











0:( < .)\$.#!).!J '&,) &! ,!C&#&' ,0!@21R,)\$.#! - '.4' , : !L%\$\$W!  
J . : : \$))&&K!

L>&#&0,(0@0' &C+@("#\$2#0C(#&%+&Y(+,(+\*-&\* ' &' (-\$,3" "\$#-(@\$\*-+\*3\$3,(+C"#S%&C&\*-\$A(  
"\$2#0C,?(

L>&#&0,("#\$2#0C(#&%+&Y,(, >\$34'(J&(#\$3+\*4.(@\$\* '3@-&' (&%&#. (A+%&(.&0#,?(

L>&#&0,(IMH)S,@3##&\*-(K&\* &#04G'3@0+\$\*("#\$2#0C(Y0,(+C"4&C&\*-&'(+\*(785a(0\*' (  
\*%&#(3\*' &#2\$\*&(0(>\$4+,-+@("#\$2#0C(#&%+&Y?(

L>&#&0,(KGH! <(0\*' (KGHH(>0%&(0,(3AA+@+&\*-\*3CJ&#(\$A(C&CJ&#,(A\$#(->&+#+\* ' +%+ '304(  
@>0#2&,(J3-@\$4&@-+%&4.(-\$\$C0\*.(C&CJ&#,(A\$#(0C0\*02&0J4&("#\$2#0C(#&%+&Y?(

++:( V&%&Y&'(\*&Y4.(+,3&'(7877(!\_H(10\*3046(#&@\$CC&\*0-\$\*(->0-("#\$2#0C(  
@>0\*2&,(+ '&\*+A+&'(+\*(->&(!\_H(C0\*304(>\$34'(J&,(3JC+--&'(-\$(->&(/&\*0-&(A\$#(  
0""#\$%04:(

