



LING5006

7 i ffYbh=ggi Yg']b'6]]b[i U`ga

HYfa `C bY`#`&\$%-

7ci fgY`Cj Yfj]Yk

`GHUZZ7cbhUWhi8YHJ`g`

`7cbj Ybcfg`

B Ua Y	9a Uj`	5j U]UV]]m	@cWWhcb	D\cbY
5b]i` < Uhcgg	U"Uhcgg4 i bgk "YXi "Ui	H\i fgXUmj`%' da	A cfj Yb`6fck b &&\$	\$&-' , ,) , ' (\$

GWXcc``7cbhUWhi`bZcfa Uhjcb

7ci fgY'8YHJ]`g

7fYX]hDc]bHg`*`

Gi a a UfmcZh\Y'7ci fgY

5ggYgga Ybh

Gh XYbhg'UFY'fYei]fYX'hc' i gY'5D5'fYZfYbW]b['Zcf'U''h\Y]f'Ugg][ba Ybhg''H\Y'WUgg'hYgh]g'WcbXi WYX cb]bY']b'WUgg'UbX'ghi XYbhg'UFY'fYei]fYX'hc'Vf]b['h\Y]f''Udhcdg"

5ggYgga YbhHUg_g`

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH	Gh XYbh@YUfb]b[Ci hWca Yg'5ggYggYX
7`Ugg'hYgh	' \$i	&- #'\$ #&\$%- '\$%\$\$'DA	%
DfYgYbhU]cb`	&\$i	Bch5dd`]WUVY	' ž(
F YgYUfW'YggUm) \$i	&* #\$(#&\$%- '\$(. \$\$'DA	&ž ž(

5ggYgga Ybh8YHJ]`g

5ggYgga Ybh%`7`Ugg'hYgh

GhUfhXUH. '&- #'\$ #&\$%- '%&.\$\$\$'DA

8YHJ]`g. 'HYghf%\f'cb' hcd]Mg'Wcj YfYX']b'h\Y'Wci fgY''8Y'j] YfYX'cb]bY'' hX]j]Xi U''ZYXVUW_k]''VY' dfcj]YX"

5XX]h]cbU'XYHJ]`g.

H\]g:]g'Ub'cb]bY'hYghWcbXi WYX']b'WUgg''Gh XYbhg'bYX'hc'Vf]b['h\Y]f'XYj]W'g'hc'UWW'gg'h\Y'hYghcb]bY"

5ggYgga Ybh&`DfYgYbhU]cb

GhUfhXUH. 'Bch5dd`]WUVY

8YHJ]`g. '5`WUgg'dfYgYbhU]cb'f%'\$'a]bi H'g'LVUgYX'cb'gYhfYUX]b[]g'UbX'hcd]Mg'Wcj YfYX']b'h\Y'Wci fgY'' hX]j]Xi U''ZYXVUW_k]''VY' dfcj]YX"

5ggYgga Ybh' . F YgYUfW'YggUm

GhUfhXUH. '&- #'\$ #&\$%- '%&.\$\$\$'DA

8YHJ]`g. '5`fYgYUfW'YggUm'fUddfcl]a UH`m&\$\$\$'k cfXg'c'cb'UbmcZ'h\Y'a U'cf'hcd]Mg'Wcj YfYX']b'h\Y'Wci fgY'' hX]j]Xi U''ZYXVUW_k]''VY' dfcj]YX''H\]g'h\Y'Z]bU'UggYgga YbhZcf'UH'YbXUbW'`di fdcgYg"

5 hYbXUbW'F Yei]fYa Ybhg

5 hYbXUbW'cZ@YWi fYg'UbX'Hi hcf]U'g'jg'a UbXUhfcm]b'h]g'Wci fgY"1 bYI W gYX'UVgYbW'Zca 'a cfY'hUb &\$i 'cZ'YWi fYg'UbX'hi hcf]U'g'k]''fYgi 'h]b'h'Y'Uk UfX'U'ZU]'[fUXY''

⊕''YWi fY'UbX'hi hcf]U'g'mci 'k]''UW]j Y'mYb[U[Y'k]h'WcfY'Wci fgY'Wcbh'bh'Z'YbUV']b['mci 'hc'UhfU]b'7 @C '%'

7 ci fgY'GWXYXi `Y

[J \]yk 'WUgg'hja YhUVY](#)

