

## JYf\_Y\fgi bZU```]b'F ÀgU.'9]bY'JYf`YhnhY bUWX'Ni gUa a Ybghc»'nk Y]Yf'D\_k g

5a '&( "\$, "'YfY][ bYhY'g]W\']b'FÀgU'Y]b'JYf\_Y\fgi bZU```a ]h `Y]W\h'j Yf`YhnhYf'DYfgcb"'8YhU]`g'ni a 'JcfZU```i bX GUW\gW\UXYb"

#### FÀgU'fbhgŁ

±b 'Y]bYa 'J Yf\_Y\fgi bZU``ž'XYf'g]WX 'Ua '&( "'5i [i gh'[Y[Yb'%'.() I \f']b 'XYf'\_`Y]bYb'; Ya Y]bXY 'F ÀgU 'YfY][bYhYž'k i fXY 'Y]bY : U\fnYi [ `Yb\_Yf]b '`Y]WX h'j Yf`Yhnh" '8 Yf'J cfZU```YfY][bYhY 'g]WX ž'U`g Y]bY '5i hcZJ\fYf]b'j Yfgi WX hYž'j cb 'XYf'? fY]gghfU» Y '%\$(']b'X]Y GØbbUYf'GhfU» Y 'UVni V]Y[Yb"'@Y]XYf'ØVYfgU\'g]Y 'XUVY]'Y]bY UbXYfY: U\fYf]bž'X]Y'j cb ``]b\_g`\YfUbZi \f'i bX'XUg'J cffYWX h`\UhhY"

8 Yf'Ni gUa a Ybghc» 'XYf'VY]XYb'D\_k 'ZØ\fhY'XUni ž'XUgg'X]Y
I bZU``j Yfi fgUW\Yf]b'i bj Yf`Yhnh'V`]YVž'k À\fYbX'X]Y'UbXYfY
: U\fYf]b'Ui Z[ fi bX']\fYf'J Yf`Yhni b[ Yb'ni f'6Y\UbX`i b[ ']bg
?`]b]\_i a '6UX'GU`ni b[ Yb'[ YVfUW\h'k YfXYb'a i gghY"'8]Yg'nY][ hž
k ]Y'gW\bY``'g]W\'gc`W\Y'G]hi Uh]cbYb'Ybhk ]W\_Y`b'\_ObbYbž'i bX'XUgg
]b'Y]bYa 'A ca Ybh'XYf'I bUi Za Yf\_gUa \_Y]h'gW\k Yfk ]Y[ YbXY
: c`[ Yb'Y]bhfYhYb'\_ObbYb"

#### 8 YhU]`g`ni a 'l bZU``\Yf[Ub[

8 Yf'[ YbUi Y'< Yf[ Ub[ 'XYg'I bZU``g'`Àggh'g]W\ 'k ]Y'Zc`[ h ni gUa a YbZUggYb. '8]Y': U\fYf]bž'X]Y']b'X]Y'GØbbUYf'GhfU» Y UVV]Y[ Yb'k c``hYž'ZØ\fhY'X]Yg']b'XYa'; `Ui VYb'Xi fW\ž'XUgg'X]Y GhfU» Y'ZfY]'gY]"'8 U[ Y[ Yb'k Uf'X]Y'UbXYfY'5i hcZU\fYf]b'a ]h'\c\Yf; YgW\k ]bX][ \_Y]h'j cb'`]b\_g'i bhYfk Y[ g'i bX'bi hnhY']\f J cfZU\fhgfYW\h''8 Yf'5i ZdfU``'k Uf'i bj Yfa Y]XVUfž'i bX'X]Y'K i W\h

XYg'Ni gUa a Ybghc» Yg'ZØ\fhY'XUni ž'XUgg'VY]XY': U\fnYi [Y'ghUf\_VYgW\ÀX][h'k i fXYb"

8]Y 'Dc`]nY]'k i fXY'gW\bY```Ui Z'XYb'I bZU```Ui Za Yf\_gUa 'i bX
\_Øa a YfhY'g]W\ i a 'X]Y'9fZUggi b[ 'XYf'bchk YbX][ Yb

