

=a a ][ fU]cb  
5hgi XYfY



5hgi XYfY! i b]j Yfg]hYh

Fi a Âbg\_

5 j fYU'gß'a ß'ÉbgW]i "Ui b]j Yfg]hYh"  
5 b[ ]j 'UhXi '[ YfbYj ]' ]bXg\_f]j Yg

Dcfh [ ]g]g\_

; cg]Uf]U'XY'a Y'a Uf]W'Uf'Ya 'i a Ui b]j Yfg]XUXY"

5 j fYU'gß'Ud']WU'Wfgj `XY'SSSSSSSSSSSSS"  
5 b[ ]j 'UhXi '[ YfbYj ]' ]gQ[Y'YhZU[

; cg]Uf]U'XY'a Y']bg]W]Yj Yf'bc'Wf]gc'XY'SSSSSSSSSSSSSSS"

gi XYbh

[ fUXi UÃ]c

: U[

gi XYbhW'X]d'ca ß

dí g[ fUXi UÃ]c

: U[

XcWcfUbX

D\8

: U[

W'bcfa ß'ÉbfYU[ ß

H'a dc']bhY[ fU

: U[

W'↑ a ßhY'XY'bcfa ß

a Y]c'dYfÉcXc

: U[

`U'X]ghub ß

cb`]bY

: U[

A ]!Uf'd'ßWU'gß'gi X]Yn`Ui b]j Yfg]hYhYU  
Xi a bYUj cU]gfß'dYb]fi 'Vß'SSSSSSSSSSSSS"  
5 b[ ]j `j cf`Ub[ 'X]b'i Xj Y\_g]b[ 'Yf

; cg]Uf]U'XY'Ygi XUF'Ya 'g'Ui b]j Yfg]XUXY'dcf  
SSSSSSSSSSSSSS"

i b'gYa Ygf]i

i a 'gYa Ygf]Y

@Ãb[ XY'UZcd\c`X]j YX'i XYb`UbXg\_ 'i b]j Yfg]hYh

i b'Ub'UWXYa ]W

i a 'Ubc'UWXY]W

@Ãb[ XY'UZcd\c`X]j YX'i XYb`UbXg\_ 'i b]j Yfg]hYh

7UFY'g bhVcbX] ]]Y'XY`i W]i 'dYb]fi 'gi XYb ]3  
GdÔf[ 'ca 'UFVY'XgfYgf]\_]cbYf'Zcf'gi XYfYbXY

E i U]gg;c'U]gfYgf]Ã]YgXY'fUWU\c'dUFUYgi XUb]Ygß

# ⇒ a a ][ fU]cb 5higi XYfY



HfYVi ]Y'gB'dfYn]bhXcW'a YbhY'Y'cf][ ]bU'Y'gu 'Vtd]]  
UY'UWg'cfU3

8Yj c'UdfYgYbHUF 'UgVd]Ug'Xcg'XcW'a Ybhcgci 'cg  
cf][ ]bU]g3

GdÔf[ 'ca 'Xi 'g\_U'UZ'Yj YfY'XY'cf][ ]bU'Y'dUd]fYf'Y'Yf'V'ch\_cd]Yf

7UFY'g bhVt'bx]] 'Y'XY'UXa ]HfY'U'i b]] Yfg]HUY3  
<j UX'Vfi [ Yg'bÁf'Xi 'UbgÔ[ Yf'ca 'cdH] Y'gy'dÁ'i b]] Yfg]HfYh

E i U]gg;c'cgfYei ]g]hcgXY'UWggc'¼'i b]] Yfg]XUXY3

ªa ]j Y ]'f]a ]Hf'c'gW]gcUFY'XY'UWdHUY3  
GdÔf[ 'ca 'Xi 'j ] 'a cXHU[ Y'Yb'Zcfa Y'cdH] Y'gy'gVY\_fÃZHY'gy

J ci 'fYWWYf' i a U'dfcdcgU'Zcfa U 3

CZYfB'i b]] Yfg]HUYU'VhUFY'XY'UgYa YbYU3  
GdÔf[ 'ca 'i b]] Yfg]HfYh] 'VmXyf' ]bX\_] UfHf]b[

5 i b]] Yfg]XUXY'Ua VÅa 'cZYfW'UWta cXUÃ\_c3

9I ]gB'dyf]cUXB'XY'dfUW]Vb'Éb'd'Ubi 'XY'gi X]]3  
GdÔf[ 'ca 'X]bY'i b]] Yfg]HfYgZU[ ]bXY'c'XYf'Yb'dfU\_h\_dYf]cXY

