

>Y`Ybh_YnÅg



5 ^b`i`Yj Å`#F YZYfYbV]U`Yj Å`

5 ^b`i`Yj Å`#F YZYfYbV]U`Yj Å`! Bm]hVg

UfUV

dcfhi [1/2

DfYnLXc`GYb\cfž

7 Ufc`GYb\cfž

<]j Uu`cgžZÅfZ] VĚa nYhtž]ga YfYhYb`bÅj

DfYnLXU`GYb\cfUž

7 UfU`GYb\cfUž

<]j Uu`cgžb]`VĚa nYhtž]ga YfYhYb`bÅj

P

DfYnLXcfU`GYb\cfUž

7 UfcU`GYb\cfUž

<]j Uu`cgžVĚa nYhtbYa Y`Åg`bYj Y`]ga YfYhYb

DfYnLXcgjGYb\cfYgž

7 UfcgjGYb\cfYgž

<]j Uu`cgžh`OW`VĚa nYth

5`ei Ya`dcggU`]bhYfYggUfž

<]j Uu`cgžVĚa nYhtfY`_`bYj Y`Åg`bYa Y`]ga YfYhYb

DfYnLXc`Gf`G]j Už

7 Ufc`Gf`G]j Už

<]j Uu`cgžZÅfZ] VĚa nYhtž]ga YfhibÅj

DfYnLXU`Gf`G]j Už

7 UfU`Gf`G]j Už

<]j Uu`cgžb]`VĚa nYhtž` \`h`Ugž]ga YfhibÅj

DfYnLXU`Gfh`G]j Už

7 UfU`Gfh`G]j Už

<]j Uu`cgžb]`VĚa nYhtžY[mYXØ 1/2`i`ž]ga YfhibÅj

DfYnLXU`Gf`G]j Už

7 UfU`Gf`G]j Už

<]j Uu`cgžb]`VĚa nYhtž]ga YfhibÅj ž]ga YfYhYb`VgU 1/2] 1/2 Udch

>Y Ybh_YnÅg



5 ^b`i`Yj Å`#F YZYfYbV]U Yj Å`

¥ Wta`gUhgZUĀ;c`ei Y`ZcfbYĀc`fYZYfA5V]Ujgc`VfY`"

Bmjĥi`a`cbXUžUa`[_cf`gnYfYHĀ`UhnU`U`gnYa`Å`mY`Y[m0thXc`[`cnb]žU_]f`Ěgn

C`a`Yi`df]a`Y]fc`WbHhc`Wta`""Zc]`Ya`""žei`UbXc`YY`Ybhfci`dUFU`""

5 bbU`YĚf]gUĚ`c[m\cbbLb`]ga`YfYX`U`Y`Ybh_Yn`h`

""a`YdYX]i`dUFUYgM]Y`Yf`i`a`UWfHU`XY`fWta`YbXUĀ;c`dUFU`U`g`U]bgM]Ā;c`#W]X]XUhi`fUYa`""":`]M`a`i`]hc`gUhgZ]hc`Ya`ZUĚc"

Bmjĥi`a`cbXUžUa`[_cf`gnYfYHĀ`UhnU`U`gnYa`Å`mY`Y[m0thXc`[`cnb]žU_]f`Ěgn

P` :`c]i`a`dfUhf`gYf`WYZY`#g`dYfj`]gc`#W`Y[U`XY`"X`YgY`""

Bmjĥi`a`cbXUžUa`[_cf`gnYfYHĀ`UhnU`U`gnYa`Å`mY`Y[m0thXc`[`cnb]žU_]f`Ěgn

:`]M`gUhgZ]hc`Ya`YgM]Y`Yf`YgUWfHU`XY`fWta`YbXUĀ;c`dUFU`""5`ei`]žYi`dfYggc`c`a`Yi`fYgdY]hc`Y`UdfYĀc`dcf`YgH`^`cj`Ya`Vf]`UbHžei`Yhfci`I`Ybch]j`Y`Wbhf]Vi`]Ā;c`Uc`hfUWU`c`Xc`a`Yi`[fi`dc"

