

K Ybb'ni 'j]Y`dYfgÖb`]WXYg
:]hbYggfhfU]b]b['ni 'j]Y`]gh

8Yf'Nk YW_X]YgYg'5fh]_Y`g']gh'Ygž'XYb'J cf\Ub['ni 'Y]b][Yb
H\Ya Yb'ni fØW_ni n]Y\Ybž'bUW_XYbYb'G]Y'VY]'XYf'5fVY]h'a]h
Y]bYa 'DYfgcbU`HfU]bYf'5i ggWUi '\U`hYb'a ØggYb"'5`g
DYfgcbU`HfU]bYf'i bX'?fUZh'i bX'?cbX]h]cbghfU]bYf'a]h'%'\$
↵\fYb'9fZU\fi b['V]b']W_X'Ui Z'j]Y'Y'DYfgcbU`HfU]bYf
[Yghc»Yb'i bX'\UVY'j]Y'Y'8]b[Y'[Y'Yfbhž'Ui Z'X]Y']W_X'UW_XhYb
a i gg"'9g'[]Vh'Y]bYb'GUhž'XYf'VYgcbXYfY'5i Za Yf_gUa _Y]h
YfZcfXYfhž'i bX'XUg']gh/ Ua d/ , &&\$/ a Zub['XYf
DfUI]g/ Ua d/ , &&%'8Yf'5bk YbXi b[gVYfY]W_X']gh'Y]b']a
a YX]n]b]gW_XYb'6YfY]W_X'U`[Ya Y]b'j Yfk YbXYhYf'5i gXfi W_ž
XYf'X]Y'; fYbnYb'ZYghY[hž']bbYf\U`V'XYfYf'YfnhY'i bX
H\YfUdYi hYb'UfVY]hYb'_ÖbbYb"'8]Yg'[]h'Ui W_X'ZØf'YXYb
DYfgcbU`HfU]bYfž'XU`Yg'Y]b][Y'; fYbnYb'[]Vhž/ Ua d^Y`]d/



8Yf'Nk YW_X]YgYg'5fh]_Y`g']gh'Ygž'XYb'J cf\Ub['ni 'Y]b][Yb
H\Ya Yb'ni fØW_ni n]Y\Ybž'bUW_XYbYb'G]Y'VY]'XYf'5fVY]h'a]h
Y]bYa 'DYfgcbU`HfU]bYf'5i ggWUi '\U`hYb'a ØggYb"'5`g'DYfgcbU`
HfU]bYf'i bX'?fUZh'i bX'?cbX]h]cbghfU]bYf'a]h'%'\$↵\fYb'9fZU\fi b[

V]b`jW\`Ui Zj jY`Y`DYfgcbU`HfU]bYf`[Yghc»Yb`i bX`\UVY`j jY`Y`8]b[Y
[Y`Yfbhž`Ui ZX]Y`jW\`UW\hYb`a i gg"

9g`[jVh`Y]bYb`GUhnž`XYf`VYgcbXYfY`5i Za Yf_gUa _Y]h`YfZcfXYfhž
i bX`XUg`]gh` l a ZUb[`XYf`DfU] jg "8Yf`5bk YbXi b[gVYfY]W\`j]gh`Y]b
]a`a YX]n]b]gW\Yb`6YfY]W\`U`[Ya Y]b`j Yfk YbXYhYf`5i gXfi W_ž`XYf
X]Y`; fYbnYb`Zfgh`Y[hž]bbYf\U`V`XYfYf`ŸfnhY`i bX`H\YfUdYi hYb
UfVY]hYb`_ŌbbYb`"8]Yg`[j]h`Ui W\`ZŌf`YXYb`DYfgcbU`HfU]bYfž`XU`Yg
Y]b][Y`; fYbnYb`[jVhž`X]Y`Y]b`HfU]bYf`b]W\h`ØVYfgW\fY]hYb`gc`hY"

8]Y`YfghY` , Vi b[`]gh`A UggU[Y`"b`XYb`a Y]ghYb`GhUUhYb`a ØggYb
A UggU[Yh\YfUdYi hYb`nYbn]Yfh`k YfXYb`"8Yf`nYbn]YfhY`H]hY`]gh
\Yf`XYf`GW\`ØggY`"8]Y`8YZ]b]h]cb`XYf`@]nYbn`Ui hYh`k jY`Zc`[h

