

5+67\$!8#!98,&\$,&:!

- To Tytom To Yuky Yuki	
%%'(')'(*%+,"-+,).%''0*11)%('2"345.6'+'(*%%''+%7"8*'(6."*9"8*%:;(&6<(1(%+'(*%"5))))	=
>?." $0*,,.@.$ A&" $0(B(,"C(@?'&"D">(',."$E"0**<7(%+'*<"$	F
G<.B.%'(*%"+%7"HI+<.%.&&"G<*@<+1&"	F
H%%)+,"C.B(. I"	F
J6*5."*9"G*,(62"	K
H6+7.1(6"L<7*1"+%7"L<7*1"*9"J56?"	M
G < *?(N('.7"0*%7)6'"+%7"; .9(%('(*%&")4))	M
>(',."\$E"J.4)+,"O+<+&&1.%'"	P
8 *%:>(',. "\$E"Q(&6*%7)6'"	!R
G<*?(N('.7"C.,+'(*%&?(5&"	!S
; $.9(\%('(*\%\&"*9"T.2">.<1\&"+\%7"U'?.<"0*\%\&(7.<+'(*%\&")))$!=
0*%9(7.%'(+,('2/"G<(B+62/"+%7"C.,+'.7"C.5*<'(%@"C.&5*%&(N(,('(.&"	! M
$G < (B + 62" + \%7" \ O *\%9 (7 . \%' (+, ('2\)"W\%7 . < \&' + \%7 (\%@"'? . " \ ; \ (99 . < . \%6 . \&")))))$! M
C.X).&'&"9*<"0*%9(7.%'(+,('2"	!P
C.&5*%&(N,."3 15,*2&"	!P
>+Y."Z+6Y"'?."8(@?'"+%7"U'?.<"G)N,(6"HI+<.%.&&"3B.%'&"	!P
; (&6,*&)<.&"C.X)(<.7"N2">?."0,.<2"H6'"	![
C.5*<'(%@"U5'(*%&"	![
3 1 .<@.%62"+%7"34'.<%+,"C.5*<'(%@"U5'(*%&"	#R
0+15)&"C.5*<'(%@"U5'(*%&"	#R
H%*%21*)&"C.5*<'(%@"	#!
C.5*<'(%@"'*"34'.<%+,"H@.%6(.&"	##
U'?.<"C.5*<'(%@"0*%&(7.<+'(*%&"))	#S
J)55*<'(B."Q.+&)<.&"+%7"C.1.7(.&"	#F
C+%@."*9"Q.+&)<.&"	#F
\$%'.<(1"J)&5.%&(*%"*<"J.5+<+'(*%"	#K
0+<."+%7"J)55*<'"C.&*)<6.&"9*<"0*15,+(%+%'&"+%7")	

5D\$!9877\$E\$F:!9'('7!G'ED&:!H!5'&7\$!; I!988.@',+&8.!!

 $>?.."0(B(,"C(@?'\&"D">(',.."\$E"0**<7(\%+'*<"6**<7(\%+'.\&"+\%7"1+\%+@.\&"'?.."0*,,..@.A\&"6*15,(+\%6.."I('?">(',..."\$E"+\%7"<..,+'.7"5<**B(\&(*%\&"*9"'?.."0,..<2"H6'"\+&"+1..%7.7"N2"-HcH]a">?.."0(B(,"C(@?'\&"D">(',..."$E"0**<7(\%+'*<"*B.<&..&"'?.."0*,,..@.A&"6..%'<+,(d.7"<.&5*%&."'*"+,,,"<.5*<'&"*9"G<*?(N('.7"0*%7)6'"'*".%&)<..."6*%&(&'.%'"(15,..1..%'+'(*%"*9"'?(&"G*,(62"+%7"6*15,(+%6.."I('?"9.7.<+,"+%7"&'+'..",+Ia">?.."0(B(,"C(@?'\&"D">(',..."$E"0**<7(\%+'*<"+%7"7..&(@%+'.7"&'+9)"I(,,/"+1*%@"*'?.<"'?(@&\"")..."?(%@&\"")...")$

- f 0*11)%(6+'." I ('?" 1.1 N.<&"*9"'?." 0*,,.@." 6*11)%('2"<.@+<7(%@"+55,(6+N,.",+I"+%7" 5*,(62"+%7"5<*B(7."(%9*<1+'(*%"+N*)'"<.5*<'(%@"+%7"&)55*<'"*5'(*%&a"

- $f \quad 0 * \% 7) 6' "' < + (\%(\%@" < . @ + < 7(\%@" > (', . "\$E/" < . , +' . 7"5 < *B(\&(*\%\&"*9"'? . "0 , . < 2"H6'" \ + \&" + 1 . \% 7 . 7"N2" H c H]/" + \% 7"G < *?(N(' . 7"0*\% 7)6'"$



 $\begin{array}{l} U66(7.\%'+,"0^*,,.@."\ I\ (,,"'+Y."<.+\&*\%+N,."\&'.5\&"'*"<.\&5*\%7"'*".+6?"(\%6(7.\%'"*9"\&.4)+,"?+<+\&\&1.\%'"\\ (\%B*,B(\%@"\ (\%7(B(7)+,\&"\&)Nb.6'" '*" '?."\ 0^*,,.@.A\&"\ 5^*,(6(.\&" '?+'" *66)<" (\%"\ 6^*\%.6'(*\%"\ I\ ('?" +\%2" .7)6+'(*\%+,"+6'(B('2"*<"*'?.'"5<*@<+1"*9"'?."(%&'(')'(*\%/"+\&"\ I..,,"+&"(\%6(7.\%'\&"'?+'"*66)<"")'&(7."*9"''?."'*2."*66)<"*\%"*<"*99"6+15)&/"(9/"N+&.7"*\%"'?.""+1,.@+'(*%\&/"'?.<."(\&"<.+&*\%"'*"N.,(.B."'?+'"'?."(\%6(7.\%'"6*),7"6*\%'<(N)'."'*"+"?*&'(,.".7)6+'(*\%+,".%B(<*\%1.\%"'*<"'*'?.<I(\&."(\%'.<9.<." I ('?"+\&')7.\%'A&"+66.\&\&"'*".7)6+'(*\%a"".7)6+'(*\%a") . \end{array}$

 $\begin{array}{l} C \cdot @+<7, \cdot \&\&"*9" \ I \ ?\cdot !?\cdot <"+"6*\ 1\ 5, +(\%'"?+\&"N \cdot ..\%"9(,\cdot .7")\%7 \cdot <"!?\cdot "@<(\cdot .B+\%6\cdot"5<*6\cdot .7)<\cdot .\&"*)', (\% \cdot .7"N \cdot ,* I/" (9"'?\cdot "0*,,\cdot @\cdot "Y\%*\ I \&/"*<"<\cdot .+\&*\%+N,2" \&?*), 7" Y\%*\ I /"+N*)'" 5*&&(N,\cdot "\&\cdot 4)+, "?+<+&& 1 \cdot .\%'" (B*,B(\%@"(\%7(B(7)+,\&"\&)Nb\cdot .6'"'*"'?\cdot "0*,,\cdot @\cdot .A\&"5*, (6(\cdot .\&"+'"'?\cdot "'(1\cdot ./"'?\cdot "0*,,\cdot @\cdot "I(,,"5<*15',2"(\%B\cdot \&'(@+'\cdot ."'*"7.''<1(\%\cdot "I?\cdot '?\cdot "?\cdot "'?\cdot "'?\cdot "+,\cdot @\cdot .7"6*\%7). 6"" 1*<\cdot ",(Y\cdot ,2"'?+\%"%*'"*66)<<\cdot .7/"*<"*'?\cdot <I(\&\cdot "<\cdot .\&5*\%7"(9"'?\cdot "')$

! "#\$%&' (&) %*+,\$&-,.,// 0 %1#&

G<*?(N('.7"0*%7)6'"1..'&"'?."7.9(%('(*%"*9">(',."\$E"J.4)+,"O+<+&&1.%'"I?.%\""

- H%"3 1 5,*2..."6*%7('(*%&"'?.."5<*B(&(*%"*9"+%"+(7/"+"N.%.9('/"*<"+"&.<B(6."*%"+%"(%7(B(7)+,\delta\binom{\text{8}}{\text{8}}) + \delta\binom{\text{8}}{\text{6}}(6(5+'(*\binom{\text{8}}{\text{6}}(\binom{\text{8}}{\text{1}}...\delta\binom{\text{4}}{\text{4}})+,"6*\binom{\text{7}}{\text{6}}(\binom{\text{8}}{\text{4}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{8}}{\text{9}}"+\binom{\text{8}}{\text{4}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{8}}{\text{9}}"+\binom{\text{8}}{\text{9}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{8}}{\text{9}}"+\binom{\text{8}}{\text{8}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{8}}{\text{9}}"+\binom{\text{8}}{\text{9}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{8}}{\text{9}}"+\binom{\text{9}}{\text{9}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{8}}{\text{9}}"+\binom{\text{9}}{\text{9}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{9}}{\text{8}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{9}}{\text{9}}"+\binom{\text{9}}{\text{9}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{9}}{\text{9}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{9}}{\text{9}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{9}}{\text{9}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{9}}{\text{9}})+,"?+<+&& 1.%']/" I ('?(\binom{\text{9}}{\text{9}})
- H" J')7.%'/" 3 15,*2../" *<" >?(<7" G+<'2" .%@+@.&" (%" J.4)+," H&&+),'/" ; * 1 .&'(6" (*, .%6./" ; +'(%@" (*, .%6./"*<"J.4)+,"+%7g*<"^ .%7 .<:N+&.7"J'+,Y(%@"+&"7.9(%.7"N.,* I i"+%7"
 - $\circ > ?."+\dots @.7"6*\%7)6""I+\&"5.<5.'<+'.7"+@+(%\&"+"5.<&*%"(%"'?."W%('.7"J'+'.\&i"+\%7")$
 - $\circ > ?.."6*\%7)6""**Y"5, +6." I ('?(\%"'?."0*,,.@. A\&"5<*@<+1 \&"+\%7"+6'(B('(.\&a"),...)))$

 $0 * \% 7) 6''' + Y. \& "5, +6." I ('?(\%''?."_0*, .@. A\& "5 < *@ < +1 \& "+\% 7" +6' (B('(.\&`"I?.\%''?+'"6*\% 7) 6''"*66) < \& V'' \!]" (\%"+", *6+'(*\%''+'"+\%".B.\%'''*<"(\%"+"6(<6) 1 \& '+\%6." I?.<."'?."0*, .@. ".4. < 6(\& .\&"\&) N& '+\%'(+, "6*\%' < *, "*B. < "N*'?"'?."< .&5*\%7. %'"+\%7"'?."6*\%'.4''(\%" I?(6?"'?."6*\%7) 6''"*66) < & i"*<"\#]"(\%"+\%2"N)(,7(\%@"*I\%.7"*<"6*\%'<*,..7"N2"+"&') 7. \%"'*<@+\%(d+'(*\%"<.6*\@(d.7"N2"'?."0*, .@. a"3B. \%'\&''?+''"*66) < "*99"6+15) & "*<"$

>(', ... E & .4) + ... + & +), '"(%6,)7 . & '<+5 ... ''9*%7, (%@/"(%6 . & '/"*<"&'+')'*<2"<+5 ... ''7 . 9(% . 7"+&"9*, ,* I & V")''