A:( <40\*\*+\*26(9&%&4\$"C&\*-(P(F3'2&-(H\$CC+--&&6(9#:(M\$.@&(L#2>-6(H>0+#(  
+:( 9#:(M\$.@&(L#2>-(Y+44(@\$\*-0@(->&(IMH)(F\$\$E,-\$#&6(G##\$4(I0#%0&X6(A\$#(>,(  
@\$CC&\*-,(\$\*(->&(N&Q-J\$\$(F3\*'4&'(V&\*04,:(N>&.(Y&#&(\*\$-(0J4&(-\$(@\$\*\*&@-:(  
++:( I\$-(!"#\$%&')](9\$@-\$#0-&(+\*(<.,@>\$4\$2.(gck(@#&' +,h:(N>&@\$CC+--&&(Y0,(  
-#.+\*2(-\$('&@+>#(->&("#\$"\$, &'(g7h('AA&#&\*-(#0@E,(\$A(->&(<9:(H\$\*,+'&#&'(  
>\$Y(->&(0'C+\*+,#0-\$#(\$A(->&("#\$2#0CS,(,040#.(,>\$34'(J&(4+,-&'(g+&:6#&4&0,&(  
+C&(\$#(0,(\*\$-&'(A344,(040#.(h:(H\$\*,+'&#&(>\$Y(->&("#\$2#0C(Y+44(#&@#3+(-,-3'&\*-,:(  
N>&(H\$CC+--&&(Y\$34'(4+E&(-\$+\*%+&-(9#:(D&\*\*\*\$\*(-\$(->&(!"#4(5d(C&&-+\*2:(  
++:( I\$-(!"#\$%&')](F!(G\*%+#\$\*C&\*04(/-3'+&,(gad(@#:( ) \*'&#2#0'30-&h:(V&@&+&%'(  
7B5k87877:( ) \*'3#&(A(->+,( "\$"\$,04(+,(0#&U\$#20\*+X0-\$\*(A(->&('&'0#-C&\*-\$#(  
@\$\*, \$4+'0+\$\*(A(#&,\$3#&@&,:(H\$\*,+'&#&'(->&(>#+\*2(\$A(5\*Y(A0#34-.(+\*  
"\$#\$"\$+\*\$\*(-\$(->&("\$#&@&-&'(a(-,3'&\*-,:(N>&@\$CC+--&&(Y\$34'(4+E&(-\$+\*%+&-(9#:(  
=3\*(F\$E(M3\*2(A\$#(A3#->#&(@40#A+@0+\$\*(-\$(->&(!"#4(5d(C&&-+\*2:(  
+%:( <&\*'+\*2(V&%+,+\$(A#C(10#>-(1&&-+\*2)(I\$-(!"#\$%&')](F!(G4C&\*0#.(  
G'3@0+\$\*(gWUbh(Y+>-(D+&#0@.(;\$@3,(578(@#:#&@&+&%'(57B75B7875:(gI\$-(+\*  
Y\$#EA4\$Yh(!3->\$#)(9#:(V\$,&\*+,(Y\$#E+\*2(\$\*(J3'2&-:(H\$\*,+'&#&'(->&(40#2&(  
0-#+-\$\*(#0-&(Y+>)\*\$(-\$04("#\$&@+\*\$\*(A\$#&0@>(.&0#:(N>&@&Q'&\*,&(-0J4&(>0,(  
'AA&#&\*-,(-3'&\*-&(&,-+C0-&,( "#&@&#:(9#:(V\$,&\*+,(3JC+--&'(0\*Y(J3'2&-(->0-  
Y+44(J&(#&%+&Y&':(  
%:( I\$-(!"#\$%&')](F/B1/(F#+'2&(<\$2#0C(+\*(H#C+\*04(M3,-+@&(5kb(@#:(gV&@&+&%'(  
7B7jh:(<\$\&@&-&'(V&%&\*3&(' \$&,(\*\$-@04#340-&(J0,&'(\$\*(>0'(@\$3\*-(0\*'-(-3+\*+\*\$(  
N>&#&(>\$34'(J&(0(a->(.&0#(A\$#(->&(1/(0\*'(#A4&@&-&'(-3+\*+\*\$(H\$\*,+'&#&'(Y>0-  
0\*\*304(>&0'@\$3\*-(#&"#&,&\*-&'(N>&(>0'@\$3\*-(g58(-,3'&\*-,h(+C&,-3+\*+\*\$( '\$&,(  
\*\$-@04#340-&(-\$(->&(#&%&\*3&6(+&+,@04#340-&'(\$\*(j@\$C"4&-+\*2(-,3'&\*-,:(I\$(  
3"'0-&(#&@&+&%'&':(  
%:( N>&#&@&+,(0("\$"\$, &'(J3'2&-(A\$#(->&(!\_H(->0-(9#:(!.'+\*(Y+44(@\$40J\$#0-&(Y+>(  
->&(H\$CC+--&&(\$\*:(

T\_\_:( !\_H() "'0-&)(9#:(I3#0\*(!.'+\*6(!.,\$@+0-&(<#\$\$,-(A\$#(!@0'&C+@(!AA0#,(  
0:( /&"-:(78756(IM/=G(@>0\*2&'(->&("#\$"\$,04(#[3#&C&\*-(0\*'('3"'0-&'(->&(C0\*304(  
gR/=G(P(!\_Hh:(N>&(C0\*304(0\*'4+\*E,(0#&("\$,-&'(\$\*4\*+&:(  
J:( ;\$3#(C0)\$#(@>0\*2&,(?(->&("\$#&@&,(\$A(0""#\$%04(+,->&,(0C&6(J3(->&(#&[3#&C&\*-,(0\*'(  
0""4+@0+\$\*(0#&(#&%+&,'&':(  
5:( !@0'&C+@([304+-.(  
7:( G%+'&\*@&(\$A(40J\$#(C0#E&-('&C0\*',(  
c:( 93"4+@0+\$\*(A("#\$2#0C,(+\*(IM(g)3,-+A.(->&(\*+@>&(Y&(0#&(\$AA&#\*2h(  
k:( /-0-&C&\*-\$A(#&,\$3#&@&,(  
@:( IMH)(C3,-(@>0\*2&(+,(0""4+@0+\$\*(0-&(#&#.(,-&"(-\$04+2\*(Y+>(!\_H(#&[3#&C&\*-,)(  
@\$\*-&\*-(0\*'(\$Y\$#EA4\$Y:(  
':( <\$2#0C(0\*\*\$3\*@&C&\*-(+,(04,\$04-&#&'(N>&("#\$2#0C(C3,-(J&(A0#(C\$#&(@\$C"4&-&(0-  
->+,( "\$\*+&:(  
&:(

