

## JZ6 Ghi hh[ Ufh. : fi gh b U W ' .' [ Y [ Y b A U]bn i b X 8 Y V U hh Y i a 'G W ] Y X g f ] W h Y f

J Z6 'Ghi hh[ Ufh'YbhhÀi gW\h'bUW\'' .' '[ Y[ Yb'A U]bnž'\_f]h]g]Yfh GW\]f]!9bhgW\Y]Xi b[ Yb'i bX'\_Àa dZh'a ]h'XYf'8YZYbg]j Y']b'XYf 6i bXYg`][ U"

8 Yf'J Z6'Ghi hh[ Ufh'\ Uh'g]W\ ']b'XYf': i » VU``!6i bXYg`][ U'a ]h'Y]bYa YbhhÀi gW\ YbXYb'9f[ YVb]g'\_cbZfcbh]Yfh'[ YgY\Ybž'U`g']a 'nk Y]hYb Gd]Y``XYf'GU]gcb'\_Y]b'G]Y[ '[ Y`Ub[ "'Hfchn'Y]bYf'ZfØ\Yb': Ø\fi b[ ']a Gd]Y`'[ Y[ Yb'XYb'%": GJ 'A U]bn'\$) '[ UVYb'X]Y'GW\ k UVYb'Y]bYb j Yfa Y]bh`]W\ 'g]W\ YfYb'J cfgdfi b[ 'Ui g'XYf' < UbX'i bX'a i gghYb'g]W\ Yhnh`]W\ 'a ]h'Y]bYa '' .' !! bYbhgW\]YXYb'VY[ bØ[ Yb"'I bhYf'XYb ) - "\$\$\$'Ni gW\ Ui Yfb']b'XYf'A YfW\XYg!6Ybn'5fYbU'gcf[ hY'XUg'Gd]Y` ZØf'[ Ya ]gW\ hY'FYU\_h]cbYbž'gck c\``Ui Z'XYa 'D`Uhn'U`g'Ui W\ 'UVgY]hg XUj cb"

 $\label{thm:local-condition} HfU]bYf'GYVUgh]Ub'<cYbY>`VfUW\hY'gY]bY'I bni Zf]YXYb\Y]h'ØVYf X]Y'XYZYbg]j Y'@Y]ghi b[ 'XYg'HYUa g'ni a '5i gXfi W_"'9f'a cb]YfhY X]Y'5bnU\`'XYf'; Y[ YbhcfYž'X]Y']b'XYf'bcW\''1 b[ Yb'GU]gcb'VYfY]hg ni 'j YfnY]W\bYb'k UfYb''' Nk Y]'Gd]Y`Yž'Y]b'Di b_h ž'ZUgghY'Yf'X]Y V]g\Yf][ Y'6]`Ubn'XYf'GW\k UVYb'ni gUa a Yb'i bX'j YfXYi h`]W\hY gca ]h'X]Y'8f]b[`]W\_Y]hž'Ub'XYf'5Vk Y\fUfVY]h'ni 'ZY]`Yb''$ 

## : fi gh ØVYf GW ]YXgf]W hYfYbhgW Y]Xi b[Yb

8]Y'I bni Zf]YXYb\Y]h'XYg'J Z6'VYgWXfÀb\_hY'g]WX'YXcWX'b]WX h'bi f Ui Z'X]Y'Y][YbY'@Y]ghi b["'5i WX'XYf'GWX]YXgf]WX hYf'H]a c'; YfUWX ghUbX']a ': c\_i g'XYf'?f]h]\_"'J Z6!Gdcfhj cfghUbX': UV]Ub'K c\`[Ya i h\ ghY``hY'ZYghž'XUgg'; YfUWX' b]WX h'gY]bYb'U``YfVYghYb'HU['[Y\UVh \UVY"'6YgcbXYfg'X]Y'9bhgWXY]Xi b[ž'X]Y'ni 'Y]bYa '9`Za YhYf'ZØf A U]bn'ZØ\fhYž'gcf[hY'ZØf'8]g\_i gg]cbYb"'J cf'XYa '5i g[`Y]WX'ni a ± XYf YfghYb < U`VnY]h ghUfhYhY XYf J Z6 Z f]cg. '9bnc 'A ]``chii bX

