

6F =7 G!GhUUhYb. '5i Z'K Y['ni f
I bUV\Åb[][_Y]h'j ca '8c``Uf'i bX'GK = H

7\]bU'i bX'Fi gg`UbX'ghÅf_Yb'\fY':]bUbngmghYa Y'i bX'k c``Yb
g]W\j ca 'K YghYb'UV_cddY`b" `ÀfY`N]Y`Y. 'Y][YbY
NU\`i b[gk Y[Y'i bX'k Yb][Yf'5V\Åb[][_Y]h'j ca '8c``Uf"

A ÅW]h[Y`BUh]cbYb'k]Y'7\]bU'i bX'Fi gg`UbX'ghY\Yb'ja `NYbhfi a
Y]bYf'6Yk Y[i b[žX]Y`XUfUi Z'UVn]Y'hž'XUg`VYghY\YbXY
:]bUbngmghYa `ni `fYZcfa]YfYb"8i fW`X]Y`GWUZI b[`Y]bYg
Y][YbYb'NU\`i b[ggmghYa g'a ÒW`hYb'g]Y`X]Y`8ca]bUbn`XYg`I G!
8c``Ufg`\YfUi gZcfXYfb"8]Yg`_ØbX][hY`g]W\]b`XYb`YhnhYb`Å\`fYb
]a a Yf`XYi h]W`Yf`Ubž]bgVYgcbXYfY`Xi fW`X]Y`5_hj]hÅhYb`XYf
6F =7 G!GhUUhYbž'X]Y`g]W`ni bY\`a YbX`j cb`XYf'5V\Åb[][_Y]h
[Y[YbØVYf`XYa `8c``Uf`VYfY]Yb'k c``Yb"

Ni `XYb'6F =7 G!GhUUhYb`[Y\`ØfYb'6fUg`]Ybž'Fi gg`UbXž`æX]Ybž'7\]bU
i bX'GØXUZf]_Už'i bX'gY]h'5bZUb[`&\$&(`UVYb'g]W`Y`[mdhYbž
Y`h\]cd]Ybž`#Ub`i bX`X]Y`J YfY]b][hYb'5fUV]gW`Yb'9a]fU`h`XYa
6ØbXb]g`Ub[YgW`cggYb"8Yf'6Y[f]ZZ' 9bhXc``Uf]g]Yfi b[
VYgW`fY]Vh`XUVY]`X]Y`6YghfYVi b[Yb`XYf`A]h[`]YXg`ÅbXYfž'X]Y
A UW`h`XYg`k Ygh]W`Yb'NU\`i b[ggmghYa g`ni `gW`k ÅW`Ybž
]bgVYgcbXYfY`XUg`]bhYfbUh]cbU`YhUV`]YfhY`GK = H!GmghYa "8]YgYg
GmghYa `Yfa Ò[`]W`h`XYb'6Ub_Yb`X]Y`5V`k]W`i b[`j cb
[fYbnØVYfgW`fY]hYbXYb'NU\`i b[Yb`i bX`\Uh`Yb`hgW`Y]XYbXY
6YXYi hi b[`ZØf`X]Y[`cVU`Yb':]bUbna Åf`hY"

GhfUhY[]gW`Y`6Yk Y[[fØbXY`\]bhYf`XYf
9bhXc``Uf]g]Yfi b[

8Yf`I G!8c``Uf`\Uh]g]W`ØVYf`Å\`fnY`b`hY`U`g[`cVU`Y`@]hk Å\`fi b[
YhUV`]Yfh`i bX`j Yf`Y]\`h`XYb`I G5`Yf`YV`]W`Yb'9]bZi gg`Ui Z