A:( <+"&4+\*&(+(C"\$#-0\*-(,\$(' &"0#-C&\*-, (C3,-(4&-(->&(<#\$\$,-S,(RAA+@&(E\*\$Y(0J\$3(->#&#(+\*-&\*+\*\$,-(\$(' &&&4\$"(0\* .("#\$2#0C,:(  
2:( 9#:(= &\* '&#,\$\*(+,@3##&\*4. (->&(<#&,+ '&\*-\$A(->&(!\_H(H\$3\*+46(0\*' (>#&("#&,&\*-, (IMH) (\$\*(->&(<#&,+ '&\*-\$, (H\$3\*+4:(  
>:( G:2:6(< , . 9(&Q@&&' , (IMH) S, (C+, ,+\$\*(0\*' (>0, (0' '++\$\*04(+\*A\$#C0+\$\*(->0-(C3,-(J&(0' '#& , &' :(  
+:( L \$#E,>\$"] (Y0\*-, (-\$(C&&-(Y+>("#\$2#0C("#\$"\$ , &# ,:(L &' : (7Uk:(  
\:( 9\$(\*\$- , 3JC+-(0\* . (\*&Y("#\$"\$ , 04, (3\*+4(->&(IMH) (04+2\*C&\*-(Y+>(!\_H(+,@\$C"4&-&' : (F. (C+'UM34. (IMH) (>\$34' (J&(#&0' . (-\$(, 3JC+("#\$"\$ , 04, : (9&"0#-C&\*-, @0\*(Y\$#E(\$\*("#\$"\$ , 04, (3\*+4(->&\*6(J3(->& . (>\$34' (@\$\* , 34(->&(<#\$\$ , -(RAA+@&(J&A\$#&>0\*' : (IMH) (04, \$(C3,-(' &-&#C+\*&(->&(A&0,+J+4+ . (\$A(->&(\*&Y("#\$2#0C6(@\$\* , + '#+\*2(->&(4+C+&' (J3' 2&-:(N>&(+\*-&\*+\*\$\*(+,\*\$-(-\$"#&U0""#\$\$&6\3,-(-\$"#\$\$+' &(23+' 0\* @& : ; \$#&Q0C"4&6(0#&(->&("#\$2#0CS, (&\*#44C&\*-( "\$\$&@+\*\$ , (0\*' (J3' 2&- (#&04+, +@e(

