

C VYf_ÖfdYfZfY]ja : fY]VUX. K Ufi a : fUi Yb Yg'cZh'a Y]XYb

9fZU\ fYb'G]Yž'k]Y Yg'g]W\ ZØf': fUi Yb UbZØ\ hž'ja : fY]VUX
cVYb'c\ bY 'ni VUXYb' Y]bY'dYfgØb]W\ Y'9f_i bXi b['bUW
bYi Yb'FY[Y'b"

⊕ j]Y Yb XYi hgW\ Yb GhAXhYb XØfZYb': fUi Yb]bnk]gW\ Yb
cVYf_ÖfdYfZfY] VUXYbž'XYb bcW\ VY]VhX]YgY': fY]\ Y]h'cZh
i b[Ybi hnh"9]bY '5i hcf]b \UhYg[Yk U[hi bX]b Y]bYa 'ÖZYbh]W\ Yb
: fY]VUX]b'6Yf']b [YhYghYhž'k]Y'g]W\ XUg'GWk]a a Yb' cVYb'c\ bY
UbZØ\ h"

6Y] &* : fUX'i bX'ghfU\ YbXYa 'GcbbYbgW\ Y]b'a UW\ hY'g]W\ X]Y
5i hcf]b'Ui ZXYb'K Y[]bg'<i a Vc`Xh\U]b'Gca a YfVUX]b'6Yf']b!
K YXX]b[" Æf'N]Y'k Uf'Ygž'X]Y'9fZU\ fi b[Yb'j cb': fUi Yb'ni
j YfghY\ Ybž'X]Y'g]W\]b'ÖZYbh]W\ Yb'GWk]a a VÅXYfb'c\ bY
C VYfhY]'nY][Yb'a ÖW\ hYb"C VgW\ cb'nU\ fY]W\ Y'cZYbY'6fYhhYf
[Y'Y[Ybh]W\ Ui Z'6`ch\YfUd]Y'XYi hYbž`U[XUg'5i [Yba Yf_`VU`X
Ui ZXYf': fU[Yž'k Ufi a 'j]Y'Y': fUi Yb'nØ[Yfbž'XUg'bYi Y'5b[YVch
XYf'6ÅXYfVYhf]YVY'k U\ fni bY\ a Yb"

B Yi Y'FY[Y`b'i bX'[YgY`gW\ UZh`]W\ Y J YfÅbXYfi b[Yb

8]Y'U_hi Y`Yb'J cfgW\ f]ZhYb'ZØf' cVYb'c\ bY 'ja '6Yf']bYf
GWk]a a VUX'g]bX'XUg'9f[YVb]g'Y]bYf'6YgW\ k YfXYž'X]Y'X]Y
' ' !Å\ f][Y'⊕]h]Uhc]b'ja '8YnYa VYf'&\$&&'Y]bFY]W\ hYž'bUW\ XYa 'g]Y
VY]a 'J Yfgi W\ ž'c\ bY'GhØfi b['ni 'gW\ k]a a Ybž'j ca
5i Zg]W\ hgdYfgcbU'XUfUi Z'\]b[Yk]YgYb'k i fXYž'g]W\ VYXYW_Yb'ni
a ØggYb"8]Y'Ca Vi XgghY`Y'ZØf'XUg'5bh]X]g_f]a]b]Yfi b[g[YgYhn
XYg'@UbXYg'6Yf']b'YbhgW\]YX'gW\]Y»`]W\ ž'XUgg'Yg'_Y]bY

[YgWk`YWk hggdYn]Z]gWk Yb`J c f g W k f]ZhYb`ZØf`XUg`GWk k]a a Yb`[]Vh"
=a`A`Äfn`&\$&`k i fXYb`X]Y`bYi Yb`FY[Y`b`VY`Ubbh`[Y[YVYb.`8 Ug
GWk k]a a Yb`cVYb`c`bY`]gh`ZØf`U`Y`DYfgcbYb`[`Y]Wk Yfa U» Yb
Yf`Ui Vh"

≠`a`Y`fYfYb`Gh`XhYb`ž`XUfi bhYf`; Øh]b[Yb`ž`G]Y[Yb`ž`i bX`i: fUb`_Zi fhž
k i fXY`XUg`GWk k]a a Yb`c`bY`C`VYfhY`]`ZØf`i: fUi Yb`a`]hh`Yfk Y`]Y
U_nYdh]Yfhž`k Ug`Y]bYb`_i`hi fY`Yb`K`UbXY`]a`i`a`[Ub[`a`]h
?ØfdYf`]Wk`_Y]hi bX`i; YgWk`YWk`hYfX]g`_i`gg]cb`gma`Vc`]g]Yfh"
8YbbcWk`V`Y]Vh`UVni k UfhYb`ž`k]Y`j`]Y`Y`i: fUi Yb`X]YgYg`5b[YVch
hUhg`ÄWk`]Wk`bi`hYb"

