

Dfc hY gh! D]W_b]W_g`ZØf`k Yb][Yf`D`Ugh]_ . 6 Øf [Yf`gY hnY b`Y]b`NY]W\ Y b

5a`GUa ghU [`VfY]hYb`Vi bXYgk Y]h`A YbgW\Yb`D]W_b]W_XYW_Yb
Ui gž`i a` [Y [Yb`D`Ugh]_a Ø`ni`dfchYgh]YfYb" `I bhYfghØhnYb
G]Y`XYb`K K : `]b`XYf` : cfXYfi b [`bUW\`Y]bYa`I B!5V_ca a Yb`

, VYf`XUg [`UbN`@UbX` \]bk Y [`VfY]hYb`A YbgW\Yb`Ua` _ca a YbXYb
GUa ghU [`] \fY`D]W_b]W_XYW_Yb`Ui gž`i a` `Y]b`_fUZh] c`Yg`NY]W\Yb
[Y [Yb`X]Y`D`Ugh]_Zi`h`ni`gYhnYb" `ϕ`Y]bYf`Y]bXfi W_gj c`Yb`5_h]cb
fi Zh`XYf`K K : `8Yi hgW\`UbX`ni`gc [YbUbbhYb`DfchYgh!D]W_b]W_g`Ui Zž
X]Y`j`cb`5UW\Yb`]a`K`YghYb`V]g`N]hhUi`]a`CghYb`gck`]Y`]b`K`m`Ui`Z
: Ø\`f`V]g`@]bXUi`Ua`6cXYbgY`Y`fY]W\Yb" `8]Y`ϕ]h]Uhc`fYb`XYf`5_h]cb
ZcfXYfbž`XUgg`X]Y`6i`bXYgfY []Yfi b [`g]W\`U_h]j`ZØf`Y]b`k`]f_gUa`Yg
I B!5V_ca a Yb` [Y [Yb`X]Y`ni`bY\`a`YbXY`D`Ugh]_j`YfgW\`a`i`hni`b [`XYf`C`nYUbY`Y]bgYhnh"

6]g`Ub [`g]bX`ØVYf`*`\$\$`gc`W\Yf`D]W_b]W_g`]b` [`UbN`8Yi`hgW\`UbX
[`Ya`Y`XYhž`i`bX`j`]Y`Y`HY]`bY\`a`Yf`\UVYb`g]W\`XUni`j`YfdZ]W\hYhž
Ui`Z9]bk`Y [`d`Ugh]_`ni`j`Yfn]W\hYb" `9]b`VYa`Yf`_Ybgk`YfhYf`5gdY`_h
]ghž`XUgg`X]Y`j`YfUbghU`hi`b [`Yb`b]W\`h`bi`f`]b`]bh]a`Yb` : `Ua`j`]Yb`!`i`bX
: `fYi`bXYg`_fY]gYb`ghUhhZ]bXYbž`gc`bXYfb`Ui`W\` [`fØ»`YfY`ÖZZY`bh]W\Y
9j`Ybhg` [`Yd`Ubhg]bXž`k`]Y`ni`a`6Y]gd]Y`]b`6Yf`]b`j`cf`XYa
6i`bXYg`_UbN`YfUa`h`8cfh`Yfk`UfhYh`XYf`K K : `Y]bY` [`fc»`Y`NU\`Ub
HY]`bY\`a`YbXYb" `ϕ`XYf`<`Ui`dghU`Xh`g]bX`U`Y]bY`(-`df]j`UhY
D]W_b]W_g`fY []ghf]Yfh"

9]b`5i`Zfi`Z`ni`a`<`UbXY`b

: `cf]Ub`H]hnYž`GYb]cf`Dc`]Wni`5Xj`]gcf`VY]a`K K : `8Yi`hgW\`UbXž`\YVh
X]Y`6YXYi`hi`b [`X]YgYf`DfchYghU_h]cbYb`\Yfj`cf`i`bX`gU [`h`8]Y
F`Ygcb`UbN`nY][`hž`XUgg`j`]Y`Y`A`YbgW\Yb`Yg`gUh\UVYbž`ØVYfU`j`cb