@]nYbn`]gh`X]Y`9fhY]`i b[`XYf`[YgYhn`]W\Yb`6YZ [b]ggY`XYg`GhUUhYg
[Ya Å»`XYb`Dc`]nY]VYZ [b]ggYb`XYg`GhUUhYg`ni f`5i gØVi b[`Y]bYg
6Yfi Zg]bbYf\U`V`Y]bYg`VYgh]a a hYb`HÅh[_Y]hgVYfY]W\g`"a
FU\`a Yb`XYg`@]nYbn]Yfi b[ggmghYa`g`XYZ]b]YfYb`X]Y`GhUUhYb
[YgYhn`]W\`X]Y`5i Z[UVYb`i bX`i b_h]cbYb`cXYf`XYb
HÅh[_Y]hgVYfY]W\`Y]bYg`6Yfi Zg`i bX`j cfgY\Ybž`XUgg`X]YgY
5i Z[UVYb`bi f`j cb`]nYbn]YfhYb`DYfgcbYb`Y[U`Ui g[YZŌ`fh`k YfXYb
XŌfZYb`"8U\Yf`j YfV]YhYh`X]Y`@]nYbn]Yfi b[`YXYa`ž`XYb`b]W\h
`nYbn]YfhYb`6Yfi Z`Ui gni ØVYbž`i bUV\Åb[][`XUj cbž`cV`X]Y`DYfgcb
j cb`Y]bYf`df]j UhYb`Cf[Ub]gUh]cb`nYfh]Z]n]Yfh`k i fXY`cXYf`b]W\h`

NYfh]Z]n]Yfi b[Yb`\]b[Y[Yb`g]bX`Y]b`ZfY]k j`][Yf`DfcnYggž`XYf`j cb
Y]bYf`df]j UhYb`Cf[Ub]gUh]cb`VYfY]h[YghY`h`k]fX`i bX`Ub[jVhž`XUgg
XYf`9fk YfVYf`j cfY]b[YghY`hY`?i fgUfVY]hYb`i bX`Y]bY`a Ō[`jW\Y
DfØZ b[`UV[YgW\`cggYb`\Uh`8]Yg`]gh`Y]bY`gY\`f`k jW\h[Y
l bhYfgW\Y]Xi b[ž`XU`Y]bY`@]nYbn]Yfi b[`Y]bY`ghfYb[Y`ghUUh`]W\Y
5i Zg]W\h`VYXYi hYhž`X]Y`X]Y` : Å\][_Y]h`XYf`DfU_h]n]YfYbXYb`ni f
5i gØVi b[`]\fYg`<UbXY`g`j cfgW\fY]Vh"

8Yf`; fi bXž`k Ufi a`A UggU[Yh\YfUdYi hYb`nYbn]Yfh`k YfXYb
a ØggYbž`]ghž`XUgg`XUg`; YVYb`Y]bYf`A UggU[Y`Y]b`Åi »Yfgh
]bj Ug]j Yg`j YfZU\`fYb`]gh`9g`[jVh`Y]bY`Ybcfa`Y`A Ub]di`Uh]cb`XYf
A i g_Y`b`i bX`XYg`?ŌfdYfgž`i bX`Yg`[jVh`Ui W\`Y]bYb`[Yk]ggYb
F]g]_cZU_hcf`VY]`A UggU[Yb`"

8i fW\`X]Y`5fhi bX`K Y]gYž`k]Y`A i g_Y`b`a Ub]di`]Yfh`k YfXYbž`]gh`Yg
ZØf`Y]bY`i bYfZU\`fYbY`DYfgcb`gY\`f`k U\`fgW\`Y]b`]W\`ž`XUgg`g]Y`XYa
?`]YbhYb`Yf\`YV`]W\`Y`J Yf`Yhni b[Yb`ni ZØ[h`5i g`X]YgYa` ; fi bX
j YfVf]b[Yb`]nYbn]YfhY`A UggU[Yh\`YfUdYi hYb`<i bXYfhY`j cb
Ghi bXYb`XUa]hž`X]Y`a YbgW\`]W\`Y`5bUhca]Yž`X]Y`K]b_Y`XYf
:]l]Yfi b[ž`X]Y`A i g_Y`U`h]cbYb`i bX`X]Y`D\`mg]c`c[]Y`ni
i bhYfgi W\`Ybž`i a` [YbUi`ni`j YfghY\`Ybž`k]Y`XYf`? ØfdYf`g]W\`Yf
a Ub]di`]Yfh`k YfXYb`_Ubb"