≯Ja ]Y @Yk Y`]b[ 'gcf[ hYb 'ZØf Y]bY 'ZfØ\Y '&.\$!: Ø\fi b[ "'8]YgY

\_ca ZcfhUV`Y '5i g[ Ub[ g`U[ Y \_\_cbbhY 'XYf J ]nYa Y]ghYf 'YXcW\ 'b]W\h
Ui gVUi Yb 'i bX '`]Y» 'A U]bn']bg 'Gd]Y ``ni fØW\_\_ca a Yb" '8Yf 'A U]bnYf

J ]YfhY 'Zc`[ hY 'Y]bYa :: ci `Y `Za YhYf j cb 'BUX]Ya '5a ]f] 'i bX 'Y]bYa

Hcf j cb '≈ bUh\Ub '6i f\_UfXhž'k Ug'X]Y 'DUfh]Y 'Ui Z'XYb '? cd Z'ghY``hY"

## 8 UgʻbÀWkghYʻDfc[fUa a i bXʻX]Y < YfUi gZcfXYfi b[Yb

A ]h'Y]bYa 'Zfi ghf]YfYbXYb'Di b\_h']a '; YdÀW\_'a i gg'XYf'J Z6'bi b']b X]Y'@ÀbXYfgd]Y`dUi gY'i bX'k ]fX'g]W\'Ui Z'X]Y'VYj cfghY\YbXYb Gd]Y`Y'[Y[Yb'6cfi gg]U'A ÒbW\Yb[`UXVUW\'i bX'6cfi gg]U 8cfha i bX'j cfVYfY]hYbž'VYj cf'XUg'[fc» Y'8i Y```]b'XYf'7\Ua d]cbg @YU[i Y'[Y[Yb'FYU``A UXf]X'UbghY\h''8]Y'\_ca a YbXYb'; Y[bYf j YfgdfYW\Yb'Y]bY'k Y]hYfY'DfØZ b['ZØf'X]Y'Ghi hh[UfhYfž'X]Y'g]W\ bi b'Ui Z']\fY'GhÀf\_Yb'VYg]bbYb'a ØggYbži a 'XUg'6`Uhh'ni 'k YbXYb i bX'X]Y'?cb\_i ffYbn']b'XYf'@][U'b]W\h'XUj cbn]Y\Yb'ni '`UggYb''

8]Y'6Yk Yfhi b['XYf'@Y]ghi b['i bX'X]Y': À\][\_Y]hž'Ui g'FØW\_gW\`À[Ybni '`YfbYbž'k]fX'YbhgW\Y]XYbX'gY]b'ZØf'X]Y'\_ca a YbXYb'DUfh]Yb" HfU]bYf'<cYbY»']gh'cdh]a ]gh]gW\ž'XUgg'XUg'HYUa 'Ui Z'XYa f]W\h][Yb'K Y[']ghž'a i gg'YXcW\'[`Y]W\nY]h]['@Ògi b[Yb'Z]bXYbž'i a X]Y'XYZYbg]j Y'GhUV]`]hÀh'ni 'j YfVYggYfb'i bX'XUg'GY`Vghj YfhfUi Ybni fØW\_ni [Yk]bbYb"

  $\label{eq:conditional} $$j\ Yf[\ Ub[\ YbY\ Nk\ Y]h][\ UgU]gcb\ `\ ]bhYf\ g]WX\ `ni\ ``UggYbž'k\ ]fX']b\ `XYb\ _ca\ a\ YbXYb\ K\ cWXYb\ gd\ \ gfVUf\ gY]b"$ 

8 YhU]`g

 $6\,Y\,gi\ W\!\!.\,Y\,b\,\,{}^.G]Y\,{}^.i\ b\,g\,{}^.Ui\ Z.\,\,{}^.b\,!\,U[\ "X\,Y\,$