9]bk Y[d`Ugh]_i a [YVYb`ni`igY]b"G]Y`k c`Yb`b]W hž`XUgg
D`Ugh]_a Ø`X]Y` ; Ygi bX`Y]h`j cb`A YbgW`i bX`B Uhi f`VY`UghYh" `8]Yg
i bhYfghfY]W h`XYb`i ba`i hž`XYb`j]Y`Y`6Øf[Yf`ØVYf`X]Y`U`_hi Y`Y
K Y[k YfZ`_i`hi f`Ya dZ]bXYb`"H]hnY`VYhc b hž`XUgg`YXYf`9]bnY`bY
Y]bYb`6Y]hfU[`Y]ghYb`_Ub bž`i a`X]YgY`DfcV`Ya Y`Ubni [Y`Ybž`UVYf
Ui W`Ui Zdc`h]gW`Y`A U» bU`a Yb`j Yfk]YgYb`k]fXž`X]Y`bØh][`g]bXž
i a`X]Y`D`Ugh]__f]gY`Ub`XYf`K i fnY`ni`dUW`Yb"

9g`nY][h`g]W ž`XUgg`X]Y`J Yf`UbX`i b[Yb`ØVYf`Y]b`]bhYfbUh]cbU`Yg
I B!5V`_ca a Yb`[Y[Yb`D`Ugh]_j YfgW`a i hni b[ž`X]Y`]b`X]YgYa
Bcj Ya VYf`UV[YgW`cggYb`k YfXYb`gc`Ybž`]bg`Ghc`W`Yb`[YfUHyb
g]bX`"H]hnY`k Ufb hž`XUgg`XYf`K]XYfghUbX`j cb`Ø`ZØfXYfbXYb`GhUUhYb
i bX`XYf`DfcXi nYbhYb`cV`Vm`X]Y` : cfhgW`f]hY`VY`]bXYfh" `9]b`I B!
5V`_ca a Yb`]gh`Y]bY`Bchk YbX][`Y]h`ZØf`XYb`D`UbYhYb` ž`gc`H]hnY
k Y]hYfž`i bX`ZcfXYfh`X]Y`6i bXYgfY[]Yfi b[`Ui Zž`g]W`a]h`B UW`Xfi W`
i bX`[YgW`cggYb`]bhYf`i a k Y`hZFYi bX`]W`Y`A U» bU`a Yb`ni
ghY`Yb"

8]Y`8 f]b[`]W`_Y]h`XYf`@U[Y

8]Y`Dfc hYgh]D]W`_b]W`_g`Z]bXYb`b]W`h`ni Z`A`][`Ua`igY`VYb`HU[`ghUhh
k]Y`Y]b`ni g`A`h`]W`Yg`J Yf`UbX`i b[ghfY`ZYb`]b`6Ub[`_c`_ž`XUg
YVYbZU`g`ZØf`XUg`I B!5V`_ca a Yb`[Y[Yb`D`Ugh]_j YfgW`a i hni b[
ghUhhZ]bXYh" `8]Yg`_Øb bhY`gma`Vc`]gW`ZØf`XUg[`cVU`Y`DfcV`Ya
ghY`Yb`i bX`X]Y`5i [Yb`Ui Z`X]Y`8 f]b[`]W`_Y]h`XYg`H`Ya Ug`f]W`hYb"
8]Y`HY]`bY`a Yf`XYf`D]W`_b]W`_g`gY`Yb`g]W`b]W`h`bi f`U`g`dUgg]j Y
Ni gW`Ui Yfž`gcbXYfb`k c`Yb`U`_hj `Ub`XYb`J Yf`UbX`i b[Yb
hY]`bY`a Yb`i bX`ZcfXYfb`j cb`XYf`dc`h]gW`Yb` : Ø`fi b[`Y]bY`_`UfY
@]b]Y`]a`I a [Ub[`a]h`XYf`D`Ugh]__f]gY"