- f L*%7,(%@"(&"'?."'*)6?(%@"*9"'?."5<(B+'."N*72"5+<'&"*9"+%*'?.<"5.<&*%"9*<"'?."5)<5*&."*9" &.4)+,"@<+'(9(6+'(*%/"I('?*)'"+99(<1+'(B."6*%&.%'a""
- f \$\%6.&'"(&"\%*\%:9*<6(N,."&.4)+,"(\%'.<6*)<&."N.'I..\%"5.<&*\\&"I?*"+<."<.,+'.7"'*".+6?"*'?.<" I('?(\%"'?."7.@<..\&"I?.<.(\%"1+<<(+@."(\&"5<*?(N('.7"N2",+Ia"
- $f \quad J'+')'*<2"<+5."(\&"\%*\%:9*<6(N,."\&.4)+,"(\%'.<6*)<\&." \ I ('?"+"5.<&*\%" \ I ?*"(\&")\%7.<"'?."&'+')'*<2" \\ +@."*9"6*%\&.%'a""$

0*%7)6'/"*%"'?."N+&(&"*9"&.4/"'?+'"6*%&'(')'.&"B(*,.%6."6*1~1(''.7"')')

- f Z2"+"6)<<..%'"*<"9*<1.<"&5*)&."*<"(%'(1+'."5+<'%.<"*9"'?."6*15,+(%+%'i"
- f Z2"+"5.<&*%" I ('?" I ?* 1 "'?. "6* 1 5,+(%+%'"&?+<.&"+"6?(,7"(%"6* 1 1 *%i"
- f Z2"+"5.<&*%" I ?*"(&"6*?+N('+'(%@" I ('?/"*<"?+&"6*?+N('+'.7" I ('?/"'?."6*15,+(%+%'"+&"+\&5*)&." *<"(%'(1+'."5+<'%.<ii"
- $f \quad Z2"+"5.<\&*\%"\&(1(,+<,2"\&(')+'.7"'*"+"\&5*)\&."*9"'?."6*15,+(%+%'")\%7.<"'?."7*1.\&'(6"*<"9+1(,2"B(*,.%6.",+I&"*9"'?."b)<(&7(6'(*\%"(\%"I?(6?"'?."6<(1."*9"B(*,.\%6."*66)<<.7i"*<"$

^{0*%7)6&}quot;*%""?."N+&(&"*9"&.4""?+"'6*%&'(')'.&"+"6*)<&."*9"6*%7)6"*7(<.6'.7"+""+"&5.6(9(6"5.<&*%""?+""I*),7"6+)&."+"<.+&*%+N,."5.<&*%""*"9.+<"9*<""?."5.<&*%A&"&+9.'2"*<""?."&+9.'2"*9"*'?.<&"*<"&)99.<" &)N&'+%'(+,".1*'(*%+,"7(&'<.&&a"L*<""?."5)<5*&.&"*9"'?(&"7.9(%'('*%"")"))

- $f \quad J)N\&'+\%'(+,".1*'(*\%+,"7(\&'<.\&\&"1.+\%\&"\&(@\%(9(6+\%'"1.\%'+,"\&)99.<(\%@"*<"+\%@)(\&?"'?+'"1+2"N)'" \\ 7*.\&"\%*'"\%.6.\&\&+<(,2"<.X)(<."1.7(6+,"*<"*'?.<"5<*9.\&\&(*\%+,"'<.+'1.\%'"*<"6*)\%\&.,(%@a)$

; +'(%@"B(*, .%6."+&"7.9(%.7"(%"'?.">(', ."\$E"; +'(%@"-(*, .%6."<u>7.9(%('(*%"</u>+N*B."'?+'"7(7"%*'"<.5*<'.7,2" *66)<"(%"+"5<*@<+1"*<"+6'(B('2"*9"'?."0*,...@."(%"'?."W%('.7"J'+'.&a"

; * 1 .&'(6"B(*, .%6."+&" 7.9(%.7"(%"'?.">(', ."\$E"; * 1 .&'(6" - (*, .%6." $\frac{7.9(\%('(*\%"+N*B."'?+'"7(7"\%*""<.5*<'.7,2"*66)<"(%"+"5<*@<+1"*<"+6'(B('2"*9"'?."0*, ...@."(%"'?."W%('.7"J'+'.&a"))))))))))$

^{• &}gt;?."5<*&'(')'(%@"*9"+%*'?.<"5.<&*%i"

 > ?. "' < +99 (6Y (%@"*9"+%*'?.<"5.<&*%/"7.9 (%.7"+&"'?."(%7)6.1.%'"*9"+"5.<&*%"'*"5.<9*<1"+"6*11.<6(+, "&.4"+6'/"*<",+N*<"*<"&.<B(6.&/"'?<*)@?"9*<6./"9<+)7/"*<"6*.<6(*%i"

^{• &}gt;?."<.6*<7(%@"*9"(1+@.&/"(%6,)7(%@"B(7.*"*<"5?*'*@<+5?/"*<"+)7(*"*9"+%*'?.<"5.<&*%A&" &.4)+,"+6'(B('2"*<"(%'(1+'."5+<'&'' I ('?*)'"'?+'"5.<&*%A&"+99(<1+'(B."6*%&.%'i"

^{• &}gt;?."7(&'<(N) '(*%"*9"(1+@.&/"(%6,)7(%@"B(7.*"*<"5?*'*@<+5?/"*<"+)7(*"*9"+%*'?.<"5.<&*%A&" &.4)+,"+6'(B('2"*<"(%'(1+'."5+<'&/"(9"'?."(%7(B(7)+,"7(&'<(N)'(%@"'?."(1+@.&"*<"+)7(*"'Y%*I&"*<"&?*),7"?+B."Y%*I%"'?+'"'?."5.<&*%"7.5(6'.7"(%"'?."(1+@.&"*<"+)7(*"'7(7"%*'"+99(<1+'(B.,2"6*%&.%'"'*"'?."7(&6,*&)<.i"+%7g*<"

^{• &}gt;?."B(. I (%@"*9"+%*'?.<"5.<&*%A&"&.4)+,"+6'(B('2"*<"(%'(1+'."5+<'&/"(%"+"5,+6." I ?.<."'?+'" *'?.<"5.<&*%" I *),7"?+B."+"<.+&*%+N,.".45.6'+'(*%"*9"5<(B+62/" I ('?*)'"'?+'"5.<&*%A&" +99(<1+'(B."6*%&.%'

 $+6'(B."<.\&5*\%\&.a"H\%"(\%7(B(7)+,"I?*"7*.\&"\%*"5?2\&(6+,,2"<.\&(\&'"*<"B.<N+,,2"<.9)\&."\&.4)+,"\\ +6'(B('2"(\&"\%*'"\%.6.\&\&+<(,2"@(B(\%@"6*\%\&.\%'a"C.,2(\%@"\&*,.,2")5*\%"\%*\%:B.<N+,"6*11)\%(6+'(*\%"6+\%",.+7"'*"+"9+,&."6*\%6,)&(*\%"+\&"'*"I?.'?..<"6*\%\&.\%'"I+&"&*)@?'"*<"@(B.\%a"$

"H99(<1+'(B."6*%&.%'"1)&'"N."*%@*(%@"'?<*)@?*)'"'?."+6'(B('2a"0*%&.%'"1+2"N."I('?7<+I%"N2"+%2"5+<'2"+'"+%2"'(1.a"C.6*@%(d(%@"'?."72%+1(6"%+')<."*9"&.4)+,"+6'(B('2/"

 ^{-0*.&}lt;6(*%`"(&"'?."(15<*5.<")&."*9"5<.&&)<."'*"6*15.,"+%*'?.<"(%7(B(7)+,"'*"(%'(+'."*<"6*%'(%)." &.4)+,"+6'(B('2"+@+(%&'"'?+'"(%7(B(7)+,A&"I(,,a"0*%&.%'"*N'+(%.7"'?<*)@?"6*.<6(*%"(&"%*'"B+,(7a"''))." &.4)+,"+6'(B('2"+@+(%&'"'?+'"(%7(B(7)+,A&"I(,,a"0*%&.%'"*N'+(%.7"'?<*)@?"6*.<6(*%"(&"%*'"B+,(7a"''))." &.4)+,"+6'(B('2"+@+(%&'"'?+'"(%7(B(7)+,A&"I(,,a"0*%&.%'"*N'+(%.7"'?<*)@?"6*.<6(*%"(&"%*'"B+,(7a"''))." &.4)+,"+6'(B('2"+@+(%&'"'))." &.4)+,"+6'(B('2"+@+(%&'"'))." &.4)+,"+6'(B('2"+@+(%&'"'))." &.4)+,"+6'(B('2"+@+(%&'"')))." &.4)+,"+6'(B('2"+@+(%&'"'))).

 $^{0*.&}lt;6(*\%"6+\%"(\%6,)7."+"I\ (7."<+\%@."*9"N.?+B(*<\&/"(\%6,)7(\%@"(\%'(1\ (7+'(*\%/"1+\%5),+'(*\%/")?<.+'\&/"+\%7"N,+6Y1+(,a"H"5.<&*%A\&"I*<7\&"*<"6*\%7)6'"+<."&)99(6(.\%'"'*"6*\&\&'(')'."6*.<6(*\%"(9"'?.2"I<*\@9),,2"(15+(<"+\%*'?.<"(\%7(B(7)+,A&"9<...7*1"*9"I(,,"+\%7"+N(,('2"'*"6?**&."I?.'?.<"%*'"*"*".\@+@."(\%"*."\%)+@."(\%"*."\%)+\%(\\@"'*"_*)'"&*1.*\%."N+&.7"*\%"&.4)+,"*<(.\%'+'(*\%'"@.\%7.<"(7.\%'('2/"*<"@.\%7.<".45<.&\&(*\%"+\%7"'?<.+'.\%(\\@"'*"?+<1"*\%.&.,9"(9"'?."**'?.<"5?2&(6+,,2/"'?+'"'?.2"7*.\%"\%"'".\%"\%".\%(\%"'*"?+<1"*\%.\%.\%,2"*\%"'"?.\%'"'?.\%'"'?.\%'"\%'"'.\%'"$

6*%9(7.%'(+,('2a">?.&."(%7(B(7)+,&"+<."5<*?(N('.7"9<*1"N<.+Y(%@"6*%9(7.%'(+,('2")%,.&&"'?.<."(&"+%"(1~1(%.%'"'?<.+'"*9"?+<1"'**&..9"*<"*'?.<&a"H%"(%7(B(7)+,"~I~?*"&..Y&"6*%9(7.%'(+,"+&&(&'+%6."~1+2"7*"&"N2"&5.+Y(%@"~I~('?"5<*9.&&(*%+,&"~I~?*"?+B."+",.@+,,2"5<*'.6'..7"6*%9(7.%'(+,('2a">?."6*%9(7.%'(+,"<.&*)<6.&"+B+(,+N,."~'*"~(%7(B(7)+,&"**%"~6+1~5)&"~+<.",(&'.7"~N.,*~I~a"~8*'./"~?*~I~.B.</"~'?+'"~'?.&."6*%9(7.%'(+,"<.&*)<6.&"+<."<.X)(<.7"N2"&'+'.",+~I"'*"%*'(92"6?(,7"5<*'.6'(B."&.<B(6.&"+%7g*<",*6+,",+~I""*%*'(92"6?(,7"5<*'.6'(B."&.<B(6.&"+%7g*<",*6+,",+~I""*%*'(92"6?(,7"5<*'.6'(B."&.)%7.<"'?.""?."+@."*9"!Pa"