C Wf'g'c'Ua VÅa ]bW ]'i a 'dYfÉ'Xc'XY'Yg]½]c3

Gh XYb ]] 'WUFY'j ]b'W'gW]a V'XY'Yi dYf]Yb B'fYMi Y  
gB'd'BH'Ug]B'hu B'XY'Éba Uf]W'UFY3

< ¼i a 'Wg'c'dUFUY'gi XUF 'Wta c']bh'f'Wta V]gU'bYgU  
i b]] Yfg]XUXY3

GdÔf[ 'ca 'Xi 'Yf'bÔXhi]' 'UhVYHU'Y'Zcf'Ughi XYfY'gca 'i Xj Y\_g]b[ ggi XYfYbXY'dÁ'XYHf'i b]] Yfg]HfYh

7i a 'dchi fa Bf]dfc[ fYg' 'Ud']W]Y]a Y'Y3

7ca c'dcgg'UWta dU'U'Uf'c'dfc[ fYgg'XU'a ]b\U  
]bg]W]Ã\_c#Mbx]XUhi fU3

GdÔf[ '\j cfxU'Xi ' \_Ub'gy'X]b'UbgÔ[ b]b[ gZ'Ya [ Ub[

7UFY'Ygh'b]] Y'i 'XY'O]a VUQWfi hB3  
GdÔf[ ]bX'h' '\j ]\_Y\_fU ]h' 'gdfc[ 'XYf'g\_U'cdZmXYg'Zcf'Uh\_i bbY'V'j Y'cdH] YhdÁ'i b]] Yfg]HfYh

E i U]gg;c'cgfYei ]g]hcgXY'Éb[ i U'dUFU'OÉb[ i U3

7i a 'Ygh'g]ghYa i 'SSSSSSSSSSSS3  
GdÔf[ 'h' ]bZcfa U]cb'ca 'gng]Ya Yh

7ca c'Á'c'g]ghYa U'XY'SSSSSSSSSSSSS3

XY'WfX]hY  
J i fXYf]b[ gng]Ya

WfÁX]hc

XY'bchY  
J i fXYf]b[ gng]Ya

bchUg

J c]'df]a ]'c'ZcU]Y'a Uf]Vt' B''UZ]bU'i 'a cV]'hB ]]3  
GdÔf[ 'ca 'Xi 'g]Xgh]'X]hi Xj Y\_g]b[ gcd'c'X'j ]'ZÁ'Yb'U'UXYa ]g\_'i Xg\_f]Zh

J ci 'fYWWYf' i a U'Wf]h]Z]W]Ã\_c'UW]X]É ]W]bc'Z]bU'Xc  
]bh'f'W]a V]c3

# ⇒ a a ][ fU]cb 5hgi XYfY



7i a 'YgY'g]g]Ya i ``XY'dfYXUY3  
GdÔf[ 'h`i bXYfj ]gb]b[ gZcfa Yb

E i U `Ác`Yg]`c`XY`Ybg]bc3

Gi bhSSSSSSSSSSSSSS`3  
GdÔf[ 'h`i bXYfj ]gb]b[ gZcfa Yb

G;c`SSSSSSSSSSSSSS`3

Wfgj f]`hcfY]W  
? i fgj gmdY

Ui `UgYI dcg]h]j Ug

gYa ]bUf]]  
? i fgj gmdY

gYa ]b½]cg

hi hcf]UY  
? i fgj gmdY

hi hcf]U]g

VbZyf]b Y  
? i fgj gmdY

VbZyf`A]b]Ug

W`ZY`XY`Wfgj f]`cZYfB` Vb`Y`XY`j UfB3  
GdÔf[ `ca `]bZcfa U]cb`ca `XY`ZU[ `XYf`h`VmXYgd`Á`gca a Yfg`c`Y

E i YWfgcg;c`cZYfW]Kcgdcf`YgW`UgXYj Yf;c3

7<sup>3</sup>bX`gY`g] g ]bY`gYg]i bYU`XY`YI Ua YbY3  
GdÔf[ `j cfbÁf`XYf`Yf`Y`g]a ]bYf

E i UbXc`U]b]h]W]a `Ugdfcj Ug3

I bXY`dch[ Bg] ]bZcfa U]]`XYgdYf`hcU]Y`Wfgj f]`Y  
X]g]cb]V]`Y3  
GdÔf[ `j cf`Xi `U]b]Z]bXY]bZcfa U]cb`ca `ZU[ YbY

