# 



A i bb 'DUf\_ž'@U\_Y`Ub Xž': `cf]XUž'I G5 !'Cb' $\Rightarrow$ bY'+ž'Zfca') 'hc'-d"a "ž'6Y`]Yj Yfg : Y``ck g\]d'7\i fW\']b'@U\_Y`UbX'k]```hU\_Y'h\Y'`YUX ]b'\cgh]b[']hg']bUi [i fU`: Ua : Ygh'Uh'A i bb'DUf\_"'H\]g'Wca a i b]hm [Uh\Yf]b[']g'bch'' gh'Ubch\Yf'ZYgh]j U`/']h g'U'j ]VfUbh'WY`YVfUh]cb'cZ ZU]h\ž'hfUX]h]cbU`'ZUa ]`]Ygž'UbX'U'\YUfhZY`h'gU'i hY'hc'ZUh\Yfg"'DUghcf  $\approx$ b': f]YXh']g'Uh'h\Y'\Y`a ž'YW\c]b['U'gYbh]a Ybh'h\Uh'fYgcbUhYg XYYd`m']b'hcXUmg'gcW]Yhm'h\Y']a dcfhUbWY'cZ'ZUh\Yfg'UbX'h\Y U`Ufa ]b[']ggi Y'cZ'ZUh\Yf`YggbYgg']a dUWh]b['5a Yf]WUb'ZUa ]`]Yg"

H\Y'Yj Ybh'ZU``g`cb'h\Y'gUa Y'XUm'Ug'h\Y'\_]W\_!cZZ'Zcf'Dc`\_'Df]XY g %\$h\'Ubb]j YfgUfm'ZYgh]j ]h]Ygž'k \]W\']bWi XYg'Zi b'Yj Ybhg'`YUX]b[ i d'hc'h\Y'a U]b'[Uh\Yf]b[ž'Df]XY']b'h\Y'DUf\_ž'cb'\$ bY'%(" <ck Yj Yfž': f]YXh'Ya d\Ug]nYg'h\Uh': Ua : Ygh']g'bch'U'a ]gg]cb'hc cddcgY`h\Y`@ 6HEŽ Wcaaib]hm" ≠ ghYUXži]h c ZZYfg`Ub`U`hYfbUh]j Y WY`YVfUh]cb`Zcf`h\cgY`k]g\]b[`hc`\cbcf`ZUa]`m`UbX`ZU]h\`Xif]b[

⇒ bYž'U'acbh\`U`gc`fYWc[b]nYX`Ug`BUh]cbU``Df]XY`Acbh\`g]bW
%---"

## $7Y^YVfUh]b[:U]h\UbX:Ua]^m$

5g'dUfh'cZ'h\Y'VfcUXYf']b]h]Uh]j Yž'A Umcf'6]``A i hn'dfcWU]a YX'¾ bYUg': U]h\'UbX': Ua ]`m'A cbh\ ']b'@U\_Y`UbXž'i f[]b['fYg]XYbhg'hcghfYb[h\Yb'Wca a i b]hm'VcbXg'h\fci [\'ZU]h\'UbX'ZUa]`m'j U`i Yg" f]YXh']g'Ybh\i g]Ugh]WUVci h'h\]g'a cj Ya Ybhž'bch]b[']h g'dUfh'cZ'U [fck]b['hfYbX'UWfcgg'7YbhfU`: `cf]XUž'k\YfY'g]a]`Uf'XYWUfUh]cbg\UjY'VYYb'a UXY']b'7`YUfk UhYfž'Gh"'DYhYfgVi f[ž'UbX'5i Vi fbXU`Y" <Y']gb h'ghcdd]b['h\YfY/'d`Ubg'UfY'i bXYfk Um'hc'gYY\_'cZZ]W]U`fYWc[b]h]cb'Zfca; cj Yfbcf'Fcb'8YGUbh]g'UbX'ZYXYfU`cZZ]W]U`g"

 $: Ua: Ygh'dfca ]gYg'U``]j Y`m'Uha cgd\YfY'k ]h\``]j Y'a i g]W^*U XUnn`]b[ `WUf'g\ck z'hUbhU`]n]b[ `ZccX'hfi W_gz'UbX'YI W]h]b[ `Vci bWW \ci gYg'XYg][ bYX'YgdYW]U``m'Zcf'W\]`XfYb"'<math>\Rightarrow$ h g'Ub'Yj Ybh'h\Uh'U]a g hc'i b]hY'ZUa ]`]Yg']b'WY`YVfUh]cb'k \]`Y'UXXfYgg]b[ `U'dfYgg]b[ gcW]YhU``WcbWWfb.'h\Y']a dUWh'cZ'ZUh\Yf'UVgYbWYz'U'hcd]Wh\Uh'\Ug [ U]bYX'g][ b]Z]WUbh'hfUWh]cb']b'fYWWbh'mYUfg"'

