

## 9`cb`A i g\_. `? cbhfcj YfgYbž A ]``]UfXYb[ Yk ]bbY'i bX'bYi Y'D`ÀbY°

9`cb'Aig\_ž'XYf'iaghf]hhYbY'HYW\!A]``]UfXÀfž'ghY\h'Ua'\\$"\$)"&\$&)']a':c\_ig'a]h'U\_hiY``Yb'9bhk]W\_`ib[Yb'niqY]bYb'IbhYfbY\aYbqdfcY\_hYb"



DfYhcf]Už'GØXUZf]\_U'!'9`cb'Aig\_ž'XYf'Ua'&, "'\*\*jb]'%-+%']b
DfYhcf]Už'GØXUZf]\_Už'[YVcfYb'kifXYž']ghY]b'VYXYihYbXYf
I bhYfbY\aYf'a]h'gØXUZf]\_Ub]gWXYbž'\_UbUX]gWXYb'ibX'IG!
UaYf]\_Ub]gWXYb'KifnY`b"'9f']gh'VY\_Ubbh'ZØf'gY]bY']bbcjUh]jYb

XYYb']b'jYfgWX]YXYbYb'\*bXighf]Ybž'XcWX'[`Y]WXnY]h]['ghY\h'Yf
UiZ[fibX'fUX]\_U'Yf'Ÿi»Yfib[Yb'ibX'JYfgWXkÒfib[gh\Ycf]Yb
nibY\aYbX']b'XYf'?f]h]\_"'Aig\_'[]`h'XYfnY]h'U`g'XYf'fY]WXghY
AYbgWX'XYf'KY`h'a]h'Y]bYa'[YgWXÀhnhYb'JYfaÒ[Yb'jcb'YhkU'&+z''A]``]UfXYb'IG!8c``Uf'fGhUbX'AÀfn'&\$&)\Lz'XUg'Yf'XifWX
YfZc`[fY]WXY'IbhYfbY\aYbg[fØbXib[Yb'ibX'\*bjYgh]h]cbYb
UiZ[YVUih'\Uh"

Ni 'gY]bYb'VYXYi hYbXghYb'l bhYfbY\a Yb'nÀ\`Yb'i bhYf'UbXYfYa

 $\label{eq:normalize} $$N]d\&\check{z}'DUmDU`\check{z}'GdUW'L`ibX'HYg`U"`N]d\&\check{z}'Y]b`GcZhkUfYibhYfbY\aYb\check{z}kifXY'%---'ZØf''$+'A]``]cbYb`IG!8c``Uf'jYf_UiZh"`DUmDU`\check{z}'XUgifQdfØb[`]W&`U`g`L"7ca`[YghUfhYh`kifXYž'VfUW&hY`Aig_'%,$A]``]cbYb`IG!8c``Uf'Y]b\check{z}'U`g'Yg'&$$&`Ub'Y6UmjYf_UiZh`kifXY''GdUWYL`fYjc`ih]cb]YfhY`X]Y`FUiaZU\fh]bXighf]Y`XifW&`X]Y$$9]bZØ\fib[`k]YXYfjYfkYbXVUfYf'FU_YhYb`ibX`k]fX`UiZ'ØVYf'%$$A]``]UfXYb`IG!8c``Uf'[YgW&Ahnh''NiXYa`ZØ\fh`Aig_'HYg`Už'XUgibhYf'gY]bYf'@Y]hib[`Y]bY`AUf_h_Ud]hU`]g]Yfib[`jcb'\ØVYf'Y]bYf6]``]cb'IG!8c``Uf'YffY]W&hY''$ 

## I bhYfbY\a Yf]gW\Y'J]Y`ZU`h'i bX'Dfc^Y\_hY

#D XY b ``Y hnhY b `A c b UhY b `\ Uh' A i g\_ `Ub [ Y\_Øb X][ hž g]W \ `]bhY b g]j Y f Ui Z `gY]bY `; Y g W \ A ZhY `ni `\_c b n Y b h f]Y f Y b ž `]b g V Y g c b X Y f Y `Ui Z `HY g` U ž I 5 = i b X `L " '9 f `d` Ub h ž `& ( #+ `Uf V Y]hY b `ni `k c ``Y b `i b X `\ Uh `g]W \ j c f[ Y b c a a Y b ž ]b `gY]bY b `5 f V Y]hg V Y f Y]W \ Y b `ni `g W \ `UZY b " `8 ] Y g \_ ca a h `ni `Y]bY a `NY]hd i b\_h ž `Ub `X Y a `Y]b `GhUfg \ ]d! @Ui b W \ ZØf `X]Y \_ ca a Y b X Y `K c W Y `Ub ghY \ h" A i g\_g `5 i gg U[ Y ž `X Ugg `Y f `b U W \ 5 V g W \ `i gg `gY]bY f `5 f V Y]hY b `V Y]a `8 Y d Uf ha Y b h `c Z ; cj Y f b a Y b h 9 ZZ] W]Y b W m a Y \ f `N Y]h `V Y] `HY g `U `j Y f V f]b [ Y b `k Y f X Y ž `k ] f Zh `Y ] b `@] W h Ui Z `gY]bY b `U\_hi Y ``Y b `: c\_i g"

