

B Yi Yg`F UX]c!@YbbYghUXh!Ghi X]c`ja
; ma G@.`9]bY`ÿfU`VY[]bbh

/ ei ch/9fZU\ fYb`G]Y`U`Yg`ØVYf`XYb`l a ni [`j cb` F UX]c
@YbbYghUXh`]b`bYi Y`F`Ài a Yžk Ugžk Ubbžk c`i bX`k Ufi a `Yg
[YgW\ U\ "`X`hnh`]b`XYb`bYi Yb`F`Ài a `]W\ _Y]hYb`Ui Z
GYbXi b[` / ei ch/

B Yi Yg`?cbnYdh`ZØf` F UX]c`@YbbYghUXh` `9]bY`6YfY]W\ Yfi b[`ZØf
X]Y`G\ Ø`Yf`i bX`X]Y; Ya Y]bXY

⇒ @YbbYghUXh` []Vh`Yg`Y]bY`Ui ZFY[YbXY`BYi][_Y]h`ZØf
F UX]c`]YV\ UVYf`i bX`X]Y; Ya Y]bgW\ UZh`]bg[YgUa h` F UX]c
@YbbYghUXh` ž`Y]bY`VY`]YVhY`GYbXYghU]cbž`\Uh`_Øfn`]W\ `]`fY
l a ni [gUfVY]h`UV[YgW\`cggYb`i bX`]gh`bi b`]b`bYi Ybž`a cXYfbYb
F`Ài a `]W\ _Y]hYb`Ubg`Àgg]["`8]Y`J`YfV]bXi b[`nk`]gW\ Yb`XYa
; ma bUg]i a `XYf`GhUXh`@YbbYghUXh`i bX`XYa `Gh`"ægYZg`<cgd]hU`ni
5`hYb`li bXYa `]gh`bi b`bcW\`gh`Àf`_Yf`[Yk cfXYbž`XU`X]Y`GYbXi b[Yb
`Yhnh`a]h\`Z`Y`Y]bYf`F]W\ hZi b`_Ub`hY`bbY`Ubg`?fUb`_Yb`Ui g
ØVYfa]hhY`h`k YfXYb"

8]Y; YgW\]W\ hY`j cb` F UX]c`@YbbYghUXh` fY]W\ h`V]g`5i [i gh`% - - \$
ni fØW`ž`U`g`XYf`YfghY`@]hYfUhi f_i fg`i bhYf`XYf`@Y]hi b[`j cb`æbbm
6cY\`a`i bX`<Y`a`i h`6YW`_Yf`]bg`@VYb`[Yfi ZYb`k`i fXY`"9g`VY[Ubb
VYgW\ Y]XYbž`a]hY]bYf`YfghYb`GYbXi b[`Ua``%+"`Bcj Ya VYf`%- - \$
Ui g`Y]bYa`dfcj]gcf]gW\ Yb`Ghi X]c`ja`?fUb`_Yb`Ui g`"æ` `X\`f`%- - %
_cbbhY`XUbb`XUg`a cXYfbY` F UX]c`@YbbYghUXh`Ghi X]c`ja
?fUb`_Yb`Ui g`Y]b[Yk Y]\`h`k YfXYbž`XUg`&\$`\$`'a]h`bYi Yf
Ghi X]chYW\ b]_`Ui g[YghUhhY`h`k i fXY"

I bhYf`XYf`@Y]hi b[`j cb`æbbm`6cY\`a`a UW\ hY`X]Y`GhU]cb
k Y]hYf\]b`i: cfhgW\ f]hhYž`V]g`Yf`&\$`%` `]b`XYb`k`c`\`j YfX]Yb`hYb
Fi \YghUbX`hfUhi bX`X]Y`@Y]hi b[`Ub`gY]bYb`?c`Y[Yb`C`j] Yf

5WXYbVUWX`ØVYf[UV"B UWXYa`XUg?fUb_Yb\Ui g`VYgW`cggYb
\UhYž`XYb`V]g\Yf][Yb`FUi a`UbXYfk Y]h][`ni`bi hnYbž`VY[Ubb`X]Y
Gi WXY`bUWX`bYi Yb`FÀi a`]W_X]hYb";`ØW`]WXYfk Y]gY`Vch`XYf
?i bghhYa dY``XYg; ma bUg]i a`g`nk Y][YY][bYhY`FÀi a`Yž`X]Y`bi b
U`g`bYi Yg`Ghi X]c`X]YbYb"

8 Ug`bYi Y`Ghi X]c`k i fXY`_Øfn`]W`cZZ]n]Y``Y]b[Yk Y]\hž`i bX
J YfhfYhYf`XYf`GhUXh`@YbbYghUXhž`XYg?fUb_Yb\Ui gYgž`XYf
HYW`b]_UVhY]i b[ž`XYf`GdUf_UggY`5@?`gck]Y`GW`i``Y]hYf`i bX
GW`Ø`Yf`k UfYb`ni f: Y]Yf`Ub`k YgYbX``8]Y`GW`i``Y]hYf]b`6]f[]hU
D]YhYfg`cVhY`XYb`9]bgUhn`j cb`C`]j Yf`5WXYbVUWX`i bX`gY]bYb
GW`Ø`Yfbž`X]Y`a]h[fc»Ya`9b[U[Ya`Ybh`Ub`XYa`bYi Yb`Ghi X]c
[YUfVY]hYh`\UVYb``9g`k Uf`VYfØ`fYbX`ni`gY`Ybž`k]Y`k]W`h][`X]Y
GW`Ø`Yf`X]YgY`5fVY]h`bY`a Yb`i bX`k]Y`ghUf`_g]Y`g]W`a]h`XYa
Ghi X]c`]XYbh]Z]n]YfYb"

5VgW`]Y»YbX`k i fXY`bcW`Y]b`DcXWUgh`a]h`Ui g[Yk`À`\`hYb`;`ÀghYb
Ui Z[Ybca`a Ybž`i a`X]Y`9]bk Y]\i b[`XYg`bYi Yb`Ghi X]cg`ni`ZY]Yfb"
8]Y`d`cg]h]j Y`F`Y`gcb`Ubn`i bX`X]Y: fYi XY`ØVYf`X]Y`bYi Yb
F`Ài a`]W_X]hYb`g]bX`gdØfVUf`i bX`nY][Ybž`k]Y`k]W`h][`F`UX]c
@YbbYghUXh`ZØf`X]Y; Ya`Y]bgW`UZh`]gh"

8]Y`GW`Ø`Yf`i bX`X]Y`6Øf[Yf`j cb`@YbbYghUXh`_ØbbYb`g]W`Ui Z
gdUbbYbXY`F`UX]cgYbXi b[Yb`Ui g`XYb`bYi Yb`Ghi X]cg`ZF`Yi Yb`i bX
XUg`9b[U[Ya`Ybh`i bX`X]Y`@Y]XYbgW`UZh`XYf`6YhY][`hYb`ZØf`X]YgY
`bgh]hi h]cb`[Yb]Y»Yb``F`UX]c`@YbbYghUXh`]gh`VYfY]hž`k Y]hYf`\b
\cW`k Yfh][Y`GYbXi b[Yb`Ubni`V]YhYb`i bX`X]Y; Ya`Y]bgW`UZh`a]h
A`i`g]_ž``bZcfa`Uh]cbYb`i bX`i bhYf`U`hi b[`ni`VYfY]W`Yfb"

fl YgW`f]YVYb`j cb.; YfX`<Yi Y`Ł` **B5**;

8YhU]`g

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