

B Yi UbZUb ['VY]a '%": 7 '@c_.'B Yi Y
; Yg]W\ hYfž'Zf]gW\ Yf'K]bX'i bX': Ub_i `hi f

B UW\ 'Y]bYa 'l a Vfi W\ 'a]h'bYi Ya 'HfU]bYf'xW\ Yb'GY]hni bX
nU\ `fY]W\ Yb 'HfUbgZYfg'nY][h'XYf'%": 7 '@c_ca ch]j Y '@Y]dn][
: cfhgW\ f]hY 'j]b'XYf'@[U"

Dcg]h]j Y 'J YfÀbXYfi b [Yb 'VY]a '%": 7
@c_ca ch]j Y '@Y]dn][

⊕'XYb`YmhYb'A cbUhYb`Uh'XYf'%": 7 '@c_ca ch]j Y '@Y]dn]['Y]bY
i a ZUggYbXY'HfUbgZcfa Uh]cb'Xi fW\ 'YVh"BUW\ 'Y]bYf
YbhhÀi gW\ YbXYb`YmhYb'GU]gcbž'X]Y'a]h'Y]bYa 'D'Uhn'a 'i bhYfYb
A]hY'ZY'X'i bX'Y]bYa 'ZfØ\ nY]h][Yb'Dc_U'Ui g'YbXYhYž'\UVYb'X]Y
J YfUbhk cfh]W\ Yb'XYg'J YfY]bg'YbhgW\]YXYbž'Y]bY' [fi bXgÀhn`W\ Y
5i ZVfi W\ gh]a a i b ['ni 'gW\ UZYb"8]YgYf'I a Vfi W\ 'VY]b\U'hYh
gck c\`dYfgcbY`Y'ŸbXYfi b [Yb'Ui Z'U'g'Ui W\ 'bYVYb'XYa
Gd]Y'ZY'Xž'i a 'XYb'J YfY]b'k]YXYf'Ui Z?i fg'ni 'Vf]b [Yb"

G][b]Z]_UbhY '5V [Àb [Y 'i bX 'B Yi ni [Àb [Y

6YgcbXYfg'VYa Yf_Ybgbk Yfh]gh'X]Y'XfUgh]gW\ Y'J YfÀbXYfi b ['ja
?UXYf"⊕g[YgUa h'\UVYb'XfY]nY\ b'Gd]Y'Yf'XYb'J YfY]b'j Yf'UggYbž
XUfi bhYf'dfca]bYbhY'BUa Yb'k]Y '@ W\ 'G]fW\ 'i bX'Cga Ub'5h][Ub"
⇒fY'5V [Àb [Y'k UfYb'bc h k YbX][ž'XU'X]Y'gdcfh]W\ Yb '@Y]ghi b [Yb
XYf`YmhYb'Gd]Y'nY]h'U'g'i bni fY]W\ YbX'Y]b [Yghi Zh'k i fXYb"
; `Y]W\ nY]h]['k i fXY'YXcW\ 'Ui W\ '[Yn]Y'h]b'bYi Y'HU'YbhY
]bj Ygh]Yfh'BYi b'bYi Y'Gd]Y'Yf'Yf [ÀbnYb'a]h'Yfk Y]'Y'X]Y
A UbbgW\ UZž'X]Y'j]b']\fYa 'YfghYb'5i gk Āfhggd]Y` [Y [Yb'J G;
5'h`']Yb]W_Y' ['Y]W\ 'Y]bYb'XYi h]W\ Yb'G]Y ['Y]bZU\ fYb'_cbbhY"
GYW\ g'BYi ni [Àb [Y'ghUbXYb'j]b'XYf'GhUfhY'Z'i bX'XYi hYhYb'Ui Z'Y]b
bYi Yg'HYUa [YZØ\ ``\]b"

B Yi Y : Ø\ fi b [gghfi _hi fYb

8]Y'ghfi _hi fY`Yb`YbXYfi b[Yb`VYhfYZYb`Ui W`X]Y`HfU]bYfdcg]h]cb"
8Yf`Ub[`À\fi][Y`HfU]bYf`5`a`YX]b`7]j`U`_Ua`b]W`h`a`Y`f`XYb
5bZcfXYfi b[Yb`XYg`J`YfY]bg`bUW`i`bX`k`i`fXY`k`À`fYbX`XYf`YhnhYb
GU]gcb`j`cb`F`cV]b`<]bhn`i`bX`Hca`]g`Uj`D]d`]WU`]bhYf]a`]gh]gW
YfgYhnh`Bi`b`ghY`h`æ`W`Yb`GY]hn`U`g`bYi`Yf`7`Y`ZhfU]bYf`Ub`XYf
Gd]hnYž`XYf`Ui`Z`Y]bY`VYUW`h]W`Y`6i`bXYg`][UYfZU\fi b[
ni`fØW`V`]W`Yb`_Ubb`i`bX`ni`j`cf`VY]`J`_hcf]U`5gW`UZZYbVi`f[`h`h][
k`Uf`"8]Y`gdcfh]W`Y`@]hi`b[`cV`]Y[`h`Hcb]`K`UW`ga`i`h`ž`XYf`]b`XYf
Gca`a`YfdUi`gY`U`_h]j`_Ua`_HfUbgZYfa`Uf`_h`h`h][`k`Ufž`i`a`_XYb`J`YfY]b
bYi`_Ui`Zni`ghY`Yb"