Bmjĥi`a`cbXUžUa`[_cf`gnYfYHĀ`UhnU`U`gnYa`Å`mY`Y[m0thXc`[`cnb]žU_]f`Ěgn

9i`b;c`Yg]hc`Ya`YgM]Y`Yf`i`a`UWfHU`XY`fWta`YbXUĀ;c`dUFU`""

Bmjĥi`a`cbXUžUa`[_cf`gnYfYHĀ`UhnU`U`gnYa`Å`mY`Y[m0thXc`[`cnb]žU_]f`Ěgn

¥`i`a`dfUhf`YgM]Y`Yf`i`a`UWfHU`XY`fWta`YbXUĀ;c`dUFU`""

Bmjĥi`a`cbXUžUa`[_cf`gnYfYHĀ`UhnU`U`gnYa`Å`mY`Y[m0thXc`[`cnb]žU_]f`Ěgn

>Y Ybh_YnÅg

5 ^b`i`y Å #F YZfYbV]Uy Å

.....
.....
..... P
..... P P

9i \b\Yc'XYgXY'žei UbXc'YY#YUg'a Uf]W'ci 'bU
a]b\UWUgy' #Wta Yc' U'fUWU\Uf Ya #bc' #bU''''

5 bbU`Yf%U\c[m\cbbLb]ga YfYX'U`Y Ybh_Yn h

P
.....

9i \b\Yc' dcf'žbU'ei U]XUXY'XY''Ya #bc' #bU''''

< cbbLb]ga YfYX'U`Y Ybh_Yn h

P
..... P P

9i 'z]'WYZ' #g dYfj]gcf #W Y[U#dfcZYggcf 'XY''XY''U
''''

< cbbLb]ga YfYX'U`Y Ybh_Yn h

..... P
..... P
P P
..... P
..

''fUWU\ci 'dUfU'a]a Ya j ½]cgdfc'YrcgWta c''''''
7 ca 'UgY'Ya 'g'i 'fUWU\czj Yc''fbc'a YXU'dYggcUWta c
i a 'Xcga Y\cfYg''ei Y'^½]j Ya cg'

Bmj`i`a cbXUz`La]_cf'gnYfYhÅ`UhnU`UgnYa Å`mY`Y[m`hXc`[cnb]žU_]f`f`gn

5 ^b`i`y Å #F YZfYbV]Uy Å ! ? ÅgngÅ[Y_

..... UfUW dcf h [½
..... P
..

8YgY'c]bÉ]c'XU'bcggU'WcfUĀ;czdYfVW]ei YYY#YU
Åi a U'dYggcU''''''

5`Y Ybh_Yn`gnYa Å`mjgÅ[ÅbY`_dcn]hĭ`c`XUU

..... P
@Y[ZcbrtcgUW'dcn]hĭ`h`UXcbg]c`_Yf%U

''X]gh]b[i]i !gY'dcf''''

..... P
5`Y Ybh_Yn`Yf ggÅ[Y]bY`_VYa i hU]gU

C`g'i`a U]cf hUYbhc'Å''''

>Y Ybh_Yn Åg



5 ^b`i`y Å #F YZfYbV]U Yj Å

" p

9`Y#9`Ugc`i V]cbUdfcV`Ya UgV]U]h] Ua Ybh`

9[mic`ntub`Y`Ybh_Yn`Yf]g]U]`Y`Zc[UX`U`Åg`a Y[c`X`U`U`_]`h] `gc`_Lh

. p

9`Y#9`U`H`Ya`i`a`'`Ua`d`c`'`Yei`Y`X`Y`V`ta`d`Y`h`V`U`g`

"

š`H`U`b`c`g`g`]`V`U`b`'`f`_`Å`d`Y`g`Å`[`Y`Y`b`h`_`Y`n`Y`f`]`g`U`

. p

9`Y#9`U`V`ta`i`b]W]g`Ug]X]Å]Ug]V`ta`'`W`U`F`Y`n`U`'

"

5`bb`U`Y`f`]`g`U`Z`c`[`m`i`U`Y`Y`b`h`_`Y`n`'`f`_`ca`a`i`b]`_`W]`g`_`Å`g`Å`[`Y`_`Y`'`f`Y`b`X`Y`_`Y`n]`_`

