



!

!

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

12(! +&%(, \$%-&! . /0, &%! /-! \$2(! 3(/#4%5, ! " 6(#%&5, ! 7, %8(#9%\$: ;! <<. ! =2(#(% , 5-\$(#>! \$2(! +&%(, \$%-&! . /0, &%?!%0!5!&'/'(4%5'!@/A: !-/#!\$2(!A(8('B6(, \$!5, A!90BB/#\$!/-!\$2(!9&%(, \$%-&C # (9(5#&2!5&\$%8%\$(9!/-!\$2(!3(/#4%5, ! " 6(#%&5, ! 7, %8(#9%\$: ;! <<. *!12(!65%, !-0, &\$%/ , !/-!\$2(! . /0, &%! %0! \$/! 599(99! \$2(! # (5'%5! /-! 9&%(, \$%-&! # (9(5#&2! 5&\$%8%\$(9! \$/! A(\$#6%, (! \$2(! 65%, ! B#%/#%\$(9!/-!9&%(, \$%-&!# (9(5#&2!5&\$%8%\$(9!\$/%090(!#(' (85, \$!#(&/66(, A5\$%/ , 9!5, A!\$!/65D(! 5BB#B#%5\$(!B#B/95'9!\$/\$2(!#(' (85, \$!9\$#0&\$0#(9!5, A!/--%&5'9!/-!\$2(!7, %8(#9%\$: *!

!

" #&'(IE*!F/G(#9!/-!\$2(!+&%(, \$%-&! . /0, &%!

F/G(#9!/-!\$2(!+&%(, \$%-&! . /0, &%>!
"!12(!+&%(, \$%-&! . /0, &%!&/#A%, 5\$(9!9&%(, \$%-&!5&\$%8%\$(9!5!\$2(!7, %8(#9%\$: H!
I"!12(!+&%(, \$%-&! . /0, &%!65D(9!#(&/66(, A5\$%/ , 9!\$/\$2(!7, %8(#9%\$: ! " A6%, %0\$#5\$%/ , ;!\$2(! " &5A(6&!. /0, &%!;\$2(!65%, !(A0&5\$%/ , 5'!0, %9!C!9&2//9!/, !%090(9!/-!9&%(, \$%-&!5&\$%8%\$: H!
. *!J / , %\$/#9!#(9(5#&2!5&\$%8%\$(9!5, A!90B(#8%0(9!\$2(!B#/8%0%/, !/-!#(9(5#&2!9\$5, A5#A9H!
K*!L(8%(G9!5, A!90BB/#9!#(9(5#&2!B#/M(&\$9!5, A!B#/M(&\$!B#/B/95'9!@59(A!/, !B#/@'(69!5, A! &25''(, 4(9H!
N*!F#/#6/\$(9!\$2(!%, \$#/A0&\$%/ , !/-!6/A(#, !%, , /85%8(!#(9(5#&2!6(\$2/A9H!
O*!K(8('B9!5!B/'&: !/-!9&%(, \$%-&!#(9(5#&2!5, A!%, , /85\$%/ , !5&\$%8%\$(9!/-!\$2(!7, %8(#9%\$: !5, A! 65D(9!&25, 4(9!5, A!5AA%\$/ , 9!\$/%!\$5D%, 4!%, \$/!5&&/0, \$!\$2(!P%0%\$, 4!#(5'%5H!
Q*!12(!+&%(, \$%-&! . /0, &%!; G%2! \$2(!%, 8/'8(6(, \$! /-! \$2(! 7, %8(#9%\$: ! R05'%\$: ! " 990#5, &(! S-%&(! (9\$5@%02(9!#%\$(#%5!-/#!(85'05\$, 4!9&%(, \$%-&!#(9/0&(9!5, A!#(9(5#&2!B#/A0&\$%8%\$: !-/#! \$2(!B0#B/9(9!/-!(85'05\$, 4!#(9(5#&2!#(90'\$9!5, A!5&5A(6&!9\$5--H!
1"!12(!+&%(, \$%-&! . /0, &%!G%'!A(8('B!#(&/66(, A5\$%/ , 9!\$/\$2(!7, %8(#9%\$: !5A6%, %0\$#5\$%/ , ! /, !%6B#/8%, 4!\$2(!#(9(5#&2!(, 8%#/ , 6(, \$!5, A!&/ , A%\$/ , 9H!
T*! J 5D(9! 5! A(&%0%/, ! 5, A! 90@6%9! #(' (85, \$! #(&/66(, A5\$%/ , 9! \$/! \$2(! 7, %8(#9%\$: ! 5A6%, %0\$#5\$%/ , !/, !9&%(, \$%-&!B0@%'&5\$%/ , 9H!
U*! +0BB/#9! 9&%(, \$%-&! # (9(5#&2! %, 9%\$0\$(9! 5, A! /\$2(!#! 9&%(, \$%-&! 599/&%5\$%/ , 9! 5, A! (, 90#(9! (--(&%8(!&/#A%, 5\$%/ , !@(\$G((, !\$2(6H!
<*!K(-, (9!5!%0\$!/-!5'!9&%(, \$%-&!B#/A0&\$9!\$25\$!, ((A!\$!/@(!#(8%(G(AH!
J *!05&%%\$5(9!\$2(!%, \$(4#5\$%/ , !/-!9&%(, \$%-&!V!#(9(5#&2!5, A!\$(5&2%, 4!B#/&(99H!
W*!F#/#6/\$(9!\$2(!A(8('B6(, \$! /-!#(9(5#&2!5&\$%8%\$(9!5!\$2(!7, %8(#9%\$: !5, A!5@#/5AH!
S*!K(8('B9!B#B/95'9!-/#!-0, A%, 4!9&%(, \$%-&!5&\$%8%\$(9!5!\$2(!7, %8(#9%\$: !5, A!6B#/8%, 4!\$2(! # (9(5#&2!%, -#59\$#0&\$0#(*!

