```
! "#$%&'!(%&)*#!"+,-#!!
./)*+,/#0+,!1!2+'/*3'+4+!!
5+,*#6+7!0&'!!"#$%&'()#*'(!#'+#,-%-$"!!
(++,0/$#0+,!8#9/+$#'!0&!'#!!."$"/'#0"(12,3'(!"4-("'/&:;,+!0&'!5'0)\%6(5\%2&"&"7'-(8'#(."(97\%),+#"*\%:7(;""\%".!<(=>?!
@#!.#;#$#\%!(%;#!
!
(+$!BC*,+DE\%!(+$)\&$)+!(+$)\*/\%9/+$#'!F#!/0+!#\&,,/7#$0+!2,G9\*/9#: &$\*\&!\&!2,+1\&9\*+!0\&!
,&H+,:#!9+$)\*/\%9/+$#'!\&$!0+)!0/,&99/+$\&$)I!'+4,#,!'#!2#,\*/9/2#9/3$!0\&!'#!:#1+,J#!0\&!'#)!
+,4#$/7#9/+$\&)!0\&!'#!)+9/\&0\#0!9/6/\&!0\&!:#$\&,#!F+,/7+$\*#'\&!1!\#;,/!\&'!\%\&4+!2+'J\*/9+!9+$\!#!
2#,\*/9/2#9/3$!2+'J\*/9#!9+$\9,&\*#!0\&!'\#!9\%O\#0\#$\$#!\#!\*,#6\D)!0\&!2,+2\\&\)\*#)!0\&!\&H+,:#!
&'\&9\*+,#'!1!0\&!'#!'\&1!0\&!\#)+9/\#9/+$\&\)!\&\$!;-)M\%\O\#!0\&!\$\$#!'\&110\&!2\#,\*/0+)!2+'J\*/9+)\\!5\#,\#!
H\$\&)!0\&!\$\\&\\*,#!2,+2\\&\\*\\*!0\*!\&\\*\\*,#*\L4/9\#!\&\)!\$\&\9\&\\#,\+!\#$\#'/7\#,!;,\&6\&:\&\$\\&\\*\\$\\!0\&!\&\)\*+)!
#,\*J9\%'+)0;'/\$\O\#\\&\!!
```

"G)!4,#6&!&\$!*L,:/\$+)!1!*L9\$/9#!9+\$)*/*%9/+\$#'\!\&'!#,*J9\%'+!/\$*,+0\%9\&!)\%;,\&2*/9/#:\&\$*\&! %\$#!H%&\$*&!O/)*/\$*#!1!)%2&,/+,!O&!'&4/*/: /O#O!1!O&!H%&\$*&!O&!O&,&9F+!M%&!)&!)%2&,2+\$&! 2+,!&\$9/:#!0&!'#!9/%0#0#\$J#\\!@#!#2&'#9/3\$!#!%\$!+,0&\$!,&6+'%9/+\$#,/+!2,&&)*#;'&9/0+\!M%&! 9,+\$+34/9#: &\$*&!2,&9&0&!#!'#!9+\$)*/*%9/3\$!:/): #&!&,0)+;&,#\$/7#!#'!Q)*#0+!+!&)*#;'&9&!)%!)+;&,#\$J#!&\$!*+,\$+!#!)%!:/):#!&U/)*&\$9/#A!\$+!H%&,#!O&!L'A!9+:+!9+,,&)2+\$O&!#!%\$! Q)*#0+!: +0&, +1:0&!+,0&\$!9+\$)*/*9/+\$#'N!W&!&)&!: +0+!)&!2%'6&,/7#!'#!)+;&,#\$J#!0&'!9/%0#0#\$+!2#,#!9%': /\$#,!&\$!'#!#;&,,#9/3\$!0&!*+0#!'&4/*/: /0#0!9+\$)*/*%9/+\$#'I!&'!)+;&,#\$+!\$+!&)!)+;&,#\$+!2#,#!9#:;/#,!&'!+,0&\$!1!&'!,L4/:&\$!M%&!L'!:/):+A!9+:+!)+; &, #\$+A!)&!O/+N!

