



#2/?89;/0@!1:!K/;612;/2! ! ! ! ! ! ! !!!!!BCDLMBCDJ!  
"H32684419N!#2/?89;/0@!1:!K/;612;/2!"144818;!32. !#2/?89;/0@!1:!K/;612;/2M%0082;/12!

!

0J/M\$!, ('!#\$%M/(&L&8)30!P2\$#%, <!)H\$!, J, '\$G&W\*!.&(&J&,\*!/: )#\$, JH\*!, ('!, 'G&(8%)#, )&2\$!.: (J)&/(%!/.!  
)</!%), )\$<&' \$!H&EH\$#!\$' : J, )&/(!&(%)&): )&/(%R!1\!+/--\$E\$%!\$(J/GM, %%\$' !@B!)</A3\$, #!J/--\$E\$%!  
)H#/: EH/: )!\ 8%J/(&R!1\A4V)\$(&R!&(!&J-: '\$' !+/( )&(: &(E!4' : J, )&/(\*!P: )#\$, JH!, ('!4AD\$, #(&(E\*!  
+ /M\$#, )&2\$!4V)\$(&R!&(\*!I &28%&/(!/.!4 )#\$M#\$( \$: #H&M!, ('!4J/(G&W! \$2\$-/MG\$ )\*\ 8%J/(&(!": L-W!  
], ' &/\*!\ 8%J/(&(!": L-W!U\$-\$28%&/(\*!Y(%): J)&/(-!+/GG: (&J, )&/(%!03%)\$G%!, ('!4V)\$(&R!&(!+/(. \$#\$(J\$!  
+\$ )\$#%^, --!%), )\$<&' \$R!!UH\$!J/GL&(\$' !&(%)&): )&/(%!\$GM-/3\$' !6\*699!., J: -)3!, ('!%), ..!, ('!H, '!, (!  
, ((, -!/M\$#, )&(E!L: ' E\$)!/.!SB79!G&-&/ (R!  
!

#2/789;/0@!1:!"34/:192/3!\*3203!"95S! ! ! ! ! ! ! BCCC!E!BCCR!  
Q/68!(91?1;0!32. !, 832N!#2/789;/0@!%0082;/12!32. !\*5PP89!\*8;;/12!TBCCB!E!BCCRU!  
, 832N!#2/789;/0@!%0082;/12!32. !\*5PP89!\*8;;/12!TBCCC!E!BCCDU!

!

OJ/M\$!, ('!#\$%M/(&L&&)30!=J, '\$G&J\*!.&(, (J&, -!/M\$#, )&/ (, -!/ : )#\$, JH!, ('!' \$2\$-/MG\$(!)! : (J)&/ (%!/.!, (!  
, J, '\$G&J!: (&!<&)H&(!)H\$!1 (&2\$#%&)3!/.!+, -&./#(&, !O, () , !+#: \*\_!./J: %\$' !&(1O&&J/(!X, --\$3\*!%\$#2&(E!L\$)<\$\$(!  
7\*999!d!@9\*999!M, #)A)&G\$!%): '\$()!M\$#!3\$, #R!O: GG\$#!O\$%&&/(!: (&!M#/2&' \$' !#\$E: -, #'! \$E#\$#!J#\$' &!)  
J/: #%\$%!./#!G, )#&J: -, )\$' !%): '\$()!M\$#!3\$, #R!O: GG\$#!O\$%&&/(!: (&!M#/2&' \$' !#\$E: -, #'! \$E#\$#!J#\$' &!)  
<, %!S67!G&-&/ (R!" , #)!/.!%\$ (&/#!G, (, E\$G\$(!)\$, G!./#!1 +!O, () , !+#: \_R!

!

W\$3!, JJ/GM-8%tHG\$(%)0!4 (H, (J\$' !/: )#\$, JH!)/!O&&J/(!X, --\$3!&(' : %)##\$%c!' \$2\$-/M\$' !#\$-, )&/ (%H&M%<&)H!  
J, GM: %!., J: -)3c!&(J#\$, %\$' !%: GG\$#!%\$%&&/(!\$ (#/--G\$(%)c!/2\$#%, <!%&E (&.&J, ()/#E, (&\_ , )&/ (, -!  
)#, (%./#G, )&/ (!\$. /#)#!' : \$!)/!G, [/#!)\$JH(-/E3!&(' : %)##\$%c!' /<(): #(!/!1699@R!

