

A Ubn'5; `ghÄf_h'Ni _i bZh'Xi fWÄ`J Yf_Ui Z
XYf'i b[Uf]gWÄ Yb`Hc WÄ hYf[YgY`gWÄ UZh

A Ubn'5; `UhiUa` &(" ' ð ` ') & \$ & (`YfZc`[fY]WÄ`X]Y'i b[Uf]gWÄ Y
HcWÄ hYf[YgY`gWÄ UZh'Ub' < Uffc' < ÖZ][Yf'j Yf_Ui Zh'z' i a
DfcXi _h]cbgghfi _hi fYb'ni`'cdh]a]YfYb"

9]b`VYXYi hYbXYf`GwÄf]hh'ZØf`X]Y`A Ubn'5; `i bX`]\fYb`bYi Yb
DUfhbYf' < Uffc' < ÖZ][Yf'J YfdUW_i b[ga UgWÄ]bYb'; a V<.'8]Y
, VYfbU\ a Y`XYf'i b[Uf]gWÄ Yb`Hc WÄ hYf[YgY`gWÄ UZh'A Ubn' < i b[Ufm
? Zh''b'8YVfYWb'a Uf_]Yfh'Y]bYb'k]WÄh][Yb'A ca Ybh']b`XYf
Yi fcdÄ]gWÄ Yb`A UgWÄ]bYbVUi VfUbwÄY''8Yf'J Yf_Ui Z'k i fXY
YfZc`[fY]WÄ`UV[YgWÄ`cggYbž'i bX`X]Y`XUZØf'bchk YbX][Yb
6YX]b[i b[Yb'g]bX`YfZØ`h"

GhfUhY[]gWÄ Y`B Yi Ui gf]WÄ hi b[`Xi fWÄ
J Yf_Ui ZgUVgWÄ`i gg

8]Y`A Ubn'5; žVY_Ubbh'ZØf`] \fY`]bbcj Uh]j Yb`HYWÄbc`c[]Yb`ja
A UgWÄ]bYbVUi ž`UhiXi fWÄ`XYb`J Yf_Ui Z]\fYf'i b[Uf]gWÄ Yb
HcWÄ hYf[YgY`gWÄ UZh'b]WÄ h'bi f`] \fY`DfcXi _h]cbgghfi _hi f'cdh]a]Yfhž
gcbXYfb`Ui WÄ`] \fY`@]ei]X]hÄh'Yf\YV`]WÄ`[YghY][Yfh'" ð': c`[Y`XYg
J Yf_Ui Zg`Yf\Ä`h'XUg'I bhYfbY\ a Yb`6Ufa]hhY''b' < Ö\Y'j cb',
A]`]cbYb`9i fcž'k Ug`XYf'5; ` \Y`ZYb'k]fXž'bYi Y
K UWÄghi a gghfUhY[]Yb'ni`j YfZc`[Yb'i bX`X]Y`9ZZ]n]Ybn']b`XYf
DfcXi _h]cb'ni`Yf\Ö\Yb"

, VYfbU\ a Y`i bX` ð hY[fUh]cb`XYf`A]hUfVY]hYf

A]h'XYf', VYfbU\ a Y'j cb`A Ubn' < i b[Ufm'Xi fWÄ`X]Y' < Uffc' < ÖZ][Yf
; fi ddY`V`Y]VYb`X]Y'fi bX`%*\$`A]hUfVY]hYf`XYg'I bhYfbY\ a Ybg']b
]\fYb`Dcg]h]cbYb''8]YgY`9bhgWÄY]Xi b[`ghY`h'g]WÄYfž`XUgg`XUg

K]ggYb`i bX`X]Y`9fZU\fi b[`XYf`6Y`Y[gW\UZh[Ybi hnh`k YfXYb
_ÒbbYbž`i a `X]Y`DfcXi _h]cbg_UdUn]h`hYb`]bbYf\U`V`XYf`9I
Ui gni VUi Yb`"H\ca Ug`K Y`Yfž`79C`j`cb`<Uffc`<ÒZ][Yfž`\Uh`VYhcbhž
k]Y`k]W\h][`X]Y`l bhYfghØhni b[`XYf`bYi Yb`?c``Y[Yb`]b`8YVfYW`b
ZØf`X]Y`_ØbZh][Y`9bhk]W`_i b[`XYg`l bhYfbY\`a Ybg`]gh"

9]b`6`]W`_Ui Z`X]Y`A Ubn`5;

