`@]YVYgVf]YZY. `9]bY`? ca ÒX]Y
ØVYf`9\ fY`i bX`9a ch]cbYb`]b`B]nnU

9]bY`i a cfj c`Y`Gca a Yf_ca ÒX]Y`ØVYf`: Ua]]YbWUcg`i bX
@]YVY`]b`B]nnU. `đ`]YhhY`YbhXYW_h`a]h`i bYfk UfhYhYb
K YbXi b[Yb`]f`@YVYb`bYi "

8]Y`ZUW`hhYbfY]WXY`H\Ya Uh]_j cb`6Yn]Y\i b[Yb`i bX`GY`VghZ]bXi b[
]b`XYf`?i bgh`Z]bXYh`]b`XYf`bYi Yb`?ca ÒX]Y` @]YVYgVf]YZY`Ui g
B]nnU `VYgcbXYfYg`; Y\Öf`5VgY]hg`j cb`XYb`cVYfZÄW`]WXYb
?`]gWXYg`XYg`: Ua]]Ybi f`Ui Vg`h\Ya Uh]g]Yfh`XYf`:]`a ž`i bhYf`XYf
FY[]Y`j cb`đ Ub`7U`VÅfUWž`XUg`_ca d`YI Y`; YZYW`h`ink]gWXYb`@]YVYž
JYf[Ub[Yb\Y]hgVYk`Ä`h][i b[`i bX`Ya ch]cbU`Yb`?cbZ`_hYb`"A]h
Y]bYf`A]gW`i b[`Ui g`<i a cf`i bX`8fUa Uh]_`Vf]b[h`Yf`X]Y
<YfUi gZcfXYfi b[Yb`XYg`@YVYbg`Ui ZY]bY`ni [Äb[`]WXY`K Y]gY
bÄ\Yf"

: Ua]]YbVUbXY`i bX`Ya ch]cbU`Y`5W`hYfVU\ b

⇒a`NYbhfi a`XYf`; YgW]W`hY`ghY`h`đ`]YhhY`ž`Y]bY`hU`Ybh]YfhY
?Øbgh`Yf]bž`X]Y`a]h`]\fYb`≡i ghfUh]cbYb`j cb`?]bXYfVØW`Yfb`X]Y
<YfnYb`j]Y`Yf`YfcVYfh`\Uh`5i Z`XYf`Gi W`Y`bUW`Fi`Y`i bX
9f\c`i b[`j cb`]fYa`Y`h]gWXYb`@YVYb`]b`DUf]g`VY[]Vh]g]Y`g]W`]b
X]Y`CV\i h`]\fYf`: Ua]]Yž`bi f`i a`]b`Y]bYb`Ghfi XY`VYa Ø`hYf
ZUa]]ÄfYf`đhf][Yb`ni`i [YfUhYb`"8Yf`:]`a`ghY`h`_Ufž`XUgg
: Ua]]YbXmbUa]_Yb`\Äi Z][j cb`; Y\Y]a b]ggYb`i bX`i b[Y`ØghYb
: fU[Yb`[YdfÄ[h]g]bX"

9]b`i bYfk UfhYhYf`: i bX`i bX`X]Y`Gi W`Y`bUW`
XYf`K U\ f\Y]h

8]Y`<UbX`i b[`b]a a h`Y]bY`i bYfk UfhYhY`K YbXi b[ž`U`g`: fUbÄc]gž

Y]b`dYbg]cb]YfhYf`C ZZ]n]Yfž`Ui Z`XYa`'8 UWXVcXYb`gY]bYg`<Ui gYg
U`hY`@]YVYgVf]YZY`YbhXYW`h`'8]YgY`6f]YZYžj c``j cb
`Y]XYbgWX UZh]WX Yf`F`Yhc f]_`i bX`c ZYbVUf`j cb`gY]bYf` : fUi`5bb]Y
j YfZUggž`k YfZYb` : fU[Yb`Ui Zž`X]Y`XUg` : i bXUa`Ybh`gY]bYf
6Yn]Y\i b[`]bg`K Ub`Yb`Vf]b[Yb`` : fUb`Āc]g`]gh`Ya`d`Ōfh`i bX`d`Ubh
F UWX Yž`k Ug`ni`Y]bYf`F`Y]gY`bUWX`B]nnU`ZŌ`fhž`X]Y`a`Y`f`ØVYf`X]Y
@]YVY`i bX`d`Yfg`Ōb`]WX`Y`→Ybh]h`Āh`c ZYbVUfh`U`g`i fgdf`Ōb[`]WX
Ub[Ybca`a`Yb`"

