

B Yi Yf'GWk Yfdi b_h'GW `Uza YX]n]b `]a
? `]b]_i a `: fUb_Zi fh'fC XYfł

/ ei ch/9fZU\fyb`G]Y'a Y\f'ØVYf'X]Y`bYi Y'gW`Uza YX]n]b]gWY
5VhY]i b[`]a `? `]b]_i a `: fUb_Zi fh'fC XYfł[Y`Y]hYh]j cb
7\YZfnh: Yf\Uh'HY_"`9bhXYW_Yb`G]Y'i a ZUggYbXY'8]U[bcgYb
i bX`]bbcj Uh]j Y`H\YfUd]Yb`ZØf'GW`UZghØfi b[Yb`i bX
5hYa Ui ZÄ`][_Y]hYb" `bZcfa]YfYb`G]Y'g]W`ØVYf'a cXYfbghY
6Y\UbX`i b[ga Yh\cXYb`i bX]j YfVYggYfb`G]Y` ÆfY
@YVYbgei U`hÅh"/ ei ch/



GW`UZa YX]n]b`YfcVYfh`XUg`?`]b]_i a `: fUb_Zi fh`fC XYfŁ.
7\YZ!D]cb]Yf`:`Yf\Uh`HY_`gYhnh`bYi Y`A U» ghÀVY`

5V`5df]`&\$&(`k]fX`ja`?`]b]_i a `: fUb_Zi fh`fC XYfŁ`Zf]gWYf`K]bX`]b
XYf`5VhY]i b[`ZØf`<U`g!BUgYb!C\fyb\Y]`_i bXY`fk`BCŁ`k Y\Yb`°`8Yf
\cW[YgW`ÀhnhY`7\YZUfnh:`Yf\Uh`HY_`Yfk Y]hYfh`gY]bY`9I`dYfh]gY
a]h`XYa `VfUbXbYi Yb`GW`k Yfdi b`_h` GW`UZa YX]n]b ``8Ua]h`ghY\`h
XYb`dUh]YbhYbcf]Ybh]YfhYb`6Y\UbX`i b[Yb`j`cb`GW`UZgh`Øfi b[Yb

Y]bY'j Ò`]['bYi Y'8]a Ybg]cb'cZYb°

GW`UZghÒfi b[Yb'g]bX'k Y]h'a Y\`f'U'g'Y]b'`Àgh][Yg'DfcV`Ya ' 'g]Y
g]bX'Y]b'; Ygi bX\Y]hgf]g]_c°'6YgcbXYfg'gW`UZVYnc[YbY
5hYa ghÒfi b[Yb'k]Y'X]Y' [YZØfW`hYhY'cVghfi _h]j Y'GW`UZUdbcY
VY`UghYb'ØVYf'A]`]cbYb'j cb'A YbgW`Yb'i bX'_ØbbYb'j Yf\YYfYbXY
: c`[Yb'\UVYb.'6'i h\cW`Xfi W_ž<Yfn]bZUf_h'i bX'gc[Uf
GW`U[UbZÀ`Y'g]bX'bi f'Y]b][Y'XYf'a Ò[`]W`Yb': c`[Yf_fUb_i b[Yb"
8]YgY'DfcV`Ya Y'gW`fÀb_Yb'X]Y'@VYbgei U'hÀh'a Ugg]j 'Y]b° ž
a U\bh': Yf\Uh'HY_'Y]bXf]b[`]W`"

A cXYfbghY'8]U[bcgh]_']b'XYf'GW`UZa YX]n]b

⇒a '\Ui gY][YbYb'GW`UZUVcf'_ØbbYb'g]W`X]Y'DUh]Ybh]bbYb'i bX
DUh]YbhYb'Ui ZY]bY'fYj c`i h]cbÀfY'8]U[bcgh]_`ZfYi Yb"A cXYfbghY
I bhYfgi W`i b[gfÀi a Y'g]bX'VYfY]hž'i a 'i b[YghÒfhY'BÀW`hY'ZØf'Y]bY
i a ZUggYbXY'5bU'mgY'XYf'GW`UZ[Yk c\`b\Y]hYb'ni 'V]YhYb"'Ni 'XYb
\Ài Z][ghYb'6YgW`k YfXYb'nÀ\`Yb' [YZÀ\`f]W`Y'5hYa gh]`ghÀbXYž
GW`bUfW`Ybž'A i bXUha i b['i bX'X]Y'hØW_]gW`Y'HU[Yga ØX][_Y]h"
GW`fYW_]W`°