; %G+%/#/&>3.&B31>"7%1#",\$"#@&

H"5.<&**%"1+2"7.&(<."'*"<.5*<'"G<*?(N('.7"0*%7)6'"'*"'?."0*,,.@."N)'"'*"1+(%'+(%"6*%9(7.%'(+,('2i''(9%*/"'?."0)B(,"C(@?'&"D">(',."\$E"0**<7(%+'*<"I(,,".B+,)+'."&)6?"<.X).&'&"c?.."+"6*15,+(%+%'"<.X).&'&"'?+'"'?."6*15,+(%+%'A&"%+1."*<""'?.."(7.%'(9(+N,."(%9*<1+'(*%"%*'"N."&?+<.7"I('?"'?."<...&5*%7.%'"*<"'?+'"%*"9*<1+,"+6'(*%"N."'+Y.%/"'?."0(B(,"C(@?'&"D">(',."\$E"0**<7(%+'*<"

="/6\\$3/+.\%/\&; \%G+".\%7\&: \@\&! 9\%\&B\\$\%.\@\&I 6\#\&

 $\begin{array}{l} H, , "?(@?.<".7)6+'(*\%"(\%\&'(')'(*\%\&''?+'"<.6.(B."9.7.<+,"9)\%7(\%@/"(\%6,)7(\%@''?."0*,,.@./"+<."*N,(@+'.7"'*"(\&\&)."5)N,(6,2"+\%"H\%\)+, "J.6)<('2"C.5*<'"_HJC`]" I?(6?"(7.\%'(9(.\&"'?."\%)1N.<"*9"5+<'(6),+<"<.5*<'.7"6<(1.\&"*\%"6+15)\&"*<"6+15)&"*<"5<*5.<'2/"*<"+7b+6.\%'"'*"6+15)&">2""*(\%6,)7." (7.\%'(92(\%@"(\%9*<1+'(*\%"+N*))'''?."6*15,+(\%+\%""*<".&5*\%7.\%'a"$

 $\begin{array}{l} H, , "?(@?.<".7)6+'(*\%"(\%\&'(')'(*\%\&"'?+'"?+B."6+15)\&"5*, (6."9*<6.\&"*<"\&.6)<('2"7.5+<'1.\%'\&"1)\&'"\\ 1+(\%'+(\%"+"7+(,2"6<(1.",*@"'?+'"(\%6,)7.\&".\%'<(.\&"9*<"+,,"6<(1.\&"'?+'"*66)<"I('?(\%"N*'?"'?."0,..<2"@.*@<+5?2"+\%7"'?."6+15)\&"&+9.'2"9*<6.A&"<.@),+<"5+'<*,"<*)'.a">>?."6<(1.",*@"7*.&"%*'"(%6,)7."(7.\%'(92(\%@"(\%9*<1+'(*\%"+N*)'"'?."6*15,+(\%+\%""*<"<.&5*\%7.\%'a")'.a")>?."6<(1.",*@"7*.&"\%*'"(%6,)7."(7.\%'(92(\%@"(\%9*<1+'(*\%"+N*)'"'?."6*15,+(\%+\%""*<"<.&5*\%7.\%'a")'.a"))''."$

G\$?8.&',E!O?&'8,:!

>?."0*,...@."&'<*%@,2".%6*)<+@.&"+,,"(%7(B(7)+,&"'*"&...Y"+&&(&'+%6."9<*1"+"1.7(6+,"5<*B(7.<"+%7g*<",+I".%9*<6.1.%'"(11.7(+'.,2"+9'.<"+%"(%6(7.%'"*9"&.4)+,"B(*,.%6.a">?(&"(&"'?."N.&'"*5'(*%"'*".%&)<."5<...&.<B+'(*%"*9".B(7.%6."+%7"'*"N.@(%"+"'(1...,2"(%B.&'(@+'(

+"<(&Y"*9"?+<1"'*"'?."6*15,+(%+%'/"<.&5*%7.%'/"*<"'*"'?."N<*+7.."6+15)&"6*11)%('2"+%7"I(,,"'+Y."&'.5&"'*"+77<.&&"'?*&."<(&Y&a">>?.&."&'.5&"1+2"(%6,)7."(%'.<(1"&)55*<'(B."*<"5<*'.6'(B."1.+&)<.&"'*"5<*'*B(7."9*<"'?."&+9.'2"*9"'?."(%7(B(7)+,"+%7"'?."6+15)&"6*11)%('2a""

 $C.5 *<'\&"*9"B(*,+'(*%\&"*9"'?(\&"G*,(62"1+2"N."1+7."'*"'?."0(B(,"C(@?'\&"D">(',."$E"0**<7(\%+'*<a"H"9*<1+,"6*15,+(%'"1+2"N."9(,.7"+'"+%2"'(1."N2")&(%@"'?."9*<1"5<*B(7.7"+'"<math>\underline{III_a*42a.7)g\&.4}$ +,: < .&5.6':'(',..:(4a"H"9*<1+,"6*15,+(%'"1+2"N."&)N1(''.7"N2"7<*55(%@"('"*99"+'"'?."0(B(,"C(@?'\&"D">(',."

H^0"C**1"!!!" IIIa*42a.7)g6(B(,:<(@?'&:'(',.:(4"

##"

>?."Z)<.+)"9*<"G<(B+'."G*&'&.6*%7+<2"37)6+'(*%"+66.5'&"+,,"'25.&"*9"6*15,+(%'&"<.,+'.7"'*"'?."0*,,.@."+%7"1+2"<.9.<"+%2"6*15,+(%'"('"<.6.(B.&"(%6,)7(%@"6*15,+(%'&"<.,+'.7"'*"'(&'(')'(*%+,"5*,(6(.&"*<"5<*6.7)<.&/"*<"N*'?/"'*"'?."0*,,.@./"+%"+66<.7('(%@"+@.%62/"*<"+%"'?.<"+55<*5<(+'.".%'('2"9*<"<.&%,)'(*%a""

Z)<.+)"9*<"G<(B+'."G*&'&.6*%7+<2"37)6+'(*%""
#FSF"0+5('*,"U+Y&"; <(B./"J)('."=RR""
J+6<+1.%'*/"0H"[FPSS"
\[!K]"=S!:K[#=""
I I I aN55.a6+a@*B"

<u>A#9%.&; %<3.#"1F&B31/"7%.,#"31/&</u>

 $>?."0^*,...@."\&'<^*\&@,2".\%6^*)<+@.\&"6^*15,+(\%+\%'\&"'*"5)<\&)."6<(1(\%+,"+6'(*\%"9*<"(\%6(7.\%'\&"*9"\&.4)+,"?+<+\&\&1.\%'/"\&.4)+,"B(*,...\%6./"+\%7"(\%'(1+'..."5+<'%.<"B(*,...\%6."'?+'"1+2"+,&*"N."6<(1...\&")\%7.<"0+,(9*<\%(+",+Ia">?."0^*,...@."I(,,"+&&(&'"+6*15,+(%+%'"(\%"1+Y(\%@"+6<(1(\%+,"<.5*<'"+\%7"6**5.<+'..."I('?",+I"...%9*<6.1...%'"+@...%6(.&"(9"+6*15,+(%+%'"7.6(7...&"'*5)<&)..."?."6<(1(\%+,"5<*6...&"'*"?....4'...%'"5<*1(1'...7"N2",+Ia")>?...0^*,...@.A&"G*,(62/"7.9(%'('*\&/"+\%7"N)<7..."*9"5<**9"1+2"7(99..."9<*1"0+,(9*<\((1(\%+,",+Ia"H"6*15,+(\%+\)"1+2"&...Y'<...6*)<&...")\%7..."?(&"G*,(62"+\%7g*<"5)<&)..."6<(1(\%+,"+6'(*\%a"8...'?...+I"...%9*<6.1...%'A&"7...<1(\%+'(*\"I?...'?...*"*'"*"*"5<*&.6)'..."+"<...&5*\%7...%'/"\%*<"'?..."*)'6*1..."*9"+\%2"6<(1(\%+,",5<*&.6)'(*\%/"+<..."7...<1(\%+'(*\"I?...'?..."*'"*"*""*"5<*&.6)'..."+"<...&5*\%7...\%'/"\%*<"'?..."**(\%6')<<...7a"$

f \$9"+"6?(,7"(&"(%"(11.7(+'."7+%@.</"6+,,"[!!a"

f \$9"'?.<."(&"%*"(11.7(+'."7+%@.</"6*%'+6'"'?."0?(,7"G<*'.6'(*%"O*',(%."#="?*)<&"+"7+2/"M"7+2&" +" I..Y/"+'"\PRR\"F=R:=RR\"89"6+,,(%@"9<*1"*)'&(7."*9"0+,(9*<%(+/"6+,,"\#!S\"KS\[:"=FR\"8"

 $[\]begin{split} &H\%2"U66(7\,.\%'+,"\,.\,1\,5,*2\,..\,"\,I\,?*"(\&"+,\&*"+"6*\%9(7\,.\%'(+,"\,.\,1\,5,*2\,..\,"\setminus9*<"\,.4+1\,5,\,./"+"'\,?\,.<+5(\&'/"\&\,.4)\,+,"\\ &+\&\&+)\,,'"B(6'(1\,"+7B*6+'\,./"\,5\,?2\&(6(+\%]]"+\%7"\,I\,?*"\,I\,+\&"\,?(<\,.7"(\%'*"\,'?+'"6*\%9(7\,.\%'(+,"<*\,,.\,"\&?*\,)\,,7"<\,.\,5*<'"\&)\&5\,.6'\,.\,7"6?(,7"+N)\&\,."*<"\%\,.@\,,\,.6'"'*",+\,I\,"\,.\%9*<6\,.\,1\,.\%'"+\%7g*<"'?\,."m*\&"H\%@\,,\,.\&"0*)\%'2"\,;\,.5+<'1\,.\%'"\\ &*9"0\,?(,7"+\%7"L+1\,(,2"J\,.<B(6\,.\&"N)\,)"\,I\,*)\,,7"\%*'"\,1\,+Y\,."+\%2"\&)\,6?"<\,.\,5*<'"'*"'?\,."0\,(B(,"C(@\,?'\&"D"><',\,."\$E")))>(',\,."\$E")) &*<7(\%+'*<"*<"'?\,.";\,(<\,.6'*<"*9"0+1\,5\,)\&"J+9\,.'2a" \end{split}$

M-??8.&'(\$!P\$+:-.\$:!+,@!G\$=\$@'\$:!