## ?f]h]\_ i bX ?cbhfcj YfgYb

 k Y[Yb'Ubh]gYa]h]gWkYf'Ÿi » Yfi b[Yb'i bX'hfUbgZY]bX`]WkYf Ÿi » Yfi b[Yb'\_f]h]g]Yfh" Ni XYa '\Uh'Yf']b'XYf'JYf[Ub[Yb\Y]h \_cbhfcj YfgY'GhUbXdi b\_hY'ni '[`cVU`Yb'?f]gYbž'k]Y'XYf'7cfcbU! DUbXYa]Yž'gck]Y'ni 'H\YaYb'a]h'\]ghcf]gWkYa'?cbhYl hž'k]Y'XYa I a[Ub['a]h'XYf'XYi hgWkYb'GWki `Xž'[YÀi » Yfh"'8]YgY'Ÿi » Yfi b[Yb \UVYb'ni 'Y]bYf'a Ugg]j Yb'ÒZZYbh`]WkYb'8]g\_i gg]cb'ØVYf'X]Y JYfUbhk cfhi b['j cb'DYfqÒb`]Wk\_Y]hYb'gY]bYg'?U`]VYfg'[YZØ\fh"

GY]b'9b[U[Ya Ybh']b'XYf'Dc`]h]\_ž'gdYn]Y``k À\fYbX'gY]bYf'NY]h'a ]h XYf'Hfi a d!5Xa ]b]ghfUh]cbž\Uh'YVYbZU``g'ni '[fc»Yf'G\_Ydg]g [YZØ\fh"Aig\_'k Uf'Ua 'JYfgi W\'VYhY]`][hž'X]Y'; fÒ»Y'XYf FY[]Yfi b['ni 'fYXi n]YfYbž'k Ug'ni 'I bg]W\Yf\Y]hYb']a 'GhUUhgX]Ybgh ZØ\fhYž'i bX'gY]bY'dc`]h]gW\Yb'5\_h]j ]hÀhYb'ZØ\fhYb'gc[Uf'XUni ž XUgg'X]Y'5\_h]Yb\_i fgY'j cb'HYg`U'bY[Uh]j 'VYY]bZi ggh'k i fXYb" 8YbbcW\'\Uh'Aig\_'Ub[Y\_ØbX][hž']b'Ni\_i bZh'dc`]h]gW\Y'GdYbXYb ni 'fYXi n]YfYbž'k cVY]'Yf'YXcW\'\_Y]bY'k Y]hYfYb'8YhU]`g'XUni dfY]g[UV"

## Df]j UhYg'@YVYb

5V[YgY\Yb'jcb'gY]bYb'VYfiZ]W\Yb'5\_h]j ]hÀhYb'\Uh'Aig\_'Y]bY
[fc»Y': Ua ]`]Yža ]h'%('?]bXYfb'jcb'j ]Yf'jYfgW\]YXYbYb': fUiYb"
6YgcbXYfg'VYaYf\_YbgkYfh']gh'X]Y'ÒZZYbh`]W\Y'8]ghUbn]Yfib[
gY]bYf'HcW\hYf'J]j ]Ub'\*YbbU'K]`gcbž'X]Y'Aig\_g'\_cbhfcjYfgY
Ÿi»Yfib[Yb'\_f]h]g]Yfh'\Uh"'Hfchn'gY]bYg'iaZUb[fY]W\Yb
9b[U[YaYbhg']b'XYf';YgW\AZhgkY`h'k]fX'Aig\_'UiW\'U`g
VY[Y]ghYfhYf'J]XYcgd]Y`Yf'VYgW\f]YVYbž'XYf'YXcW\'ni[Y[YVYb\Uhz'VY]a'Gd]Y`Yb'[YgW\iaaYhni'\UVYb"

±g[YgUa h'V`Y]Vh'9`cb'Aig\_'Y]bY'dc`Uf]g]YfYbXY':][ifž'X]Y'gckc\`6YkibXYfib['ZØf']\fY'9ffib[YbgW\UZhYb'U`g'UiW\'?f]h]\_'ZØf']\fY
\_cbhfcjYfgYb'5iggU[Yb'\YfjcffiZh"'GY]b'9]bZigg'YfghfYW\_h'g]W\
ØVYf'nU\`fY]W\Y'6fUbW\Yb'ibX'V`Y]Vh'Y]b'ZUgn]b]YfYbXYg'H\YaU
ZØf'6YcVUW\hYf'XYf'[`cVU`Yb'K]fhgW\UZhg!'ibX
HYW\bc`c[]YgnYbYb"

| 8 Y hU]`g |   |
|-----------|---|
| JcfZU``   | G_UbXU`                                       |
| Cfh       | DfYhcf]Už'GØXUZf]_U                           |
| EiY``Yb   | <ul><li>k k k "_b!cb`]bY"XY</li></ul>         |
|           | <ul><li>k k k "Vi g]bYgg]bg]XYf"Wca</li></ul> |
|           | • h' b"XY                                     |

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