J]Y`Y`DYfgcbU`HfU]bYf`]bgVYgcbXYfY`i bYfZU\`fYbY` `a ØW`hYb
XYb`?i bXYb`ni gÅhn`]W\`Yb`GYfj]W\`i bX`5i Za Yf_gUa _Y]h`V]YhYb`"
DYfgcbU`HfU]bYf`\`UVYb`a UbW\`a U`Y]b`ZU`gW\`Yg; YZØ`\`XYg
J YfhfUi Ybgž`XUgg`g]Y`a Y\`f`k]ggYb`U`g`g]Y`hUhgÅW\`]W\`k]ggYb`" ð
X]YgYa` : U`VfYW\`Yb`i bYfZU\`fYbY`HfU]bYf`XYb` , Vi b[gi a Zub[
i bX`a Ugg]YfYb`?i bXYbž`i a` Hf][[Yfdi b_hY`žFY]ni [YVYb`i bX
GW\`a YfnYb`ni ``]bXYfb`"8 Ug`DfcV`Ya`XUVY`]ghž`XUgg`g]Y`XUg
F]g]_cž`XYa`g]Y`j\`fY`?i bXYb`Ui ggYhnYbž`i bhYfgW\`ÅhnYb"

8]Yg`]gh`[YbUi`XYf`; fi bXž`k Ufi a`YfZU\`fYbY`HfU]bYf`] \`fYb
?i bXYb`VY]Vf]b[Ybž`GY`ZlA mcZUgW]U`F Y`YUgY`ni`j Yfk YbXYb`"8]Y
gY`Vgha mcZUgn]U`Y` : fY]gYhni b[`VYghY\`h`Ui g`8]b[Yb`k]Y
GW\`Ui a fc`Ybž`VY`]XYbYb`Y]b`?i bXY`XUfUb`UfVY]hYb`_Ubbž
Hf][[Yfdi b_hY`ni ``ØgYb`i bX`j YfgdUbbhY`A i g_Y`b`ni ``cW_Yfbž
c\`bY`Ya U`g`Y]bYb`HfU]bYf`ni `VYbØh][Ybž`XYf`X]Y`< ÅbXY`XUfUi Z
`Y[h"

GhfYhW\]b[`]gh`Y]b`k Y]hYfYf`C fhž`Ub`XYa`HfU]bYf`Yhk Ug`ni`]bj Ug]j
k YfXYb`_ØbbYb`"9]b`BYVYbYZZY_h`XYg`? fUZh`fU]b]b[g`]gh`X]Y
GhfUZZi b[`XYf`A i g_Y`b`"8Y\`bYb`]gh`XU\`Yf`i bVYX]b[h`YfZcfXYf`]W\`ž
i a ``cW_YfY`A i g_Y`b`ni `Yf\`U`hYb`i bX`X]Y`6Yk Y[i b[gžFY`\Y]hni
gW\`ØhnYb`"5i W\`VY`]Y]bYa`i bYfZU\`fYbYb`HfU]bYf`_Ubb`X]Yg`ni
J Yf`Yhni b[Yb`ZØ\`fYb"

GhfYhW\]b[`[Y\`Øfh`XYZ]b]h]j`ni a`HÅh][_Y]hgVYfY]W\`Y]bYg`HfU]bYfgž
569F`Yg`a i gg`j YfUbhk cfhi b[gVYk i ggh`Xi fW\ [YZØ\`fh`k YfXYb`"
, VYfXY\`bi b[`Y]bYg`A i g_Y`g`cXYf`8Y\`bi b[`Y]bYg`A i g_Y`g`]b`X]Y
ZU`gW\`Y`F]W\`hi b[`_Ubb`ni`A i g_Y`! cXYf`GY\`bYbf]ggYb`ZØ\`fYb`"8]Y
B]W\`hVYUW\`hi b[`XYf`8Y\`bi b[gdfchc_c``Y`_Ubb`YVYbZU`g`ni

