



LING5024

H\Y`Gci bX`GmgHYa `cZ9b[`]g\

HYfa `Hk c`#`&\$&%

7ci fgY`Cj Yfj]Yk

GHJZZ'7cbHJW`i8YHJ]`g

7cbj Ybcfg

B Ua Y	9a U]`	5j U]`UV]`]m	@cWJhcb	D\cbY
HfYfgU'7\Ub	hfYfgU"W\Ub%4 i bgk "YXi "Ui	VmUddc]bħa Ybh	C b`]bY	

GWXcc``7cbHJW`i`bZcfa Uh]cb

GWXcc``cZ<i a Ub]hYg`UbX`@Jb[i U[Yg

@cWJhcb. 'GWXcc``C Z]W`žA cfj Yb`6fck b`6i]X]b[ž@Yj Y``&ž&),

C dYb]b[`<ci fg. 'A cbXUm! : f]XUmž'- Ua `!') da

D\cbY. 'ž*%&'- ' ,) `)* , %

: U! . 'ž*%&'- ' ,) ; , +\$)

9a U]: [\U`4 i bgk "YXi "Ui](#)

7 ci fgY'8YHJ]`g

7 fYX]hDc]bqg '*`

Gi a a UfmcZ`hY'7 ci fgY

⊕`h]g`Wci fgYžmci `k]`YI d`cfY`hY`dUthYfbg`cZgdc_Yb`9b[`]g\`"Mci `k]`ZfghYI Ua]bY`hY`Zcfa U]cb`cZ
gci bXg`UbX`hY`gci bXg`hUha U_Y`i d`hY`9b[`]g\`gci bX`gmghYa "Mci `k]`hYb`Vi]X`Zca `g]b[`Y`gci bXg
h`hY`Wca V]bU]cb`cZgci bXg`]brc`gm`UV`Yg`UbX`hY`fc`Y`cZgm`UV`Yg`]b`9b[`]g\`f\ntla žhUh]gžhY

5ggYgga Ybh

5ggYgga YbhHUg_g

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH	Gh XYbh@YUfb]b[Ci hWta Yg'5ggYggYX
HU_Y` \ca Y'hYgh	')i	&' #*\$ #&\$%\$*.\$\$.DA	%
DfYgYbhUj]cb'	%i	Bch5dd`]WUV`Y	&
Dfc YW) \$i	\$- #\$, #&\$%\$*.\$\$.DA	%ž' &ž'

5ggYgga Ybh8YHU]`g

5ggYgga Ybh% 'HU_Y` \ca Y'hYgh

GHUfhXUH. 'Bch5dd`]WUV`Y

8YHU]`g.

H\Y`hYghWcj Yfg`hY`WcbhYbhcZfYUX]b[g`UbX`gYa]bUf`X]gW`gg]cb`cZhYa "'&`\ci fg"Gh XYbthg`fYW]j Y k f]hYb`ZYXVUW`"

Hi fb]hb`gYhb[. H\]g`Ugg][ba Ybh]g`gi Va]hX`h`fci [\`Hi fb]hb`UbX`gh XYbthg`Xc`bchgYY`Hi fb]hb g]a]Uf]mifYdcftrg"

5ggYgga Ybh&. 'DfYgYbhUj]cb

GHUfhXUH. 'Bch5dd`]WUV`Y

8YHU]`g.

% `!`&\$`a]bi hYg"Gh XYbthg`fYW]j Y`k f]hYb`ZYXVUW`"

Gi Va]gg]cb`bchYg. H\Y`dfYgYbhUj]cbg`k]`VY`fcghYfYX`]bhc`hY`gWXYXi`Y"

Hi fb]hb`gYhb[. H\]g`Ugg][ba Ybh]g`gi Va]hX`h`fci [\`Hi fb]hb`UbX`gh XYbthg`Xc`bchgYY`Hi fb]hb g]a]Uf]mifYdcftrg"

5ggYgga Ybh' . 'Dfc YW

GHUfhXUH. 'Bch5dd`]WUV`Y

8YHU]`g.