DYfgØb`]Wk`Y`9fZU`fi b[Yb`i bX`< ØfXYb

5`g`X]Y`5i hc f]b`g]Wk`gWk`]Y»`]Wk`YbhgWk]YXž`XUg`F]g]_c`XYg`cVYb
c`bY`GcbbYbVUXYbg`Y]bni [Y`Yb`ž`gi`Wk`Y`g]Y`bUWk`Y]bYa
[YY][bYhYb`D`Uhn`i bX`gdØfhY`XUVY`]X]Y`dfØZYbXYb`6`]W`Y`XYf
A`ÄbbYf`8]YgY`FYU`_h]cbYb`ž`X]Y`c`Zhij`cb`gYI`i`Y`Yf`6Y`Ägh][i b[`V]g
ni`Y]bYa`i bVY`U[`]Wk`Yb`i; YZØ`Yf]Wk`Yb`ž`g]bX`i]b`XYf`; YgY`gWk`UZh
k Y]hj`YfVfY]hYh"≠`fY`9f]bbYfi b[`Ub`ZfØ`YfY`i bUb[YbY`a`Y
9fZU`fi b[Yb`ž`Y]bgWk`]Y»`]Wk`Y]bYf`G]hi Uh]cb`Ua`i: ??!GhfUbXž
hfi [Yb`b]Wk`hni`]fYf`6Yfi`][i b[`VY]"

B UWk`Y]bYf`K`Y`]Y`ZUbX`g]Y`Y]bYb`fi`][Yb`D`Uhn`Ua`9bXY`XYf
K]YgYž`k`c`g]Y`g]Wk`i bhYf`Y]bYa`6Ui`a`b]YXYf`UggYb`_c`bbhY`8]YgY
_`Y]bYž`UVgY]hg`[Y`Y[YbY`C`UgY`Vch`]f`X]Y`b`Øh][Y`G]Wk`Yf`Y]hž`i`a
XUg`9i`dYf]a`Ybh`ni`k`U[Yb`8cWk`Ui`Wk`Y]Yf`gdØfhY`g]Y`X]Y`UhYbhY
5b[ghž`VYk`YfhYh`ni`k`YfXYb"

8]Y`5b[ghj`cf`6Y`Ägh][i b[`U`h`Y]bYb`[fc»Yb`9]bZi`gg`Ui`ZX]Y
9bhgWk]YXi`b[`j`]Y`Yf`i: fUi Yb`ž`c`V`g]Y`g]Wk`cVYb`c`bY`nY][Yb`cXYf
b]Wk`h`9]bY`i`a`ZfU[Y`j`cb`B`c`f`gh`Uh`Yf[UVž`XUgg`+%`Dfc`nYbh`XYf
A`ÄbbYf`i`bX`bi`f`(`) `Dfc`nYbh`XYf`i: fUi Yb`ZØf`Y]b
[YgWk`YWk`hYfØVYf[fY]ZYbXYg`GWk k]a a Yb`c`bY`C`VYfhY`]`g]bX`9]b
`Äi`Z][`YÄi`»`YfhYg`5f[i`a`Ybh[Y[Yb`X]YgY`DfUI`]g]gh`X]Y`Gcf[Y
j`cf`Y]bYa`5bgh]Y[`gYI`i`Y`Yf`6Y`Ägh][i b[Yb"

Hfch`n`XYf`bYi Yb`FY[Y`i b[Yb`]gh`X]Y`BYfj`cg]h`Äh`XYf`i: fUi Yb`]a

: fY]VUX`k Y]hYf\]b`[fc»"8]Y`6Yf`]bYf`6ÅXYfVYhf]YVY`VYf]Wk hYbž
XUgg`gY]h`XYf`9]bZØ\fi b[`XYg` cVYb`c\`bY !5b[YVchg`XUg
J Yf\U`hYb`XYf`; ÅghY`g]Wk `b]Wk h`k YgYbh]Wk `[YÅbXYfh`\Uh"
7ci j Yfh]YfhY`6fi gh`gWk`À[h]a a Yf`bcWk`XYb`cZZYbYb`CVYf_ÖfdYf"
8]Yg`_ÖbbhY`Ui Z]h]YZj Yfk i fnY`hY`[YgY`gWkUZh]Wk Y`Bcfa Yb`i bX
ÿb[ghY`\]bk Y]gYb"