\dip Zcfa Uh]cbYb"'6Y]'XYf'I bhYfgi W\ i b[ 'j cf'Cfh'\_cbbhYb'X]Y

6YUa hYb'XYb'GUW\gW\UXYb'Ub'XYb'VY]XYb': U\fnYi [ Yb'Ui Z'Yhk U
, \$\$\$'9i fc'VYn]ZZYfb"'Ni XYa 'ghY``hY'g]W\'\YfUi gž'XUgg'\_Y]bYf'XYf

VY]XYb'K U[ Yb'a Y\f'ZU\fVYfY]h'k Ufž'gcXUgg'g]Y'VY]XY'j cb'Y]bYa

5VqW\`YddX]YbqhYbhZYfbh'k YfXYb'a i qghYb"

#### I fgUWXYb i bX : c`[Yb

I bZÀ``Y'X]YgYf'5fh'g]bX'\Ài Z][ 'Ui Z'a YbgW\`]W\Yg'JYfgU[Yb
ni fØW\_ni ZØ\fYb"' ±b'X]YgYa 'gdYn]Y``Yb': U```\_ÒbbhY'5V`Yb\_i b['cXYf
Y]bY'ZU`gW\Y'9]bgW\Àhni b['XYf'JYf\_Y\fgg]hi Uh]cb'X]Y
YbhgW\Y]XYbXYb': U\_hcfYb'[Yk YgYb'gY]b"'9g'k]fX'XYi h`]W\ž'XUgg
[YfUXY'Ub'?fYi ni b[Yb'i bX'9]ba ØbXi b[Yb'Yf\Ò\hY'Jcfg]W\h
[YVchYb']gh"'JYf\_Y\fghY]`bY\a Yf'gc``hYb'ghYhg'[Yk Ufbh'gY]b'i bX
]\fY'I a [YVi b['Ui Za Yf\_gUa 'VYcVUW\hYbži a 'XYfUfh][Y
Ni gUa a YbghÒ» Y'ni 'j Yfa Y]XYb"

 $8 ]Y `VYhfc ZZYbY `: U \fYf]b \check{z} X]Y `]a `?`]b]_i a `6UX `GU`ni b[Yb VY \UbXY`h'k YfXYb'a i gghY \check{z} gc``hY `]b `XYb'_ca a YbXYb'HU[Yb k]YXYf'[YbYgYb'', VYf'X]Y `GWk YfY `XYf'J Yf`Yhni b[Yb'k i fXYb V]g`Ub['_Y]bY'k Y]hYfYb' <math>\Rightarrow$  Zcfa Uh]cbYb'j YfÒZZYbh`]W\hz`'YXcW\]gh \_`Ufž'XUgg'X]Y': U \fYf]bbYb']b'Y]bYf'XYfUfh'XmbUa ]gW\Yb'G]hi Uh]cb gW\bY``']b'[fc\\*Y'; YZU\f'[YfUhYb'\_ObbYb''

8]Y'6Yf]W\hYfghUhhi b['ØVYf'gc`W\Y'I bZ\A``Y'V`Y]Vh'YbhgW\Y]XYbX\Zi a 'XUg'6Yk i gghgY]b'Z\Øf'X]Y'F]g]\_Yb']a 'GhfU\Ybj Yf\_Y\f'ni gW\AfZYb"'8Yf'JcfZU``']b'F\AgU'Yf]bbYfh'i bg'XUfUb\Z'k]Y'k]W\h]['Yg]gh\Z'ghYhg'XYZYbg]j Y': U\fk Y]gY'ni 'dfU\_h]n]YfYb'i bX'X]Y'FY[Y\b'XYgGhfU\Ybj Yf\_Y\fg'ni 'fYgdY\_h]YfYb"'JYf\_Y\fgg]W\Yf\Y]h'gc``hY'Z\ØfU``Y'JYf\_Y\fghY]bY\cVYfghY'Df]cf]h\Ah'\UVYb"

