



# MMAN9452

A UghYfg`Dfc`YWhi6

HYfa`Cby`##`&\$&%

GWcc`cZA`YWXUb]WU`UbX`A`Ubi`ZUWh`f]b[`.9b[`.]bYYf]b[`.##`.I`BGK`.9b[`.]bYYf]b[`


9a U]

[9b\[ \]bYYf\]b\[ \]Gh.XYbhGi ddcfhGYfj \]Wg](#) – W ffYbhghi XYbhYbei ]f]Yg

- Y"[ "Ybfc`a Yblždfc[ fYgg]cbžWUg\`fYei YgrgžWci fgY`]ggi Yg`cf`dfc[ fUa !fY`UhYX`ei Yf]Yg

[9b\[ \]bYYf\]b\[ \]`bXi.glf\]U`HfU\]b\]b\[ \]`bXi.glf\]U`HfU\]b\]b\[ \]`ei Ygh\]cbg](#)

[I.BGK`Gh.Xm5VfcUX`](#) – gh XmiUVfcUX`gh XYbhYbei ]f]Yg`fZcf`]bVci bX`gh XYbhgk

[I.BGK`9I.WXUb\[Y`](#) – gh XYbhYI WXUb[ Y`Ybei ]f]Yg`fZcf`]bVci bX`gh XYbhgk

[I.BGK`i.h.fY`Gh.XYbhg](#) –`dchYbh]U`gh XYbhYbei ]f]Yg

- Y"[ "UXa ]gg]cbgžZYgždfc[ fUa gžWYX]hifUbgZYf

[GWcc`C.ZW](#) – GWcc`[ YbYfU`cZ]W`UXa ]b]ghfU]cb`Ybei ]f]Yg

- B6. h.Y`fY`Yj UbhYUa g`]ghYX`Uvcj Y`a i ghVY`WcbUWYX` - gh XYbhYbei ]f]Yg



H\Y`Wt i fgY`jg`hUi [ \hUg`Ub`]bX]j ]Xi U`fYgYUfW`dfc`YWz`hc`XYj Y`cd`U`Yj Y`cZfYgYUfW`g\_]`g`UbX  
Ui`h`bca`m`



# F Ygci fWg

F YWca a YbXYX'F Ygci fWg

BchUj U]UV'Y

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

@UVcfUhcfmK cf\_g\cd' bZcfa Uh]cb

7CJ 8!%- 'BCH9.'H\Y'GWcc''UVcfUhcfmZUW]j]hYg'UFY'cdYb'hc'fYgYUfW' h\Yg]g'gh XYbhg/\ck Yj Yfz'UWWgg  
]g''ja ]hYX''Hc'Wca d'mk ]h' [ cj Yfba Ybh]gcW]U'X]ghUbw]b[ 'fYei ]fYa YbhgZ'Y" ["Z( 'gei UFY'a YhYfg'dYf  
dYfgcbz'YUW'fcca '\Ug'U'a Ul ]a ]a 'WUdUW]m''ja ]h'k \]W'k ]''VY'a cb]hc'fYX'VmihY'gi dYfj ]g]b[  
dfcZ'gg]cbU''ghUZZ'D'YUgY'WXYW'k ]h' h\Y''UVcfUhc'fmcZ]W'f' ]b'mci f'UFYU'VY'Zc'fY'UWWgg]b[ 'UbX'cVgYfj Y'h\Y  
'ja ]h'UbX'U''c'h\Y'f'gUZ'hmidfYW]i h]cbg"

Mci 'a i ghgYY\_[ i ]XUbW'UbX'Uddfcj U'Zca 'mci f'H\Yg]g'gi dYfj ]gcf'df]cf'hc'Ubmi'UVcfUhc'fmUW]j ]hYg"