8 Ug`9b[U[Ya Ybhi bX`X]Y`A cV`]g]Yfi b[`XYf`6Yj Ø`_Yfi b[
j YfXYi h]W`Ybž`XUgg`XYf`8 fi W`_Ui Z`X]Y`Dc`h]_`k`A`W`ghž
YbhgW`]YXYbYfY`G`W`f]hY`ni`i bhYfbY`a Yb" `8]Y`K`Y`Y`Ub
J YfUbghU`hi b[Ybž`X]Y`i bhYf`XYa`A`chc`ghY`Ybž`_Y]bYb`D`Ugh]_a`Ø`
ni`_]bhYf`UggYbž`]gh`Y]b`5i gXfi W`_XYg[YgY`gW`UZh]W`Yb`K`UbXY`g
]b`ni`a`Y`f`I`a`k`Y`hVYk`i`gghgY]b`i bX`B UW`U`h][`Y]h" `5bghUhh`g]W`
a]h`XYf`XYfnY]h][Yb`G]hi Uh]cb`UVni Z]bXYbž`Yfa`i`h][h`XYf`K`K` :
YXYb`9]bnY`bYbž`HY]`X]YgYf`6Yk Y[i b[`ni`k`YfXYb`i bX`XUg

Y][YbY`J Yf\U`hYb`ni`ØVYfXYb_Yb"

9g`V`Y]VhUVni k UfhYbž`k Y`WXY`5i gk]f_i b[Yb`X]YgY`Vi bXYgk Y]hYb
5_h]cbYb`Ui Z`X]Y`dc`h]gWXYb`9bhgWXY]Xi b[ghfÅ[Yf`\UVYb`k YfXYb"
8Yf`K K :` \Uh`XYf`6i bXYgfy[]Yfi b[`Y]bY`_UfY`5i ZcfXYfi b[
Ui g[YgdfcWXYbž`g]WXY`ZØf`Y]b`k Y`hk Y]h[Y`hYbXYg`FY[Y`k Yf_
Y]bni gYhYbž`XUg`b]WXY`h`bi f`8Yi hgWXY`UbXž`gcbXYfb`Ui WXY`UbXYfY
@AbXYf`]b`X]Y`J YfUbhk c`fhi b[`n]Y`h`9g`]gh`Y]bY`a UggYb`UZhY
A cV`]g]Yfi b[ž`X]Y`b]WXY`h`][bcf]Yfh`k YfXYb`_Ubbž`i bX`g]Y`nY][hž
XUgg`X]Y`6Øf[Yf`U_hj Yf`HY]`XYf`@Øgi b[`gY]b`a ØWXYb"

9]b`NY]WXYb`XYf`< c ZZbi b[

÷a]hYb`U`XYf`< YfUi gZcfXYfi b[Yb`nY][h`g]WXY`ž`XUgg`Y]b
[Ya Y]bgUa Yg`9b[U[Ya Ybh[Y[Yb`D`Ugh]_a Ø`Yb`hghUbX`6Y]`XYb
DfchYgh`D]W_b]W_g`k]fX`X]Y`XY`Y`YVYbX][ž`XUgg`j]Y`Y`÷X]j]Xi Yb
[Ya Y]bgUa `Y]bYb`i bhYfgWXY]YX`a UWXYb`_ØbbYb`8]YgYg
_c`Y`_hj Y`< UbXY`b`]gh`b]WXY`h`bi f`Y]bY` : cfa`XYg`DfchYghgž`gcbXYfb
Ui WXY`Y]bY`E i Y`Y`XYf`< c ZZbi b[ž`XUgg`Xi fWXY`[Ya Y]bgUa Yg
J cfgdfYWXYb`i bX`< UbXY`b`J YfÅbXYfi b[Yb`]b`XYf`Dc`h]_i bX`XYa
I a [Ub[`a]hi bgYfYa `D`UbYhYb`a Ø[`]WXY`g]bX`"

Dc`h]gWXY`F U\ a YbVYX]b[i b[Yb`XYf
D`Ugh]_j YfgWXY`a i hni b[

8]Y`DfcV`Ya Uh]_XYf`D`Ugh]_j YfgWXY`a i hni b[`]gh`b]WXY`h`bi f`Y]bY
I a k Y`hZfU[Yž`gcbXYfb`Ui WXY`Y]bY`_ca`d`YI Y`dc`h]gWXY
< YfUi gZcfXYfi b["K Y`hk Y]h`d`fcXi n]Yfh`X]Y`A YbgWXY`Y]h`Å`f`]WXY
ØVYf` "\$`A]`cbYb`Hcb`bYb`D`Ugh]_ž`i bX`Y]b`Yf`YV`]WXY`g`J c`i a Yb
[Y`Ub[h`XUVY]`]b`X]Y`C`nY`UbY`8Yf`Ni [Ub[`ni`gUi VYfYa `K UggYf
i bX`[Ygi bXYb`@VYb`gfÅi a Yb`k]fX`ni bY`a YbX`[YZÅ`f`XYh"
8Yi hgWXY`UbXž`Y]bgh`J cffY]hYf`]b`i a k Y`hZfU[Ybž`g]Y`h`g]WXY`a]h`XYf
< YfUi gZcfXYfi b[`_cbZfc`bh]Yfhž`]bhYfbY`Dc`h]_i bX`]bhYfbUh]cbU`Y
J YfY]bVUfi b[Yb`]b`9]b`_Ub[`ni`Vf]b[Yb`"