J Yf`Yhni b[Yb`Z0\ fYb" 8 Ug`8 Y\bYb`gc`hY`ja a Yf`bUW`XYa
HfU]b]b[`YfZc`[Yb" `b]Ya U`g`ni j cf" 8]Yg`gW`0hnh`XYb`? i bXYb
k A\ fYbX`XYg`HfU]b]b[g"

8 Ug`8 Y\bYb`gc`hY` A A 9F`a]h`Ui Z[Yk Afa hYb`A i g_Y`b`YfZc`[Yb"
A i g_Y`b`Z b_h]cb]YfYb`ZUgh`]XYbh]gW`a]h`; i a a]VAbXYfb" `K Ybb
G]Y`Ya U`g`j Yfgi W`h`\UVYbž`Y]b`; i a a]VUbX`ni `n]Y\Ybž`XUg
YI hfYa ` _U`h]ghž`VYa Yf_Yb`G]Yž`XUgg`Yg`gdf0XY`]gh`i bX`gW`bUddh"
A i g_Y`b`UfVY]hYb`Ui Z`X]Y`[`Y]W`Y`K`Y]gY`/K`Ybb`g]Y`_U`h]g]bX`i bX
XYf`HfU]bYf`j Yfgi W`hž`g]Y`ni `XY\bYbž`VYghY`h`X]Y`; YZU\ fž`XUgg`g]Y
fY]» Yb"

8]Yg`]gh`Ai » Yfgh`k]W`h][ž`k Ybb`Zc`fhgW`f]h`]W`Y
8 Y\b`i b[ghYW`b]_Yb`k]Y`DB: !8 Y\b`i b[`j Yfk YbXYh`k YfXYbž`VY]
XYbYb`XYf`A i g_Y`[YXY\bhž`ni gUa a Yb[Ync[Yb`i bX`YfbYi h
[YXY\b`h`k]fXž`i a `Y]bY`[f0» YfY`8 Y\b`i b[`i bX`6Yk Y[i b[gžY]`Y]h
ni `Yfn]Y`Yb" 8]YgY`Zc`fh[YgW`f]h`YbY`8 Y\b`i b[`_Ubb`Y]W`h`ni
J Yf`Yhni b[Yb`Z0\ fYb"

9g`]gh`Ui W`k]W`h][ž`Y]b`[fc» Yg`hU_h]`Yg`6Yk i gghY]b`ni ` \UVYb" `A f
dYfg0b`]W`Yf`HfU]bYf`a i gg`ja `; fi bXY`[Ybca a Ybž`k c`]a a Yf`G]Y
]b`7cbbYW`h]W`h`gi W`Ybž`[Ybi [`9fZU\ fi b[` \UVYbž`i a `[YbUi`ni
k]ggYbž`k]Y`k Y]h`G]Y`XYb`A i g_Y`XY\bYb`_0bbYbž`c`bY`ni `k Y]h`ni
[Y\Yb"

?Ybbhb]ggY`XYf`5bUhca]Y`i bX`A i g_Y`U_h]j]h`h`g]bX`YVYbZU`g
i bYf`Agg`]W`" `A i g_Y`b`VYk Y[Yb`g]W`]b`VYgh]a a hYb`A i ghYfb
VUg]YfYbX`Ui Z`]\ fYa `D]bbUh]cbgk]b_Y`" `K Ybb`G]Y`j Yfgi W`Ybž
Y]bYb`A i g_Y`[Y[Yb`XUg`A i ghYf`ni `XY\bYbž`[YZ\ fXYb`G]Y`XYb
?`]YbhYb`cXYf`hfYZZYb`b]W`h`a Y\ f`XYb`f]W`h][Yb`A i g_Y`"