- $f \quad m(\ 1\ ('(\%@"+\%"(\%7(B(7)+,"*<"*<@+\%(d+'(*\%A\&"+66.\&\&"'*"6.<'+(\%"0*,,.@."9+6(,('(.\&"*<"+6'(B('(.\&"5.\%7(\%@"<.\&*,)'(*\%"*9"'?."1+''.i"}$
- f *,)%' + <2",.+B."*9"+N&.%6.i"
- f G<*B(7(%@"+%".&6*<'"'*".%&)<."&+9."1*B.1.%'"N.'I...%"6,+&&.&"+%7"+6'(B('(.&i"
- f G<*B(7(%@"+6+7.1(6"&)55*<'"&.<B(6.&/"&)6?"+&"')'*<(%@i"
- f %' . < (1 %) & 5 . % & (*%"*<"0*, ...@ .: (15*&.7", ..+B.i")

'1#%."0 &)+/<%1/"31&3.&)%<...,#"31&

B, .%, .17%) + <<3.%; %/3 + .6%/&>3.&B30 < \$, "1, 1#/&, 17&; %/<317%1#/&

 $>?.."0*,..@."(\&"6*1\ 1\ (''.7"'*"'<.+'(\%@"+,,"1\ .\ 1\ N.<\&"*9"'?."6*1\ 1\)\%('2"\ I\ ('?"7(@\%('2/"6+<./"+\%7"<.\&5.6'a"H\%2"\&')7.\%'"\ I\ ?*".45.<(.\%6.\&"*<"(\&"+99.6'.7"N2"B(*,+'(*%\&")\%7.<"''?(\&"G*,(62/"\ I\ ?.'?.<"+\&"+"6*15,+(\%+\%'/"+"<.&5*\%7.\%'/"*<"+"'?(<7:5+<'2/"\ I\ (,,"?+B.".X)+,"+66.\&\&"'*"&)55*<'"+\%7"6*)\%\&.,(%@"&.<B(6.\&"'?<*)@?"'?."0*,..@.a"$

 $>?." \ 0^*,...@." \ \&'<*\%@,2" \ .\%6^*)<+@.\&" \ (\%7(B(7)+,\&" '*" <.5*<'" \ G<*?(N('.7" \ 0*\%7)6'a" >?." \ 0^*,...@." <.6*@\%(d.\&/" ?* I .B.</"'?+'"'? ." 7.6(&(*\%" '*" <.5*<'" \ G<*?(N('.7" \ 0*\%7)6'" \ '*"'? ." \ 0^*,...@."+\%7g*<'',+ I" .\%9*<6.1 .\%']"6+\%"N."7(99(6),'a">?."0^*,...@."&'<*\@,2".\%6*)<+@.\&"(\%7(B(7)+,\&" I ?*"+<."6*\&(7.<(\%@" \ 0.00)))|$

$$\begin{split} &I?.'?.<""""<.5*<""G<*?(N('.7"0*\%7)6'"""\&...Y"'?."\&)55*<"""*9"6*\%9(7.\%'(+,"6+15)\&"+\%7"6*11)\%'(2"<..\&*)<6.\&/",(\&'.7"N.,*Ia">>?.&."'<+(\%.7"5<*9.\&\&(*\%+,\&"6+\%"5<*B(7."@)(7+\%6."(%"1+Y(%@"7.6(\&(*\%\&/"(\%9*<1+'(*\%"+N*)'"+B+(,+N,."<..\&*)<6.\&"+\%7"5<*6.7)<+,"*5'(*%\&/"+\%7"+&&(&'+\%6."'*".('?.."5+<'2"(\%"'?." B.\%'"'?+'"+"<..5*<'"+\%7g*<".&*,)'(*\%")\%7.<"'?(&"G*,(62"(\&"5)<&).7a">>?.&."<..\&*)<6.\&"+<."+B+(,+N,."<..@+<7,..&&"*9"I?.\%"*<"I?.<."'?."(\%6(7.\%""*66)<<..7a")$$

B31>"7%1#",\$\&;\%/3+.6\%/\&\\23145\%7\\6,\\$\\&\

>?."0*,,.@."&'<*%@,2".%6*)<+@.&"+,,"6*11)%('2"1.1N.<&"'*"1+Y."+"5<*15''<.5*<'"*9"+%2"(%6(7.%'"*9"G<*?(N('.7"0*%7)6'''*",*6+,",+I".%9*<6.1.%'"+%7"'?."0*,,.@.a"L*<"(%7(B(7)+,&"I?*"+<."%*'"

J+%'+"Q*%(6+/"0+,(9*<%(+"[R=R="" \=#=]"#F[:M#RP"\#=:?*)<"?*',(%.]"

177"#"31, \$\&\ A14B, 0 < +/\&\ S\&\ A>>4B, 0 < +/\&; \%/3+.6\%

 $U66(7.\%'+,"6*1\ 1\)\%('2"1.\ 1\ N.<\&"?+B."+66.\&\&"'*"+"B+<(.\ '2"*9"<.\&*)<6.\&"5<*B(7.7"N2"'?."0*,,.@.a"H,," *%:6+15)\&"<.5*<'(%@"*5'(*%\&",(&'.7"+N*B."?+B."&'+99"1.1N.<\&"'<+(%.7"'*"&)55*<'"(%7(B(7)+,\&"), and the context of the cont$

O(\$.('\$L!8#!G\$:87-&'8,!O?&'8,:!

>?.."5<*6.&&.&")%7.<""?(&"G*,(62"+<.."&.5+<+'."+%7"7(&'(%6""9<*1"0+,(9*<%(+A&"6<(1(%+,"5<*6.7)<.&a"G<*6...7(%@&")%7.<""?(&"G*,(62"1+2"N."6+<<(.7"*)'"5<(*<"'*/"&(1),'+%.*)&,2" I ('?/"*<"9*,,* I (%@"6(B(,"*<"6<(1(%+,"5<*6...7(%@&"*99:6+15)&a"8.('?.<"+"7.6(&(*%"N2",+ I ".%9*<6.1.%'"<.@+<7(%@"5<*&.6)'(*%"%*<"'?."*)'6*1."*9" +%2" 6<(1(%+,"5<*6...7(%@" I (,," N." 6*%&(7.<.7" 7.'.<1(%+'(B." *9" I ?.'?.<"+"B(*.+'(*%"*9"'?(&"G*,(62"*66)<<..7a""

'1"#",\$&I//%//0%1#&

>?."0(B(,"C(@?'&"D">(',."\$E"U99(6." I (,,"5<*B(7."*)'<.+6?"'*".+6?"(7.%'(9(+N,."6*15,+(%+%'"'?+'"(&"+,,.@.7"'*"?+B.".45.<(.%6.7" I (&6*%7)6'a">?."*)'<.+6?" I (,,"(%6,)7."'?."9*,,* I (%@"(%9*<1+'(*%\"")*)")'

- '?."0*,..0."?+&"<.6.(B.7"+"<.5*<'"'?+'"'?.2"1+2"?+B.".45.<(.%6.7"1(&6*%7)6'i"
- <.'+,(+'(*%" 9*<" 9(,(%@" +" 6* 1 5,+(%'" *<" 5+<'(6(5+'(%@" (%" +" 6* 1 5,+(%'" 5<*6.&&/" *<" N*'?/" (&" 5<*?(N(' .7i"
- '?."6*)%&.,(%@"<.&*)<6.&"+B+(,+N,."+'"'?."0*,..@."*<"(%"'?."6*11)%('2i"
- '?+'/" I ?.%"+"6<(1." 1+2"?+B."*66)<<.7/"'?.2"?+B."'?."<(@?'"'*"<.5*<'"'?." 1+''.<"'*",+ I ".%9*<6.1.%'i"
- '?."<(@?'"'*"&..Y"1.7(6+,"'<.+'1.%'i"
- '?."0*,..@.A&"(%B.&'(@+'(*%"5<*6.7)<.&i"
- 5*'.%'(+,"(%'.<(1"1.+&)<.&"'?+'"+<."+B+(,+N,.i"
- '?."(15*<'+%6."*9"5<.&.<B(%@".B(7.%6.i"
- +"<.X).&'"9*<"'?."6*15,+(%+%'"'*"1...'" I ('?"'?."0(B(,"C(@?'&"D">(',."\$E"U99(6."'*"7(&6)&&" *5'(*%&"9*<"<.&5*%7(%@"'*"'?."<.5*<'i""
- '?."<(@?'"'*"N."+66* 1 5+%(.7"N2"+%"+7B(&*<"*9"6?*(6.i"+%7"

• '?." I +2" '?." O*,,.@."<.&5*%7&" '*"<.5*<'&" *9" 1 (&6*%7)6'" +%7" +" 7.&6<(5'(*%" *9" 5*'.%'(+," 7(&6(5,(%+<2"6*%&.X).%6.&a"

H&"5+<'"*9"'?."(%('(+,"+&&.&&1.%'/"'?."0(B(,"C(@?'&"D">(',."\$E"U99(6." I (,,\"

- f + &&.&&""?."%+")<."+%7"6(<6) 1 &'+%6.&"*9""?."<.5*<'i""
- f +77<.&&"(11.7(+'."5?2&(6+,"&+9.'2"+%7".1*'(*%+,"I...:N.(%@i""
- $f \quad 6*11)\%(6+'.\%.6.\&\&+<2"7.'+(,\&"*9"'?."<.5*<'"'*"0+15)\&"J+9.'2"'*".\%'.<"'?."<.5*<'"(%'*"'?."'0*,...@.A&"7+(,2"6<(1.",*@"(9"<.X)(<.7"N2"'?."0,..<2"H6'i""$
- f 5<*B(7." '?." 6*15,+(%+%'" I('?" +%" .45,+%+'(*%" *9" '?." 5<*6.7)<+," *5'(*%&/" (%6,)7(%@" ; (&6(5,(%+<2"C.&*,)'(*%"+%7"H7+5'+N,."C.&*,)'(*%i""
- f 7(&6)&&" '?." 6* 15,+(%+%'A&" 5<.9.<.%6." 9*<" 1+%%.<" *9" <.&*,)'(*%" +%7" +%2" N+<<(.<&" '*" 5<*6..7(%@i""
- f = 7(&6)&&""?."5<*6.&&"9*<"9(,(%@"+"9*<1+,"6*15,+(%'i")
- f + && &&"9*<"+%2"5+".<"*9"6*%7)6""N2""?."<.&5*%7.%'i"+%7"

H%2"J)55*<'(B."Q.+&)<.&"5)'"(%"5,+6."I(,,"N."Y.5""5<(B+'./".46.5""'*"'?.".4'.%"''?+"'7*(%@"&*"(15+(<&"'?."+N(,('2"*9"'?."(%&'(')'(*%"'*"5<*B(7."'?."&)55*<'(B."1.+&)<.&a"L*<".4+15,./"'*".99.6')+'."+"?*)&(%@"6?+%@./"&'+99"+'"C.&(7.%'(+,"37)6+'(*%"+%7"O*)&(%@"J.<B(6.&"I(,,"N."(%9*<1.7"*9"'?."%..7"'*"+&&(&"I('?"+"?*)&(%@"6?+%@."+&"7(<.6'.7"N2"'?."0(B(,"C(@?'&"D"><',."\$E"0**<7(%+'*<"N)'"I(,,"%*'"N."5<*B(7.7"I('?"+%2"*9"'?."7.'+(,&"*9"+%2"6*15,+(%'a"c?.%"'?."0(B(,"C(@?'&"D"><',."\$E"0**<7(%+'*<"N)'"I(,,"%*'"?."0')."(%'*'(-',"+%'")*)."*(15*&."(%'.<(1"5<*'.6'(B."1.+&)<.&/"*<"'+Y."+%2"*''+Y."+%2"*(%'''?+'"(15+6'&"+"<.&5*%7.%'/"'?."0(B(,"C(@?'&"D"><',."\$E"0**<7(%+'*<"I(,,"+,&*".%&)<."''?."'?."

H''''?.''6*%6,)&(*%''*9'''?.