]b hY fb Uh]c b U`Y :]b Ub nhf Ub gU_h]c b Yb" J]Y`Y`@Ab XYf`VY hf UWX hYb
X]Y gYb`9]b Zi`gg`U`g`ghf UhY []g WX Yb`B UWX hY]`ž]bg VY gcb XYfY`gY]h
XYa`l`_fU]b Y! ? c b Z]_hž`k`c`X]Y`l`G5`]\fY`GUb_h]c bg]b ghfi`a`Yb hY
[Ybi`hnh`UVYb ži`a`k`]fhg WX UZh]WX Yb`8 fi`W`Ui`Z`F`i`gg`Ub X
Ui`gni`ØVYb"8]Y`6F`⇒G!GhUUhYb`g]b X`ni`bY`a`Yb X`XUfUi`Z`VYXUWX hž
g]WX`j`c b`X]Y gYf`k`Y gh]WX Yb`J`c f`Y`ffg WX UZh`ni`VY ZfY]Yb`i`b X
Gi`WX hYb`b UWX`5`hY fb Uh]j`Yb ži`a`XYb`Ni`[`Ub`[`ni`[`c VU`Yb
:]b Ub na`Āf`_hYb`b]WX h`XYb`d c`h]g WX Yb`ϕ hYfY ggYb`Y]b Yg`9]bnY`b Yb
ni`ØVYf`UggYb"

8]Y gY`l`b UV`Āb [][_Y]h`i]gh`Y]b Yg`XYf`<`Ui`dhn]Y`Y ž`X]Y`VY]`Y]b Ya
_Øfn]WX`UV [Y`U`hYb Yb`;]dZY`XYf`6F`⇒G!GhUUhYb`]b`Gh`DY hY fgVi`f [X]g`_i`h]Yfh`k`i`fXYb ž`k`c`c`WX`fUb [][_Y`Dc`h]_Yf ž`Y]bg WX`Y`»`]WX
K`UX]a`]f`Di`h]b ž`ni`gUa`a`Yb`_Ua`Yb"5b`XYb`; Ygd fĀ WX Yb`b U`a`Yb
Ui`WX`X]Y`ZØ`fYb XYb`?`ÒdZY`XYf`b Yi`Ui`Z [Ybca`a`Yb Yb`A`]h [`]Y XYf
hY]"8 UVY]`k`i`fXY`XYi`h]WX ž`XUgg`X]Y`9b hk`]W`i`b [`Y]b Yg`Y][`Yb Yb
NU`i`b [ggmg hYa`g [Ub n`c VYb`Ui`Z XYf`5 [Yb XU`ghY`h"

? fmd hc k Ā \ fi b [Yb`U`g`HY]`XYf`Ghf UhY []Y

9]b`k`Y]hYfYf`5gdY`_h`XYf`[`Yd`Ub hYb`9b hXc`Uf]g]Yfi`b [`]gh`X]Y
Bi`hni`b [`j`c b`?`fmd hc k Ā \ fi b [Yb"8]Y gY`X][`]hU`Yb`K`Ā \ fi b [Yb
VUg]YfYb`Ui`ZY]b Yf`6`c`W`WX U]b!HY WX bc`c []Y`i`b X`g]b X`XUa`]h
i`b UV`Āb [][_Y]c b`XYb`ghUUh]WX Yb`ϕ gh]hi`h]c b Yb ž`X]Y`hf UX]h]c b Y`Y`Y
K`Ā \ fi b [Yb`_c b hf c`]YfYb" ?`fmd hc k Ā \ fi b [Yb`V]Y hYb`XYb
A`]h [`]Y XgghUUhYb`X]Y`A`Ò [`]WX`_Y]hž`<`Ub XY`g [Yg WX`Ā ZhY
Xi`f WX ni`ZØ`fYb ž`c`b Y`g]WX`]b`XUg`VY ghY`Yb XY`:]b Ub ngmg hYa
Y]b ZØ [Yb`a`ØggYb ž`XUg`j`c b`k`Y gh]WX Yb`6Ub`_Yb`Xca`]b]Yfh`k`]fX"