!

" #&'(!a*!1(#6% 5\$/ , !/-!\$2(!50\$2/#%\$: !/-!\$2(!+&%(, \$%-&! . /0, &%!
12(! 50\$2/#%\$: ! /-! \$2(! +&%(, \$%-&! . /0, &%! %! \$(#6% 5\$(A! A0#%, 4! \$2(! #(/#45, %]5\$/ , ! /#!
'\0%A5\$/ , !/-!\$2(!7, %8(#9%\$: *!
!

" #&'(! b*! c/%, \$! 6(((\$, 4! /-! \$2(! +&%(, \$%-&! . /0, &%! 5, A! \$2(! " &5A(6&! . /0, &%! /-! \$2(!
7, %8(#9%\$: !!
)*!T, !\$2(!&59(!B#/8%A(A!-/#!%, !\$2(!#(40'5\$/ , 9!/-!\$2(!7, %8(#9%\$: ;!%\$!%B/99%@(!\$/12/'A!5!M/%, \$!
6(((\$, 4!/-!\$2(!" &5A(6&!5, A!+&%(, \$%-&! . /0, &%*9*!
E*! 12(! 6(((\$, 4! /-! \$2(! +&%(, \$%-&! . /0, &%! 5, A! \$2(! " &5A(6&! . /0, &%! %! &25%#(A! @: ! \$2(!
. 25%#B(#9/ , !/-!\$2(!" &5A(6&! . /0, &% ;!5, A!%, !2%#15@9(, &(!/#!@: !\$2(!A(&%/ , !/-!\$2(!65M/#%\$: !
/-!\$2(!B(#9/ , 9!B#(9(, !\$5!\$2(!M/%, \$!6(((\$, 4;!@: !\$2(!. 25%#B(#9/ , !/-!\$2(!+&%(, \$%-&! . /0, &%*"! !
M/%, \$!6(((\$, 4!%#150\$2/#%\$] (A!-!%\$!%#15\$\$ (, A(A!@: !6/#(\$25, !25'-!/-!\$2(!-0"!6(6@(#92%B!/-!\$2(!
+&%(, \$%-&!5, A!" &5A(6&! . /0, &%*9;!@0\$! , /!'(99!\$25, ![!6(6@(#9!-#/6!(5&2!&/0, &%*!
X*!12(!A(&%/ , !5!\$2(!M/%, \$!9%\$%, 4!925'!@(!65A(!@: !5!65M/#%\$: !/-!\$2(/9(!B#(9(, \$!@: !/B(, !
8/\$, 4*! 12(!M/%, \$!A(&%/ , !%# 65A(!% , !\$2(!-/#6!/-!5!#(9/'0\$/ , ;!G2%&2!%#9%A, (A!@: ! \$2(!
&25%#B(#9/ , 9!/-!\$2(!" &5A(6&!5, A!+&%(, \$%-&! . /0, &%*9*!
!