9]b`gWk f]hhk Y]gYf`K UbXY``]b`XYf GWk k]a a dfUI]g

8]Y`5i hc f]b`gY`Vgh`YbhgWk]YX`g]Wk ``YhnhYbX`]Wk ž`ni f`Hc`]YhhY`Y]b
6_]b]!CVYfhY`]ni`hfU[Yb"5i Wk`k Ybb`g]Y`VY]a`GWk k]a a Yb`i bX
GcbbYbVUXYb`VYcVUWk hYb`_cbbhYž`XUgg`Y]b][Y`: fUi Yb`]fYa
6Y]gd]Y`Zc`[hYbž`V`Y]Vh`X]Y`A Y`f\Y]h]j cb`]bYb`VY`]XYf
hfUX]h]cbY`Yb`6UXYVY`_Y]Xi b["8]Y`6Yf`]bYf`6ÅXYfVYhf]YVY`\UVYb
V]g\Yf`_Y]bY`6Yf]Wk hY`ØVYf`X]fY`_hY`gYi i Y`Y`6Y`Ågh][i b[Yb`]b
J YfV]bXi b[`a]h`XYa` CVYb`c\`bY !GWk k]a a Yb`Yf\U`hYbž`k Ug
XUfUi Z\]bXYi hYhž`XUgg`j]Y`Y`: fUi Yb`]fY`9bhgWk Y]Xi b[`Ui g
dYfgÖb`]Wk Yb`; fØbXYb`hfYZZYb"

8]YgY`[YgUa h[YgY`gWkUZh]Wk Yb`6YcVUWk hi b[Yb`k YfZYb`: fU[Yb
ØVYf`X]Y`5_nYdhUn]j cb`? ÖfdYfb`i bX`X]Y`]bX]j]Xi Y`Y`: fY]\Y]h`Ui Z'
5i Wk`k Ybb`X]Y`fYWk h]Wk Yb`F U\`a YbVYX]b[i b[Yb`g]Wk `[YÅbXYfh
\UVYbž`gWk Y]bh`Ygž`XUgg`XUg`[YgY`gWkUZh]Wk Y`?`]a U`ZØf`j]Y`Y
: fUi Yb`bcWk`b]Wk h`VYfY]h]ghž`X]YgY`: fY]\Y]hYb`]b]j c`Ya`i a ZUb[
Ui gni`YVYb"9g`V`Y]Vh`UVni k UfhYbž`cV`g]Wk`XUni`]b`Ni`_i bZh`Y]bY
J YfÅbXYfi b[`UbVU\`bYb`_ÖbbhY"

8]Y`fYWk h]Wk Yb`F U\`a YbVYX]b[i b[Yb`ZØf`: fUi Ybž`X]Y
cVYf_ÖfdYfZfY`]VUXYb`a ÖWk hYbž`\UVYb`g]Wk`]b`8Yi hgWk`UbX`]b`XYb
`YhnhYb`↘\fYb`XYi h]Wk`]YfÅbXYfh"8]YgY`9bhk]W`i b[`ghY`h]a
?cbhYi hY]bYf`VfY]hYfYb`[YgY`gWkUZh]Wk Yb`8]g_i gg]cb`ØVYf
;`Y]Wk ghY`i b[`i bX`? ÖfdYfVYk i gghgY]b"8]Y`; YgYhn[YVi b[`]b
j YfgWk]YXYbYb`XYi hgWk Yb`6i bXYg`ÅbXYfb`\Uh]g]Wk`ni bY\`a YbX
ZØf`Y]bY`9bh_f]a]bU`]g]Yfi b[`]j cb`BUW`h\Y]h]b`ÖZZYbh]Wk Yb
6YfY]Wk Yb`Y]b[YgYhnhž`k Ug`Ui Wk`VY`]UbXYfYb`: fY]nY]hU`_h]j]hÅhYb
k]Y`XYa`i`??!6UXYb`ni`VYcVUWk hYb`]gh"↵j]Y`Yb`GhÅXhYbž
XUfi bhYf`Ui Wk`6Yf`]bž`g]bX`↵]h]Uh]j Yb`YbhghUbXYbž`X]Y`g]Wk`ZØf

a Y\ f' C ZYb\ Y]h]b' 6Yni ['Ui ZXYb' Y][YbYb' ? ÒfdYf' i bX' X]Y
GY\ VghVYgh]a a i b['Y]bgYhnYb"