#### I bXYfghUbX]b[ : Uh\Yf5VgYbW

FYgYUfWX 'g\ck g'h\Uh'WX]`XfYb'VYbYZ]h']a a YbgY`m'Zfca ']bj c`j YXZUh\Yfgž'`YUX]b['hc']a dfcj YX'Ya ch]cbU`'\YU`h\'UbX'UWUXYa ]WdYfZcfa UbW'''H\Y'UVgYbWY'cZ'ZUh\Yfg']g'cZhYb'WcffY`UhYX'k ]h\bY[Uh]j Y'ci hWca Ygž']bWi X]b['\][\Yf'f]g\_g'cZ'gi VghUbWY'UVi gY

## 5 7 U```hc 5 Wh]cb

#D fYgdcbgY 'hc'h\Y'bYYX'Zcf'a cfY'Yb[U[YX'dUfYbh]b[ž']b]h]Uh]j Yg

`]\_Y: Uh\Yf]b['Ghfcb['UfY'd]j chU`']b'YbWci fU[]b['ZUh\Yfg'hc

VYWca Y'a cfY']bj c`j YX'UbX'fYgdcbg]V`Y"'FYgYUfW\'\Ug'g\ck b

h\Uh'a Uff]YX'cf'Wc\UV]hUh]b['ZUh\Yfg'UfY'cZhYb'a cfY'Yb[U[YX
h\Ub'h\Y]f'g]b[`Y'cf'X]j cfWYX'Wci bhYfdUfhg"'H\Y'a YggU[Y']g'WYUf.

Vi ]`X]b['U'bYhk cf\_'k\YfY'ZUh\Yfg'WUb'WcbbYWhž'g\UfY
YI dYf]YbWYgž'UbX'UWWYgg'fYgci fWYg']g'YggYbh]U`'Zcf'ghfcb[Yf
ZUa]`]Yg"

9j Ybhg``]\_Y: Ua: Ygh'UfY`Wfi W]U``]b'ZcghYf]b[`U'gYbgY`cZ'VY`cb[]b[UbX'gi ddcfh'k]h\]b'h\Y'Wca a i b]hm"5g'k Y'[Uh\Yf'Uh'A i bb'DUf\_ž]hg'Ua ca Ybh'bch'f gh'hc'WY`YVfUhY`ZUh\Yf\ccXž'Vi h'hc'fYWc[b]nY]hg']a dcfhUbWY'UbX'h\Y'\cdY`Zcf'U'Zi hi fY'k\YfY'Yj Yfm'W\]`X'WUbh\f]j Y']b'U'bi fhi f]b['ZUa]`m'Ybj]fcba Ybh" =b'U'k cf`X'k\YfY'ZUh\YfUVgYbWY']g'U'[fck]b['WcbWYfbž'[Yhh]b[']bj c`j YX'UbX'fU]g]b[Uk UfYbYgg']g'a cfY']a dcfhUbh'h\Ub'Yj Yf"

 $\hbox{$\approx$ ]b 'h Y 'ZYgh]j ]h]Yg 'Uh': Ua : Ygh 'Ub X 'VY 'U 'd Ufh 'c Z'ghf Yb [ h Yb]b [ ZUa ]`m'h]Yg ']b '@U_Y`Ub X "'Hc [ Yh Yfž `Yh g 'WY`YVf UhY 'ZU]h \ ž i b]hmž 'Ub X h Y ']bj U`i UV`Y 'fc`Y 'c Z'ZUh Yfg ']b 'ci f 'Wca a i b]h]Yg "': cf'a cfY |b Zcfa Uh]cb 'cb 'h Y 'Yj Ybhž i |g]h'h \ Y`YX [ Yf "Wca "$ 

8 YhU]`g	
Cfh	Aibb'DUf_ž'@U_Y`UbXž': `cf]XUž'l G5
EiY``Yb	• k k k "h\ Y`Y X [ Y f "Wca
	• k k k "ZUh\Yf\ccX"cf[
	• i fVUb`][ \ h"cf[

# 6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'a Y]b!k ]Yb "bYh