8]Y`A Ubn`5;`]gh`Y]b`k Y`hk Y]h`U[]YfYbXYg`l bhYfbY\`a Ybž`XUg`g]W\
Ui Z`X]Y`9bhk]W`_i b[`j`cb`A UgW\]bYb`ZØf`X]Y`@]h\]i a`!`εbYb!
6UhYf]YdfcXi _h]cb`gck]Y`Y`Y`_hfc]gW\Y`?ca`dcbYbhYb
gdYn]U`]g]Yfh`\Uh`"GY]h`]\fYf`; fØbXi b[`]a` `]\f`%`-`+`\Uh`g]W\`XUg
l bhYfbY\`a Yb`_cb]bi]Yf`]W\`k Y]hYfYbhk]W`_Y`h`i bX
Yfk]fhgW\UZhYhY`]a` `]\f`&\$&` `Y]bYb`l a`gUm`j`cb`&(`-`ž&`A`j``cbYb
9i fc``8Ub`_`XYf`VfY]hYb`DfcXi _hdU`YhY`_Ubb`A Ubn
a U» [YgW\`bY]XYfhY`@Øgi b[Yb`UbV]YhYbž`X]Y`Ui Z`X]Y`6YXØfZb]ggY
\fYf`]bhYfbUh]cbU`Yb`?i bXYb`ni [YgW\`b]hYb`g]bX"

8]Y`G][b]Z]_Ubn`XYf`HfUbgU`_h]cb`ZØf`X]Y =bXi ghf]Y

8]YgY`HfUbgU`_h]cb`j`YfXYi`h`]W\`h`b]W\`h`bi`f`X]Y`ghfUhY[]gW\Y
BYi Ui gf]W\`hi b[`XYf`A Ubn`5;`ž`gcbXYfb`Ui W\`XYb`HfYbX`ni`f
?cbgc`]X]Yfi b[`]b`XYf`A UgW\]bYbVUi VfUbW\Y``8i fW\`X]Y`Yb[Y
Ni gUa`a`YbUfVY]h`a`]h`XYf`<Uffc`<ÒZ][Yf`J`YfdUW`_i b[ga`UgW\]bYb
;`a`V`<`k`]fX`Yfk`UfhYhž`XUgg`X]Y`VY]XYb`l bhYfbY\`a Yb`]fY
A`Uf`_hdcg]h]cb`k`Y]hYf`gh`f`_Yb`_ÒbbYb``8]Yg`_ØbbhY`dchYbn]Y``
5i`gk`]f`_i b[Yb`Ui Z`XYb`[YgUa`hYb`GY`_hcf`XYf`dfcXi`n]YfYbXYb
=bXi ghf]Y`]b`9i`fcdU`\UVYb"

5i`gV`]W`_ZØf`X]Y`Ni`_i`bZh

8Yf`J`Yf`_Ui Z`XYf`A Ubn`<`i b[Ufm`?`Zh``]gh`Y]b`NY]W\Yb`ZØf`X]Y
J`Yf`ÅbXYfi b[`i`bX`5bdUggi b[`]a` `A UgW\]bYbVUi ``A`Ufh]b`8`fUgW\`ž
79C`XYf`A Ubn`5;`ž`\Uh`XYb`A`]hUfVY]hYfb`ZØf`]\fY`k`Yfhj`c``Y`5fVY]h
]b`XYb`Y`hnhYb`&\$`]\fYb`[YXUb`_h`i`bX`V`]W`_h`c`d`h]a`]gh]gW\`Ui Z`X]Y
Ni`_i`bZh`XYf`Ni`gUa`a`YbUfVY]h`]a` `F`U\`a`Yb`XYf`<Uffc`<ÒZ][Yf`

; fi ddY"8]Y'A Ubn'5; 'V`Y]Vh'gca]h'Y]b'k]W'h][Yf'Gd]Y`Yf'`b`XYb
[`cVU`Yb`A Y[UhFYbXg`XYf'9`Y_hfca cV]`h`h'i bX'8][]hU`]g]Yfi b["

⊕g[YgUa h'nY][h'X]YgY`9bhk]W_`i b[ž'k]Y`I bhYfbY\`a Yb`ja
XmbUa]gW`Yb`I a Z`X`XYf`[`cVU`Yb`A `f_hY`fYU[]YfYb`i bX`g]W
UbdUggYb`a ØggYbž`i a ``Ub[Zf]gh][`_cb_i ffYbnZ`A\][`ni `V`Y]VYb"
8]Y`Yb[Y`Ni gUa a YbUfVY]h'ink]gW`Yb`A Ubn'5; `i bX`<Uffc`<ÒZ][Yf
_ÒbbhY`gca]h`b]W`h`bi f`ZØf`VY]XY`I bhYfbY\`a Ybž`gcbXYfb`Ui W`ZØf
X]Y`[YgUa hY`6fUbW`Y`7\UbW`b`V]YhYb"

· ·B5;

8YhU]`g

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