" p

9`Y#9`U`X`U`V`Ya`'`V`ta`'`f`Y`g`d`c`b`g`U`]'`X`U`X`Y`g`'

5`bb`U`Y`f`]`g`U`Z`c`[`m`i`U`Y`Y`b`h`_`Y`n`'`_`Å`d`Y`g`Y`[`m`i`W`U`d`U`c`h`#`d`f`c`_`Y`_`h`i`f`'`]'`f`]`b`n`f`U`b]`Å`g`f`'`X`c`[`c`n]`_`b`n`c`a`'`g`U`U`h`i`g`

'''' p

9`Y#9`U`H`Ya`j`U`g`c`V`b`W]`V`a`Y`b`h`c`Ya`#`b`c`#`b`U`''''

5`bb`U`Y`f`]`g`U`Z`c`[`m`i`U`Y`Y`b`h`_`Y`n`'`a`]'`m`Y`b`_`Å`g`Å`[`Y`_`Y`'`f`Y`b`X`Y`_`Y`n]`_`

. p

9`Y`Y`b`h`b`X`Y`f`U`d]`X`U`a`Y`b`h`'`b`c`j`c`g`V`b`W]`h`c`g`U`W]`H`U`V`f`]`W`g`
V`b`g`f`i`h`j`U`g`Y`]`b`g`f`i`Å`N`Y`g`f`Y`U`h`j`U`g`U`c`g`i`'`f`U`U`Z`c`"

. p

"

C`_`c`g`Z`[`n`Y`g`Å`g`X]`b`U`a`_`i`_`g`'`Y`Y`b`h`_`Y`n`'`Y`f`]`g`U`Z`b`U`[`m`c`b`X]`V`g`Å`f`

P '''' p ''''

9i`[`c`g`U`f]`U`X`Y`a`Y`b`V]`c`b`U`f`'`U`e`i`]'`e`i`Y`''''`Å`''''`Y`h`Ya`'`U`
`U`]'`X`U`X`Y`X`Y`''''

F`Å`g`n`Y`h`g`Y`f`]`g`U`U`b`U`_`z`c`[`m`i`U`Y`Y`b`h`_`Y`n`'`a`]'`f`Y`_`Å`d`Y`g`

. '''' p

G`i`U`Y`i`f`U`c`f`X]`b`]`U`W`d`U`]'`X`U`X`Y`X`Y`''''`Z`c]`]`b`Y`g`]`a`'`j`Y`''

"

5`Y`Y`b`h`_`Y`n`'`Y`[`c`W`h`'`U`X`c`b`g`]`_`b`U`_`Y`f`]`g`U`

'''' p

9`Y#9`U`H`Ya`'`g`Ya`d`f`Y`i`a`'`d`U`b`Y`'`U`h`j`c`'`Ya`#`b`c`#`b`U`''''

9[mic`ntub`Y`Ybh_Yn`Yf]g]U]`U`h]`z`Å`g`g`n`Y`f`Y`h`f`Å`g`h`j`Y`b`b]`U`a`i`b`_`W]`U`b`

>Y'Ybh_YnÅg



5 ^b`i`Yj Å`#F YZfYbV]Uyj Å`

· · · · ·
· P · · · · ·
· P · · · · ·
· P · · · · ·
· P · · · · ·
· · · · ·
· · · · ·
· · · · ·
· · · · ·
· · · · ·
· · · · ·

9`Y#9`UW a dfY'cgjdfUhcjgduFU'c'hÅa]bc'Xcg]fUMU\cg'
E i UbXc'hYa 'i a 'ei Ygh]cbLa Ybhc'ci 'dfYcWdUÅ;c'U
fYgdY]hc'XY'i a U'HUFYZLZYY#YU'ZJU'WUFUY'X]fYHLa YbHYZ
XUbXc'j cniUcgW'Y[Ugei YHUj YniHm\Ua 'Uga Yga Ug
XÖj]XUga Ugb;c'g'gYbHYa 'WbZcfH½Y]gdUFU'dYf[i bHU"