Gh XYbthg`k]`k cf_`k]h`gdYYW`gUa d`Yg`h`fci [\`ci h`hY`h`fa`UbU`mg]b[`hY`gdYYW`UW`c`fX]b[`hc`Wci fgY h`d]Wg`H\YfY`UfY`h`fY`Ugg][ba Ybthg`h`UhWta df]gY`hY`dfc`YW`HchU`bi a VYf`cZk cfXg`]g`Uddfc]`ja UH`m '\$\$\$`Gh XYbthg`fYW]j Y`k f]hYb`ZYXVUW`"

H\]g`]g`hY`ZbU`Ugg][ba YbhZcf`UhtYbXUbW`di fdcgYg"

5 hYbXUbW F Yei]fYa Ybhg

Gh XYbhg UfY gfcfb[mYbWci fU[YX'hc UhmYbX'U''WUggYg UbX'fYj]Yk ''YWhi fY'fYWcfX]b[g"

7 ci fgY'GWXYXi `Y

[J \]Yk WUgg'ha YhUVY](#)

H]a YhUV`Y`

8UhY	HmdY	7cbhYbh
K YY_%'' %A Um!'(' >i bY	GYa]bUf	%" 7 ci fgY]bfcXi W]cb'UbX'fYei]fYa Ybhg &"Cj Yfj]Yk 'cZbYI hk YY_'g'fYUX]b[g. F YUX]b['GYh% ' ""@YWhi fY. 'h fcXfcX(cX< XhXhXg XhXhX]Yg. F Yh%]b[g

F Ygci fWg

DfYgW]VYX`F Ygci fWg`

H\Y`Wèi fgY`fYUX]b[g`UfY`èi fbU`Ufh]WYg`Uj U]UV`Y`h\fcì [\`ì B GK ``]VfUfm`

F YWca a YbXYX`F Ygci fWg

6cc_`-`Gci bX`DUh`fbg`cZ9b[`]g\`Vmi@]bXU`G`cW`Ym`6`UW`k Y``Di V`]g\Yfg"

7ci fgY`9j U`i Uh]cb`UbX`8Yj Y`cda Ybh

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

Hi fb]h]b 'Gi Va]gg]cb

Ẓmci 'YbWci bHYf'U'dfcV'Ya 'k \Yb'UHYa dh]b['hc'gi Va]hmc i f'Ugg][ba YbhiH'fci [\ 'Hi fb]h]bž'd'YUgY
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'- ' ,) " ' ' %cf'Ya U] 'H'Ya 'cb'YI HYfbU'HY'hgi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh
\ci fg'UfY' , .\$Ua '—%\$. \$\$da 'cb'k YY_XUmg'UbX'-. .\$Ua '—) . \$\$da 'cb'k YY_YbXg'fI *) 'XUmg'U'mYUfI" Ẓmci
UfY'i bUV'Y'hc'gi Va]hmc i f'Ugg][ba YbhiXi Y'hc'U'Zi 'hk]H'Hi fb]h]b'mci 'a UmiUdd'm'Zc'f'Ub'YI HYbg]cbž'Vi hmc i
a i ghfYH]b'mci f'h]W'Yhbi a VYf'Z'ca '9I HYfbU'Gi ddcfhfU'cb['k]H'UbmicH'Yf'fY'Yj UbhXcW a Yb'gk'hc
]bWi XY'Ug'Yj]XYbW'hc'gi ddcfhmc i f'YI HYbg]cb'Udd'j]W]h]cb" Ẓmci 'Ya U] '9I HYfbU'Gi ddcfhmc i 'k]`

5 WUXYa]W< cbYgmiUbX`D`U[]Uf]ga

D`U[]Uf]ga `]g`i]g]b[`hY`k cfXg`cf]XYUg`cZcH`Yfg`UbX`dFYgYb]b[`hYa `Ug`mci f`ck b`" #WUb`hU`Y`a Ubm
Zcfa gZ`Zca `XY`]VYfUH`VX`YU]b[`hc`UW]XYb]U`mWc]dm]b[`Zca `U`gci fW`k]h`ci hUW`bck `YX[Ya Yb]f`

I BGK ` [fci dg`d`U[]Uf]ga `]bhc`hY`Zc`ck]b[`W]hY[cf]Yg.