Q'!#,*J9%'+!&\$9/&,,#!%\$#!0+;'&!9+\$*,#0/99/3\$I!%7('<=, *\$'!&!

```
Q)*&!#$G'/)/)!1!&'!#'%:;,#:/&$*+!0&!'#!9+$*,#0/99/3$!*&$0,J#$!9+$)&9%&$9/#)!
H\%90# : \&\$*\#'\&)!2\#,\#!*+0+!\&'!2,+9\&)+!0\&!,\&9+\$)*,\%99/3\$!0\&'!Q)*\#0+!1!0\&!,\&H+, : #)!0\&!'#)!
'&1&)!1!0&!'#!:/):#!(+$)*/*%9/3$\\!b(3:+!&)!2+)/;'&!\\%&!'+)!9/\%0#0#$+)!9\%;#$+)!2\%&0#$!
&K&,9&,\&'!2+0&,\&\#, *$"O,7$,!1!$+!*&$4#$!2+0&,!$/!: &9#$/):+)!,&9+$+9/0+)!2#,#!
.\&H+, : \#, !'\#! (+\$)*/*\%9/3\$A!M\%\&!\&)!\%\$\#!\&U2,\&)/3\$!O\&!\&)\&!2+O\&,!)+;\&,\#\$+cd!
 \$!\&4\%$0+!\#,4\%:\&$\*+!\&\)\*,\/;\#!\&\$!M\%\&!\)\!6\&:+\)!\#!\((+\$)\*\\%\\9/3\$!9+:+!\\$\!G,;+\!0\&!
,#:/H/9#9/+$&)!'34/9#)\!9+$!)\%!#,*/9\\'#0+!M\%&!,&)2+$0&!#!\\$!+,0&$!0&!4&$&,#9/3$!0&!
2+0&,11!0&,89F+)1!&*+$9&)!&'!#,*19%'+!D_`19/&,,#!1!;'/$0#!%$!2+0&,10&'!Q)*#0+!M%&!$+!
&)*G!O&H/$/O+!&$!$/$4%$+!O&!'+)!#,*J9%'+)!O&!'#!(+$)*/*%9/3$!M%&!2,&9&O&$!#'!#,*J9%'+!_!
9+:+!0&H/$/*+,/+!0&!'#!H%&$*&!0&!'&4/*/:/0#0!1!)+;&,#$J#!2+2%'#,&)\\!!
8/$4%$+!0&!'+)!&'&: &$*+)!1!2,/$9/2/+)!9+$!'+)!M%&!&'!Q)*#0+!9%;#$+!)&!;'/$0#!
9+$)*/*%9/+$#': &$*&!2.&9&0&$!#!'#!)+: &.#$J#!&$!'#!H+.: %'#9/3$!9+$)*/*%9/+$#'N!@#!
)%9&0&$\!)\$!0&)2,&$0&,)&!'34\/9#: &$*&!0&!&''#\!)+'+!2#,#!'\:\/*#,'#!1!$&4#,'#\!!
W&!&)*#!: #$&,#!&'!#,*J9%'+!D_`!&)!&$!1!2+,!2,/$9/2/+!/$9+$)*/*%9/+$#'\!&$!'#!: &0/0#!M%&!
*+:#!O/)*#$9/#!O&'!&%&,9/9/+!:/):+!O&!'#!)+;&,#$J#\!$+!)+'+!O&!'#!M%&!2%&O&!)&,!&%&,9/0#!
&\\#, \*\\"O, 7\\\, \A!\)\\$+!\*\#: ;\L\$!O\&!\\#!M\\&!\\&!\&\\, 9\&!2+,!\,\&2\,\&\)\&\\*\\#9\/3\$\\!\@+\)!\&\\&4\/O+\)!2+,!\&\'!
2%&;'+!2#,#!M%&!'+!,&2,&)&$*&$!&$!'#!R)#:;'&#!8#9/+$#'!$+!2%&0&$!,&2,&)&$*#,!)%)!
/0&#)!0&!9#:;/+!0&!%$!+,0&$#:/&$*+!M%&!)&!)%2+$&!$#9/0+!0&'!:#$0#*+!2+2%'#,\!!