\_m:( ) "' 0-&]\_N(K\$%&#\*0\*@&B\_N(H\$\* , 34-0\*-6(9#:( ! 0#\$( ! , E06(T<6(H+&A(R"#&0+\*\$ , (RAA+@&#(R"#&0+\*\$ , (P\_\*\*\$%0+\*\$ , (P( 1 , : (< . 44+, (/X0\*+6( ! , , \$@+0-&(T<(A\$#(\_\*A\$#C0+\*\$ (N&@>\*\$4\$2. (  
0:( V"E(K#\$3" (#&"\$#- (+\*@43' &' (k7(#&@\$CC&\* ' 0+\*\$ , (A\$#(->&(0' C+\*+, -#0+&(-\$#&' 3@&(@\$, -, ( \$#(&\*>0\* @&#&#&3&:\_N(Y0, (\$\*&(0#&0:(F# . 0\*(H\$>\*&6(A\$#C&#(H\_R(\$A(->&(H) I Z (/ . , -&C6(#&#&Y&' (IMH) S, (\_N, " &\* ' +\*2(0\*' ("#\$@& , & , : (  
J:(\_N(K\$%&#\*0\*@&)](0"#\$@& , , (\$A(2\$%&#\*0\*@&(Y0, ("#& , &\*-&' (->0-(+\*@43' &' (0\*(0' %+, \$# . ( J\$0#'(C0' &(3"(\$A(->&(C0\$#(, -0E&>\$4' &# , ) , &\*+\$#4&0' &# , >+"6(0@0' &C+@BA3\*+@\$\*04(3\*+-( , 3J\&@-(C0--&#(&Q" &#-, (g/ 1 G, h6\_N(0' %+, \$# . (J\$0#' 6\_N(/ 1 G, 6\_N(4&0' &# , >+"6(0\*' ('#\$&@- (#& [ 3& , - \$# , : (N>&("#\$@& , , (+\*@43' &' (->&(A\$4\$Y+\*2(">0, & , ) (, 3JC+ , , +\$\*(0\*' (+\*+@4(#&%&Y(">0, &6(& , +C0+\*\$\*(">0, &6("#& , &\*-0+\*\$\*(">0, &6(0\*' (0""#\$%04(">0, & : (  
@:( / "&\* ' +\*2)(i5` : b(C+44+\$\*(, " &\*-\$\*\_N(' 3#+\*2( ; Z(785dU7875(Y+>(k8 p ("3-(\$Y0#'( / 00 / ( , \$43-\$\* , B / \$A-Y0#&BD+@&\* , & , : (N>&\_N(9&"0#-C&\*-(0\*' (3\*+%&# , + . UY+&' (&' &' (#&"#& , &\*-&' (ka p (\$A(-&(-\$-04\_N, " &\* ' : (  
' : ( V&@\$CC&\* ' 0+\*\$ , ) (  
+:( \_C"4&C&\*-(0\*\_N(2\$%&#\*0\*@&("#\$@& , , (->0-(Y+44(&\* , 3#&\_N("#\$)&@-, (\$#(+\*%& , -C&\*-, (>0%&(0@4&0#(J3 , +\*% , , (\*&&' 6\3 , -+@+0+\*\$\*6(0\*' (04+2\*C&\*-(-\$(3\*+%&# , + . (\*&&' , (J&A\$#&(A3\*' +\*2(0\*' ("#\$@3#&C&\*-(C\$%& , (A\$#Y0#': (  
++:( \_N("#\$@3#&C&\*-(, >\$34' (J&(+\*@43' &' (+\*(044\_N("#\$@3#&C&\*-, : (  
+++:( / \$A-Y0#&B / 00 / ( , &#%+@& , >\$34' (>0%&(0(C0\*02&# : (  
+:( H\$\*-#0@-, (>\$34' (J&(&%0430-&' (&%&# . ( . &0# : (  
%:( ! ("#\$@& , (A\$#(-#0@E+\*2(4+@&\* , & , (>\$34' (J&' &%&4\$"&' : (  
%+:( 9&%&4\$"(, -0\*' 0# , (A\$#(' & , E-\$ , 6(40"- \$ , 6(0\*' (\$->&#(' &%+@& , : (  
%+:( 1 +\*+C+X&(->&"3#@>0, +\*2(\$A(" &# , \$\*04(" #+\*-&# , : (  
%+:( V&' 3@&(\$#(&4+C+\*0-&(' 3"4+@0+&("#\$' 3@-, B, &#%+@& , : (  
+Q:( ! (#&%&Y(\$A(' &"0#-C&\*-, (\$A-Y0#& , >\$34' (J&(@\$\* ' 3@-&' (-\$(' &-&#C+\*&(A(\*&Y(A&0-3#& , (0\*' (A3\*+@\$\* , (+\*(<\$"4& / \$A-(d:7(@0\* (#&' 3@& (#&4+0\* @&(\$\*(\$->&#(@\$, -4. ( ->+ # ' U"0#- . ("#\$' 3@-, : (  
&\$34' (J&' &%&4\$"&' : (



! '\\$3#\*](k]5k(

V&,"&@-A344.(,3JC+-&'(J.(