6YgcbXYfg`X]Y`J Yf\UbX`i b[Yb`Ui Z`I B!9VYbY`g]bX`ZØf`X]Y
ni`_ØbZh][Y`< UbX`UVi b[`j`cb`D`Ugh]_`Yb`hgWXY]XYbX`8Yf`8fi W`Ui Z

@AbXYfž'g]W`Ub`j`YfV]bX`]W`Y`5V`_ca`a`Yb`ni`'\U`hYbž'ghY][`hž`XcW`
cZi'g]bX`'k`]fhgW`UZh]W`Y`'b`hYfYggYb`'`VYgcbXYfg`]b`
Ø`dfcXi`n]YfYbXYb`GhUUhYbž`X]Y`j`cb`XYf`D`Ugh]_dfcXi`_]cb`
dfcZ]h]YfYb`'`Y]b`'\Ya`a`YbXYg`9`Ya`Ybh`'Ni`a`'6Y]gd]Y`'\UVYb`
@AbXYf`k`]Y`X]Y`I`G5`i`bX`HY]Y`5g]Ybg`]b`XYf`J`Yf[`Ub[`Yb`Y]h[`Y[`Yb`
ghfYb[`YfY`FY[`Y`i`b[`Yb`[`Yk`YhYfhž`k`cXi`fW`':`cfhgW`f]hhY`j`YfnØ[`Yfh`
k`i`fXYb`"8`Ug`Ni`gUa`a`Ybgd]Y`X]YgYf`d`c`]h]gW`Yb`?`fÀZhY`'\Uh`
YbhgW`Y]XYbXYb`9]bZi`gg`XUfUi`Z`]bk`]Yk`Y]h`]bhYfbUh]cbU`Y`
F]W`h`]b]Yb`ni`f`FYXi`n]Yfi`b[`j`cb`D`Ugh]_a`Ø``i`a`[`YgYhnh`k`YfXYb`
_ØbbYb`"

GhUh]gh]gW`Y`9]bV`]W`_Y`]b`XUg`D`Ugh]_dfcV`Ya`

5_hi`Y``Y`8`UhYb`j`YfXYi`h]W`Yb`XUg`5i`ga`U»`XYf`
D`Ugh]_j`YfgW`a`i`hni`b[`"@Ui`hY]bYf`Ghi`X]Y`XYf`9`Yb`A`UW5fh\i`f`
:`ci`bXUh]cb`Ui`g`XYa`'`&\f`&\$&%`k`]fX`Yfk`UfhYhž`XUgg`V]g`&\$`\$`
`Å\`f`]W`ØVYf`)`\$\$`A`j``]cbYb`HcbYb`D`Ugh]_a`Ø``YfnYi`[`h`k`YfXYbž`
k`Ybb`_Y]bY`A`U»`bU\`a`Yb`Yf[`f]ZYb`k`YfXYb`"8]Yg`gW`]Y»`h`gck`c`\`
J`YfdUW`_i`b[`ga`UhYf]U`Yb`U`g`Ui`W`DfcXi`_hY`Y]bž`X]Y`Ui`Z`
HfU[`YhUgW`Yb`i`bX`9]bk`Y[`Ufh]_Y`Ub[`Yk`]YgYb`g]bX`"