C_cgZ[mYgÅgX]bLa]_i g'Y'Ybh_Yn`Yf]g]zbU[mcb'XÉWÅf

5 ^b`i`Yj Å`#F YZfYbV]Uyj Å`! : YY ggÅ[]_ÖfÖ_

· · · · ·
· P · · · · ·
· · · · ·
· · · · ·

UfUV dcfh [½
9bei Ubhc'YghU'WbcbgWZYY#YU'9gU
fYg]cbgM]]XUXY'bj c'j]U''''''

5`ZY'UXU_h_ÖfÖ_`Yf]g]z]`Yj Yz\c[m]huc_'dcb]c]g]b'a]h]g'hUf]U'a UhbU_

· P · · · · ·
· · · · ·

Gi Ugd]f]bV]dU]g]fYg]cbgM]]XUXY'g]Yf]Ua ''''

5`Y'Ybh_Yn`_cf]W]ZY'UXU_h_ÖfÖ]bY_`Yf]g]z

'''' · P · · · · ·

Gi Ug]HUFYZLZg]Ya UbU]g]Wb]g]h]Ua 'Ya ''''

<Yj]ZY'UXU_h_ÖfÖ_`Yf]g]z

5 ^b`i`Yj Å`#F YZfYbV]Uyj Å`! ¥fhÅ_YÅg

· · · · ·
· P · · · · ·
· · · · ·
· P · · · · ·
· P · · · · ·
· · · · ·
· · · · ·
· · · · ·
· · · · ·
· · · · ·
· · · · ·

UfUV dcfh [½
; cg]Uf]U'XY'X]nYf'ei YÅ'i a 'dfUhyf'hfUMU\Uf'Wda ''''''9`Y
#9`UÅ'WbZ]½Yz]bHY][YbHY'HYa 'g]b]gc'XY'i a cf''

5`Y'Ybh_Yn`dcn]Hj`ÅfhÅ_YÅgY

· · · · ·
· P · · · · ·
· P · · · · ·
· P · · · · ·

>Y`Ybh_YnÅg

5 ^b`i`Yj Å`#F YZYfYbV]U`Yj Å`



..

GY`c`gM`XYgYa dYb\c`Ya `bcggJYa dfYgJ`Åi a UVcU
]bX]W]c`XYVza c`YY`#YUUh UF]UbUg UZYY`#`Ugyf]U
i a U`Uei]g]c`Yi hfYa La YbH`dcg]hj U`dUfU`c`gM
dfc[fLa U'

>Y Ybh_YnÅg



5 ^b`i `Yj Å #F YZYfYbV]U Yj Å

B U[mcb'dcn]hġ `ÅfrÅ_Y ÅgbÅ`

B U'a]b\ U'cd]b]cž'""ÅX]] [YbhZ'hYa `]b]M]U]j UY
]bj Uf]Uj Ya YbhY'YbhYbXY'Yi UfUa YbhY'g'VfY'c'ei Y'ÅWÅXU
dfc^Yrc"

Dcn]hġ `ÅfrÅ_Y ÅgbÅ`

""W]bg]gYbhYa YbhY'dfcXi n'fUMU\c'XY'U'U'ei U]XUXY
Ya `hYa dc\`½]"

Dcn]hġ `ÅfrÅ_Y ÅgbÅ`

..... C Öb]W' dcbhc'ZFUW'ei Y'dYfVW] Ya `g'f' `XYgYa dYb\c'Zc]
.....

¥frÅ_Y ÅgbÅ` bY[U]hġ `c`XU`]ga YfYhÅgY

9i `UWfYX]hc'ei Y""XYj Y'g'f' W]bg]XYfUXc'¼ZfYbhY'XY
ci hf'cgW]bX]XUrcg'dcfei Y""

J U'Ua]mYb`_ØÖb`Y[Yg'c_Vi `U^b`Ub]`U`Y Ybh_Yn hžbU[mcb'dcn]hġ `ÅfrÅ_Y Åg

5 ^b`i `Yj Å #F YZYfYbV]U Yj Å ! @Yn½½g

UFUW

dcf h [½

""gca Uf½'dcg]hġ Ua YbhY'dUFU'g'f' `dfc[fUa U'GY'Yi `U]bXU
di XYf'g'f' Öh`XY'ei Uei Yf'Zcfa U'Zdcf'Z] cf`Ybj]Yi a `Y!
a U]`ci ``][i Y'dUFU'a]a "