Q)*#)!#2,+U/: #9/+$&)!#!'+)!#,*J9%'+)0;'/$0#K&!)+$!;G)/9#)!2#,#!%$#!,&H+,:#!
9+$)*/*%9/+$#'\!1#!\\&#!2'#$*\&#0#!\0\&!:#$\&,#!\4'+;#'!+!\0\&!:#$\&,#!\&\)2\&9JII/9#\!X/$!\&:;#,4+\!!
6/)*+!&$!'#!2,+2/#!0/$G:/9#!2+'J*/9#!9%;#$#\!\&!2'#$*&#!\\$!0/\\&:#!4&\\&.\#'!2\#,\#!*+0+\)!'+)!
#9*+.&)!2+'J*/9+)!M%&!&)*G!:#.9#$0+!\%)!2.G9*/9#)!1!'&4/*/:#$0+!&'!9#:/$+!+!'#!6J#!
F/*3./9#!0&!&6+'%9/3$!+!9#: ;/+!0&)0&!'+)!F&9F+)!#'!0&,&9F+\lambda!0&)0&!'#!,&#'/0#0!2+'J*/9#!#!
#'!#$0#:/#K&!'&4#'!1!9+$)*/*%9/+$#'N!O$!*L,:/$+)!F/)*3,/9+)!1!2+'J*/9+)!&)*#!&6+'%9/3$!
,&H'&K#!*,&)!9%&)*/+$&)!&)&$9/#'&)!O&'!+,O&$#:/&$*+!O&'!Q)*#O+!9%;#$+N!!
5,/: &.#I!'#!6+'%$*#0!1!'#!#99/3$!2+'J*/9#)!&$!(%;#!$%$9#!)&!F#$!9+$)*,%/0+!&$!'+!
H%$O#: &$*#'!)+;,&!'#!;#)&!M%&!+H,&9&$!'#)!/$)*/*%9/+$&)!;%,+9,G*/9#)!1!'#!:/):#!
(+$)*/*%9/3$N!@#)!2,G9*/9#)!0&'!O)*#0+!H%&,+$!:#,9#0#)!2+,!'#)!$&9&)/0#0&)!0&'!4+;/&,$+!
1!H%$0#0#)!&$!%$#!)&0/9&$*&!&!/$#*,#2#;'&!>&6+'%9/3$!9+:+!H%&$*&!0&!0&,&9F+N!X/$!
/$)*/*%9/+$#'/O#0!$+!F#;J#!:#$&,#!0&!:&O/,!'#!&H&9*/6/0#0!0&!'#)!2+'J*/9#)!2-;'/9#)!$/!0&!
0\&'/: /*\#,!,\&)2+\$)\#; /'/0\#0\&)A!'\&4\#'/0\#0!1!9\#: 2+)!0\&!\#99/3\$N!W\&!\&)\#!: \#\$\&,\#!\&'!Q)*\#0+!
)/: 2'&: &$*&!#9*%#;#!1!9+: 2'/9#;#!'#)!0/$G:/9#)!&$!*+0+)!'+)!G:;/*+)!0&!'#!6/0#!)+9/#'N!
Q$!&'!9+$*,#)*&!0&)*,%9*/6+!&$*,&!'#!#99/3$!P&)2+$*G$&#V!0&'!,L4/: &$!1!'#!,&#'/0#0A!'#!
2,G9*/9#!2+'J*/9#!#)%:/0#!&)!0&!F&9F+A!$+!0&!0&.&9F+N!@#!2+'J*/9#!0&)&::+9#!
/$&6/*#; '&: &$*&!&$!'#!%,4&$9/#!1!$+!&$!'+)!#9*+)!+,0&$#0+)!1!9+$*,#)*#0+)!9+$!1!0&)0&!
'#!'&1\!R)J!)&!#9*\#:#!&$!'#!L2+9#!0&'!/$:+6/'/):+!1!#)J!9+:/&$7#!#!#9*\#,)&!&$!'#!L2+9#!
0&!'#!#2&,*%,#I!'#!2,G9*/9#!9+:+!9,/*&,/+!0&!'#!#99/3$A!$+!'#!'&1N!!