8 Ug`9b[U[Ya Ybh`XYf` : UbG

8]Y`bYi`Y`Y`fU`VY]a`_%"`: `7`@`_ca`ch]j`Y`@Y]dn][`k`]fX`b]W`h`bi`f`Ui`Z
XYa`_Gd]Y`ZY`X`gdØfVUfž`gcbXYfb`Ui`W`_ja`_l`a`ZY`X`XYg`7`i`Vg`"8]Y
U`_h]j`Y`:`UbgnYbY`_U`h`a`]h`Y]bYf`_Hf]_chU[`!5`_h]cb`Y]bXfi`W`_gj`c`
[`YnY][`hž`k`]Y`k`]W`h][`X]Y`l`bhYfghØhni`b[`XYf`;`Ya`Y]bgW`UZh`ZØf`X]Y
9bhk`]W`_i`b[`XYg`J`YfY]bg`]gh`":`Ubg`k`UfYb`Y]b[`Y`UXYbž`]\fY`Hf]_chg
ni`hfU[Ybž`i`bX`ni`f`<`U`VnY]hdUi`gY`k`i`fXYb`X]Y`VYghYb
9]bgYbXi`b[Yb`_c`b`c`f]Yfh`_Gc`W`Y`;`Ya`Y]bgW`UZh`gU`_h]cbYb`gh`h`f`_Yb
b]W`h`bi`f`XYb`HYUa`[`Y]ghž`gcbXYfb`Ui`W`_X]Y`_c`_U`Y`_X`Yb]h`h`h`XYg
7`i`Vg"

I a VUi`XYf` : Ub_i fj Y`U`g`Gma Vc`_ZØf`XYb

K UbXY`

9]b`k`Y]hYfYg`<][` \][` \h`XYf`HfUbgZcfa`Uh]cb`]gh`XYf`I`a`VUi`XYf
:`Ub_i`fj`Y`]a`_GhUX]cb`]b`@Y]dn][`!DfcVgh\Y]XU`"5i`Z[`Yk`YfhYh`igck`c`\`
U`_i`gh]gW`_U`g`_Ui`W`_j`]gi`Y`ž`nY][`hig]Y`XUg`9b[`U[`Ya`Ybh`XYg
J`YfY]bgž`X]Y`[`YgUa`_hY`9fZU\fi`b[`Y]bYg`Gd]Y`g`ni`_j`YfVYggYfb"
8]YgY`Y`bXYfi`b[Yb`_g]bX`b]W`h`bi`f`Y]b`NY]W`Yb`ZØf`XYb`:`c`fhgW`f]hh
XYg`7`i`Vgž`gcbXYfb`Ui`W`_ZØf`X]Y`5a`_V]h]cbYbž`]b`_Ø`YfY`@[`Yb
Ui`Zni`ghY][`Yb"

: Un]h

Ni gUa a YbZUggYbX`Äggh'g]W`gU[Ybž'XUgg'XYf'%"': 7 '@_ca ch]j Y
@Y]dn]['Ui Z'Y]bYa '[i hYb'K Y[']'gh"'8Yf'J YfY]b '\Uh]b'XYf
V]g\Yf][Yb'GU]gcb'VYfY]hg'g]YVYb'Di b_hY'Ui g'XfY]'Gd]Y`Yb'[Y\c`h
i bX'gW`Y]bh'gdcfh`W`Ui Z'XYa 'f]W`h][Yb'?i fg'ni 'gY]b"'8]Y
: UbgnYbY'k ÄW`gh'i bX'Vf]b[h'Zf]gW`Yb'K]bX']b'X]Y'5_hj]hÄhYb'XYg
7`i Vgž'XYf'g]W`ni bY\`a YbX'j cb'gY]bYa 'æ U[Y'U`g' 7\UcgWi V
YbhZYfbh"'9g'V`Y]Vh'UVni k UfhYbž'k]Y'g]W`X]YgY'dcg]h]j Y
9bhk]W`i b[']'b'XYb'_ca a YbXYb'K cW`Yb'Zc fhgYhmYb'k]fX"

8YhU]`g

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