8]Y`?Ybbhb]g`XYf`A i g_Y`U_h]j]h`h`]gh`Ui W`Z0f`XUg`8 Y\bYb`gY\ f
k]W`h][" `C V`Y]b`; Y`Yb`_ [YVYi [h`cXYf`[YghfYW_h]ghž`VYgh]a a hž`c V
VYgh]a a hY`A i g_Y`b`ni gUa a Yb[Ync[Yb`cXYf`YbhgdUbb`h]g]bX`" 9g
]gh`gY\ f`Y]bZUW`ž`Y]bYa `?`]YbhYb`VY]ni Vf]b[Ybž`k]Y`Yf`g]W`f]W`h][
XY\bhž`k cXi fW`Yf`ghYi Yfb`_Ubbž`k]Y`k Y]h`i bX`k]Y`j]Y`8 fi W_
Ui g[Y0Vh`k]fX" 8]Yg`]gh`Y]bY`k Y]hUi g`g]W`YfYfY`A Yh`cXYž`k Ybb
g]Y`j cb`Y]bYa `YfZU\ fYbYb`DYfgcbU`HfU]bYf`0VYfk UW`h`k]fX"

J Yf[YggYb`G]Y`b]W\h`XYb`?ca`ZcfhZU_hcf`ZØf`Y]bYb`?i`bXYb`"9]bY
dYfgØb`]W\Y`HfU]b]b[gVYn]Y\i`b[`gc`hY`g]W\Yf`i`bX`_ca`ZcfhUVY`
gY]b`"9-B`**DYfgcbU`HfU]bYf`6**"`k`c`]W\`a`]W\`VYZ]bXY`cXYf`k`c`
]a`a`Yf`G]Y`gi`W\Yb`ž`gc`hY`Yg`Y]bYa``?i`bXYb`B`⇒A`5@G
i`bUb[YbY\`a` `gY]b`ž`g]W\`ni` `i`bhYf\U`hYb`cXYf` `ni` `j`]Y` `ni`
VYfØ\`fYb`"6YfØ\`fYb`gc`hY`k`]f`_]W\`Ui`ZY]b`A`]b]a` `i`a` `VYgW\`fAb`_h`
k`YfXYb`"8Ug`Y]bn][Y`A`U`ž`XUgg`Y]b`?`Y]b`h`Ya`U`g`VYfØ\`fh`k`YfXYb`
gc`hY`ž`VYghY`h`XUf]b`ž`gW\`bY`Y`Dcg]h]cbgUbdUggi`b[Yb`
j`cfni`bY\`a`Yb`cXYf`VY]a` `8Y\`bYb`ni` `Y`ZYb`"8]YgY`6YfØ\`fi`b[
gc`hY`gc`a`]b]a`U`]b]Ug]j` `k`]Y`a` Ø[`]W\`gY]b`i`bX`Yg`gc`hY`]a`a`Yf`
X]Y`Ni`gh]a`a`i`b[`XYg`?i`bXYb`j`cf`]Y[Yb`"

⇒`a`Y]bYb`%\$`⇒\`fYb`U`g`gY\`f`YfZc`[fY]W\Yf`DYfgcbU`HfU]bYf`
a`i`gghY`]W\`Y]bYb`?i`bXYb`b]Y`a`Y\`f`U`g`Y]bY`_i`fnY`
Dcg]h]cbgUbdUggi`b[`VYfØ\`fYb`ž`i`a` `ni` `VYhcbYb`ž`k`c`XYf`
GW\`k`Yfdi`b`_h`XYf`5fVY]h`]Y[Yb`gc`hY`ž`cXYf`i`a` `VY]`XYf`8Y\`bi`b[
VY]a` ``Y]W\`hYb`8Y\`bYb`ni` `Y`ZYb`ž`k`Ybb`]W\`XUni` `Ui`Z[YZcfXYfh`
k`i`fXY`"⇒W\`UhhY`bcW\`b]Y`Y]b`DfcV`Ya` `XUa`]h`ž`XUgg`?i`bXYb`b]W\`h`
`YfbYb`_cbbhYb`ž`g]W\`ni` `XY\`bYb`cXYf`gY`Vgha`mc`ZUgn]U`Yg`F`Y`YUgY`
ni` `j`Yfk`YbXYb`"Gc`dYfgØb`]W\`X]YgY`6fUbW\`Y`Ui`W\`]gh`ž`Yg[]Vh`gc`
Yhk`Ug`k`]Y`ni` `dYfgØb`]W\`"