X&4%$0#I!&'!0/6+,9/+!0&!'#!(+$)*/*%9/3$!9%;#$#!9+$!'#!.&#'/0#0!)+9/#'\\!8/$4\\$+!0&!'+)!
#,*J9%'+)!0&!'#!(+$)*/*%9/3$!2%&0&!)&,!,&)2&*#0+!)/!(%;#!$&9&)/*#;#!1!$&9&)/*#!*&$&,!6/0#!
)+9/#'<sup>4</sup>!<sup>4</sup>89+$3:/9#!<sup>1</sup>!<sup>9</sup>8':%,#'<sup>8</sup>1'| $!F<sup>4</sup>89F+!<sup>2</sup>2+'<sup>3</sup>1'| $9F+!<sup>2</sup>2+'<sup>3</sup>1'| $9F+!<sup>3</sup>2+'<sup>3</sup>1'| $9F+!<sup>3</sup>2+'<sup>3</sup>1'| $9F+!<sup>3</sup>2+'<sup>3</sup>1'| $9F+!<sup>3</sup>2+'<sup>3</sup>1'| $9F+!<sup>3</sup>2+'<sup>3</sup>1'| $9F+!<sup>3</sup>2+'<sup>3</sup>1'| $9F+!<sup>3</sup>2+'<sup>3</sup>1'| $9F+!<sup>3</sup>2+'<sup>3</sup>1'| $9F+!<sup>3</sup>2+'<sup>3</sup>1'| $9F+!<sup>3</sup>1'| $9F+!<sup>3</sup>1'
>&6+'%9/3$!1!0&'!2+0&,!&$!'+)!-'*/:+)!Z]!#T+)!&)!'#!*+'&,#$9/#!0&!'#!/'&4#'/0#0!:#,4/$#'!
9+:+!/\$)*,%: &$*+!0&!)%2&,6/6&$9/#!0&!*+0+)!'+)!#9*+,&)!0&!'#!)+9/&0#0!9%; #$#N!Q'!
)#9,/H/9/+!0&!'#!/$)*/*%9/+$#'/O#0!F#!)/O+!&'!9+)*+A!2&,+!#'!:/):+!*/&:2+!F#!#'/:&$*#0+!'#!
$&9&)/O#0!0&!#9+2'#,!'#)!/$)*/*%9/+$&)!1!'#!(+$)*/*%9/3$!#'!2#J)!,&#'\\!!
S&.9&.#!1!-'*/: #I!'#!'&4/*/: /O#0!)+9/#'!0&!*+0+)!'+)!#9*+.&)\!!+)!&)*#*#'&)!1!'+)!$+!
&)*#*#'&)\\!2&,: /*&!'#!6\\&'*#!#'!0\&;#*&!)+;,\&!'+)!6\#'+,\&)!\\$\/6\&,\)#'\&)!1!\&'!*,\#;\#K+!;\G)\/9+!0\&!
'&4/*/: #9/3$!)+9/#'!$&9&)#./+!2#.#!/: 2%')#.!.&H+.:#)!9+$)*/*%9/+$#'&)&!#'!:#.4&$!0&!'#!
(+$)*/*%9/3$A!*#'!1!9+:+!F#9&!&'!4+;/&,$+N!RM%J!'#!2,&4%$*#!&)I!b2+,!M%L!'#)!,&H+,:#)!
/$9+$)*/*%9/+$#'&)!M%&!F#9&!&'!4+;/&,$+!)+$!'&4J*/:#)\!1!'#)!M%&!2,+2+$&!'#!)+9/&0#0!
9/6/'!$+!'+!)+$c!!
```

Q)*#!-'*/: #!9%&)*/3\$!&)!H%\$0#: &\$*#'!&\$!'#!&)*,#*&4/#!1!'#!*G9*/9#!M%&!0&)2'&4#:+)!0&)0&!(+\$)&\$)+!(+\$)*/*%9/+\$#'!1!0&)0&!BC*,+DEI!:+6&,\$+)!)+9/#'!1!2+'J*/9#: &\$*&!&\$!'#)!