Ni gàhn`]W\ni 'XYb'dYfgÒb`]W\Yb'JYf`Yhni b[Yb'i bX'XYb Z|bUbn]Y``Yb'5i gk]f\_i b[Ybž'X]Y'Xi fW\'XYb'GUW\gW\UXYb'Ub'XYb : U\fnYi [Yb'YbhghY\Ybž'\_ObbYb'gc`W\Y'I bZÀ``Y'Ui W\dgmW\c`c[]gW\Y': c`[Yb'ZØf'X]Y'6YhY]`][hYb'\UVYb"'8]Y JcfghY``i b[ž']b'Y]bYb'I bZU``'j Yfk ]W\_Y`h'[Yk YgYb'ni 'gY]bž'\_Ubb Y]bY']a a YbgY'Ya ch]cbU`Y'6Y`Ughi b['XUfghY``Yb"

A ]h'YXYa 'k Y]hYfYb'j YfnY]W\bYhYb'l bZU``'k ]fX'\_`Ufž'k ]Y
YbhgW\Y]XYbX'Y]bY'\_cbh]bi ]Yf`]W\Y'GYbg]V]`]g]Yfi b['i bX
5i Z\_`Àfi b['ØVYf'J Yf\_Y\fgg]W\Yf\Y]h']gh"'8]Y'<cZZbi b['VYghY\hž
XUgg'Xi fW\'\DZcfa Uh]cbg\_Ua dU[bYb'i bX'GW\i`i b[Yb'XUg
6Yk i gghgY]b'ZØf'g]W\YfYg': U\fYb'k Y]hYf'[YghÀf\_h'k]fX'i bX'X]Y
NU\``XYf'l bZÀ``Y``Ub[Zf]gh]['g]b\_h"

#### $J Yf_Y fgg]WX YfY]h']a : c_i g$

5 VgWX`]Y» YbX`gY]`ZYgh[Y\U`hYbž`XUgg`X]Y`; YgWXY\b]ggY`]b`F ÀgUb]W\h'bi f`Y]bYb``c\_U``VY[fYbnhYb`JcfZU```XUfghY``Ybž`gcbXYfb`Y]bkY]hYfYg`VY]gd]Y`\UZhYg`GnYbUf]c`]b`XYf`8]g\_i gg]cb`i aJYf\_Y\fgg]W\Yf\Y]h'g]bX"`\\*XYg`AU`ž'kYbb`g]W\JYf\_Y\fghY]`bY\aYf`\]bhYf`XUg`GhYiYf`gYhnYbž`g]bX`g]Y`b]W\h'bi fZØf`]\f`Y][YbYg`Kc\`Yf[Y\Yb`jYfUbhkcfh`]W\ž`gcbXYfb`UiW\`ZØfXUg`XYf`UbXYfYb"`5kUfYbYgg`i bX`JYfUbhkcfhi b[gVYki gghgY]bg]bX`jcb`[fÒ» hYf`6YXYi hi b[ži a`XUg`F]g]\_c`ZØf`U``Y`6YhY]`][hYb`nia]b]a]YfYb`i bX`I bZÀ``Y`ni 'jYfaY]XYb"