" #&'(!)d*! c/%, \$! A(&%/ , ! /-! \$2(! +&%(, \$%-&! . /0, &%! 5, A! \$2(! " &5A(6&! . /0, &%! /-! \$2(!
7, %8(#9%\$: !!
12(!M/%, \$!A(&%/ , !/-!\$2(!+&%(, \$%-&! . /0, &%!5, A!\$2(!" &5A(6&! . /0, &%!/-!\$2(!7, %8(#9%\$: !
5A/B\$9>!
" ?!7, %8(#9%\$: !#(9(5#&2!B#%/#%\$(9H!
! ?!T, \$(, 5'!0, %8(#9%\$: !9\$5, A5#A9!-/#!#(9(5#&2!5, A!%, , /85\$/ , !5&\$%8%\$(9H!
. ?!/\$2(!#!%90(9!G%\$2, !\$2(!50\$2/#%\$: !/-!\$2(!" &5A(6&! . /0, &%!5, A!\$2(!+&%(, \$%-&! . /0, &% ;!
G2%&2!#('5\$(!\$/!\$2(!9&%(, \$%-&!#(9(5#&2!5&\$%8%\$(9!/-!\$2(!7, %8(#9%\$: ;!%-!5!M/%, \$!6(((\$, 4!5, A!
M/%, \$!A(&%/ , !%#(\0#(A!@: !5\$!'(59\$!)VZ!/-!\$2(!&/6B/9%\$/ , !/-!\$2(!" &5A(6&! . /0, &%!/#!V!
5, A!\$2(!+&%(, \$%-&! . /0, &%*!
!

" #&'(!))*!1#5, 9%\$/ , 5!F#/8%\$/ , 9!
12(! 9\$5\$0\$(! /-! \$2(! +&%(, \$%-&! . /0, &%! (, \$(#9!%, \$/!-/#&(!OB/ , !5BB#/85'!@: !/#A(#! /-! \$2(!
F#(9%A(, \$*!0#/6!\$2(!A5\$(!/-!(, \$#: !%, \$/!-/#&(!/-!\$2%#!+\$5\$0\$(!/-!\$2(!+&%(, \$%-&! . /0, &% ;!5, : !
&25, 4(!V!5AA%\$/ , !\$/!%#1925'!(, \$(#!%, \$/!-/#&(!OB/ , !&/ , 9%A(#5\$/ , !/-!\$2(!A#5-\$!56(, A6(, \$!@: !
\$2(!" &5A(6&! . /0, &%!5, A!5BB#/85'!@: ! \$2(!/#A(#!/-!\$2(!F#(9%A(, \$*!
!

" #&'(!))*!1#5, 9%\$/ , 5!F#/8%\$/ , 9!
12(! 9\$5\$0\$(! /-! \$2(! +&%(, \$%-&! . /0, &%! (, \$(#9!%, \$/!-/#&(!OB/ , !5BB#/85'!@: !/#A(#! /-! \$2(!
F#(9%A(, \$*!0#/6!\$2(!A5\$(!/-!(, \$#: !%, \$/!-/#&(!/-!\$2%#!+\$5\$0\$(!/-!\$2(!+&%(, \$%-&! . /0, &% ;!5, : !
&25, 4(!V!5AA%\$/ , !\$/!%#1925'!(, \$(#!%, \$/!-/#&(!OB/ , !&/ , 9%A(#5\$/ , !/-!\$2(!A#5-\$!56(, A6(, \$!@: !
\$2(!" &5A(6&! . /0, &%!5, A!5BB#/85'!@: ! \$2(!/#A(#!/-!\$2(!F#(9%A(, \$*!
!

" #&'(!))*!1#5, 9%\$/ , 5!F#/8%\$/ , 9!
12(! 9\$5\$0\$(! /-! \$2(! +&%(, \$%-&! . /0, &%! (, \$(#9!%, \$/!-/#&(!OB/ , !5BB#/85'!@: !/#A(#! /-! \$2(!
F#(9%A(, \$*!0#/6!\$2(!A5\$(!/-!(, \$#: !%, \$/!-/#&(!/-!\$2%#!+\$5\$0\$(!/-!\$2(!+&%(, \$%-&! . /0, &% ;!5, : !
&25, 4(!V!5AA%\$/ , !\$/!%#1925'!(, \$(#!%, \$/!-/#&(!OB/ , !&/ , 9%A(#5\$/ , !/-!\$2(!A#5-\$!56(, A6(, \$!@: !
\$2(!" &5A(6&! . /0, &%!5, A!5BB#/85'!@: ! \$2(!/#A(#!/-!\$2(!F#(9%A(, \$*!
!