7 cdm]b[. `i]g]b[`hY`gUa Y`cf]j Yfmg]a]Uf`k cfXg`hc`hY`cf][]bU`hY] hcf]XYU`k]h`ci hUW`bck `YX[]b[`hY`
gci fW`cf`i]g]b[`ei`c]h]cb`a Uf`g`"H`]g`U`gc`Udd`]Yg`hc`]a U[YgZ`Uf]h]UbX`XYg][b`dfc`YW]gZ`Ug`k Y`Ug`
dfYgYb]h]cbg`k \YfY`gca YcbY`dFYgYb]g`Ubch`Yf`g]XYUg`cf`k cfXg`k]h`ci hW]YX]f`

#Uddfc]df]U]h`dUfUd`fUg]b[. `7`Ub[]b[`U`Zk`k cfXg`UbX`d`fUgYg`k \]Y`a`cghm]fY]h]b]b[`hY`cf][]bU`
gh]f] W] fY`UbX`#cf`dfc[fYgg]cb`cZ]XYUg`cZ`hY`cf][]bU`Z`UbX`]bZcfa U]cb`k]h`ci hUW`bck `YX[Ya Yb]f`H`]g`U`gc`
Udd`]Yg`]b`dfYgYb]h]cbg`k \YfY`gca YcbY`dUfUd`fUgYg`Ubch`Yf`g]XYUg`cf`k cfXg`k]h`ci hW]YX]h]UbX`hc`
d]YW]b[`hc[Yh`Yf`ei`c]h]g`UbX`dUfUd`fUgYg`]bhc`U`bYk`k \c`Yz`k]h`ci hUddfc]df]U]h`fYZYfYbW]b["

7 c`i]g]cb.`k cf_]b[`k]h`c]h`Yfg`Vi`hdUgg]b[`cZ`h`Y`k cf_]Ug`U`dYfgcb`g`]bX]j]Xi`U`k cf_]7 c`i]g]cb`U`gc`
]bW] XYg`dfc]j]X]b[`mci`f`k cf_]hc`Ubch`Yf`g]h]XYbh]VYZc`fY`hY`Xi`Y`XU]h]Zc`f`Zc`f`hY`di`fdcgY`cZ`h`Ya`
d`U[]Uf]g]b[`Uh]Ubmi]h]a YZ`dUm]b[`Ubch`Yf`dYfgcb`hc`dYfZcfa `Ub`UW]XYa]W]h]g`_Z`gh]U`]b[`cf`UW]i]f]b[
Ubch`Yf`dYfgcb`g`UW]XYa]Wk cf_]UbX`Wc]dm]b[]h`cZ]Yf]b[`hc`W]a`d`Yh`Ubch`Yf`dYfgcb`g`k cf_]cf`gY]_]b[

- i bXYfghUbx'mci f'f][\hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wcdmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'UbX'5Ww'dhUV'Y'I gY'cZ I BGK '⇒H'F Ygci fW'g'Dc`]Wm
- VY'Uk UfY'cZh'Y'ghUbxUfXg'cZVY\Uj]ci f'YI dYW'X'cZYj Yfmcby']b'h'Y'I BGK 'Wca a i b]m
- 'cWJh'gYfj]W'g'UbX'j]bZcfa Uh'cb'UVci hl BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZh'YgY'UfYUg'k]''VY'ZJa]]Uf'hc'mci ž'ch'Yfg'k]''VY'bYk "'; U]b]b['U'gc`X'i bXYfghUbx]b['cZU''h'Y fY'UH'X'UgdYW'g'cZ9@G9'k]''\Y'd'mci 'a U_Y'h'Y'a cghcZmci f'gh X]Yg'Uhl BGK ""

[\hhd.##ji V'YW'i \]XYg"'\]VfUfm'i bgk "YXi "Ui #' \]gY#JVci h' \]gY](#)

5 WUXYa]W=Zcfa Uh]cb

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

- fYei Ygth`Zcf`Yl H`bg]cb/