!

#2/789;/0@!1:!"34/:192/3!\*32!V9326;/61! ! ! ! ! ! ! DWWC!E!BCCC!  
- ; /; 0320!, 832N!%. 5630/1234!\*5FF190!\*89?/68;N!\*6H114!1:!, 820;/09@!TDWWX!E!BCCCU!  
, /986019N!%. 5630/1234!\*5FF190!\*89?/68;!TDWWL!E!DWWXU!  
- ; /; 0320!, /986019N!" 120/25/21!%. 5630/12!TDWWB!E!DWWLU!  
<323!8P820!\*89?/68;!):/689N!" 120/25/21!%. 5630/12N!\*6H114!1

) 0H89!0836H/2I!F1;/0/12;!  
\*3203!"4393!#2/?89;/0@! !

! ! ! ! ! ! !

DWJL!MDWJZ



!

#2/789;/0@1:!"34/:192/3!\*@;08P!

6998!d!()\*(! !!+/( )&(: &(E!4' : J, )&/(!/.!)H\$!5, #!F/2\$#(&(E!+/GG&))\$\$\*!+H, &#!

6999!d!()\*(!!!!!! !!1 (&2\$#%&&)3!4V)\$(%&/(!+/: (J&!/.! \$, (%!

699>!d!69@9! !!4' : J, )&/(!, (' !+: ##&J: -: G!\ /#TE#/: M\*!1+!+/GG&%&&/(!/(!)H\$!K: ): # \$!

"3PF5; !

69@6! ! !!P(-&(\$!D\$, #(&(E!4V\$J: )&2\$!+/GG&))\$\$!

699N!d!()\*((' !!4X+i "#/2/%)0%!4V\$J: )&2\$!+/: (J&!

699N!d!()\*(! !!+/: (J&!/.!"#/. \$%&&/ (, -!0JH// -! \$, (%!

699N!d!()\*((' !!0\$(, )\$!+/GG&))\$\$!/(!+/( )&(: &(E!, (' !+/GG: (&)3!4' : J, )&/(! \$VA/..&J&/a!

69@9! ! !!

!  
\*%=%''%, !Y\$-&' \*!-&, !(\$+Q-' %!\*#(()) \$'!  
!  
=-)\$#(,) &2\$!+#\$' &!f: &' \$-&(\$%!, (' !4J/%3%)\$G!  
5&-!g!F \$-&(' ,!f,) \$%K/: (' ,)&/(!  
`"#&(J&M, -!Y(2\$%)&E, )/#a! ! ! ! ! !!!!!!!S!@R8>!G&-&/(! ! 69@?!  
!  
+H, (E\$!, (' !Y((/2, )&/(!D, L!  
D: G&(!K/: (' ,)&/(!  
`"#&(J&M, -!Y(2\$%)&E, )/#a! ! ! ! ! !!!!!!!S?99\*999! ! 69@B!  
!





!

0, (' \$\$ (\*!+R\*!42\$#H, #)\*!I R\*!O\$3G/: #\*!I R\*!e/%H&(/\*!WR!`69@?aR!  
R!=G\$#&J, (!+/: (J&!/(!4' : J, )&/(!, (' !5-, JTL/, #' R!

!

0, (' \$\$ (\*!+R!`69@?aR!+/GM\$)\$ (J3A5, %\$' !4' : J, )&(!%b/!)H\$!b\$<!j FPP+Rk! \*!K, --!  
69@?\*!MR!69A66R!

!

0, (' \$\$ (\*!+R\*\$' R!`69@?aR!5\$3/( ' !)H\$!Y(-.\$J)&/(!" /&()0!] \$&G, E&(E!5: %&(\$%!F /' \$-%!. /#!; &EHS#!  
4' : J, )&/(R! R!=G\$#&J, (!+/: (J&!/(!4' : J, )&/(R!

0, (' \$\$ (\*!+\*\$' R!`69@?aR!O&E(, -%!, (' !OH&amp. )%&(!)H\$!" /%)%\$J/( ' , #3!D, (' %J, M\$R!

0, (' \$\$(\*!+R!`699>aR!!Y)0%!b/)!4, %3!5\$&(E!f#\$\$ (0!f#\$\$ (!F , #T\$)&(E!, (' !4(2&#/(G\$() , -!+/(%: G\$#%G!&(!  
+/( )&(: &(E!; &EH\$#!4' : J, )&/ (R! CB\*!>BA@@BR!