H\Y''UVcfUhc'f]Yg'UFY'h\Y'fYgdcbg]V']]mciZ'h\Y'ghUZZ]b]WUf[ Y'Z'UbX'mci 'a i ghcdYfU'h'k ]h' ]b' h\Y'UWW'dhYX  
dfUW]W'g'cZ'h\Y''UVcfUhc'fm'VcbW'fbYX''@UVcfUhc'fm]ghUZZ'UFY'\][ '\mg\_]''YX'UbX'\Y'dZ' /hU\_Y'Z' ''UXj UbhU[ Y  
cZ'h\Y]f'YI dYfj]YbW' /\ck Yj Yfz'mci 'g\ci 'X' bchYI dYW'h'UVcfUhc'fm]ghUZZ'hc' hU\_Y'fYgdcbg]V']]mZc'f'mci f'h\Yg]g  
cf'WUffmici hk cf\_'Zc'f'mci "

Z'mci f'dfc'YWh]bj c] Yg''UVcfUhc'fmk cf\_Z'VcbUW'h'h\Y'cZ]W'f] ]b]WUf[ Y'fC => E'cZ'h\Y''UVcfUhc'fm]b'k \]W' mci  
k ]''VY'k cf\_]b[ 'Ug'gccb'Ug'dcgg]V'Y'hc'X]gW'gg'mci f'fYei ]fYa Ybhg''H\Ymk ]''gggi Y'mci 'k ]h' U'@UVcfUhc'fm  
5W'W'gg'5ddfcj U'f'5E'Zc'fa 'k \]W' mci 'a i ghWca d'Y'h'UbX'fYh' fb'hc'h\Y'C => "

[: cf'a cfY' \]bZcfa Uh\]cb'UVci hUWWgg\]b\[ 'h\Y'GWcc' 'g' UVcfUhc'f\]YgZ'd'YUgY'j \]g\]h'h\Y'GWcc'  
k'YVg\]hY.'\h\]dg.##k k k "Yb\[ \]bYf\]b\[ "i bkg "YXi "Ui #a YWU\]b\]W\]!Yb\[ \]bYf\]b\[ #Ygci fWg#UV!UWWgg!\ck !hc!  
Zcfa g](#)

## K cf\_g\cd

Mci 'a i ghgYY\_[ i ]XUbW'UbX'Uddfcj U'Zca 'mci f'H\Yg]g'gi dYfj ]gcf'df]cf'hc'fYei Ygh]b[ 'UbmK cf\_g\cd  
UW]j ]hYg"

5`gh XYbhUWj ]hYg fYei ]f]b[ 'a Ubi ZJWñ fY' ]b'hY'A YWUbjWU`UbX'A Ubi ZJWñ f]b[ '9b[ ]bYYf]b[ 'fA A 9Ł  
k cf\_g\cd'g\ci 'X'VY'X]gW ggYX'k ]h'hY'k cf\_g\cd'dYfgcbbY`UhihY' ]bWd]cb'cZ'hY'k cf\_"H\Y'k cf\_g\cd  
dYfgcbbY`a i gh\Uj Y'hY'cddcfri b]mhc'UXj ]gY'UbX' ]bZi YbW'hY'XYg][ b'hc'\Y'd'a ]b]a ]gY'UggYa V'mž  
a Ubi ZJWñ fY'cf'Z bW]cbU`dfcV'Ya g"

H\Y'k cf\_g\cd' ]g'i gi U`m]b'j Yfm\][ \ 'XYa UbX" 'Zmci 'fYei ]fY'hY'k cf\_g\cd'hc'a Ubi ZJWñ fY'Yei ]da Ybh  
YggYbh]U'hc'mci f'hYg]gž'hYb'a U\_Y'gi fY'hUhmci 'X]gW gg'mci f'fYei ]fYa Ybhg'Ug'YUfmiUg'dcgg]V'Y'k ]h'hY  
K cf\_g\cd#@UVcfUhcfmA UbU[ Yf"Mc'ig\ci 'X'dfcj ]XY'Yb[ ]bYYf]b[ 'XfUk ]b[ g'k \]W'UfY'Z]fghUddfcj YX'Vm  
hY'UVcfUhcfmC 7"Mc'ig\ci 'X'a U\_Y'Yj YfmYZcfh'hc'a ]b]a ]gY'hY'K cf\_g\cd'cUX'Vma cX]h]b[ 'YI ]gh]b[  
Yei ]da YbhfU'hYf'hU'Vi ]X]b[ 'Zca 'bYk žUbX'Vm\_YYd]b[ 'mci f'XYg][ bg'g]a d'Y