R3.0, 8B30 < 14/8 = 00 / 14/

$$\begin{split} &H"9*<1+,"6*15,+(\%'"9*<"5)<5*\&.\&"*9"'?(\&"G*,(62"(\&"+"7*6)\ 1\ .\%'"9(,.7"N2"+"6*15,+(\%+\%'"*<"\&(@\%.7"N2"+"6*15,+(\%+\%'"*<"&(@\%.7"N2"+"6*15,+(\%+\%'"*<"&(@\%.7"N2"+"6*15,+(\%+\%'"*<"&(@\%.7"N2"+"6*15,+(\%+\%'"*<"&(@\%.7"N2"+"6*15,+(\%+\%'"*))) \\ &'?."0*,...@."(\%B.\&'(@+'."'?."+,...@+'(*\%a"H"9*<1+,"6*15,+(\%'"1+2"N."9(,.7"+'"+\%2"'(1."N2")\&(\@"'?+"'9*<1"5<*B(7.7"+'"\?."'9"+"''?."'9"+1"1\.a*42a.7)g&.4)+,:<.&5.6':'(',...(4a"\ H"\ 9*<1"\ 1+2"\ N."\&)\ N\ 1 (''.7"\ N2"\ 7<*55(\%@"('"*99"+'"'?."\ 0(B(,"C(@?'\&"\ D">(',...\$E"\ U99(6./"\ N2"\ .\ 1+(,\"*<"\ N2"\ 1+(,\"\$S*\"'-1*)\ 1+(,\"\$S*\"'-1*)\ 6*\ 15,+(\%'\"''?."\ 0(B(,"C(@?'\&"\ D">(',...\$E"\ 0**<7(\%+'*<"\ I(,,"6*\%'+6'"'?."\ 6*\ 15,+(\%+\\"''*)"'?."\ 0(B(,"C(@?'\&"\ D">(',...\$E"\ 0**<7(\%+'*<"\ I(,,"6*\%'+6'"'?."\ 0(B(,"C(@?'\&"\ D">(',...\$E"\ 0**<7(\%+'*<"\ I(,,"6*\%'+6'"'?."\ 0(B(,"C(@?'\&"\ D">(',...\$E"\ 0**<7(\%+'*<"\ I(,,"6*\%'+6'"'?."\ 0(B(,"C(@?'\&"\ D">(',...\$E"\ 0**<7(\%+'*<"\ I(,,"6*\%'+6'"'?."\ 0(B(,"C(@?'\&"\ D">(',...\$E"\ 0**<7(\%+'*<"\ I(,,"9'<\&"\ 15,+(\%'\"''?."\ 0(B(,"C(@?'\&"\ D">(',...\$E"\ 0**<7(\%+'*<"\ 1,"\ 0."\ 1.5,+(\%'\"''?."\ 0(B(,"C(@?'\&"\ D">(',...\$E"\ 0**<7(\%+'*<"\ 1,"\ 0."\ 1.5,+(\%'\"''?."\ 0(B(,"C(@?'\&"\ D">(',...\$E"\ 0**<7(\%+'*<"\ 1,"\ 0."\ 1.5,+(\%'\"''?."\ 0(B(,"C(@?'\&"\ 0"\ 0."\ 1.5,+(\%'\"''?."\ 0."\ 0."\ 0."\ 1.5,+(\%'\"''?."\ 0."\ 0."\ 1.5,+(\%'\"''\ 1.5,+(\%'\"''\ 1.5,+(\%'\"''\ 1.5,+(\%'\"''\ 1.5,+(\%'\"''\ 1.5,+(\%'\"''\ 1.5,+(\%'\"''\ 1.5,+(\%'\"''\ 1.5,+(\%'\"\ 1.5,+(\%'\"''\ 1.5,+(\%'\"''\ 1.5,+(\%'\"'\ 1.5,+(\%'\"'\ 1.5,+(\%'\"\ 1.5,+(\%'$$

- f '?."6*%7)6'"+,..@.7"I*), $7/"(9"5<*B.7/"<math>6*\%\&'(')'." \ge (',...\%E"J.4)+,"O+<+\&\&1..\%'i"$ "
- f '?."6*%7)6'"+,..@.7"*66)<<.7"(%"'?."W%('.7"J'+'.&i""
- f '?."6*%7)6'"+,..@.7"*66)<<.7"*%"*<"+9'.<"H)@)&'"!=/"#R#Ri"+%7"

 $\$9"'?."9*<1+,"6*15,+(%'''\&+'(\&9(.\&"+,,"*9"'?.\&.".,.1.\%'\&''('"I(,,"N."(\%B.\&'(@+'.7"+\%7"<.\&*,B.7"+\&"+">(',.") \\ \$E"J.4)+,"O+<+\&\&1.\%'"1+''.<"'?<*)@?"'?."5<*6.7)<.\&"*)',(%.7"(%"H55.%7(4"Ha"$9"('"+55.+<&"N+&.7") \\)5*%"(%('(+,"<.B(.I"*<")5*%"(%9*<1+'(*%"@+'?.<.7"7)<(%@"+%"(%B.\&'(@+'(*%"'?+'"+"9*<1+,"6*15,+(%'''7*.&"%*''*&+'(&92"+\%7g*<"%*",*%@.<"&+'(&9(.\&"+,,"'?.\&.".,.1..%'&'''?."0*,,.@."I(,,"7(&1(&&"'?."9*<1+,"6*15,+(%'''9*<5)<5*&.&"*9"'?.">(',."$E"J.4)+,"O+<+&&1..%'"5<*6.&&a">?." \\$

 $\$\%" \ 6+\&.\&" \ I \ ?.<." \ ('"+55.+<\&" \ N+\&. \ 7"*\%"+\%" \ (\%('(+,"<.5*<'"'?+'"'?.".,.1.\%'\&"\&'+'.7"+N*B." \ I*),7"N." \\ \&+'(\&9(.7/"N))""?."6*15,+(%+\%"7*.\&"%*'"I(\&?"'*"9(,."+"9*<1+,"6*15,+(%'/"'?."0(B(,"C(@?'\&"D"><'(,."$E"D><',."$E"D><'(,."$E"J.4)+,"O+<+&&1.\%'"+%7" \\ (\%('(+'."+\%"(\%B.\&'(@+'(*\%"+\%7"<.\&*,)'(*\%"5<*6.\&\&")\%7.<"'?."5<*6.\&\&"*)',(%.7"N.,*Ia\$9"'?(&"*66)<&/"'?." \\ O(B(,"C(@?'\&"D"D"><',."$E"O**<7(\%+'*<"I(,,"%*"N."+6*15,+(%+\"**"*'?.<I(\&."+"5+<'2"'*"?."?."'?."2"'*"?."1+''.<a href="extraction-color: "1..." \ 1... \$

"

 $>?.."0(B(,"C(@?'\&"D"><(',.."\$E"0**<7(\%+'*<"I(,,"6*\%\&(7.<"I?+'"\&'.5\&"1+2"N.."5*\&\&(N,.."*<"+55<*5<(+'.."I?..\%"+"<.\&5*\%7.\%'"(\&")\%Y\%*I\\%"*<"'?.."6*15,+(\%+\%"'<.X).\&'\&"+\%*\%21('2/"+\%7"I?+'"*'?.<"1.+\&)<.\&"*<"<.1.7(.\&"1(@?'"N.."6*\&(7.<.7"'*"+77<.&\&"+\%2".99.6'\&"*9"'?.."<.5*<'.7"N.?+B(*<"*\%"'?.."6+15).&"6*11)\%('2a">?.."0(B(,"C(@?'\&"D"><(',.."\$E"0**<7(\%+'*<"I(,,"1+Y."+"7.'.<1(\%+'(*\%"<.@+<7(\\@"'?.."+55<*5<(+'.."1+\%..<"*9"<.&*,)'(*\%")\%7.<"'?.."5*,(62a">?.."0*,,..@.."I(,,\%...Y"<.&*,)'(*\%"6*\&(\&'.\%'"I('"')*''?.."+1...\%')\$*\%1.\%'\%1.\%\%1.\%'\%1.\%1.\%'\%1.\%1.\%'\%1.\%'\%1.\%'\%1.\%\%$

 $\begin{array}{l} c ? < < ```? . "0 (B(, "C(@?`\&"D">(', ."\$E"0**<7(\%+'*<"7 .' .< 1 (\% .\&"`?+""+"6* 1 5, +(\%+\%'A\&"< .X) .\&'\&]"6+\%"N ." ?***< < .7/" '? ." 0 *, ... @ ." 1 + 2" % .B . <'? . . .&&" '+Y ." *'? .< "+55<*5<(+' ." &' .5\&" '*" ., (1 (\%+' ." '? ." < .5*<' .7" 6*%7) 6'/" 5< .B .%'" ('&" < .6) << .%6 ./" +%7" < .1 .72" ('&" .99 .6'&" *%" '? ." 6* 1 5, +(\%+\%'" +%7" '? ." 0 *, ... @ ." 6* 1 1)% ('2a">?*& ."&' .5&" 1 + 2"(%6,) 7 ."(%6< .+& .7" 1 *%('*<(%@/"&) 5 .S(&(*%/"*<"&.6) <('2"+'",*6+'(*%" ** ** ** +6'(B('(.&" 1 ? .< ."'? ." +, ... @ .7" 1 (&6*%7) 6''*66) << .7i"5<*B(7(%@"+77('(*%+,"'<+(%(@"+77',7) 6+'(*%" 1 +' .<(+,&"9*<"&') 7 .%'&"+%7" . 1 5,*2 ... &i"*<"6*%7) 6'(%@"6,(1+' ." &) <B .2&"< .@+<7(%@"& .4) +, "B(*, ... %6 .a" >? ." 0 *, ... @ ." 1 (,," +,&*" '+Y ." (1 1 .7(+' ." &' .5&" '*" 5<*B(7 ."9*<"'? ." &+9 .'2" *9" '? ." 6* 1 5,+(%+%'" 1 ?(, ... Y ... 5(%@"'? ."6* 1 5,+(%+%'" 4.4) +, "B(*, ... %6 .a")? ... &" ... &$

 $\$\%"'?*\&."(\%\&'+\%6.\&"\ I\ ?.\%"'?."0(B(,"C(@?'\&"D">(',."\$E"0**<7(\%+'*<"7.'.<1\ (\%.\&"'?+'"'?."0*,,.@."\ 1\)\&'" \\ 5<*6...7"\ I\ ('?"+\%"(\%B.\&'(@+'(*\"7.\&5('."'?."6*\ 1\ 5,+(\%+\%'A\&'<.X).\&'"'?+'"('"\%*'"*66)</"'?."0(B(,"C(@?'\&"D">(',."\$E"\ 0**<7(\%+'*<"\ I\ (,,"\%*'(92"\ '?."\ -\ 14.5(9\ 143\ c\ mB/9\ 143\ c\ mB9\ 143\ c\ mBTBT500(,)\ 0.2(")\ 0.2(")\ -2)$

+ "B(*, +'(*%"*9"+"&.5+<+'."5*, (62/"I?.'?.<"J')7.%'"0*7."*9"0*%7)6'/"L+6), '2"O+%7N**Y/"*<"J'+99"O+%7N**Y/"'?."0*, ...@."

 $\begin{array}{l} c ? . < . "'? . < . "(\&".B(7.\%6."*9"+"5+''.< \%"*9"6*\%7)6'"\&(1(,+<"(\%"\%+')<."N2"'?."< . \&5*\%7.\%'/".('?.<"5<(*</"*<"\&)N\&.X) . \%'/"'*"'?."6*\%7)6'"(\%"X) . \&'(*\%/"'?(\&"(\%9*<1+'(*\%"1+2"N."7...1.7"<...,B+\""+\%7"5<*N+'(B.""'?."7..6(\&(*\%:1+Y.< &\&"7.'.<1(\%+'(*\%"*9"<..&5*\&&(N(,('2/"+\%7g*<'"'?."7.'.<1(\%+'(*\%"*9"\&+\%6'(*\%a">?.""0(B(,"C(@?'\&"D"></"."8E"0**<7(\%+'*<"I(,,"1+Y."+7.'.<1(\%+'(*\%"*9"<..,B+\%6."N+&.7"*\%"+\%"+\%4&.&&1.\%'"*9"I?."?."6*\%7)6'"6('.7"(\%"'?."</".5*<'"+\%7"(\%7(6+'.\&"+"5+''.<\%"*9"N.?+B(*<"+\%7"'?."0*,,.@./"'?<*)@?"'?."0(B(,"C(@?'\&"D"><',."$E"0**<7(\%+'*<)")?."$E"0**<7(\%+'*<)$

 $< .6*<7a"J)6?"<.6*<7\&"I(,,"N.")\&.7"(\("\cdot \).B(. I (\(\pma\)^{\text{"}}\))<'?.<"6*\(\cdot 7\))6'\("\cdot \).T B., \(*5(\pma\)^{\text{"}}\)+\(\pma\)^{\text{"}}+\(\pma\)^{\text{"}}+\(\pma\)^{\text{"}}\) 1 (,,,"<. 1 + (\(\pma\)^{\text{"}}\)+\(\pma\)^{\text{"}}+\(\pma\)^{\text{"}}\) 7. \(\pma\)^{\text{"}}\)6\(\pma\)^{\text{"}}\)6\(\pma\)^{\text{"}}\)7. \(\pma\)^{\text{"}}\)7. \(\pma\)^{\text{"}}\)7. \(\pma\)^{\text{"}}\)7. \(\pma\)^{\text{"}}\)7. \(\pma\)^{\text{"}}\\ 1 \\ \pma\)^{\text{"}}\\ 2. \\ \pma\)^{\text{"}}\\ 3. \\ 2. \\ \pma\)^{\text{"}}\\ 3. \$

K??\$,@'>!K)!C':%'?7',+./!G\$:87-&'8,!8#!+!Q.'\$(+,%\$!8#!5'&7\$!; I!M\$>-+7! R+.+::=\$,&!!

