
∴;!;D" ~~E")%" \$2\$ - \$1" * + " & (" * H & % " ? * & > A S E " % H) A A " O S " 0) % \$ 1 " + (" K \$) - % " + 2 " % \$ - O & > \$ " * + " * H \$ " = & % * & > *) (1 " % H) A A ") 7 7 A K " * + ") A A " . \$. 0 \$ % " + 2 " * H \$ " 0) ') & (& (' / (& * " \$ ') 1 A \$ % % " + 2 " > A) % % & 2 & >) * & + (" + " 7 + % & * & + (" H S A 1 ; " ? " K \$) - " + 2 " S S 7 \$ & \$ (> \$ " . / % * " \$ 7 - \$ % \$ (* (+ * " A \$ % % " % H) (" % \$ O \$ (* K B 2 & O \$ " 7 \$ > \$ (* " T C 4 U V " + 2 " * H \$ " 1) K % " + 2 " \$ @ / & \$ 1 " 2 / A A B * & . \$ " % \$ - O & > \$] ") A * H + / ' H " % \$. \$ % * \$ % " N & A A " O \$ ") 1 1 \$ 1 " * + ' \$ * H \$ E " \$ O \$ (" & 2 " & (" % \$ 7)) * \$ % > H + + A " K \$) % E & (" > + . 7 / * & (' " K \$) - % " + 2 " % \$ - O & > \$; ")~~

∴;!;D;! " ~~Q (" & (% *) (> \$ % " N H \$ \$ " * H \$ \$ " H) % " O S \$ (" 7 - & + - > \$ * & 2 & >) * \$ 1 " % \$ - O & > \$ " & (" * H \$ " = & % * & > * E " K \$) - % " + 2 " % \$ - O & > \$ " & (" * H \$ " = & % * & > * % H) A A " O S " 1 \$ * \$. & (\$ 1 " O K " / % & (' " * H \$ " 1) * \$ " + (" N H & > H " * H \$ " * \$) > H \$ " . + % * " - > \$ (* A K " ^ + & (\$ 1 " * H \$ " = & % * & > * E ") (1 " * H \$ (" 0) > [1] * & (' " * H \$ ") ((& O \$ %) - K " 1) * \$ O K " * H \$ " (/ . 0 \$ - + 2 " K \$) - % " 7 - \$ O & + / % A K " % \$ - O \$ 1 " T O) % \$ 1 " / 7 + (" > / . / A) * & O \$ " % \$. \$ % * \$ % " 1 / & (' " N H & > H " * H \$ " * \$) > H \$ " % \$ - O \$ 1 " C 4 U " + " . + \$ " + 2 " * H \$ " * & . \$ V ; " Q ((+ " >) % \$ % H) A A " * H \$ ") ((& O \$ %) - K " 1) * \$ O \$ " \$) - A & \$ " * H) (" * H \$ " 2 & % * " \$ @ / & \$ 1 " 1) K " + 2 " % \$ - O & > \$ " & (" * H) * % > H + + A " K \$) - ; ")~~

∴;!;D;9"

∴!;!9"

)%"-\$2\$-\$1"*+!&("H\$"?77A&>)*&+(")(1"

<"

∴;9;`" ?AA"*)(%2\$ ")77A&>)(%E"/7+ (" \$>\$&7*+2"*HS"+22\$ "+2)"7+%&*&+ ("H)AA" \$%7+(1"OK"D"7;. ;"+2"
*HS"(\$S*O/%&(\$%%"1)K;"Z &*H&("H&%"*& . \$">+(%*)&(*E"*HS"7\$ %+(" .)K" \$@/\$%*"&(2+ .)*&+ ("
-\$')-1&(' "HS"%*)*/%" +2") (K"+*HS "7+%&*&+(T%V"2+ "NH&>H"HS,%HS")77A&&\$1E") (1"*HS" a / .) ("
#\$%+ / >\$%"M22&>\$"%H)AA">+ . 7AK"N&*H"%/>H" \$@/\$%*;"

"

∴;9;!5" Q2") ("77A&>)(*2)&AA%"*+)">>>\$7*+ " \$%7+(1"*+)"\$(*)*&OS")%%&' (-.\$(*E+ "NH\$(")AA")O)&A)OAS"
-.\$)(%" +2">+ . . / (&>)*&+ (%7 +O\$ / (% />>\$%2/A"&(">+ (*>*&(' "H)*")77A&>)(*E"*HS" a / .) ("
#\$%+ / >\$%"M22&>\$" .)K"7 +>\$1"*+ "HS"+*HS " \$2\$ \$1")77A&>)(*%;"

"