UggYgga YbhdYfZcfa UbWžmci 'UfY'Y'[ J]V'Y'hc'Udd'mZcf'GdYWU'7 cbg]XYfUhc'b'df]cf'hc'gi Va ]h]b[ 'Ub  
UggYgga Ybhcf'g]h]b[ 'Ub'YI Ua "

I BGK 'bck '\Ug'U': [Jhrc'G\]h#Gi Va \]hfi\\_Yžk \\]](#)W'a YUbg'hUh]Zmci 'UhtYa dhUb'YI Ua 'cf'gi Va ]hU'd]YW'cZ  
UggYgga Ybhžmci 'UfY'XYWUf]b[ 'mci fgY'Z]hYbci [ \ 'hc'Xc'gc'UbX'WUbbch'Uhtf'Udd'mZcf'GdYWU'  
7 cbg]XYfUhc'b"

: cf'XYHU]g'cZUdd'm]b[ 'Zcf'GdYWU'7 cbg]XYfUhc'b'UbX'WcbX]h]cbg'Zcf'hY'Uk UfX'cZgi dd'Ya YbhUfm  
UggYgga Ybhž'd'YUgY'gYY'hY'jbZcfa Uhc]b'cb'I BGK 'g' [GdYWU'7 cbg\]XYfUhc'b'dU\[ Y"](#)

D'YUgY'bc'hY'hUhighi XYbhg'k ]'bchVY'fYei ]fYX'hc'dfcj ]XY'UbmXcW a YbhUfmYj ]XYbW'hc  
gi ddcfhiUVgYbW'g'Zca 'UbmWUggYg'a ]ggYX'VYWU]i gY'cZ7CJ -8!%- 'di V']W\YU'h' a YUgi fYg'gi W'Ug  
]gc'Uh]cb" I BGK 'k ]'bchVY' ]bg]gh]b[ 'cb'a YX]W'Wf]h]Z]W]hYg'Zca 'UbmcbY'XYYa YX'hc'VY'U'dcg]h] Y'WUgYž  
cf'k \Yb'hYm\Uj Y'fYVčj YfYX" 'Gi W'Wf]h]Z]W]hYg'UfY'X]Z]W'h'hc'cVHU]b'UbX'di hUb'i bbYW'ggUfmgfU]b'cb  
gh XYbhg'UbX'a YX]W'ghUZZ'

5dd']W]h]cbg'Zcf'gdYWU'Wcbg]XYfUhc'b'k ]'VY'fYei ]fYX'Zcf'UggYgga YbhUbX'dUfh]W]dUhc'b'UVgYbW'g'—  
Vi hbc'XcW a YbhUfmYj ]XYbW'Zcf'7CJ -8'-%- ]'bYgg'cf']gc'Uh]cb'k ]'VY'fYei ]fYX"

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

I BGK `Ug`Ub`cb[ c]b[ `Wca a ]ha Ybhlc`ZcghYf]b[ `U`W`hi`fY`cZ`YUfb]b[ `]bZcfa YX`VmiUWUXYa ]W]bhY[ f]m`5`  
I BGK `gh`XYbthg`Uj`Y`U`fYgdcbg]V`]mhc`UX`YfY`hc`h`g`df]bW]d`Y`cZUWUXYa ]W]bhY[ f]m`D`U[ ]Uf]ga  
i bXYfa ]bYg`UWUXYa ]W]bhY[ f]m]UbX`]g`bchlc`YfUHYX`Uhl`BGK`"B`SY[Sde\_`SfG@E|`[e VWX`W`Se ge[`Y`  
fZWi`ad/e`ad[VWSe`aXafZWde`S`V`bSee[`Y`fZW\_`aXSe`kagdai`ž`