23#"6%&3>&'1C%/#"F,#"31&

 $\text{W5*}\%"?."9(,(\%@"*9"+"$\underline{L}*<1+,"0*15,+(\%')'"\text{I}<(''.\%"*''6."\text{I}(,,"N."5<*B(7.7"'*"'?."5+<'(.\&a">?."\%*'(6."\text{I}(,,"N."5<*B(7.7"'*"'?."5+<'(.\&a">?."\%*'(6."\text{I}(,,"N."5<*B(7.7"'*")?."$]<*(...)* \\ \text{I}(,,"(\%6,)7."'?."9*,,*\text{I}(\%@"(\%9*<1+'(*\%V")")*)* \\ \text{I}(,,"(\%6,)7."'?."9*,,*\text{I}(\%@"(\%9*<1+'(*\%V")")*)* \\ \text{I}(,,"(\%6,)7."'?.")* \\ \text{I}(,,"(\%6,)7.")* \\ \text{I}(,,$

- $f > ?. \ \%5.6(9(6"+,, ..@+'(*\%"+\%7"'?."\&5.6(9(6"6*\%7)6"''?+''(\&"+,, ..@.7"'*"?+B."*66)<<.7i"$
- f > ?."(7.%'('2"*9"'?."5+<'(.&i")
- $f > ?."7+'."+\%7",*6+'(*\%"\setminus(9"Y\%*I\%]"*9"'?."6*\%7)6'"'?+'"(\&"+,,.@.7"'*"?+B."*66)<<.7i"$ $f = (-2.5)^{1/2}$

 $>?. " \$\%B.\&'(@+'*<" I (,," 5<.5+<." +" \&) 1 1+<2" *9" .+6?" (\%'.<B(. I " _) \$\%'.<B(. I " J) 1 1 +<2`]a" >?. " \$\%B.\&'(@+'*<" I (,," \&?+<."'?." \%'.<B(. I " J) 1 1 +<2" I ('?"'?." (\%'.<B(. I ...a" >?." (\%'.<B(. I ...a" Y +B." \%''.) \%'.<B(. I ...a" Y +B." \%''.) \%''.$

3+6?"5+<'2" I (,,"N."5<*B(7.7" I ('?"+%"*55*<')%('2"'*"*99.<"<.,.B+%'" I ('%.&&.&"+%7".B(7.%6.a">?." \$%B.&'(@+'*<"I (,,"6*%&(7.<"+,,"<.,.B+%'".B(7.%6./"N*'?"(%6),5+'*<2"+%7".46),5+'*<2a"H,,"(%9*<1+'(*%" 9*<"6*%&(7.<+'(*%" N2" '?."O.+<(%@" U99(6.<" 1)&" N."5<*B(7.7" '*" '?." \$%B.&'(@+'*<"+&"5+<'"*9" '?."

'*"<.,.B+%'"(%9*<1+'(*%/"'?."\$%B.&'(@+'*<"

O. + < (%@"U99(6. < "V99(6. < "V99

(&"<.&5*%&(N,."9*<"*%."*<"1*<."B(*,+'(*%&"*9"'?."0*,,.@.A&"+%'(7(&6<(1(%+'(*%"5*,(6(.&/"'?."0*,,.@."1(,,"(&&)."&+%6'(*%&"6*11.%&)<+'."1('?"'?."B(*,+'(*%&]/"(%"+66*<7+%6."1('?"'H55.%7(4"3"*<"H55.%7(4"La"H%2"&+%6'(*%&"(&&).7"I(,,"N."(%6,)7.7"(%"'?."O.+<(%@"U99(6.<A&"I<(''.%"7.'.<1(%+'(*%a")H55.%7(4"La"H%2"&+%6'(*%&"(&&).7"I(,,"N."(%6,)7.7"(%"'?."O.+<(%@"U99(6.<A&"I<(''.%"7.'.<1(%+'(*%a")H55.%7(4"La"H%2"&+%6'(*%&"(&%a")H%2")H55.%7(4")H56.%

I << %, \$/&

H55.+,&"1+2"N."9(,.7"N2".('?.<"5+<'2"+%7"1)&'"N."&.%'"'*"'?."0(B(,"C(@?'&"D">(',."\$E"0**<7(%+'*<a"c?.%"+%"+55.+,"(&"9(,.7/"'?."*'?.<"5+<'2" I (,,"N."%*'(9(.7/"(%" I <('(%@/"+%7" I (,,"'?.%"?+B."9(B."\F]" N)&(%.&&"7+2&"'*"<.&5*%7"'*"'?."+55.+,a"H%2"5+<'2A&"7.6(&(*%"%*'"'**&)N1('"+<.5,2"'*"+%"+55.+,"(&"%*'" .B(7.%6."'?+'"'?." %*%:+55.+,(%@" 5+<'2"+@<...7" I ('?"'?."+55.+,a">?."+55.+,a">?."+55.+,&" 5<*6.&&"(&"7*6)1.%'+<2"*%,2/"+%7"%*"?.+<(%@" (&"?.,7a" H55.+,&" I (,,"9*,,*I"'?."5<*6.7)<.&"*)',(%.7" (%"H55.%7(4"^a"

!

=K"

K??\$,@'>!S)!C':%'?7',+./!G\$:87-&'8,!8#!+!Q.'\$(+,%\$!8#!A8,B5'&7\$!; I!P':%8,@-%&!KE+',:&!+!M&-@\$,&!

23#"6%&3>&'1C%/#"F,#"31&

 $\$9" \setminus !]" \, !?." \, 0(B(, "C(@?'\&"D">(', ."\$E"0**<7(\%+'*<"7.'.<1(\%.\&"'?+'"'?."6*15,+(\%+\%'A\&"<.5*<'"1)\&'"5<*6..7"'?<*)@?" \, ; (\&6(5,(\%+<2"C.\&*,)'(*\%i"\#]".('?.<"'?."6*15,+(\%+\"*<"<.&5*\%7.\%'"\9+(,&"'*"<5)<&)."H7+5'+N,."C.\&*,)'(*\%i"*<"\S]".('?.<"'?."6*15,+(\%+\%'"*<.&5*\%7.\%'"\9+(,&"'*"<.&5*\%7.\%'"\9+(,&"'*"'?."0)(B(,"C(@?'\&"D">(',."\$E"0**<7(\%+'*<A&"(\%X))<2"<.@+<7(\%@"H7+5'+N,."C.\&*,)'(*\%'''?."0)(B(,"C(@?'\&"D">(',."\$E"0**<7(\%+'*<A&"(\%X))<2"<.@+<7(\%@"H7+5'+N,."C.\&*,)'(*\%'''?."0)(B(,"C(@?'\&"D">(',."\$E"0**<7(\%+'*<A&"1<('\%@'''?+'"'?."6*15,+(\%'''1(,.,"5<*6..7"'?<*)@?";(&6(5,(\%+<2"C.\&*,)'(*\%a">?."0(B(,"C(@?'\&"D">(',."\$E"0**<7(\%+'*<A&"1<(''.\%"\%*'(9(6+'(*\%"'*"'?."<<.&5*\%7.\%''+\%7"6*15,+(\%+\%'''1(,.,"(\%6,)7.\""$

- f > ?."6*15,+(%+%'A&"%+1.i")
- f = 8+' < ."*9"'?." < .5* < 'i"
- f J5.6(9(6"5*,(62"B(*,+'(*%\&]"+,,.@.7"\.a@a/"&.4)+,"+&&+),'/"&.4)+,"?+<+&&1.%'/"<.'+,(+'(*%]i"
- f ; +'.\&]"*9"+,..@.7"5*,(62"B(*,+'(*%\&]i"
- f $m*6+'(*\%\\&]"*9"+,...@.7"5*,(62"B(*,+'(*\%\\&]i"$
- f Z<(.9"7.&6<(5'(*%"*9"+,..@+'(*%&]i"
- f H" &'+'. 1 .%'" '?+'" '? ." 5+<'(.&" ?+B." '? ." <(@ ?'" '*" <.B(. I " +%7" (%&5 .6'" +,," .B(7 .%6 ." N . (%@" 6*%&(7 .< .7" N2" '? ." \$%B .&'(@+'*<" *<" O .+<(%@" U99(6 .<" 7)<(%@" '? ." ; (&6(5,(%+<2" C .&*,)'(*%" 5<*6 .&&/"6*%&(&' .%'" I ('?"'?(&"G*,(62i"+%7""
- f H"&'+'. 1 .%'"<.@+<7(%@"'?."0*,,.@.\&"5*,(62"<.,+'.7"'*"9+,&."<.5*<'\&"+\%7" 1 +Y(\%@"Y\%* I (\%@,2" 9+,\&.\\&'+'. 1 .\%'\&"7)<(\\@\"'?.\"; (\&6(5,(\%+<2\)"C .\&*,)'(*\"5<*6.\&\a"

 $>?...\%*'(6...*9"'?.."6*15,+(\%'"I(,,"+,\&*"N."+66*15+\%(.7"I('?"+"<.X).\&'"9*<"+"1...'(\%@"I('?"'?.."0)(B(,"C(@?'\&"D"><',...\$E"0**<7(\%+'*<"I('?(\%"9*)<"\=]"N)&(\%.\&\&"7+2&a"H''''?.."1...'(\%@/"*<"(9"'?.."<.&5*\%7.\%'"7*.&"\%"'*-1...'(\%@''<.X).&'"*<"(\&")\%+N,.."'*"1...'"I('?(\%"9*)<"\=]"N)&(\%.&&"7+2&/"'?.."0)(B(,"C(@?'&"D"><(',...\$E"0**<7(\%+'*<"I(,...\$5*B(7...''?.."9*,,*I(\%@''(\%9*<1+'(*\%"(\%"I<('(\%@\""*1...''))))))) | (',...\$E"0**<7(\%+'*<"I(,...\$5*B(7...''?.."9*,,*I(\%@''(\%9*<1+'(*\%"(\%""1<(\%@\""*1...'')))))) | (',...\$E"0**<7(\%+'*<"I(,...\$5*B(7...''?.."9*,,*I(\%@''(\%9*)<"1+'(*\%"(\%""1<(\%""1...''))))) | (',...\$E"0**<7(\%+'*<"I(,...\$5*B(7...''?.."9*,,*I(\%@''(\%9*)<"1+'(*\%""1...'')))) | (',...\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...''\$1...\$1...'\$1...\$1...'\$1...\$$