∴;9;!!" ?(K*\$)>HS-

>;= \$0\$A+7. \$(*)+2)77+7&)*\$&(2+.)&+(-'\$)-1&('6I#6E"HS)A*H"0\$(\$2&%"E")-(1"+*HS"-
-.)**\$ %;"

::<;9" ?AA(+&>\$%"+2"O))(>&\$%"H)AA"0\$7-\$7)-\$1)"%"++(-)"%7+%%&OAS")2*\$-"O))(>&\$%)(1"
7+%%&&+((%) "\$[(+N(E"NA*H"*HS"\$S>\$7*%+(*H)"*O))>(>&\$%"*H)"*O\$>+.\$[(+N(")(1")O)&A)OAS"
)%")-\$%/A"+2"\$)-AK-\$&\$-\$.\$(*,\$%&'(-)*&+(-(+&>\$%"\$*2+*H"(";<;!;9"NA&AA"0\$7+%"\$1"+(-"
\\\$0-/)K"!4*H;"*P)>H(+&>\$%"H)AA"0\$)10\$-%&\$1"OK" a / .)(#\$%+/->\$%"M22&>\$&("HS"
2+AA+N&('N)K%&d"

h — 8+%"*"+(*HS"=%%& &>*NSO%&*\$"
h — P.)&A"*+*HS"1\$%&'(-)*\$1"?%"+&>)&+(-'\$7-\$%\$(*)*&OST%V"
h — P.)&A"*+*\$>HS %""

? 10\$-%&\$. \$(*d" IHS"=%%&-&>*%H)AA")10\$-%&\$"O))(>&\$%"+(&%"NSO%&*\$2+-(+AS%%"*H)("2+/-"
TDV"N+-[1)K%") (1(+*k2K"/(&*" . \$. 0\$-%)) (1"1\$%&'(-)*\$1"?%"+&>)&+(-'\$7-\$%\$(*)*&OS%"+2"
O))>(>&\$%OK"\$.)&A;" ? 10\$-%&\$. \$(%"*H)AA" . &(& .)AAK&(>A/1\$)"1\$%>-&7*%+("2"*HS"7+%%&&+(E"
. &(& . / . "\$S7\$-&\$(>\$E"/)A&2&>)*&+(-\$@/&-1E") (1"*HS"1\$)1A&(\$2+)-/77AK&('E'/(AS%%"*HS"
7+%%&&+(&%"1\$%&'(-)*\$1)"%"+7\$("/(&A"2&AA\$1:""

::<;<" PS>\$7*2+-%/7A/%*\$>HS"7A))>\$. \$(*) (1">+(*>)*\$1*\$>HS %"/()%&&'(\$1"OK"? / /%*"!E"(+ "
O))>(>K">("OS"2&AA\$1")%")-\$'/A)"%&&'(-.\$(*"1/ &("6*\$7%!")(1"9"/(&A&%"*H)"*O\$\$("
)10\$ %&\$1"i(")>>+1))>("N&H"\$%*)O&H\$1"7+>\$1/\$%;"PA&'&O&A&Kd" i (&*" . \$. 0\$-%))77AK&(' "
./%*" . \$\$" . &(& . / . "\$S7\$-&\$(>\$E"/)A&2&>)*&+(-\$@/&-\$. \$(%"*+OS">+(&1\$-\$1"2+)-"
O))>(*"7+%%&&+(:"\ /AAB*% . \$"/(&*" . \$. 0\$-%&(")7+O)*&+(-)K%*"*/%")-\$(+*"SA&'&OAS;" "
a+N\$O\$E"2/AA"+-7)-*B*% . \$"7+O)*&+(-)K"/(&*" . \$. 0\$-% .)K")77AK"2+7+%%&&+("2+)*HS"
%>H+AA"K\$)-&("NH&>H"*HSK")-\$"SA&'&OAS"+)*&("7\$- .)(\$(*%*)% / %;"

::<;<!"8)-*%& . \$\$. 7A+KSS%"j"7+O)*&+(-)K+-\$7\$- .)(\$(*"j)-\$)AA+N\$1"*+))77AK"*+)(K"7+%%&&+(" "
1/-&('HS%>H+AA"K\$)-"H)"*N+/A1")AA+N"*HS . "+&(>-\$)%\$/7"*+!"5" \ IP;"

::<;<9" I+ . &(& . &g\$1&%-/7*%+(*%*/1\$(*%E"2")"O))>(>K"+>>/-%"1/-&('HS%>H+AA"K\$)-)(1"
+/%&&1\$"+2"*HS">A+*\$1"7\$-&+1E"*HS"=%%&-&>*%H)AA"2&AA"*HS"7+%%&&+("N&H")("\$S\$-(A)">)(1&1)*\$:"