9]b`J`c f hY]`j`c b`?`fmd hc k Ā \ fi b [Yb`Y]Y [h]b`XYf`Ā`Ò`YfYb`G]WX Yf`Y]h
i`b X`Hf Ub gd UfY bn ž`XU`Y XY`Hf Ub gU_h]c b`XY nYb hf U`]b`Y]b Ya
BY hnk`Yf`_j`c b`7ca`di`hY fb`UV [YgdY]WX Yfh`i`b X`j`Yf]Z]n]Yfh`k`]fX"
8Yb bc WX`a`ØggYb`g]WX`X]Y`6F`⇒G!GhUUhYb`Ui`WX`a`]h`XYb
<`YfUi`gZc`fXYfi`b [Yb`Ui`gY]b Ub XYfgY hmYb ž`X]Y`a`]h`XYf`J`Yfk`Yb Xi`b [`j`c b`?`fmd hc k Ā \ fi b [Yb`Y]b`Yf [Y`Yb"8 Uni`[`Y`Ā`fYb`6Y XYb`_Yb
`]\bg]WX h]WX`XYf`5bcbma`]hĀ`hi`b X`XYf`dchYbn]Y`Yb`Bi`hni`b [`ZØf
]`Y [U`Y`5`_h]j`]hĀ`hYb`k`]Y`;`Y`Xk`Āg WX`Y`c XYf
HYffcf]ga`i`gZ]b Ub n]Yfi`b ["

K Å\fybX`X]Y`6F ⇒G!GhUUhYb`Ub`]\fyf`J]g]cb`Y]bYf`a`i`h]dc`UfYb
K Y`hk`]fhgWÅUZh`UfVY]hYbž`gWÅY]bYb`X]Y`A`Ò[`]WÅ`_Y]hYb`ZØf`Y]bY
VfY]hY`6YhY]]][`i`b[`]Ub`Y]bYa`bYi`Yb`NUÅ`i`b[`]ggmghYa
Y]bXfi`W_gj`c``ni`gY]b``6Yf]WÅhYb`ni`Zc`[`Y`nY][`Yb`%)`-`@ÅbXYf
≠hYfYggY`Ub`X]YgYf`9bhk`]W_`i`b[``8]YgY`BYi`Ui`gf]WÅhi`b[`]_ÖbbhY
<YfUi`gZcfXYfi`b[`]Yb`a`]h]g]WÅ`Vf]b[`]Ybž`]bgVYgcbXYfY`]b`6Yni`[`]Ui`Z
X]Y`GWÅUZZ`b[`]ghUV]`Yf`fYWÅh]WÅYf`F`U\`a`YbVYX]b[`]i`b[`]Ybž`X]Y`ZØf
XYb`9fZc`[`]X]YgYf`≠]h]Uh]j`Yb`i`bYf`Ågg`]WÅ`g]bX"

8]Y`9bhXc``Uf]g]Yfi`b[`]gghfUHy`[`]Yb`XYf`6F`⇒G!GhUUhYb`_ÖbbhYb
`Ub[`]Zf]gh][`]X]Y`]bhYfbUh]cbU`Y`k`]fhgWÅUZh]WÅY`@UbXgWÅUZh
j`YfÅbXYfb``8]Y`9hUV`]Yfi`b[`]Y]bYg`Y][`YbYb`NUÅ`i`b[`]ggmghYa`gž`XUg
HfYbXg`k`]Y`X]Y`Bi`hni`b[`]j`cb`?`fmdhck`Å\fi`b[`]Yb`]bhY`[`f]Yfhž`_ÖbbhY
Y]bY`A`Ò[`]WÅ`_Y]h`V]YhYbž`g]WÅ`[`]Y[`]Yb`GUb`_h]cbYb`ni`k`UddbYb`i`bX
X]Y`Z]bUbn]Y``Y`5i`hcbca`]Y`XYf`A`]h[`]YXg`ÅbXYf`ni`ZØfXYfb"