- $f >>?."<+\%@."*9"\&) 55*<'(B." 1 .+\&)<.\&"+\%7"<. 1 .7(.\&"+B+(,+N,./"(\%6,)7(\%@"6?+\%@.\&"'*"+6+7 . 1 (6/" ,(B(\%@/"'<+\%\&5*<'+'(*\%/"+\%7g*<" I *<Y(\%@"&(')+'(*\%\/"*<"*'?.<"&) 55*<'(B." 1 .+&)<.\&"+\&" 1+2"N." +55<*5<(+'.a")$

 $f \quad H\%"*B.<B(.\ I"*9"'?."5<*6.7)<+,"*5'(*\%\&"+\%7"5<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/"(\%6,)7(\%@"H7+5'+N,."C.\&*,)'(*\%"+\%7"5)<*6.\&\&/(\%6,)7(\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\&%(*6.\%"+\%7"5)<*6.\%(*6.\%"+\%7"5)<*6.\%(*6.\%"+\%7"5)<*6.\%(*6.\%"+\%7"5)<*6.\%(*6.\%"+1.00"5)<*6.\%(*6.\%"+1.00"5)<*6.\%(*6.\%"+1.00"5)<*6.\%(*6.\%"+1.00"5)<*6.\%(*6.\%"+1.00"5)<*6.%(*6.\%"+1.00"5)<*6.%(*6.\%"+1.00"5)<*6.%(*6.\%"+1.00"5)<*6.%(*6.\%"+1.00"5)<*6.%(*6.\%"+1.00"5)<*6.%(*6.\%"+1.00"5)<*6.%(*6.\%"+1.00"5)<*6.%(*6.\%"+1.00"5)<*6.%(*6.\%"+1.00"5)<*6.%(*6.\%"+1.00"$

f

- >?."5+<'(.&" 1+2"5<*B(7."+" I <(''.%"<.&5*%&.a">?."\$%B.&'(@+'*<" I (,,"(%6*<5*<+'."+%2" I <(''.%" <.&5*%&."5<*B(7.7"N2"'?."\$5+<'(.&"(%"'?."\$%B.&'(@+'(*%"C.5*<'a"
- >?."5+<'(.&" 1+2"&)N 1 ('"+" I <(''.%"<.X) .&'"9*<"+77('(*%+,"(%B .&'(@+'(*%a" J)6?"<.X) .&'&" 1+2" (%6,)7 ./"N) '"+<."%*'",(1 ('.7"'*/"'? ."9*,,* I (%@\"\!]"<.X) .&'\&]"9*<"9*,,* I :)5"(%'.<B(. I \&]" I ('?" .4(&'(%@" I ('% .&& .&"'*"6,+<(92"*<"5<*B(7 ."+77('(*%+,"(%9*<1+'(*%/"(%6,)7(%@"*99.<(%@"X) .&'(*%&" '*"'? ."\$%B .&'(@+'*<]i"\#]"<.X) .&'\&]" 9*<"(%'.<B(. I &" I ('?"% . I " I ('% .&& .&i"*<"\\$]"<.X) .&'\&]""*6*%&(7 .<"% . I " .B(7 .%6 .a"H%2"<.X) .&'" 9*<"+77('(*%+,"(%9*<1+'(*%"*9"'? ."\$%B .&'(@+'*<]i"\#]"<.X) .&'"



 $\begin{array}{l} O. + < (\%@"U99(6.<"I\ (,,"6*\%7)\ 6"+",(B."?.+<(\%@/"+")\ I\ (?6?"'?.2"\ I\ (,,"5.<1\ ('"\%7(<.6'"6<*\&\&:.4+1\ (\%+'(*\%"*9"'?."'5.+<'(.\&"+\%7"\ I\ ('\%.\&\&.\&a"L*<"5)<5*\&.\&"*9"'?(\&"G*,(62/"'?."'.<1"\$\%7(<.6'"\ 0<*\&\&:34+1\ (\%+'(*\%"*9"'?."'5.+<'(.\&"+\%7"\ I\ ('%.\&\&.\&a"L*<"5)<5*\&.\&"*9"'?(\&"G*,(62/"'?."'.<1"\$\%7(<.6'"\ 0<*\&\&:34+1\ (\%+'(*\%"*1.4)))) \\ 1. + \%\&"'?."O. + < (\%@"U99(6.<"I\ (,,"+,,*I"'?."5+<'(.\&"+\%7g*<"'?.(<"+7B(\&*<\&"'**\&))) 1 ("'5<*5*\&.7"X).\&'(*%\&"9*<"'?."'5+<'(.\&"+\%7"\ I\ ('%.\&\&.\&/"+\&"I..,"+&"9*,,*I:)5"X).\&'(*%\&"N+\&.7"*\%"'.\&'(1*\%2"5<*B(7.7"7)<(%@"'?."?.+<(%@a">?."O. +<(%@"U99(6.<"I\ (,,"+&Y"'?."5+<'(.\&"+\%7"\ I\ ('%.\&\&.\&"'?."5<*5*\&.7"X).\&'(*%\&"'?+'"?."'?."'?."'?."') \\ O. + < (%@"U99(6.<"7.'.<1\ (%.\&"+<."6*%&(&'.\%"'I\ ('?"'?(\&"G*,(62"+\%7"+<."5<*N+'(B."*9"9+6'&"<...B+\%'"'**"')) (*'"*"+1,*I"X).&'(*%\&"'?+'"+<.")\%7),2" \\ ? + < + \& \& (\%@"*<"'?+'"\&...Y"(\%9*<1+'(*\%"'?+'"(\&"%*'"<...B+\%'"))%7.<"'?(&"G*,(62a"))) < 1.5'' | (*'"G*,(62a")) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'"*) | (*'""*) | (*'"") |$

>?."O. +<(%@"U99(6.<"(&"<.&5*%&(N,."9*<"1+(%'+(%(@"+%"*<7.<,2/"9+(</"+%7"<.&5.6'9),"?.+<(%@"+%7"?+&"N<*+7"+)'?*<('2"'*"<.&5*%7"'*"7(&<)5'(B."*<"?+<+&&(%@"N.?+B(*<&/"(%6,)7(%@"+7b*)<%(%@"'?."?.+<(%@"*<".46,)7(%@"'?."*99.%7(%@"5.<&*%a"G+<'(.&"1+2"1+Y."<.X).&'%"'*"'?."

 $>?.."O. + < (\%@"U99(6.<"I(,,"7.'.<1(\%."(9"'?."5<*99.<.7"I('\%.\&\&\.\&]"?+\&"<.,.B+\%'"(\%9*<1+'(*\%"+\%7"(9"'?.<"(\&"\&)99(6(.\%"b)\&'(9(6+'(*\%"9*<"5.<1(''(\%@"+"I('\%.\&\&"I?*"I+\&"\%*'"(\%'.&B(.I.7"N2"'?."$\B.\&'(\@+'*<">>?."O. + < (\%@"U99(6.<"1+2"+,&*"<.X)(<."'?."$\B.\&'(\@+'*<"'*"(\%'.&B(.I.7"N2"'?."\%.I.2"5<*99.<.7"I('\%.\&\&a"c?.\%"I('\%.\&\&.\&"+<."+55<*B.7"'*"N."5<.\&.\%'/"'?."<.&5*\%7.\%'"+\%7"6*15,+(\%+\%'"I(,"N."5<*B(7.7"I('?"+",(\&'"*9"I('\%.\&\&.\&"+\%7"+\%2"<.,.B+\%'"7*6)1.\%'\&"<.,+'.7"'*"'?."I('\%.\&\&.\&A"+55.+<+\%6."+'"'?."?.+\%(\%@"\%*",+'.<"'?+\%''?<..."$

 $5.<1 \ (''.7"'*"6<*\&\&:.4+1 \ (\%."'?."I \ ('\%.\&\&.\&"*<"+\%2"5+<'2"7)<(\%@"'?."?.+<(\%@/"\%*<"I(,,"'?.2"N."5.<1 \ (''.7"'*"*99.<"I('%.\&\&.\&/"7*6)1.\%'&/"*<"+"6,*&(\%@"&'+'.1.\%'a"$9"+\%2"5+<'2"6?**&.&"\%*'"'*"+55.+<"+'"'?."?.+<(\%@/"'?."0*,,.@."1+2"1*B."9*<I+<7"I('?"'?."?.+<(\%@"+\%7"$

>?." 0(B(, "C(@?'&"D">(', ." E"0**<7(%+'*<"



K??\$,@'>!C)!K@+?&+67\$!G\$:87-&'8,!J.8%\$@-.\$:!

 $H7+5'+N,."<.\&^*,)'(*\%"(\&"+"B*,)\%'+<2/"<.~1~.7(.\&:$

I7,<#,:\$%&;%/3\$+#"31&A<#"31/&

 $\frac{}{6*15,+(\%+\%'/" \ '?." < .\&5*\%7.\%'/" \ +\%7g*<" \ *'?.<" \ 5+<'(6(5+\%'\&" \ '*" \ 7(\&6)\&\&" \ .45<.(.\%6." \ +\%7" \ 5.<&5.6'(B."+\%7" .45,*<."(\%'.<.\&'\&" I ?(,." I *<Y(\%@"'* I +<7&" 1 ..'(\%@".45<.\&\&.7"\% ..7&a">>?(\&"\%...\%"'?."5<*6.\&&"7*.\&"%*'"<.X)(<."7(<.6'"(\%'.<+6'(*\"N.' I ..\""?."5+<'(.\&"*<"'?."5+<'(.\&"*<"'?."5+<'(.\&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<"'?."5+<'(.&"*<$

 $\frac{\|H\|9+6(,('+'.7\|(\%'.<+6'(*\%''N.'I..\%''?."<.\&5*\%7.\%''+\%7'')}{0^*,,.@."9+6),'2"+\%7g*<'\&'+99"7.\&(@\%.7"'*"5<*B(7."+66*)\%'+N(,('2/"&'<)6')<.7"&)55*<'/"+\%7"'?."}\\7.B.,*51.\%''**9"+",.+<%(%@"5,+%a">?."9*6)&"*9"+"0UH"(&"'*"N+,+%6."&)55*<'"+%7"+66*)\%'+N(,('2"9*<"+\%"(\%7(B(7)+,"I?*"?+&"+6Y\%*I,.7@.7"'?.(<"*N,(@+'(*\%"'*"<.5+(<"?+<1"+\%7"I(,,(\%@\%.&&"'*".\%@+@."(\%"+\%".7)6+'(*\%+,"5<*6.&&a">?."0UH"1*7.,"7*.&"\%*'"<.X)(<."5+<'(6(5+'(*\%"9<*1"'?."6*15,+(\%+\%'/"N)'"+\%1('?"*'?.<"'25.&"*9"+7+5'+N,."<.&*,)'(*\%/"("1)\%'"N."B*,)\%'+<2"9*<"'?."6*15,+(\%+\%'"+\%7"'?."<.&5*\%7.\%'a"$

 $Q \cdot + \& > < \& " \cdot ? + ` " \cdot 1 + 2 " N \cdot " + @ < \cdot \cdot .7 " \cdot *" + \& " + " < \cdot \&), ` " * 9 " \cdot ? \cdot " + 7 + 5 ' + N, \cdot " < \cdot \& *,) ' (* % " 5 < * 6 \cdot \& \& " \cdot 1 + 2 " (% 6,) 7 \cdot V "$