::<;D" G+&>\$%"+2"F))>(>&\$%"NA&AA"0\$(-. 0\$-\$1"i("HS"+1\$"-+2"%%/))>(\$;"?77A&>)*&+("7+>\$%&d"
PA&'&OAS"/(&*" . \$. 0\$-% .)K")77AK"2+)"O))>(>K"OK"%/O . &***&(')"(+&A&('S')77A&>)*&+(:"

::<;4" ?(K"-+1&2&>)*&+(*"+)G+&>\$%"+2"F))>(>K%&H)AA" \$@/&\$")(\$N"7+%%&&(')(1">))>(\$AA)*&+("2+ "
)&K">+ . . &*. \$(%"O)%\$1"+(*HS"7-\$O&+/%"G+&>\$%"+2"F))>(>K;"Q(\$*-O&SN"7+>\$%&d" IHS"
=%%&-&>*" .)K"%SA\$>*%HS")77A&>)(*"NH+E"&("HS"^/1' . \$(*"2"*HS"%&*\$")1 . &(&%-)*+--+ "
7+-'- .)1 . &(&%-)*+E"O\$%*" . \$\$%*"HS"(\$S1%+2"*HS"=%%&-&>*%&("2&AA&(")O))>(*"7+%%&&+(:"

::<;L" ?"AA&%"&('"+2"7+%%&&+("2&AA\$1"%H)AA"0\$7+O&1\$1"/7+(" \$@/\$%*"*+*HS"6JI?"+("*HS"2& %*) (1"
2&2*\$\$(*H"+2"\$>H" . +(*H; IHS"=%%&-&>*%H)AA"+22\$-O))>(*"7+%%&&+("%"*+*HS"OS%*"@/)A&2&1\$ "
)77A&>)(*;" i (&*" . \$. 0\$-%NH+)-\$"+22\$-\$1")O))>(*"7+%%&&+("H)AA"H)O\$"+(\$T!V"N+-[&(" "
1)K"+-\$7+(1"*+*HS"+22\$-;" ?"/(&*" . \$. 0\$-%NH+&%"(+*+22\$-\$1")O))>(*"7+%%&&+(" .)KE"
/7+(-\$@/\$%E"-\$>\$OS"OS-O)A"2\$S10)>[1"2+ . "*HS" a / .)(#\$%+/->\$%="7\$)-. \$(*)%"+NHK"
*HSK"NS-\$(+%"\$A\$>\$1"2+)*HS"7+%%&&+(:"

":;<;C" IHS"7->+\$1/-"\$>+(*&(\$1"&("6\$>*k+("::<"%H)AA"(+*)77AK"*+"6\$>*k+(%"::DB::L"/(A\$%"
%7\$>k2k\$1"*HS-\$k(:"

":D;! " IHS"&(k&k)A"1\$(k2k>)*k+(") (1"(+*k2k>)*k+("+2"/-7A/%"7\$ %+((\$A"N&AA"O\$)>>+ . 7A&k%HS1"OK"
*HS" a / .) (" # \$ % + / > \$ % " M 2 2 k > \$ " (+ " A) * \$ " * H) (" * H \$ " \ k 1) K " + >> / k (" ' k (" * H \$ " 2 k % * 2 / AA " N \$ \$ [" k ("
? 7 k AE " k (% + 2) ") % " H \$ K ") \$ [(+ N (; " 8 \$ % + ((\$ A " k 1 \$ (* k 2 k \$ 1 " 2 + " % / 7 A / % k (" ' % H) AA " O \$ " (+ * k 2 k \$ 1 "
N k & H k (" H \$ \$ T < V " 1) K % " + 2 " * H \$ " * k . \$ " * H \$ K ") \$ k 1 \$ (* k 2 k \$ 1 ; " 6 / > H " (+ * k 2 k >) * k + (" % H) AA " > + (% k % * " + 2 "
N k * \$ (" (+ * k > \$ " .) k A \$ 1 " * + ") 1 1 \$ % % " + 2 " \$ > + 1 ") (1 ") (\$.) k A " * + " H \$ " N + [") 1 1 \$ % % ; "

6 / - 7 A / % k (" ' .) K " + >> / - 2 + - * H \$ " 2 + AA + N k (" ' \$) % + (% d "

) ; " — MOS " % *) 2 2 k (" ') * % > H + + A " % k * \$ % " T 6 / - 7 A / % " 8 \$ % + ((\$ A V ; "

0 ; " — # \$ 1 / > \$ 1 " 2 / (1 k (' " k (" % 7 \$ > k) A " 7 + ') . % ; "