Dc`mJa`cf]Y`i bX`X]Y`<YfUi gZcfXYfi b[Yb`XYf
@]YVY

8]Y`H\Ya`Uh]_`XYf`Dc`mJa`cf]Yž`cXYf`XUg`@YVYb`]b`a`Y`fYfYb
fca`Ubh]gWX`Yb`6Yn]Y\i b[Yb`[`Y]WX`nY]h][ž`k`]fX`Ui ZY]bY`Ua`ØgUbhYž
UVYf`Ui`WX`bUWX`XYb`_]WX`Y`5fh`i bX`K`Y]gY`VY`UbXY`h`` : fUb`Āc]g
5b[f]Z`Ui Z`gY]bYb`j Yfa`Y]bh`]WX`Yb`F`j U`Yb`6cf]g`k`]fX`gWX`bY``ni
Y]bYa`K`Y`h`Ui Z`XYf` : YZŌ`Y`i bX`XYg`d`Yfg`Ōb`]WX`Yb`K`UWX`ghi`a`g`
K`Ā`fYbX`5bb]Y`g]WX`ni bY`a`YbX`]b`X]YgY`i bYfk`UfhYhY
J YfV]bXi b[`Y]b`YVhž`Yf`_Ybbh` : fUb`Āc]gž`XUgg`Yg`i a`a`Y`f`[Y`h`U`g
bi`fi`a`j`Yf`Y`h`h`Y`A`ĀbbYf[YZŌ`Y` `Yg`[Y`h`i`a`XUg`J YfghY`Yb
i bX`5`_nYdh]YfYb`XYf`Y][YbYb`9a`ch]cbYb`"

?i`h`i`fY``Y`F`YZ`YI]cb`i bX`a`cXYfbY
6Yn]Y\i b[Yb

A`h]gY]bYf`Y]WX`hYb`?ca`_]i bX`XYa`gWX`UfZYb`K`]hn`Yfa`i`h][h
`@]YVYgVf]YZY`Ui`g`B]nnU`X]Y`Ni`gWX`Ui`Yf`X`Uni`ž`bYi`Y`DYfgdY`_h]j`Yb
Ui`Z`6Yn]Y\i b[Yb`i bX`XUg`5`hYfb`Y]bni bY`a`Yb``8]Y`?ca`ŌX]Y
gWX`]XYfh`b]WX`h`bi`f`X]Y`g`_i`ff`Yb` : UWX`hYb`j`cb`9`Yb`i`bX
 : fYi`bXgWX`UZhYbž`gcbXYfb`h`Ya`Uh]g]Yfh`Ui`WX`XYb`A`i`hž`ja
Zcfh[YgWX`f]hYbYb`5`hYf`YfbYi`h`ni``]YVYb``8]Y`7`chY`X`5ni`f`X]Ybh
U`g`a`U`Yf]gWX`Y`?i`h]ggY`ZŌf`X]YgY`Ya`ch]cbU`Yb`K`YbXi b[Yb`i bX
V]YhYhY]bY`[fUbX]cgYž`\i`a`cfj`c``Y`F`YZ`YI]cb`ØVYf`XYb`Xf]hYb`i bX
j`YfYb` : fŌ`\]b[`XYg`@YVYbg`"

: Un]h.`<i`a`cf`U`g`GW`X`ØggY``ni`J`Yfgh`ĀbXb]g

@jYVYgVf]YZY`Ui g`B]nnU `V]YhYh`b]W`h`bi f`l bhYf\U`hi b[ž`gcbXYfb
fY[h`Ui W`ni a `BUW`XYb_Yb`ØVYf`X]Y`5Vgi fX]h`hYb`XYg`5`hU[g
i bX`X]Y`H]YZY`a YbgW`W`W`Yf`6Yn]Y\i b[Yb`Ub``8i fW`gY]bY
gdUbbYbXY`9fnÅ`k`Y]gY`i bX`X]Y`7\UfU_hYfYbhk`]W`i b[`j`Yf`Y]\h
XYf:`]a`X`Ya`Di`V`_i a`X]Y`:`Å\][`_Y]hž`Y]bYb`\i a`cfj`c``Yb`6`]W_
Ui ZX]Y`?ca`d`YI`]h`h`XYg`@YVYbg`ni`k`YfZYb```đ`Y]bYf`NY]hž`]b`XYf
HfUX]h]cbYb`i bX`a`cXYfbY`K`YfhY`cZi]a``?cbZ]_highY\Ybž[`Y`]b[h
Yg`X]YgYa`K`Yf_ž`XYb`Ni`gW`Ui`Yf`Ui`ZY]bY`FY]gY`Xi`fW`X]Y
gW`]`YfbXY`K`Y`h`XYf`@jYVY`ni`YbhZØ`fYb`"

8YhU]`g

6Ygi W`Yb`G]Y`i bg`Ui Z.`X]Y!bUW`f]W`hYb`"bYh