9]b`6`]W_`Ui`Z`X]Y`Ni`_i`bZh`XYg`[`]c`VU`Yb
:]bUbngmghYa`g

8 Ug`J`cf\UVYb`XYf`6F`⇒G!GhUUhYbž`Y]b`i`bUVÅb`][`Yg
NUÅ`i`b[`]ggmghYa`ni`gWÅUZZYb`i`bX`XYb`8c``Uf`U`g`@Y]hk`Å\fi`b[`]b
: fU[`]Y`ni`ghY``Ybž`\Uh`XUg`DchYbn]U`ž`X]Y`8mbUa`_]`XYf
K Y`hk`]fhgWÅUZh`[`fi`bX`Y[`]YbX`ni`VYY]bZi`ggYb``Gc``hY`Yg`XYb
A`]h[`]YXg`ÅbXYfb`[`]Y`]b[`]Ybž`\fy`J]g]cb`ni`fYU`]g]YfYbž`_ÖbbhYb`k`]f
NYi`[`]Yb`Y]bYg`XYi`h]WÅYb`K`UbXY`g]b`XYf`[`]c`VU`Yb
:]bUbnUfWÅ]hY`_hi`f`k`YfXYb``9g`V`Y]Vh`UVni`k`UfhYbž`k`]Y`X]Y
YhUV`]YfhYb`:]bUbngmghYa`Y`Ui`Z`X]YgY`9bhk`]W_`i`b[`]Yb`fYU[`]YfYb
i`bX`]bk`]Yk`Y]h`Y]bY`YWÅhY`9bhXc``Uf]g]Yfi`b[`]9fZc`[`]UVYb`_Ubb"

Dc`h]gWÅY`i`bX`_Ö`cbca`]gWÅY`<]bhYf[fØbXY
XYf`6F`⇒G!GhUUhYb

8]Y`6F`⇒G!GhUUhYbž`VYghY`YbX`Ui`g`6fUg]`Ybž`F`i`gg`UbXž`≠X]Ybž
7\]bU`i`bX`GØXUZf]_Už`fYdfÅgYbh]YfYb`Y]bY`VYXYi`hYbXY`;`fi`ddY
Ui`ZghfYVYbXYf`J`c`_gk`]fhgWÅUZhYbž`X]Y`g]WÅ`U`g`5`hYfbUh]j`Y`ni`XYb
hfUX]h]cbY``Yb`k`Ygh]WÅYb`A`UWÅhghfi`_hi`fYb`Zc`fa`]Yfh`\UVYb``8]Y
k`]fhgWÅUZh]WÅYbž`dc`h]gWÅYb`i`bX`gc`n]U`Yb`6YX]b[`]i`b[`]Yb`]b`X]YgYb

@AbXYfb'g]bX'j]Y`gWk]Wk h[" 7 \]bU`VY]gd]Y`gk Y]gY` \ Uh]g]Wk `]b`XYb
`YhnhYb` \fnY\ bhYb`ni `Y]bYf`XYf`[fO» hYb`Jc`_gk]fhgWk UZhYb`XYf
K Y`h`Yb`hk]W_Y`hi` bX`gd]Y`h`Y]bY`GWk`ØggY`fc`Y`]a` ` [`cVU`Yb
< UbXY`" `6fUg`]]Yb`i` bX`b`X]Yb` \]b[Y[Yb`j YfZØ[Yb`ØVYf`[fc» Y
Fc\ghcZ] cf_ca` a Yb`i` bX`Y]bY` \c\Y`6Yj` Ò`_Yfi` b[gnU\`ž`k Ug`g]Y`ni
k]Wk h[Yb`5`_hYi` fYb`]a` `6YfY]Wk`XYf`[`cVU`Yb`9bYf` []Y!`i` bX
BU\fi` b[ga`]hhY`j Yfgcf`[i` b[`a` UWk`h"