GW\`]Y»`]W\`]gh`XUg[fØ»`hY`5bnY]W\Yb`ZØf`Y]bYb`i`bYfZU\`fYbYb`cXYf`
i`bg]W\YfYb`HfU]bYf`Y]bY`,`VYf`_ca`dYbgUh]cb`"⇒W\`UUVY`
ZYgh[YghY`h`ž`XUgg`XYf`Ui`hYghY`HfU]bYf`]a` `F`Ui`a` `XYf`Yb][Y`]gh`ž`XYf`
XYb`A`Ub[Y`Ub`K`]ggYb`i`bX`GY`Vghj`YfhfUi`Yb`ØVYf`_ca`dYbg]YfYb`
a`i`gg`"8]Yg`g]bX`Ui`W\`X]Y`HfU]bYf`ž`X]Y`XUni` `bY][Yb`ž`Y]bY`bYi`Y`
 : Å\][_Y]h` `ni` `Yf`YfbYb`ž`i`bX`XUg[]gh`U`Yg`ž`k`Ug`g]Y`hi`b`ž`V]g`g]Y`X]Y`
b`ÅW\`ghY`YfbYb`"8]YgY`HfU]bYf`a` ØggYb`nY][Yb`ž`k`]Y`j`]Y`g]Y`
k`]ggYb`ž`]bXYa` `g]Y` GU`cb`!Hf]W_` `!` Vi`b[Yb`cXYf` `bYi`Y`
A`Yh\`cXYb`Ub`k`YbXYb`ž`UVYf`g]Y`hi`b`X]Yg`c`bY`FY]a` `cXYf`;`fi`bX`
8Yf`VYghY`HfU]bYf`]gh`XYf`Yb][Y`ž`XYf`Y]bYa` `?i`bXYb`Y`gY`X]Y`
9f[YVb]ggY`Y]YZfb`_Ubb`ž`X]Y`Yf`ZØf`gY]bY`gdYn]Z]gW\Yb`N]Y`Y`
k`ØbgW\`h`ž`c`bY`XUfØVYf`ni` `gW\`fY]Yb`i`bX`c`bY`XYb`?i`bXYb`a`]h`
⇒Zcfa`Uh]cbYb`ni` ``Ub[k`Y]Yb`ž`X]Y`]a` `Y\`f`]W\`[YgU[h`
bcfa`U`Yfk`Y]gY`Y[U`g]bX`"

8]Y`A`Y\`f`Y]h`XYf`?i`bXYb`_Øa`a`Yfh`g]W\`b]W\`hi`bVYX]b[hi`a` `XUg`

K JY/GJY'k c`Yb'bi f']\fY'N]Y`Y`YffY]WXYb"9g]gh'GUWXY`XYg
HfU]bYfgž'ØVYf'U`Y`YfZcfXYf']WXYb'Hcc`g'ni`j YfZØ[Ybž'i a`XYb
?i bXYb'VY]a`9ffY]WXYb'X]YgYf'N]Y`Y`ni`i bhYfghØhYb"8]Y`VYghYb
HfU]bYfž'X]Y`WXY`Y`[YhfcZZYb`\UVYž'k]ggYb'j]Y`ØVYf'j]Y`5VYf
GJY`k YfXYb'Yg'j]Y`Y]WXYh'b]Y`YfZU\fybž'k Y`g]Y`b]WXYh'VYk Y]gYb
a ØggYbž'XUgg'g]Y`VYggYf'g]bX'U`g`YXYf'UbXYfY`HfU]bYf"Æf
Y]bn][Yf'Nk YW_]gh'Ygž']\fyb`?i bXYb'ni`\Y`ZYbž']\fy'N]Y`Y`ni
YffY]WXYb"9]b`[i hYf'HfU]bYf'ØVYfhfY]Vh'b]Ya U`g'bYi Y`Hf]W_gž'X]Y
Yf`Yfbh"GhUhhXYggYb'k Å\`Yb'g]Y`Ui g']\fYa`K]ggYb'ggWXYh'X]Y
VYghYb'A Yh\cXYb'ZØf'X]Y`f]WXYh][Yb`?i bXYb'Ui g`

Ægd]f]Yfh]j cb`9n]bY`i bX`6]``A`MYU[Yf

8YhU]`g

6Ygi WXYb'G]Y`i bg'Ui Z.`a Y]b!Z]hbYgg"bYh