C bXY`dcggc`YbVb]h]Uf`]bZcfa U]b]V]g]c`VfY`cg`Wfgcg  
X]g]cb]j`Y]g3

5 fY`i b]j Yfg]h]U]U`Wb]fi `gdcf]h]j 3  
GdÔf[ `ca `XYf`Yf`Yb`gdcf]h]U`dÁ`i b]j Yfg]h]Y]h

< ½i a `V]a d`YI c`Ygdcf]h]j c`Uei ]3

7i a `a B`dchiU]B]hi fU]Ugc]W]U]]`cf`gi XYb Y h]3  
GdÔf[ `j cfXU]b`Xi `U]b]XY`h]U[ Y]`gi XYb]YfZcfYb]b[ Yf

7 ca c`dcggc`a YU]Z]U]f`U]b]g]h]i ]Á]V]g]Yg]i XU]b]h]g3

7 UY`g] bhW]Y`hi ]Y]`Y`XY`É]h]fY ]bYfY`Yg]a U]h] Y`É]b  
Q]fU i `Q3  
GdÔf[ `YZ]Yf`XY`U]bg`Á]XY`Y] Yca `cg]b]b[ Yf]`V]mYb

E i U]gg;c`cg`W]g]c]g]XYj ]XU]Yg]a U]XcgYa `Q]XU]Y]Q3

5hgi XYfY!`Gdfc[\_i fgYf  
F i a Ábg\_

Dcfhi [ ]g]g\_

# ⇒ a a ][ fU]cb 5hgi XYfY



7Y`ja V]gfb]bY'dchgi X]U'Eb'Wbfi`  
Xi a bYU cUgfb3

E i U]g`Eb[i Ug]dcggc`Ygi XUF`Ya`g UYgM'U3

GdOf[ `j ]`\_Y'gdfc[ `Xi`\_Ub'ghi XYfY'dA'g\_c`Yb

9I ]gB'i b`HghXY`Yj U i UFY'dYbfi`U'a ]'gY`XYHfa ]bU  
bj] Yi`XY`ja VB3

9I ]gY'i a`HghY`XY`bj] YUa Ybhc'dUFU`Uj U]UF`a Yi`bEj`Y3

GdOf[ `ca`XYf`Yf`Yb`d`UWf]b[ ghYgiZcf`UhVYXOa a Y`X]hb]j YU

9I ]gB'dcg[V]`]hU`U`XY`U`Z`]fUbgZfU`U`U`hb]j Y`  
XUW`bi`ZfY`Yb`Hn`b]j Yi`dchf]j ]ha ]Y3

Dcggc`a Y`fUbgZf]f`dUFU`ci`f`c`bEj`Y`gY`c`ei`YYgci`  
Z`hYbXc`b`c`Zcf`UXYei`UXc`dUFU`a ]a 3

GdOf[ `ca`Xi`\_Ub`g\_]ZfY`b]j YU`j]gXi`\_]\_\_Y`Yf`h`]ZfYXg`a YX`XYhXi`XY`hU`Yf`]

5j Y ]c`XYgM]YfY`XY`hU]U`b`U`Wfg`i ]3

J cW]Ej`hVa`i a U`XYgM]A`c`XY`hU`UX`Xc`Wfgc3

GdOf[ `ca`XYf`Yf`Yb`XY`hU`YfYhVYg`f]j Y`gY`UZ`ZU`Yh

7UFY`Ygh`bi a Bfi`a U ]a`XY`gi`XYb ]`X]bfi`c`WUg3

E i U`A`c`bOa`Yfc`a`h`ja`c`XY`U`i`bcgdcf`WUg3

GdOf[ `j] UX`XYha`U`g]a`U`Y`Ub`hU`UZ`XY`hU`YbXY`gi`XYfYbXY`Yf`df`"ZU]