8 Ug' ÒZZYb h']W\ Y' 6UX' U' g' F Ui a ' XYf' gc n]U' Yb
=b hYfU_ h]c b

2 ZYb h']W\ Y' 6\ XYf' g]bX' b]W\ h' bi f' C fhY' XYf' 9f\ c' i b[ž' gcbXYfb' Ui W\
gc n]U' Y' HfY ZDi b_ hY" 'G]Y' V]YhYb' Y]bY' D' UhhZcfa' 'ZØf' =b hYfU_ h]c bYb
nk]gW\ Yb' A YbgW\ Yb' i bhYfgW\]YX']W\ Yf' < Yf_ i bZhi bX
5' hYfg[fi ddYb" ' =b' XYb' 6\ XYfb' gd]Y[Y' h' g]W\ ' \Ài Z][' X]Y' ' Yk Y]' [Y
[YgY' ' gW\ UZh']W\ Y' G]hi Uh]cb' k']XYf" ' =b' Gh\ Xh]gW\ Yb' F Ài a Yb' k YfXYb
6\ XYf' ni bY\ a YbX' ni ' C fhYbž' Ub' XYbYb' H\ Ya Yb' k]Y
; YgW\ ' YW\ hYf[' Y]W\ \ Y]h' i bX' _i ' hi fY' ' Y' i bhYfgW\]YXY' h\ Ya Uh]g]Yfh
k YfXYb" ' 8]Y' 8]g_ i gg]cb' ØVYf' X Ug' C VYb' c\ bY !6UXYb']gh' bi f' Y]b
6Y]gd]Y' ' ZØf' X]Y' 5i gY]bUbXYfgYhni b[' a]h' ? ÒfdYfV] ' XYfb' i bX
[YgY' ' gW\ UZh']W\ Yb' Bcfa Yb']b' XYf' 2 ZYb h']W\ _Y]h"

8]YgYf' K UbXY' k]fX' Ui W\ Xi fW\ ni bY\ a YbXY' 6Yk Y[i b[Yb' k]Y
XYb' : Ya]b]ga i g' i bX' ? ÒfdYfdcg]h]j]ga i g' i bhYfghØhnh"
Cf[Ub]gUh]cbYb' i bX' 9]bnY' dYfgcbYb' gYhnYb' g]W\ ' XUZØf' Y]bž' XUgg
XUg' ? ÒfdYfV] ' X' b]W\ h' Xi fW\ ' ; YgW\ ' YW\ hYffc' ' Yb' cXYf
[YgY' ' gW\ UZh']W\ Y' ? cbj Ybh]cbYb' Y]b[YgW\ fÀb_ h' k]fX" ' 8]YgY
d cg]h]j Y' 9bhk]W_ i b[' _ØbbhY' XUni ' VY]hfU[Ybž' XUgg' a Y\ f' : fUi Yb
g]W\ ']b' ÒZZYb h']W\ Yb' F Ài a Yb' k c\ Yf' ZØ\ ' Ybž' k Ybb' g]Y' g]W\ ' ZØf' XUg
C VYb' c\ bY !6UXYb' YbhgW\ Y]XYb"

8 Ug' D\ Àbca Yb' XYf' ? ÒfdYfk U\ fbY\ a i b[']b
XYf' ; YgY' ' gW\ UZh

8]Y' K U\ fbY\ a i b[' XYg' Y][YbYb' ? ÒfdYfg' \ Uh' ghUf_ ' a]h
[YgY' ' gW\ UZh']W\ Yb' Bcfa Ybž' A YX]YbV] ' XYfb' i bX' _i ' hi fY' ' Yb
: U_ hc fYb' ni ' hi b" ' Gh' i X]Yb' nY][Ybž' XUgg' : fUi Yb' \ Ài Z][' i bhYf' XYa
8 fi W_ ' ghY\ Ybž' Y]bYa ' VYgh]a a hYb' ? ÒfdYf]XYU' ni ' Ybhgd fYW\ Yb"
8]YgY' 8 fi W_ j Yf\ À' hb]ggY' VY Y]bZi' ggYb' b]W\ h' bi f' XUg' GY\ VghV] ' Xž
gcbXYfb' Ui W\ ' XUg' j Yf\ U' hYb']b' ÒZZYb h']W\ Yb' F Ài a Yb' k]Y
GW\ k]a a V\ XYfb" ' @Ui h' Y]bYf' i a ZfU[Y' XYg
A Uf_ hZc fgW\ i b[g]bgh]hi hg' GhUh]ghU' [UVYb' *) ' Dfc nYbh' XYf