!

0, (' \$\$(\*!+R!`6998aR!5//G\$#%\*! \$#%\*!, (' !F&-\$((&, -%^ \ H/!, #!)H\$3!, (' !<H,)! ' /!)H\$3!#\$, --3!<, ()!.#/G!  
J/( )&(: &(E!H&EH\$#!\$' : J, )&/ (m! C6\*!@@AB@R!

!

0, (' \$\$(\*!+R!`699CaR!D\$

!

0, (' \$\$(\*!+R!`69@C\*!b/2\$GL\$aR!j +/(%: G\$#!5, JT-, %H0!; /<!+, (!1 (&2\$#%&)&\$%Y((/2, )\$!0/-: )&/ (%!)/!  
F, T\$!+/--\$E\$!F /#\$! =../#', L-\$!./#10): '\$()%, (' !K, G&&\$%mk!=%/J&,) &/(!/!": L-!J!, (' !D, (' Af#, ()!  
1 (&2\$#%&)&\$%, ((: , -!G\$\$)&(E\*\ , %H&(E)/(!! +R!

!

0, (' \$\$(\*!+R!`69@C\*!F , #JHaR!j +/GM\$)\$ (J3!5, %\$' !4' : J, )&/ (!Y((/2, )&/ (!, (' !5\$3/( ' Rk!=G\$#&J, (!+/: (J&!  
/(!4' : J, )&/ (!, ((: , -!G\$\$)&(E\*\ , %H&(E)/(!! +R!

!

0, (' \$\$(\*!+R!`69@?\*!O\$M)\$GL\$aR!jY((/2, )&/ (%!&!U\$JH(/-/E30!+H, (E\$!&(!)H\$!K: ): #D, (' %J, M\$!/.!  
; &EH\$#!4' : J, )&/ (kR!"-\$ (, #3!, ' ' #\$\$%R!D\$, #(&(E!&(!, !! &E&), -!\ /#-' 0!69@?!4' : J, )&/ (!D\$, ' \$H&M!  
+/(. \$\$ (J\$R!=G\$#&J, (!"%3JH/-/E&J, -!=%/J&,) &/(\*!\ , %H&(E)/( \*! +R!

!

0, (' \$\$(\*!+R!`69@?\*!O\$M)\$GL\$aR!jY((/2, )&/ (!D\$, ' \$H&M!, (' !4()#M#\$( \$: #G%Grk!K\$, ): #'!  
%M\$, T\$#i ., J&&), )/#R!D\$, ' \$H&M!Y(%&): )\$!69@?R!1 (&2\$#%&)3!/.!b/#)H!+, #/-&(, !, )!f#\$\$ (%L/#/\*!  
f#\$\$ (%L/#/\*!b+R!

!

0, (' \$\$(\*!+R!`69@?\*!F , 3aR!j =JJ\$%\*!Y((/2, )&/ (\*!P: )J/G\$%kr!K\$, ): #D' !%M\$, T\$#R!01be!+/(. \$\$ (J\$!/(!  
Y(%): J)&/ (!, (' !U\$JH(/-/E3\*!Y)H, J, \*!beR!

!

0, (' \$\$(\*!+R!`69@?\*!F , 3aR!f#, ' : , )&/ (!J/(2/J, )&/ (!, ' ' #\$\$%R!b\$<!e/#T!1 (&2\$#%&)3!OJH//!/.!+/( )&(: &(E!

0, (' \$\$(\*!+R!`69@B\*!b/2\$GL\$aR!&E&,-! \$G/J#,) &\_ )&/(!/.!1 (&2\$#%&)&\$%R!'' , (\$-!M#\$\$(\$ , )&/(!, )!  
U#, (%, )-, )&!OJ&\$ (J\$!\ \$ \$T!%M/(%/#\$' !L3!)H\$!b/#<\$E&, (!F &(&)%#3!/!.!4' : J, )&/(!, (' !]\$\$\$, #JHR!  
\ , %H&(E)/( \*!+R!!!

!

0, (' \$\$(\*!+R!`69@B\*!b/2\$GL\$aR!] \$' \$.&(&(E!; &EH\$#!4' : J, )&/(0!Y((/2, )&2\$!''# , J)&J\$%!, (' !42/-2&(E!  
''/-&J&\$%R!'' , (\$-!M#\$\$(\$ , )&/(!, )!\ /G\$(!&(!F/2\$#(G\$(!]\$-, )&/(%!4' : J, )&/(!U, %T!K/#J\$R!\ , %H&(E)/( \*!  
!+R!