7Y`ZUW] ]hBf]`cZfB`Wbfi`3

E i U]gg;c`UgW`a`cX]XUXYgXU`YgM'U3

GdOf[ `j ]`\_Y`ZUW] ]hYf`XYf`Z]bXYg`dA'g\_c`Yb

Cf[ Ub]nU ]`Yi`Wfg] ]XY`UgYa`YbYU3

J cW]Ej`hVa`V`A`c`f[ Ub]nUa`Yi`Wfg]Yg3

GdOf[ `ca`g\_c`Yb`c[ gA`UffUb[ YfYf`Y`g\_i`fg]cbYf

7Y`dfc[ fUa`B`cZf] ]3

E i U]gdfc[ fUa`Ugj`cW]Ej`cZfY`W`a`3

GdOf[ `j ]`\_Y`dfc[ fUa`a`Yf`XYf`h`Vn`XYg

## 5hgi XYfY!`Gh]dYbX]Yf

### Fi a A`bg\_

### Dcfh [ ]g]g\_

5a`j`Yb]hdYbfi`U`WfY`]bZcfa`U]]`Eb`Y[ B`h`fB`W`  
dcg[V]`]hB ]`Y`XY`Z]bUb`UFY

;`cg]Uf]U`XY`g]WYf`ei`U]gg;c`Ug]dcf`h`b]XUXYg`XY`  
Z]bUb]Ua`Ybhc`"

GdOf[ `YZf`a`i`][`YXYfbY`Zcf`gh]dYbX]Yf

7Y`cf[ Ub]ga`Y`Ea ]`dchZ]bUb`U`gi`X]]`Y3

E i U]gj`f[ ]`cg]dcXYa`Z]bUb]Uf`a`Yi`gYgi`Xcg3

GdOf[ `YZf`j`j ]`\_Y`cf[ Ub]g]cbYfz`XYf`\_Ub`Z]bUb]YfY`X]hgi`X]i`a

5a`bY]c]Y`XY`U`f`hcf`Z]bUb]Uf`dYbfi`  
SSSSSSSSSSSS"

DfW]gc`XY`U`I`E]c`Z]bUb]W]f`c`dUFU`SSSSSSSSSSSS"

5b[ ]j`UhXi`UF`Vfi [ `Zcf`O`cbca ]g`\_`A`d`

# ⇒ a a ] [ f U h ] c b 5 h i g i X Y f Y



KU B'XY' Vê'UF]nUFY

a YbgJ]XUXYg

GU[ Yfz'Xi '\UF'V\cj 'Zcf'Ô\_cbca ]g\_'g'ÔtY'h`

ÊbhfY ]bYfY

XYgdYgJgXY'g Vg]gh'ÆV]U

GU[ Yfz'Xi '\UF'V\cj 'Zcf'Ô\_cbca ]g\_'g'ÔtY'h`

Êb[ f]fY'Vêd]]'a ]bcf]

W]XUXcg]bZUbh]g

GU[ Yfz'Xi '\UF'V\cj 'Zcf'Ô\_cbca ]g\_'g'ÔtY'h`

7Y'Zr'XY'Vi fgY'XY'gh X]i 'g bhX]gdcb]V]Y3

E i U]gg;c'cg]h]dcb]XY'Vc'gJgX]gdcb]f] Y]g3

GdÔf[ '\j ]'\_Yb'gU[g'g]dYbX]Yfz'XYf'Yf'h`[ 'Åb[ 'Y][ 'Y

5 h i g i X Y f Y ! ; c X \_ Y b X Y g Y ' U Z i X Y b ` U b X g \_ Y i X X U b b Y g Y f

F i a Å b g \_

D c f h [ ] g g \_

5 'j fYU'g3'a ]'Y\W]j UYn'Wf]h]Z]W]h'`XY'gh X]]'Êb  
OUfUQ

9i '[cg]Uf]U'XY'j U]XUf'a Yi 'X]d'ca U'Ya 'Q]Uf]Q

5 b [ ]j 'UhXi '[ YfbY'j ]'j U]XYfY'X]hiUZgi HtYbXY'Y\_g]a YbgVY ]g]'`UbXYh

5 j Y ]'c`']gB'W'f]UXi V]hcf]'U hcf]nU]'Êb'Q]a VUC3

J cW]hYa 'i a U`]gU'XY'f]UXi hcfYg'Wf]h]Z]W]XcgYa  
OÊb[i U3

GdÔf[ 'ca 'XYf'Yf'Yb`']gY'cj Yf'Wf]h]Z]WfYXY'cj Yfg'ÅHtYfY]'XYhgd]fc[ 'Xi '\UF'V\cj 'Zcf

I bXY'dchcV ]bY'i b'Wf]h]Z]W]hXY'Y\W]j U'UFY3

CbXY'dcggc'V]bgY[i ]f'i a 'Wf]h]Z]W]Xc'XY'Yei ]j U'ÆV]U3

GdÔf[ '\j cf'Xi '\_Ub'Z'Å'Yh'Å\_'j ]j U'Ybg'Wf]h]Z]\_Uh