- f H,6*?*,".7)6+'(*%"6,+&&.&"9*<"'?."<.&5*%7.%'i"
- f C.@),+<"1...'(%@&"I('?"+%"+55<*5<(+'."0*,..@."(%7(B(7)+,/"))%('/"*<"<.&*)<6.i"
- $f \qquad G. < 1 + \%.\%''.4'.\%\&(*\%''*9"+"\%*:6*\%'+6'"7(<.6'(B.i''))$
- $f \quad C.\&'<(6'(*\%"9<*1"5+<'(6(5+'(*\%"(\%"\&5.6(9(6"6,))N\&"+\%7g*<"*<@+\%(d+'(*\%\&i"))))))$
- f < .&5*%7.%''<.&'<(6'(*%"9<*1"5+<'(6(5+'(*%"(%"5+<'(6),+<".B.%'&i"
- f <.&5*%7.%'"6*15,.'(*%"*9"+%".7)6+'(*%+,"5,+%" I ('?"<.@),+<"1..'(%@&" I ('?"'?."+7+5'+N,.i" <.&*,)'(*%"6**<7(%+'*<"*'?.<"+55<*5<(+'."0*,..@."&'+99"*<"9+6).'2"1.1N.<i"+%7g*<"
- f = 0*)%&.,(%@"&.&&(*%&"9*<"'?."<.&5*%7.%'a"

\$\%7(B(7)+,&" I ?*" I (&?"'*" 5+<'(6(5+'."(\%"+\%"+7+5'+N,."<.&*,)'(*\%" 5<*6.&&" 1)&'" ?+B."&)66.&&9),,2" 6*15,.'.7"5<.5+<+'*<2" 1 ...'(\%@&" I ('?"'?."+7+5'+N,."<.&*,)'(*\%" 6**<7(\%+'*<a" \$\%7(B(7)+,&" 1+2" N." +66*15+\%(.7"N2"+\%"+7B(&.<"+'"+\%2" 1 ...'(\%@&"<.,+'.7"'*"'?."+7+5'+N,."<.&*,)'(*\%" 5<*6.&\&a""

I7.<#.:\$%&:%/3\$+#"31&IF.%%0%1#/&

%.6.&&+<2" '*" 9+6(,('+'."'?."<.&*,)'(*%/"'?." 0*,,...@." 1+2" N."<.X)(<.7" '*" 5<*7)6."<.6*<7&"6<.+'.7" 7)<(%@"'?(&"5<*6.&&"(%"<.&5*%&."'*"+"b)7(6(+,"&)N5*.%+"*<"+"L3CGH".7)6+'(*%+,"<.6*<7"<.X).&'a"\$9" +7+5'+N,.."<.&*,)'(*%" (&" &'*55.7" 5<(*<" '*" 6* 15,..'(*%/" &'+'.1..%'&" 1+7." N2" +" 5+<'2" (%" +7+5'+N,." <.&*,)'(*%" 1+2"%*'"N.")&.7"(%"+"7(&6(5,(%+<2"<.&*,)'(*%"5<*6.&&"<.,+'.7"'*"'?+'"1+''.<a""

## 17,<#,:\$%k; %0%7"%/&3.&'1#%.C%1#"31/&>3.	%kB3\$\$%F%kB300+1"#@&

\$%" + 77('(*%" '*" (%' .<B .%'(*%&" +55, (.7" '*" '? ." < .&5*%7 .%'/" +%7" < .@+<7, .&&"*9" I?.'? .<" '? ." 0*,, .@ ." 5) < &) .&" +"; (&6(5, (%+<2"C .&*,)'(*%"*<" '+Y .&"*'? .<"9*<1+,"7(&6(5, (%+<2"+6'(*%/" '? ." 0)B(,"C(@?'&"D" >(', ."\$E"0**<7(%+'*<" 1+2"9(%7"('"? .,59) ,"*<"% .6 .&&+<2"'*"<.X) .&'"*<"X) .&'"*<"X) (<."'? ." < .&5*%7 .%'"*<"*'? .&" '*")%7 .<'+Y ." &5 .6(9(6"&' .5&"7 .&(@% .7" '*" .,(1 (%+' ."'? ." 1 (&6*%7)6'/"5<.B .%'" ('&" < .6)<< .%6 ./" +%7g*<" < .1 .72"('&" .99 .6'&a"34+15 , .&"(%6,)7 ./"N) '"+< ."%*'",(1 (' .7"'*/"'? ."9*,,* I (%@V"

- $f \quad C.X).\&'(\%@"*<''<.X)(<(\%@"+"0*,,.@.".\%'('2"'*"5<*B(7."'<+(\%(\%@"9*<''('\&"\&'+99"*<"1.1 N.<&i'')))))))$
- f = C.X).&'(%@"*<"<.X)(<(%@"'?."<.&5*%7.%'"'*"<.6.(B."'<+(%(%@i"))))
- f = 0*%'(%)(%@"+%2"*9"'?."5<*'.6'(B."+%7"&)55*<'(B."1.+&)<.&"5<.B(*)&,2".&'+N,(&?.7i")
- $f \quad \$7.\%'(92(\%@"'?.\%..7"9*<"+\%2"+77('(*\%+,"*<"*\%@*(\%@"1.+\&)<.\&/"\&) \\ 55*<'\&"+\%7"<.1.7(.\&i"*<")$
- $f \quad C.B(\&(\%@"0*,,.@."5*,(6(.\&/"5<+6'(6.\&/"*<"\&.<\!B(6.\&a"$

KR"

>?.."0(B(,"C(@?'&"D"><',."\$E"0**<7(%+'*<"+,&*"?+&"'?."7(&6<.'(*%"'*"<.B(. I"+%2"(%'.<(1"5<*'.6'(B."*'))<0.1.5'(B."*')<0.1.5'(B."*')<0.1.5'(B."*')<0.1.5'(B."*')<0.1.5'(B."*')<0.1.5'(B."*')<0.1.5'(B."*')<0.1.5'(B."*')<0.1.5'(B."**')<0.1.5'(B."**')<0.1.5'(B."**')<0.1.5'(B."**')<0.1.5'(B."**')<0.1.5'(B."**')<0.1.5'(B."**')<0.1.5'(B."**')<0.1.5'(B."**')<0.1.5'(B."**')<0.1.5'(B."**')<0.1.5'(B."**')<0.1.5'(B."***')<0.1.5'(B."***')<0.1.5'(B."******)<0.1.5'(B."****)<0.1.5'(B."****)<0.1.5'(B."***)<0.1.5'(B."*****)<0.1.5'(B."***)<0.1.5'(B."***)<0.1.5'(B."***)<0.1.5'(B."***)<0.1.5'(B."***)<0.1.5'(B."***)<0.1.5'(B."***)<0.1.5'(B."***)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)<0.1.5'(B."**)

$$\begin{split} &H\%2"*\%."*<"1*<."*9"'?."\&+\%6'(*\%\&",(\&'.7"?.<."1+2"N."(15*\&.7"*\%"+"<.\&5*\%7.\%"I?*"(\&"9*)\%7"\\ &<.\&5*\%\&(N,."9*<"+"B(*,+'(*\%"*9"'?."0*,..@.A\&"J.4)+,"+\%7"\%'.<5.<&*\%+,"Q(&6*\%7)6'"G*,(62a"J+\%6'(*\%\&"+<."+\&&.&&.&.\\ &+<."+\&\&.\&\&.7"(\%"<.\&5*\%\&."'*"'?."&5.6(9(6"B(*,+'(*\%\&"+\7"*)"?."*4.6(5,(\%."?(\&'*<2"*9"'?."<.&5*\%7.\%'"+55.+,&"'?."9(\%7(\@\&"6*\%'+(\%.7"'?."*4.6'(*\%\&"+\7"*)"?."<.&5*\%7.\%'"+55.+,&"'?."9(\%7(\@\&"6*\%'+(\%.7"'?."*4.6'(*\%\&"I(,,"6*\%'(\%))."(\%".99.6'"7)<(\\@""?."+55.+,a">?."\&+\%6'(*\%\&"1+2"N."',(9'.7"*\%,2"(9)"+\&"+"<.&),'"*9"'?."\%'*1."*9"'?."+55.+,\%'"?."</.&5*\%7.\%'"(\&"9*)\%7"\%*'"<.&5*\&(N,."',9*\%,2"(9)"+&"+"<.&),'"*9"'?."\%',(62"B(*,+'(*\%\&"\&)N1(''.7"*"'?."C.B(.I"G+\%.,\&)&)). \end{split}$$

T''/#&3>&83//":%&),16#"31/&

 $\frac{}{G<^*?(N('.7"0*\%7)6'/"'?."0(B(,"C(@?'\&"D"><."+"\&')7.\%'"(\&"9*)\%7"<.\&5*\%\&(N,."9*<".\%@+@(%@"(\%"G<^*?(N('.7"0*\%7)6'/"'?."0(B(,"C(@?'\&"D"><',."$E"0**<7(\%+'*<"I(,,"6*%\&(7.<"+\%7"7.'.<1(\%."I?.'?.<"\%*%:7(&6(5,(\%+<2/"+71(\%(\&'<+'(B."1.+\&)<.\&"9*<"'?.",+<@.<"6+15)&"6*11)\%('2"+<."+55<*5<(+'.a"J)6?"<.1.7(+,/"6*11)\%('2:N+&.7"<.&5*%&.&"1+2"(%6,)7.".7)6+'(*\%+,"(%'('(+'(B.\&"+\%7g*<"'<+(\%(\%@\&/"6,(1+'."\&)<B.2\&/"*<"*'?.<"+55<*5<(+'."1.+&)<.&a""$

 $\frac{}{6+)\&."9*<"+77('(*\%+,"7(\&6(5,(\%+<2"+6'(*\%a"})+'(*\%"*<"<.5.'('(*\%"*9"G<*?(N('.7"0*\%7)6'"1+2"N."))))}{6+)\&."9*<"+77('(*\%+,"7(\&6(5,(\%+<2"+6'(*\%a"})+'(*\%"*3"+3"))))}$

 $\frac{\text{"C.5+21.\%""*"?."0*,,.@."*<""*"+\%"+99.6'.7"5+<'2"9*<"7+1+@.\&"<.\&),'(\%@"9<*1"+"B(*,+'(*\""9"'?(\&"0*7.a">*".\%9*<6."'?(\&"&+\%6'(*\%/"'?."0*,,.@."<.&.&B.\&"'?."<(@?""*"I('??*,7"('\&"'<+\%&6<(5'&"+\%7"7.@<...&"*<"'*"7.\%2"+"&')7.\%'"5+<'(6(5+'(*\%"(\%"@<+7)+'(*\%"6.<..1*\%(.\&"+\%7"5<(B(,.@.7".B.\%a"$

K??\$,@'>!N)!N+%-7&/!8.!M&+##! P\$=6\$.!M+,%&'8,',E!J.8%\$@-.\$:!

 $\$9" \ '?." < .\&5*\%7.\%'" \ (\&" \ 9*)\%7" < .\&5*\%\&(N,." \ 9*<" \ +" \ B(*,+'(*\%" \ *9" \ *\%." \ *<" \ 1 \ *<." \ *9" \ '?." \ O*,,..@.A\&" \ A&" \ (N,... \ 9*)$

 $6*\%\&(\&'\,.\,\%'''\ I\ ('\,?"+\%2"+55,(6+N,\,."\,6*,,\,.\,6'(B\,."N+<@+(\%(\%@"+@<...\ 1\ .\,\%'a"))))$

K??\$,@'>!**Q**)!**K??\$**+7!**J**.8%**\$**@-.\$:!

H55.+,&"*9"?.+<(%@"*<"(%B.&'(@+'(B."*)'6*1.&"1+2"N."9(,.7"N2".('?.<"5+<'2a"H55.+,&"1)&'"N."&.%'"1+2"N."?."