H]a YhUV`Y`

8UhY	HmdY	7cbhYbh
K YY_ '% '% : YVfi Ufm! '&(: YVfi Ufm	Hcd]W	⊕gi Yg'cZXYZ]b['UbX'a Udd]b['V]]b[i U]ga '! HYI hVcc_'7 \UdhYf'%
K YY_ '&.'&) : YVfi Ufm!' ' A UfW	Hcd]W	⊕gi Yg'cZa YUgi fYa YbhczV]]b[i U]ga '! HYI hVcc_'7 \UdhYf'&
K YY_ " .' ('A UfW '! '%\$ A UfW	Hcd]W	C bhc[YbYg]g'cZV]]b[i U]mi !HYI hVcc_'7 \UdhYf''
K YY_ (. '%%A UfW '! '%+ A UfW	Hcd]W	7 c[b]hj Y'YZY'Wg'cZV]]b[i U]ga '! HYI hVcc_'7 \UdhYf' (
K YY_) . '% 'A UfW '! '&(A UfW	Hcd]W	GcW]YhU'V]]b[i U]ga 'UbX']bhYf[fci d'fY'Uh]cbg! HYI hVcc_'7 \UdhYf'%"\$"
K YY_ '*.'&) 'A UfW '! " % A UfW	Hcd]W	

F Ygci fWg

DfYgW]VYX F Ygci fWg

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

5 WUXYa]W<c bYghmUbX 'D`U[]Uf]ga

D`U[]Uf]ga]g'i g]b['hY'k cfXg'cf]XYUg'cZchYfg'UbX'dfYgYbh]b['hYa 'Ug'mci f'ck b" #WUb'fU_Y'a Ubm Zcfa gZ Zca 'XY]VYfUHY'WXUhf]b['hc'UWV]XYbhU`mWcdm]b[Zca 'U'gci fW'k]h'ci hUW_bck 'YX[Ya Ybh'

I BGK '[fci dg'd`U[]Uf]ga]bhc'hY'Z`ck]b['WUHY[cf]Yg.

7cdm]b[.i g]b['hY'gUa Y'cf'j Yfmg]a]Uf'k cfXg'hc'hY'cf][]bU`hYI hcf]XYU'k]h'ci hUW_bck 'YX[]b['hY'gci fW'cf'i g]b['ei chU]cb'a Uf_g" 'H\]g'U'gc'Udd'Yg'hc'ja U[YgZ'UfhUbX'XYg][b'dfc'YWgZ'Ug'k Y`'Ug dfYgYbhU]cbg'k \YfY'gca YcbY'dfYgYbhg'UbchYf'g'XYUg'cf'k cfXg'k]h'ci hW'YX]h'

#Uddfcdf]UHY'dUfUd\fUg]b[.7\Ub[]b['U'Zk'k cfXg'UbX'd\UgYg'k \]Y'a cghm'fYU]b]b['hY'cf][]bU'gfi W'fY'UbX'#f'dfc[fYgg]cb'cZ]XYUg'cZhY'cf][]bU'Z'UbX']bZcfa U]cb'k]h'ci hUW_bck 'YX[Ya Ybh' 'H\]g'U'gc'Udd'Yg']b'dfYgYbhU]cbg'k \YfY'gca YcbY'dUfUd\fUgYg'UbchYf'g'XYUg'cf'k cfXg'k]h'ci hW'YX]h'UbX'hc d]Y]W]b['hc[Y'hYf'ei chYg'UbX'dUfUd\fUgYg']bhc'U'bYk'k \c'Y'Z'k]h'ci hUddfcdf]UHY'fYZYfYbW]b["

7c`i g]cb.'k cf_]b['k]h'chYfg'Vi hdUgg]b['cZ'hY'k cf_'Ug'U'dYfgcb'g']bX]j]Xi U'k cf_"7c`i g]cb'U'gc]bWi XYg'dfcj]X]b['mci f'k cf_'hc'UbchYf'gh'XYbhVYZc'fY'hY'Xi Y'XUHY'Zc'f'Zc'f'hY'di fdcgY'cZ'hYa d'U[]Uf]g]b['UhUbmi]ja Y'Z'dUm]b['UbchYf'dYfgcb'hc'dYfZc'fa 'Ub'UWUXYa]W]Ug_žgh'U']b['cf'UW'ei]f]b[UbchYf'dYfgcb'g'UWUXYa]Wk cf_'UbX'Wcdm]b[]h'ZcZYf]b['hc'Wca d'YH'UbchYf'dYfgcb'g'k cf_'cf'gYY_]b[dUma YbhZc'f'Wca d'Y]b['UWUXYa]Wk cf_"