# JYf\_Y\fgi bZÀ``Y`]b'8Yi hgWX`UbX.'5\_hi Y``Y HfYbXg

± XYb ``YhnhYb '\*J\fYb `\Uh'g]W\ 'X]Y 'G]hi Uh]cb `XYf'J Yf\_Y\fgi bZÀ ``Y]b '8 Yi hgW\ `Ub X'j YfÀb XYfh" @Ui h'XYa 'GhUh]gh]gW\Yb '6i b XYgUa h [UV 'Yg']a '\*J\f'&\$&%']bg[ YgUa h'&") (\*"%(%'fY[ ]ghf]YfhY JYf\_Y\fgi bZÀ``Yž'k Ug'Y]bYa 'FØW\_[ Ub[ 'j cb '&ž' 'i ']a 'J Yf[ `Y]W\ni a 'J cf'U\f'Ybhgdf]W\h" 'Hfchn'X]YgYf'dcg]h]j Yb '9bhk ]W\_`i b[ 'V`Y]Vh X]Y `NU\``XYf'J Yf`YhnhYb 'VYgcf[ b]gYffY[ YbX"'=a '\*J\f'&\$&%'k i fXYb '\$("(\$\$'DYfgcbYb'j Yf`Yhnhži bX'&"+%- 'A YbgW\Yb'\_Ua Yb'i a g @YVYb"'8]YgY'NU\`Yb'j YfXYi h`]W\Ybž'XUgg'X]Y'J Yf\_Y\fgg]W\Yf\Y]h Y]b 'nYbhfU`Yg'5b`]Y[ Yb'Ui Z'XYf'dc`]h]gW\Yb'5[ YbXU'V`Y]Vh"

6YgcbXYfgʻUi ZZÀ``][ˈ]ghž'XUggʻI bZÀ``Yʻk ]YʻXYfʻ]bʻF ÀgUʻc ZhʻXi fWX b]WXhʻVYUWXhYhYʻJ cfZU\fhgfY[Y`bʻj Yfi fgUWXhʻk YfXYb"'=a ˈ≯J\f &\$&\$`k UfYbʻYhk Uʻ&) `i ˈXYfʻI bZÀ``YʻUi ZʻJ cfZU\fhga ]ggUWXhi b[Yb ni fØW\_ni ZØ\fYb"'8 UgʻnY][hž′k ]Yʻk ]WXh][ˈJYf\_Y\fgYfn]Y\i b[ˈi bX 5k UfYbYgg!? Ua dU[bYbʻg]bXžʻi a ˈXUgʻ6Yk i gghgY]bʻXYfʻ: U\fYfʻni gWX ÀfZYb"

## I fgUWX Yb 'j cb 'J Yf\_Y\fgi bZÀ``Yb

8]Y'<Ui dhi fgUWXYb'ZØf'JYf\_Y\fgi bZÀ``Y'g]bX'j]Y`ZÀ`h]["'Ni 'XYb\\Ài Z][ghYb': U\_hcfYb'nÀ\`Yb'i bhYf'UbXYfYa '5V`Yb\_i b[Ybž; YgWXk]bX][\_Y]hgØVYfgWXfY]hi b[Yb'i bX'5`\_c\c``Ua 'GhYi Yf"'9]b6Yf]WXh'XYg'8Yi hgWXYb'JYf\_Y\fgg]WXYf\Y]hgfUhYg'f8JFŁ'ghY``h'ZYghžXUgg'fi bX''\$'i 'XYf'JYf\_Y\fgi bZÀ``Y']a 'Ni gUa a Yb\Ub['a]h5V`Yb\_i b[Yb'ghY\Ybž'k cVY]'Ga Ufhd\cbY!Bi hni b['Y]bYkYgYbh`]WXY'Fc``Y'gd]Y`h''5`\_c\c`]g]YfhY': U\fYf'g]bX'YVYbZU``g'Y]bYYf\YV`]WXY'; YZU\f'ZØf'X]Y'JYf\_Y\fgg]WXYf\Y]h']a '\\X\f'\&\\$\&\\$kUfYb'YhkU')\Z, 'i 'XYf'hÒX`]WXYb'I bZÀ``Y'Ui Z'5`\_c\c`ni fØW\_ni ZØ\fYb"

9]b'k Y]hYfYf'k ]WXh][Yf'5gdY\_hž'XYf'\Ài Z]['ØVYfgY\Yb'k ]fXž']gh'XYf Ni ghUbX'XYf': U\fnYi [Y"FY[Y`a À»][Y'K Ufhi b['i bX'\*bgdY\_h]cbYb \_ÒbbYb'XUni 'VY]hfU[Ybž'hYWXb]gWXY'8YZY\_hY'ni 'j Yfa Y]XYbž'X]Y i bhYf'l a ghÀbXYb'ni 'Y]bYa 'l bZU``ZØ\fYb'\_ÒbbYb"'