D`U[ ]Uf]ga`]g`U`mdY`cZ]bhY`YWfi`U`h`YZh`#`hW]b`hU`\_Y`a`UbmiZcfa`gž`Zca`XY`]VYfUHY`WXYU]b[ `hc`UWUXYbH`m`  
Wcdm]b[ `Zca`U`gci`fWY`k`]h`ci`hUW`bck`YX[`Ya`Ybh`I`BGK` `Ug`dfcXi`WYX`U`k`YVg]hY`k`]h`U`k`YU`h`cZ`  
fYgci`fWYg`hc`gi`ddcfhghi`XYbthg`hc`i`bXYfgtUbX`UbX`Uj`c]X`d`U[ ]Uf]ga`ž`]g]h`[gh`XYbthi`bgk`"YXi`"Ui`#d`U\[ \]Uf\]ga`"](#)  
H\Y`@YUfb]b[ `7`YbhfY`Ugg]gth`ghi`XYbthg`k`]h`i`bXYfgtUbX]b[ `UWUXYa ]W]bhY[ f]m]UbX`ck`bchlc`d`U[ ]Uf]gY`  
H\YmiU`gc`c`X`k`cf\_g`cdg`UbX`W]b`Y`d`gh`XYbthg`cbY!cb!cbY"

Mci`UfY`U`gc`fYa`]bXYX`h`UhWUfYZ`h`ja`Y`a`UbU[`Ya`Ybh]g`Ub`ja`dcffUbhdufhcZghi`XmiUbX`cbY`cZ`hY`

5 WUXYa ]W=Zcfa Uh]cb

7 fYX]hdc]bHg

7 ci fgY WYX]h]g WUW UHX]b]l b]hg!C Z 7 fYX]hfl C 7 E"H\Y'bcfa U'k cf\_cUX'YI dYWU]cb Zc'cbY'I C 7 ]g Uddfcl ]a UH'm&) \ci fg dYf'h'fa "H\]g ]bWl XYg WUgg WcbUW\ci fgždf]j UH'gh Xnž'chYf'YUfb]b[ UW]j ]hYgždfYdUfU]cb UbX'h]a Y'gdYbhc b'U'UggYggUV'Y'k cf\_"

A cghWci fgYk cf\_Wci fgYg'Uhl BGK 'UFY\*'I C 7 'UbX']bj c]j Y'Ub'Ygh]a UHX'%) \$ \ci fg hc Wca d'YHžZcf'Vch fY[ i 'Uf'UbX']bH'bg]j Y'h'fa g"9UWX Wci fgY ]bWl XYg U'dfYgW]VYX'bi a VYf'cZ\ci fg dYf'k YY\_'f# E'cZ gWYXi 'YX'ZJW!hc!ZJW'UbX#cf'cb']bY WcbUW'5bmUXX]hcbU'h]a Y'VYmcbX'hY'dfYgW]VYX'WcbUW\ci fg g\ci 'X'VY'gdYbh]b'a U\_]b[ 'gi fY'h'Uhmci 'i bXYfgHUbX'h'Y'YVh fY'a UH'f]U'žWca d'Yh]b[ 'h'Y'gYh Ugg][ ba YbHgžZ fH'Yf'fYUX]b[ žUbX'fYj ]g]b[ 'Zcf'UbmYI Ua ]bU]cbg"

C b!WJa di g WUgg UH'YbXUbW

Di V]WX]ghUbW]b[ 'WcbX]hcbg'a i ghVY Zc'ck YX'Zcf'U'ZJW!hc!ZJW WUggYg" Hc'Ybgi fY'h ]gžcb'migh XYbHg

⇒ dcfhUbh@]b\_g

- [A ccX`Y](#)
- [@UV`5WV`gg](#)
- [<YU`h`UbX`GUZYhm](#)
- [7ca`di`hb\[`: UW`hYg](#)
- [Gh`XYbhF`Ygci`fW`g](#)
- [7ci`fgY`Ci`h\]bYg](#)
- [9b\[ \]bYYf\]b\[ `Gh`XYbhGi`ddcfhGYfj`\\_W`g:7YbhfY](#)
- [A`U`YfgdUW`](#)
- [I`BGK`H\]a`YhUV`Y](#)
- [I`BGK`<`UbXVcc`](#)
- [I`BGK`A`YWX`Ub\]W`UbX`A`Ubi`ZUW`h`f\]b\[ `9b\[ \]bYYf\]b\[](#)
- [9ei`\]hUV`Y`@YUfb\]b\[ `GYfj`\\_W`g](#)