K]Y'Zi b_h]cb]Yfh'X]Y'8]U[bcgh]_3'Ni bÀW`gh'ghY'h'Y]b
Ui gZØ\`f]W`Yg'5bUa bYgY[Ygd fÀW`Ub' `XUg'VYXYi hYhžXUgg'X]Y
A YX]n]bYf'[YbUi 'ni \ØfYbž'i a 'X]Y'DfcV`Ya Y'f]W`h]['ni 'j YfghY\`Yb"
9g'Zc`[h'X]Y'Dc`mgca bc[fUd\`Y' `Y]bY' [Yb]U'Y'A Yh\cXYž'i a
<]fbghfÒa Yž'5hYa Zi gg'i bX'j]Y'Y'k Y]hYfY'k]W`h][Y'DUfUa YhYf'a
GW`UZ'ni 'a YggYb"'8]Y'Ui gk YfhYbXYb'9I dYfhYb']b'XYf'<BC!?'`b]_
ghY`Yb'XUbb'gW`bY`ZYghž'k]Y'j]Y'5`Ufa 'j]b'XYb'BÀW`hYb'k]f_]W`
ghYW`h°

⇒b b c j Uh]j Y'H\YfUd]Yb'ZØf'VYggYfY'BÀW`hY

8]Y'H\YfUd]Ya Ò[`]W`_Y]hYb'g]bX'VfY]h'[YZÀW`Yfh'`Jcb'Y]bZUW`Yb
ÿbXYfi b[Yb'XYf'GW`UZVYX]b[i b[Yb'V]g'\]b'ni
a U» [YgW`bY]XYfhYb'I bhYf_]YZfj cfgW`i VgW`]YbYb'_ca a Yb'X]Y
VYghYb'@Øgi b[Yb'ni a '9]bgUhm": Øf'X]Y'Yb][Ybž'X]Y'a]h'XYf
\Yf_Òa a `]W`Yb'7D5D!H\YfUd]Y'f7cbh]bi ci g'Dcg]hj Y'5]fk Um
DfYggi fYÉ'b]W`h'[`ØW_]W`k YfXYbž'[]Vh'Yg'X]Y'Ui ZfY[YbXY

A Ò[`]Wk_Y]h'XYg'Ni b[YbgWk f]hha UWk Yfg" 8]YgYf']bbcj Uh]j Y'<Y`ZYf
i bhYfghØhnh'X]Y`A i g_Y`gdUbbi b[`XYf'Ni b[Y`]a `GWk `UZ `Y]b
YWk hYf'; Ua YWk Ub[Yf`ZØf'j]Y`Y`°

K]f`UVYb`X]Y`?fUZh'X]Y`@VYbgei U`]hÅhi bgYfYf'DUh]Ybh]bbYb
i bX'DUh]YbhYb`XfUgh]gWk`ni`j YfVYggYfb žVYhcbh`Jb`J_cV]hñžXYf
?`]b]_[YgWk`ÀZhgzØ`fYf" `9]b`ghUf_Yg`HYUa`j cb`cWk`ei U`]Z]n]YfhYb
YfnhYbž`DZY[Y_f`ÀZhYb`i bX`: UWk`dYfgc`bU`[UfUbh]Yfh`Y]bY
hcd`a`cXYfbY`a`YX]n]b]gWk`Y`J Yfgcf[i b[`]b`6fUbXYbVi f["

8 Ug`?`]b]_i a` : fUb_Zi fh'fC XYf`n`n`h`ni`XYb`fYbca`a`]YfhYghYb
a`YX]n]b]gWk`Yb`9]b]Wk`hi b[Yb`]b`XYf`FY[]cb" `5`g`U`UXYa`]gWk`Yg
@Y`f`fUb`_Yb`Ui`g`XYf`7`Uf]hÅ! i b]j Yfg]hÅhga`YX]n]b`6Yf`]b`]gh`Yg
ghc`n`XUfUi`Z`gY]bYb`_Y]bYb`i bX`[fc» Yb`< YfUi`gZcfXYfi b[Yb`a`]h
?ca`dYhYbn`i bX`9a`dUh`Y]ni`VY[Y[bYb" <]Yf`k`]fX`g]Wk`i a`X]Y
; Ygi bX`Y]h'XYf`6Yj`Ø`_Yfi b[`]b`ØVYffY[]cbU`Ya`A`U» ghUV
[Y_Øa`a`Yfh`A`Y`f`b`Zcfa`Uh]cbYb`i bhYf.`k`k`k`"_`]b]_i a`ZZc`XY

8YhU]`g

6Ygi Wk`Yb`G]Y`i bg`Ui`Z.`a`Y]b!VYf`]b`b`Yh