!

0, (' \$\$(\*!+R!`69@B\*!O\$M)\$GL\$aR!+H, (E\$\*!h: , -&)3\*!OJ, -\$0!UH\$!4' : J, )&/(Y((/2, )&/(!D, (' %J, M\$R!  
''#\$\$(\$ , )&/(!, )!)H\$!5/ , #' !/.!U#: )\$\$%!.!)H\$!1 (&2\$#%&)3!/!.!F , %, JH: %\$))%!(03%)\$GR!=GH\$#%)\*!F =R!

!

0, (' \$\$(\*!+R!`69@B\*!O\$M)\$GL\$aR!+H, (E\$\*!h: , -&)3\*!OJ, -\$0!UH\$!4' : J, )&/(Y((/2, )&/(!D, (' %J, M\$R!W\$3(/)\$!  
M#\$\$(\$ , )&/(!, )!)H\$!69@B!W&JT/..!/.!)H\$!1 (&2\$#%&)3!/!.! \ %J/(%&(!F , ' %&/(!4' : J, )&/(Y((/2, )&/(!  
Y(&)&)&2\$R!F , ' %&/( \*!\ YR!

!

0, (' \$\$(\*!+R!`69@B\*! =: E: %)aR!Y((/2, )&/(!&(!; &EH\$#!4' : J, )&/(R!F\$(\$#, -!O\$%&&/(!, )!)H\$!%) , ...!  
J/(2\$(&(Ei#\$)\$#, )!/.!)H\$!+/: (J&!/.!] \$E&/ (, !=JJ#\$' &)&(E!+/GG&&&/ (%R!5%/)/ (\*!F =R!  
!

!

0, (' \$\$(\*!+R!`69@B\*!o: -3aR!!b\$<!'' /%)%\$J/( ' , #3!4' : J, )&/(!D, (' %J, M\$R!PMS (&(E!T\$3(/)\$!, )!)H\$!, ((: , -!  
G\$\$&E!/.!)H\$!b\$)</#T!./#!+H, (E\$!, (' !+/( )&(: /: %!Y((/2, )&/(R!Y(' &, (, M/-&&\*!YbR!  
!

!

0, (' \$\$(\*!+R!`69@B\*!o: (\$aR!b\$<!'' /%)%\$J/( ' , #3!4' : J, )&/(!D, (' %J, M\$R!PMS (&(E!T\$3(/)\$!, )!)H\$!  
1 (&2\$#%&)3!03%)\$G!/.!F\$/#E&, !=' : -)!D\$, # (&(E!+/(%/#)&: G!O: GG\$#!Y(%&): )\$R!O, 2, ((, H\*!F\$/#E&, R!  
!

!

0, (' \$\$(\*!+R!`69@B\*!o: (\$aR!] %&\$!/.!)H\$!F PP+%!K/#\$%H, ' /<&(E!)H\$!+/G&(E!U#, (%./#G, )&/(!/.!; &EH\$#!

0, (' \$\$(\*!+R!`69@B\*!F, #JHaR!b\$<!'' ,)H<, 3%!. /#f# , ' : , )\$!4' : J, )&/ (!, (' !D&.\$- / (E!D\$, # (&(E0!] \$)H&(T&(E!  
! \$E#\$\$\$, (' !+)\$&.&.)\$, (' !4(2&%/ (&(E!b\$<!+##\$' \$ (&, -%R!!''#\$\$\$( ), )&/ (!, )!, !< /#T%H/M!M/ (%/#\$' !L3!  
)H\$!1 (&2\$#%&)3!/. !Y-&(/%&!, )!1#L, (, A+H, GM, &E(!, (' !)H\$!b, )&/ (, -!OJ&\$ (J\$!K/: (' , )&/ (R!1#L, (, A  
+H, GM, &E(\*!Y-&(/%&R!  
!  
!

0, (' \$\$(\*!+R!`69@B\*!F, #JHaR!] /, ' G, M!)/! =), &(G\$ (R!''#\$\$\$( ), )&/ (!, )!)H\$! =G\$#&J, (!+/: (J&! / (!  
4' : J, )&/ (!, ((: , -!G\$\$)&(ER!\ , %H&(E) / (\*!I +R!  
!  
!