### $F]Wh^]b]Yb^nif^JYf_Y\fgg]WhYf\Y]h$

±0.18 Yi hgWX `UbX `[ ]Vh'Yg'X]j YfgY '±0]h]Uh]j Yb'ni f'9f\Ò\i b[ 'XYf J Yf\_Y\fgg]WXYf\Y]h" 8]Y '6i bXYgfY[ ]Yfi b[ '\Uh'j YfgWX]YXYbY Dfc[ fUa a Y']a d`Ya Ybh]Yfhž'i a 'I bZÀ``Y'ni 'fYXi n]YfYb'i bX'X]Y G]WXYf\Y]h'Ui Z'XYb'GhfU» Yb'ni 'j YfVYggYfb" 8 Uni 'nÀ\`Yb'i bhYf UbXYfYa 'X]Y'9]bZØ\fi b[ 'j cb'; YgWXk]bX][ \_Y]hgØVYfk UWXi b[ Yb i bX'j YfghÀf\_hY'?cbhfc``Yb']a 'GhfU» Ybj Yf\_Y\f"

Ni XYa '[]Vh'Yg'gdYn]Y``Y'A U» bU\a Yb'ZØf'[YZÀ\fXYhY

J Yf\_Y\fghY]`bY\a Yf'k]Y'F UXZU\fYf'i bX': i » [Àb[Yf"'GhÀXhY'\UVYb

Dfc[fUa a Y'ni f'J YfVYggYfi b['XYf' + DZfUghfi \_hi fž'k]Y'ni a '6Y]gd]Y`

XYb'5i gVUi 'j cb': U\ffUXk Y[Yb'i bX'g]WXYfYb

¸ VYfei Yfi b[ ga Ò[`]WX\_Y]hYb ZØf: i » [Àb[YfžY]b[YZØ\fh"8]YgY ♣b]h]Uh]j Yb n]Y`Yb XUfUi Z'UVžX]Y G]WXYf\Y]h ni 'Yf\Ò\Yb i bX XUg
F]g]\_c j cb J Yf\_Y\fgi bZÀ``Yb k Y]hYf ni 'fYXi n]YfYb"

A ]h:XYf:ghÀbX][ Yb:9bhk ]W\_i b[ijcb:HYWkbcic[]YžYhk U:Xi fWk:X]Y 9]bZØ\fi b[ijcb:U\fYfUgg]ghYbngmghYa Ybž'k]fX:X]Y:<cZZbi b[ [Yk YW\_hž:XUgg:X]Y:NU\:XYf'J Yf\_Y\fgi bZÀ:Y'k Y]hYf:g]b\_hi bX gca ]h:X]Y:GhfU» Yb:g]WkYfYf'k YfXYb":8]YgY:9bhk]W\_i b[Ybgd]Y[Y'b:g]Wk:Ui Wki]b:XYb:6Ya Ø\i b[Ybijcb:5i hca cV]:\YfghY:`Yfbk]XYfž'bYi Y:G]WkYf\Y]hgghUbXUfXgini gYhnYbii bXi]bbcj Uh]j Y@Ògi b[Yb:Ubni V]YhYb"

8]YgY'9bhk]W\_`i b[Yb'gck]Y'X]Y'[YbUbbhYb'GhUh]gh]\_Yb j YfXYi h`]W\Yb'X]Y'\_cbh]bi ]Yf`]W\Yb'5bghfYb[i b[Yb'ni f JYfVYggYfi b['XYf'JYf\_Y\fgg]W\Yf\Y]hii bX'X]Y'Bchk YbX][\_Y]hž'X]Y 6Yj Ò`\_Yfi b['ØVYf'X]Y'F]g]\_Yb'i bX'JYfUbhk cfh`]W\\_Y]hYb']a GhfU»Ybj Yf\_Y\f'Ui Zni \_`ÀfYb"

8 YhU1`a

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