#Uddfcdf]UHY'W]hU]cb.'7]h]b['gci fW'g'k \]W\Uj Y'bchVYYb'fYUXZ'k]h'ci hUW_bck 'YX[]b['hY'"gYWcbXUfm' gci fW'Zca 'k \]W'_bck 'YX[Y'cZ'hYa '\Ug'VYYb'cV]b]bYX"

8i d']WU]cb'f'fY'Z'd`U[]Uf]ga "L'gi Va]h]b['mci f'ck b'k cf_ž]b'k \c'Y'cf']b'dUf'žk \YfY']h\Ug'dfYj]ci g'm VYYb'dfYdUfYX'cf'gi Va]h]YX'Zc'f'UbchYf'UggYgga Ybhcf'Wci fgY'Uhl BGK 'cf'UbchYf'i b]j Yfg]m'

7cffYW'fYZYfYbW]b['dfUW]W'g.

- DUfUd\fUg]b[žgi a a Uf]g]b[žYggUm'k f]h]b['UbX'hja Y'a UbU[Ya Ybh
- 5ddfcdf]UHY'i gY'cZUbX'Uhf]Vi h]cb'Zc'f'U'fU]b[Y'cZa UHYf]U'g']bWi X]b['hYI hž]a U[YgZ'Zc'fa i 'UY'UbX WcbW'drg"

#X]j]Xi U'Ugg]gh'UbW']g'Uj U]UV'Y'cb'fYei YghZca 'H\Y'@Yf]b['7YbhY'f'f'hd.##k k k "Wi bgk "YXi "Ui #"
Gh XYbhg'UfY'U'gc'fYa]bXYX'h.UhWfYZ'`hja Y'a UbU[Ya Ybh]g'Ub]a dcf]UbhdUfhicZgh'XmUbX'cbY'cZ'hY]XYbh]ZYX'Wli gYg'cZd'U[]Uf]ga]g'dccf'hja Y'a UbU[Ya Ybh'Gh XYbhg'g'lc'i 'X'U'ck'gi Z]W]Ybh]ja Y'Zc'fYgYUfW'Z'XfU]h]b['UbX'dfcdYf'fYZYfYbW]b['cZgci fW'g']b'dfYdUf]b['U'UggYgga Ybh]h'a g"

I BGK '@]VfUfm'U'gc'\Ug'hY'9@G9'hc'`Uj U]UV'Y'hc'Ugg]gh'mci 'k]h'mci f'gh'XmUhl BGK "'9@G9']g XYg][bYX'hc']b]fcXi W'bYk'gh'XYbhg'hc'gh'Xn]b['Uhl BGK 'Vi h]h'WUb'U'gc'VY'U' [fYUhfY'ZYg\Yf'Xi f]b['mci f'gh'Xm'

7ca d'Y]b['hY'9@G9'h'hc'f]U'UbX'ei]n'k]`YbUVY'mci 'hc.

- UbU'mgY'hc'd]WgZ'd'Ub'fYgdcbgYg'UbX'cf[Ub]gY'fYgYUfW'Zc'f'UWUXYa]Wk f]h]b['UbX'chYf'UggYgga Ybh]Ug_g

- i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V]hYg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wcdmf][\hžI BGK 'Gh XYbh7cXY'cZ7cbXi WñUbX'5WwdfUV'Y'I gY'cZ I BGK '⇒H'F Ygci fW'g'Dc`]Wñ
- VY'Uk UfY'cZñY'ghUbXUfXg'cZVY\Uj]ci f'YI dYWñX'cZYj YfñcbY']b'hY'I BGK 'Wca a i b]m
- `cWñH'gYfj]W'g'UbX']bZcfa Uhcb'UVci hl BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZñYgY'UfYUg'k]`VY'ZJa]]Uf'ñ&

] i b g'U'Dc'b

5WUXYa JW]bZcfa Uh]cb`

: cf`YggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[`rc.

- fYei Yghg`Zcf`YI hYbg]cb/
- `Uh]`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I BGK `<YU`h`UbX`GUZY`midc`]W]Yg/
- YI Ua]bUh]cb`dfcVWXi fYg/
- gdYW]U`Vc]bg]XYfUh]cb`]b`hY`Yj Ybh]cZ]`bYgg`cf`a]gUXj Ybh] fY/
- ghi XYbhYei]m]UbX`X]gUV`]m/
- UbX`chYf`YggYbh]U`UWUXYa]W]bZcfa Uh]cbz`gYY

[\h\]dg.#k k k "Ufmg"i b\]gk "YXi "Ui #W ffYbh\]ghi XYbh\]bZcfa Uh\]cb`#dfc\]cVc`g!\[i \]XY`\]bYg#](#)