Dcn]hġ `U^b`i `Yj Å ``Yn½½g]U_cf

P "" P ""

""hYa `U'a]b\ U'fW]ca YbXUÅ;c""9`Y#9`U'g'f'½] W'YbhY
dUFU'c'g'f' `dfc[fUa U'

Dcn]hġ `U^b`i `Yj Å ``Yn½½g]U_cf

>Y Ybh_YnÅg



5 ^b`i `Yj Å`#F YZfYbV]U Yj Å`

·P ····· ·····
·P " ····· ·····
" ·····

9gci `Wfhc`ei Y""`Vbh]bi Uf½UgYf`a i]hc`dfcXi Hji cfUe'
9`Y#9`UHya `Ua]b\Ua U]gUHUfWta YbXUÅ;c"

Dcn]Hj `U`b`i `Yj Å`~Yn1/0]_cf

" ····· ····· ····· ····· ····· ····· P
" ·····

8ci !\`Ya]b\Ua U]gUHUfWta YbXUÅ;cžgYa `fYgYfj Ug'
Dcf Z]j cfZ`][i Y!a Yci `Ybj]!a YY!a U]`Wgc`hYb\U
XÖ]XUg"

F YbX_ġ Ø`dcn]Hj `U`b`i `Yj Å`~Yn1/0]_cf

P ····· ·····
·····
·P ·····
" ····· P ····· P
" ····· P

5VfX]hc`Z]fa Ya Ybh`Ya `g Ug\UW]`]XUXYgYi WdV]cbU]g
dUFU""`YfWta YbXc!\`YdUFUYgU'i b]j Yfg]XUXYžcbXYYY
#`UdcXYf½XygYbj c]j Yf`Yi H]`nUF`gYi gHU Ybhcg
Vf]\`UbhYg"

F YbX_ġ Ø`dcn]Hj `U`b`i `Yj Å`~Yn1/0]_cf

P ····· ·····
····· " ·····
" ·····

¥` [fUH]Z]Wbh`dcXYf`XUF!\`YU'a]b\Ua U]gUHU
fWta YbXUÅ;c"9gdYf`c`ei Y`YgU]bZcfa UÅ;c`dcegU`gYf
Öj`"

F YbX_ġ Ø`dcn]Hj `U`b`i `Yj Å`~Yn1/0]_cf

·····
" ·····

9i `g]bWfUa Ybh`fWta YbXc`""`Wta ci a `WbX]XUrc
dfca]ggcfžgYa `fYgYfj Ug'

F YbX_ġ Ø`dcn]Hj `U`b`i `Yj Å`~Yn1/0]_cf

" ····· ····· ····· ·····
" ·····
" ·····

F UfUa Ybh`fWta YbXc`U[i Åa `gYa `fYgYfj Ug"¥`i a
dfUhYf`Z]h`E`c`bc`Wgc`XY`""

F YbX_ġ Ø`dcn]Hj `U`b`i `Yj Å`~Yn1/0]_cf

>Y'Ybh_YnÅg

5 ^b`i `Yj Å`#F YZYfYbV]U'Yj Å`



.
"
P

9i 'fYgdY]hc''''Vta c'Vt'Y[Už'a Uj'XYj c'X]nYfž'Vta
\cbYg]XUXYžei Yb;c'dcggc'fYVta YbXUf!'`Y'dUfU'g U
Ya dfYgJ"

5a]_cf'bYa '[cbXc`cXž`c[mU'Y'Ybh_Yn 'U_U'a Uj'U'dcnÉV]i fU

.
"

F Yg]cbXYfY]Vta 'dfUhf'ei U]gei Yf'dYf[i bH]j'UX]V]cbU]g
ei Y'c'g]b\cf'#U'g]b\cf'U'h]b\U'

Dcn]Hj 'U'Yb`i `Yj Å`Yn1É]g]_cf

.
"
P

C'g]b\cf'#5'g]b\cfU'dcXY'bfUf'Ya 'Vb]Uhc'Vta][c'dcf
Wf]U#Y!a U]`W]c'dfW]g'XY'ei Uei Yf'j]bZcfa U]c
UX]V]cbU"

Dcn]Hj 'U'Yb`i `Yj Å`Yn1É]g]_cf