VYfU[hYb': fUi Yb'Ubž'g]Wk'a UbWka U''b'6UXYUbnØ[Yb'i bg]WkYf
ni'ZØ\`Ybž'k A\fybX`À\`b`]WkY'9a dZ]bXi b[Yb']b'6Yni [`Ui ZX]Y
A cXY`XYf`A ÀbbYf`gY`hYbYf`[YbUbbh'k i fXYb"

8]Y`XUa]hj YfVi bXYbYb`Yb[ghYž'g]Wk`ÒZZYbh`]Wk`ni`nY][Ybž
_ÒbbYb`XUni`ZØ\fybž'XUgg': fUi Yb'g]Wk`k Yb][Yf`ZØf`U`hYfbUh]j Y
6UXYcdh]cbYb`k]Y`XUg` C VYb`c`bY`!GWk`ja a Yb`YbhgWkY]XYb"
I a gc`k]Wk]h[Yf`]gh`Ygž`XUgg`X]Y` ; YgY`gWk`UZh`Y]bYb`FUi a`V]YhYhž
XYf`Y]bY`X]j Yfg]Z]n]YfhY`? ÒfdYfk U\fbY\`a i b[`ZØfXYfhi bX': fUi Yb
Yfa i h][hž'g]Wk`]b`]\fYa`? ÒfdYf`k c\`ni`ZØ\`Ybž'i bUV\`Àb[]j`cb
Bcfa Yb`cXYf`9fk Ufhi b[Yb"

8]Y`F c``Y`XYf`A YX]Yb`]b`XYf`8]g_i gg]cb`i a
XUg` C VYb`c`bY`!GWk`ja a Yb

8]Y`A YX]Yb`gd]Y`Yb`Y]bY`YbhgWkY]XYbXY`F c``Y`]b`XYf`8]g_i gg]cb
i a`? ÒfdYfk U\fbY\`a i b[`i bX` ; YgWk`YWk`hYf[YfYWk]h[`_Y]h"
6Yf]Wk`hYfghUhi b[`ØVYf`H\Ya Yb`k]Y` C VYb`c`bY`!GWk`ja a Yb
_ÒbbYb`XUni`VY]hfU[Ybž'XUg`6Yk i gghgY]b`ZØf`gc`WkY` : fU[Yb`ni
gWk`ÀfZYb`i bX`[YgY`gWk`UZh`]WkY`Bcfa Yb`\YfUi gni Zc fXYfb``5i Wk
k Ybb`XUg`< Ui dhUi [Yba Yf`_cZh`Ui Z'gYbgUh]cbY`Yb`5gdY`hYb
`Y][hž`Y]ghYb`j]Y`Y`A YX]Yb`\`Ai gYf`Ui Wk`Y]bYb`k Yfhj`c``Yb`6Y]hfU[
ni f`5i Z`_Àfi b[`ØVYf`? ÒfdYfk U\fbY\`a i b[`žGY`VghU`nYdhUbn`i bX
X]Y`F YWk`hY`U`Yf`A YbgWkYb`]a`ÒZZYbh`]WkYb`FUi a`"

9g`V`Y]Vh`ZYghni`U`hYbž'XUgg`hfc`hn`ni`bY\`a`YbXYf`5`nYdhUbn`]b
Y]b][Yb`6YfY]WkYbž'X]Y`F YU`]h`h`ZØf`j]Y`Y` : fUi Ybž'X]Y`g]Wk`ZØf`XUg
C VYb`c`bY`YbhgWkY]XYbž'bUWk`k]Y`j`cf`j`cb` ; YZØ\`Yb`XYf
I bg]WkYf\`Y]hi bX`dchYbn]Y`Yf`6Y`Àgh][i b[`[YdfÀ[h`]gh`8]Yg`nY][hž
k]Y`k]Wk]h[`Yg`]ghž`Zc`fh`Ui ZYbX`ØVYf`gc`WkY`H\Ya Yb`ni`X]g_i h]YfYb
i bX`]b`XYb`A YX]Yb`g]Wk`hVUf`ni`a`UWkYb``8]Y`Ni`gUa`a`YbUfVY]h
nk]gWkYb`gcn]U`Yb`6Yk`Y[i b[Ybž`A YX]Yb`i bX`XYf` ; YgY`gWk`UZh`]gh
YbhgWkY]XYbXž'i a`X]Y`9]bghY`i b[Yb`[Y[YbØVYf`XYa`? ÒfdYf`i bX
 ; YgWk`YWk`hYff`c``Yb`k`Y]hYf\]b`ni`j`Yf`ÀbXYfb"

6Ygi W\Yb`G]Y`i bg`Ui Z.`a Y]b!VYf`]b"bYh