Ni`g`Àhn`]Wk`j YfZc`[h`Fi` gg`UbXž`]bgVYgcbXYfY`Xi`fWk`gY]bY
9bYf`[]YI`dcfhYž`Y]bY`U[[fYgg]j Y`5i` » Ybdc`h]_ž`i` a` `gY]bYb
9]bZi`gg`]b`XYf`K`Y`hk`]fhgWk UZh`ni`VY` \Ui`dhYbž`k Ug`g]Wk`]b`XYb
GdUbbi`b[Yb`a`]h`XYb`k`Ygh]Wk`Yb`GhUUhYb`k`À`fYbX`XYg`I`_fU]bY!
?f]Y[g`nY][h`8]Y`6F` ⇒G!GhUUhYb`a` ÒWk`hYb`U`gc`Y]bY`gh`Àf`_YfY
]bhYfbUh]cbU`Y`F`c`Y`gd]Y`Yb`i` bX`bi`hnYb`X]Y`D`UhhZcfa` ž`i` a
dc`h]gWk`Y`i` bX`k`]fhgWk UZh`]Wk`Y`b`hYfYggYb`ni`V`ØbXY`b`i` bX
[Ya`Y]bgUa`Y`GhfUHy`[]Yb`[Y[Yb`k`Ygh]Wk`Y`9]bZi`ggbU\`a`Y`ni
Yb`hk`]W_Y`b"

5`_hi`Y``Y`GhUh]gh]_Yb`ni`f`5``]Ubn`i`bX`]\`fYf` 9]bZi`ggbU\`a`Y`

GhUh]gh]gWk`Yb`8`UhYb`ni`Zc`[Y` \UVYb`X]Y`6F` ⇒G!GhUUhYb`]b`XYb
`YhnhYb` \fnY`fYb`Ub`[`cVU`Yf`K`]fhgWk UZh`_fUZh`[Yk`cbbYb`" `a` ` \f
& \$ & & hfi` [Yb`g]Y`ni`gUa`a`Yb`ØVYf`&) i`ni`a` ` [`cVU`Yb
6fi`hnc]b`UbXgdfcXi`_h`f`b`Đ`É`VY]"`8`UfØVYf` \]bUi`g`ghY`Yb`g]Y`a`Y`f
U`g`(\$i` `XYf`K`Y`hVYj`Ò`_Yfi`b["8]YgY`XYa`c[fUZ]gWk`Y`i`bX
k`]fhgWk UZh`]Wk`Y`F`Y`Yj`Ubn`[]Vh`XYb`6F` ⇒G!GhUUhYb`Y]bY`ghUf`_Y
J`Yf` \UbX`i`b[gdcg]h]cb`Ui`Z`]bhYfbUh]cbU`Yf`9VYb`Y"

9]bY`i`a`ZfU[Y`j`cb`6F` ⇒G`F`YgYUfWk`nY][hž`XUgg`Yhk`U`+\$i` `XYf
VYZfU[hYb`@AbXYf`Y]bY`j`Yfgh`Àf`_hY`Ni`gUa`a`YbUfVY]h`a`]h`6F` ⇒G
UbghfYVYbž`]bgVYgcbXYfY`]b`XYb`6YfY]Wk`Yb`9bYf`[]Y`i`bX`< UbXY`"
; YbUbb`h`k`]fX` \]Yf`j`cf`U`Y`a` `XYf`6YXUfZ`Ub`U`hYfbUh]j`Yb
9bYf`[]Y`]YZYfi`b[Yb`i` bX`< UbXY`gk`Y[Ybž`i`a` `X]Y`5V\`Àb[][_Y]h`j`cb
XYb`k`Ygh]Wk`Yb`A`Àf`_hYb`ni`j`Yff]b[Yfb`"8]Y`ni`bY` \a`YbXY
9fgWk`]Y`»i`b[`j`cb`< UbXY`gfc`i`hYb`]b`5Zf`_U`i`bX`5g]Yb`j`YfXYi`h`]Wk`h
X]Y`5a`V]h]cbYb`XYf`6F` ⇒G!GhUUhYbž`] `cVU`Y`< UbXY`gbYhnc`Yf`_Y`ni
X]j`Yfg]Zn]YfYb`i`bX`i`bUV\`Àb[][_Yf`ni` `cdYf]YfYb`"

K Y]hYfY' bZcfa Uh]cbYb'Z]bXYb'G]Y'Ui Z'XYb'K YVgY]hYb'j cb'Un!
cb`bY"XY'i bX'GB 5 #a U[c"

8YhU]`g

6Ygi W\Yb'G]Y'i bg'Ui Z.'X]Y!bUW\ f]W\ hYb"bYh