0, (' \$\$(\*!+R!`69@B\*!o, (: , #3aR!F PP+%, (' !P)H\$#!Y(( /2, )&/ (%!&(!)H\$!' /%)\$J/ (' , #3!D, (' %J, MSR!  
''#\$\$\$( ), )&/ (!, )!)H\$! =%/J&, )&/ (!/ .! =G\$#&J, (!1 (&2\$#%&)&\$%! = =1a!+/: (J&! / (!K\$' \$#, -!] \$-, )&/ (%!, ((: , -!  
J/ (.##\$ (J\$R!b\$<!P#-\$, (%\*!D/: %&!, (, R!  
!  
!

0, (' \$\$(\*!+R!`69@6\*!F, #JHaR!X&\$<!./G!)H\$!' #\$\$%' \$ (&, -!O: &) \$0!UH/ : EH)%!, L/: )!D\$, ' \$#%H&M\*!+H, (E\$\*!, (' !  
] %&-\$ (J\$R!''#\$\$\$( ), )&/ (!, )!)H\$!1 (&2\$#%&)3!''#/. \$.%&/ (, -!+ / ()&( : &(E!4' : J, )&/ (! =%/J&, )&/ (!, ((: , -!  
G\$\$)&(E\*!''/#)-, (' \*!P#\$/ (R!  
!  
!

0, (' \$\$(\*!+R!\*!K-\$G&(E\*!+R\*!; , (J/JT\*!F R\*!OG: )\_\*! \ R!`@9@6\*!F, #JHaR!O)#, )\$E&J!'' , #) (\$#%H&M%0!Y(( /2, )&/ (!  
)H#/: EH!P: )%&' \$!P#E, (&\_ )&/ (%R!'' , (\$-!M#\$\$\$( ), )&/ (!, )!)H\$!1 (&2\$#%&)3!''#/. \$.%&/ (, -!+ / ()&( : &(E!  
4' : J, )&/ (! =%/J&, )&/ (!, ((: , -!G\$\$)&(E\*!''/#)-, (' \*!P#\$/ (R!  
!  
!

0, (' \$\$(\*!+R!`69@\*!P) /L\$#aR! =))# , J)&(E!, !U, -\$) \$' \*!I &2\$#%\$! \ /#T. /#J\$R!''#\$\$\$( ), )&/ (!, )!)H\$!K&.)H!  
= ((: , -!+, -&./# (& !U/ < (!, (' !f/ < (!+ / (.##\$ (J\$\*15\$#T\$-\$3\*!+, -&./# (& , R!  
!  
!

0, (' \$\$(\*!+R!`69@9\*!F, #JHaR!+ /GG: (& , )&/ (!OJ\$ (, #&/%0!+, %\$!O): ' &\$%R!''#\$\$\$( ), )&/ (!, )!)H\$!I \$, (0%!  
D\$, ' \$#%H&M!Y(%&): )\$!699>A69@9R!1 +D= !OJH/ /-!/. !I \$ ( )%&)#3\*!D/ %! = (E\$-\$\*!+, -&./# (& , R!  
!  
!

0, (' \$\$(\*!+R!, (' !; : )JH&(/ (\*!OR!!`69@9\*! =M#&aR!'' : ))&(E!+#\$, )&2&)3!)/! \ /#TR!''#\$\$\$( ), )&/ (!, )!)H\$!  
1 (&2\$#%&)3!+ / ()&( : &(E!4' : J, )&/ (! =%/J&, )&/ (!, ((: , -!G\$\$)&(E\*!O, (!K#, (J&J/ \*!+, -&./# (& , R!  
!  
!





!  
0, (' \$\$ (\*!+R!`69@>!\*!=: E: %)aR!; /<!)/!UH#&2\$!&(!)H\$!K, J\$!/.!5: ' E\$)!+: )%0!5#/ , ' \$ (&(E!=JJ\$%!)/!; &EH\$#!  
4' : J, )&/ (R!UH\$!42/---: )&/ (R!H))M%i\$2/---: )&/ (R/J/GiG, (, E&(EA&(%&): )&/ (iH&EH\$#n\$' nL: %&(\$%iH/<A)/A  
)H#&2\$A&(A)H\$A., J\$A/ .AL: ' E\$)AJ: )%AL#/ , ' \$ (&(EA, JJ\$%A)/AH&EH\$#A\$' : J, )&/ (i!  
!



0, (' \$\$