⇒ U[ Y`7`fYX]h

GmbYf[ ]Yg`]b`Gci`bX`&\$%\*`

7F ⇒ CG

7F ⇒ CG`Dfcj`]XYf`7`cXY.`\$\$\$-`,`;

5W\_bck`YX[ Ya`YbhcZ`7`ci`b]fm

K`Y`UW\_bck`YX[ Y`h`Y`6YXY[ U`d`Ycd`Y`k` \c`UFY`h`Y`fUX]h]cbU`W`g]hX]Ubg`cZ`h`Y`UbXg`cb`k` \]W`I`BGK`  
?`Ybg]b[ hcb`W]a`di`g`]g`cW]hYX"

5ddYbX]l . '9b[ ]bYYfg'5i ghfU`U'f95Ł'DfcZYgg]cbU`'9b[ ]bYYf'7ca dYhYbWm  
 GHUbXUfX

Dfc[ fUa 'hYbXYX'@YUfb]b[ 'Ci hWta Yg	
? bck `YX[ Y'UbX'g_]`VUgY	
D9%"%7 ca dfY\Ybg]j YžhYcfmVUgYX'i bXYfghUbX]b[ 'cZhY'i bXYfd]bb]b[ 'bUh fU`UbX d\mg]WU`gWYbWg'UbX'hY'Yb[ ]bYYf]b[ 'Z bXUa YbHU'g'Udd`]WUV'Y'hc'hY'Yb[ ]bYYf]b[ 'X]gWd`]bY	
D9%"&'7 cbWdh U`i bXYfghUbX]b[ 'cZhY'a UhYa Uh]Wgžbi a Yf]WU`UbU'mg]gžghUhgh]WgžUbX Wta di hYf'UbX']bZcfa Uhcb'gWYbWg'k \]W' i bXYfd]b'hY'Yb[ ]bYYf]b[ 'X]gWd`]bY	
D9%" " 'h!XYdh'i bXYfghUbX]b[ 'cZgdYWU`]ghVcX]Yg'cZ_bck `YX[ Y'k ]h]b'hY'Yb[ ]bYYf]b[ X]gWd`]bY	
D9%"('8]gWfba YbhcZ_bck `YX[ Y'XYj Y`cda YbhUbX'fYgYUfW'X]fYW]cbg'k ]h]b'hY Yb[ ]bYYf]b[ 'X]gWd`]bY	
D9%"') ? bck `YX[ Y'cZYb[ ]bYYf]b[ 'XYg][ b'dfUW]W'UbX'WcbhYi h U`ZUWc'fg]a dUW]b[ 'hY Yb[ ]bYYf]b[ 'X]gWd`]bY	
D9%"* 'i bXYfghUbX]b[ 'cZhY'gWc'dYždf]bWd`Ygžbcfa gžUW]ci bhUV]`]h]Yg'UbX'Vci bXg'cZ gi ghU]bUV'Y'Yb[ ]bYYf]b[ 'dfUW]W' ]b'hY'gdYW]ZWX]gWd`]bY	
9b[ ]bYYf]b[ 'Udd`]WU]hcb'UV`]m	
D9%"%5dd`]WU]hcb'cZYghUV`]g\YX'Yb[ ]bYYf]b[ 'a YhlcXg'hc'Wta d'Yl'Yb[ ]bYYf]b[ 'dfcV'Ya gc`]b[	
D9%"&'&: 'i YbhUdd`]WU]hcb'cZYb[ ]bYYf]b[ 'hYW]b]ei Ygžhc'c'g'UbX'fYgci fW'g	
D9%" " '5dd`]WU]hcb'cZgmgHya Uh]WYb[ ]bYYf]b[ 'gmbhYg]g'UbX'XYg][ b'dfcW'ggYg	