Ni`XYa`'nY][`h`Y]bY`I`a`ZfU[`Y`XYg`A`Uf`_hZc`fgW`i`b[`g]bgh]hi`hg`-dgc`gž`
XUgg`ØVYf`+\$`Dfc`nYbh`XYf`8Yi`hgW`Yb`g]W`ghUf`_i`a`XUg`H\Ya`U`
D`Ugh]_a`Ø``i`bX`XYggYb`:`c`[`Yb`ZØf`X]Y`I`a`k`Y`h`gcf[`Yb`"8]YgY`
6Ygcf[`b]g`k`]fX`Ui`W`Xi`fW`fY[`Y`a`Å»][`Y`6Yf]W`hYfghUhi`b[`]b`XYb`
A`YX]Yb`i`bhYfghØhnhž`X]Y`XUg`6Yk`i`gghY]b`ZØf`X]Y`,`VYf`Ughi`b[`]XYf`
C`nYUbY`gW`ÅfZYb`"9]b`k`Y]hYfYf`]bhYfYggUb`hYf`5gdY`_h]ghž`XUgg`
j`]Y`Y`A`YbgW`Yb`VYfY]h`g]bXž`]\fYb`Y][`YbYb`@YVYbggh]`ni`AbXYfbž`
i`a`ni`f`FYXi`n]Yfi`b[`j`cb`D`Ugh]_a`Ø``VY]ni`hfU[`Yb`",`VYf`*`\$`
Dfc`nYbh`XYf`6Y`ZfU[`hYb`[`UVYb`Ubž`XUgg`g]Y`]b`XYb`Y`hnhYb`&\fYb`
]\fYb`?`cbgi`a`j`cb`9]bk`Y[`d`Ugh]_fYXi`n]Yfh`\UVYb`"

<]ghcf]gW`Y`DUfU``Y`Yb`]a`'I`a`k`Y`hd`fc`hY`gh`

8Yf`VYj`cfghY`YbXY`DfchYghI`D]W`_b]W`_]b`8Yi`hgW`UbX`Yf]bbYfh`
ghUf`_Ub`ZfØ`YfY`I`a`k`Y`hVYk`Y[`i`b[`Yb`"9]b`6Y]gd]Y``]gh`XYf`9Ufh`
8Um`ž`XYf`Yfgha`U`g`%-`+\$]bg`@YVYb`[`Yfi`ZYb`k`i`fXYž`i`a`k`Y`hk`Y]h`
Ui`Z`I`a`k`Y`hZfU[`Yb`Ui`Za`Yf`_gUa`'ni`a`UW`Yb`"8]YgY`

J YfUbgU`hi b [Yb ` \ UVYb `XUni `VY][YhfU [Ybž`Y]bY `VfY]hY `ÖZYb`h]WXY
8YVUhhY `ØVYf`fY`Yj UbhY`H\Ya Yb`k]Y`@ Zh!`i bX
K UggYfj YfgW`a i hni b [`ni `ZÖfXYfb"

9]b `VYXYi hYbXYf`l bhYfgW`]YX`nk]gW`Yb `XYb`XUa U`][Yb `DfchYghYb
i bX`XYf`\Yi h][Yb `G]hi Uh]cb `VYghY`h`YXcW`]b`XYf` [`cVU`]g]YfhYb
J YfbYhni b [" `8]Y`\Yi h][Y`DfchYgh`i `hi f`bi hnh`gc n]U`Y`A YX]Ybž`i a
Y]bY` [fÖ» YfY`F Y]W`k Y]hY`ni `Yfn]Y`Yb`i bX`a Y`f`A YbgW`Yb`ni
a cV`]g]YfYb`"Gcn]U`Y`D`UhhZcfa Yb`Yfa Ö [`]W`Yb`Yg`; fi ddYbž
cVYf`U`V`bUh]cbU`Yf`; fYbnYb`ni gUa a Ybni `_ca a Yb`i bX
[Ya Y]bgUa Y`5b`]Y [Yb`YZZY`_h]j `ni ` _ca a i b]n]YfYb`"8]Y
VYgcbXYfY`F c`Y`j cb`C f [Ub]gUh]cbYb`k]Y`XYa `K K : `VY]`XYf
A cV`]g]Yfi b [`XYf`N]j] [YgY`gW`UZh`nY][hž`k]Y`k]W`h [`ghfUhY []gW`Y
DUfhbYfgW`UZhYb`]b`XYf`\Yi h][Yb`l a k Y`hdc`]h`_g]bX"

8YhU]`g

6Ygi W`Yb`G]Y`i bg`Ui Z. `b!U ["XY