> ; " — IHS " * \$. k () * k + (" + 2 ") (" e I ? " 7 + % k * k + (" + " % 7 \$ > k) A " 2 / (1 \$ 1 " 7 + % k * k + (" 2 + ") \$ ' / A) - "
7 \$.) (\$ (* * \$) > H \$ " N H + " H) % (+ " k . . \$ 1 k) \$ " \$ * / (" k ' H % * " + ") 7 + % k * k + (E " > A) % k 2 k >) * k + ("
+ -) " 1 \$ % k ' () * \$ 1 " 7 + % k * k + (; "

= \$ 2 k (k * k + (d " ? (" k (O + A / (*) - K % / - 7 A / % " * -) (% 2 \$ - " k % " + (\$ " k (" N H k > H " * H \$ " \$. 7 A + K \$ \$ " k % " & 1 \$ (* k 2 k \$ 1 " O K "
* H \$ " = k % * - k > E " > + (% k % * \$ (* " N k * H " * H k % " ? - * k > A \$ " : ; D E ") % % / - 7 A / % ; " " ? " O + A / (*) - K % / - 7 A / % " * -) (% 2 \$ - " k % "
+ (\$ " k (" N H k > H " * H \$ " \$. 7 A + K \$ \$ " O + A / (* \$ % - " * + " O \$ " * -) (% 2 \$ - - \$ 1 " k (% * \$) 1 " + 2 ") (+ * H \$ - " \$. 7 A + K \$ \$ "
O \$ k (" 1 \$ % k ' () * \$ 1 ") % ") (" k (O + A / (*) - K % / - 7 A / % " * -) (% 2 \$ - ; " " ? " % / - 7 A / % " * -) (% 2 \$ - " k % ") " O + A / (*) - K " + - "
k (O + A / (*) - K " * -) (% 2 \$ - + 2 ") / (k * . \$. O \$ - " k () > A) % % - + + . " * \$) > H k (' 7 + % k * k + (E " k (> A / 1 k (" " * \$) > H \$ - "
- \$ % + / - > \$) (1 " * -) k (' " % 7 \$ > k) A k % * E " 1 / \$ " * + " + O \$ - B

~~*HS \$) \$>+ . 7\$AA(' " \$)%(%2+ " 1+(' + *HS N&%SE"*HS"%&*\$")1 . &(&0%) * + "%H)AA"1\$>A) \$"
%/ 7A/%"*HS"&(1&0&1/)!"N&%H"*HS"\$) %* = &%* &>*%\$(&+ &*K"&("HS"/O\$>*) \$)+2"*HS"7+%&&+("
1\$>A) \$1"/-7A/%;"G+*&>\$+2"*-) (%2\$-d" IHS"= &%*-&>*%H)AA" (+&2K"/ (&* . \$. OS-%+2"*HS&-"
%/ -7A/%*-) (%2\$-TNHS*HS-"O+A/(*)-K"+-&(O+A/(*)-KV") (1("SN")%&&' (. \$(*"OK"\$.)&A"/&(' "
HS"= &%-&>*%\$.)&A")11-\$%:"~~

~~∴;D;D;! "Q2"*HS"\$>HS "NH+ "%0"1\$>A) \$1"/-7A/%"H)"%\$ OS1"&(") (+*HS "/O\$>*2&\$A1"N&%H&("HS"
7 \$O&+/%"2&OS"K\$) %E"+ "H)"%") .)^+ " + " . &(+ " &(") (+*HS "/O\$>*2&\$A1E"*HS"\$>HS " .)K"
>H+ + %\$"+ "OS">+ . 7) \$1"&(") (K"+2"*H+ %\$2&\$A1%+ ("HS"O)"%&&"+2"= &%* &>*%\$(&+ &*K"2+ "%/ -7A/%"
1\$>A))&&+(-;"~~

~~∴;D;4" Q2"*HS"%&*\$")1 . &(&0%) * + "1\$>A) \$ %"/-7A/%") (&(1&0&1/)"!+ *HS "H) ("HS"+ ("N&%H"*HS"\$) %*"
= &%* &>*%\$(&+ &*K"*HS"%&*\$")1 . &(&0%) * + "%H)AA"& . \$1&)*\$AK"7A)>\$"&("N &&("HS" \$)%(%2+ "
%/ >H"1\$>A) &&+ (") (1"*) (% . &*%*HS . " * + "HS" a / .) (" # \$ % + / - > \$ % " M22 & > \$)) (1 " * + " HS " \$) > HS " T % V "
&(O+&OS1; "IHS"= &%*-&>*%H)AA">+ . 7AS\$*"\$HS"6/-7A/%"I-)(%2\$-"7->+%\$E"&(>A/1&(')AA" I (+N(""
O))> (>\$E"OK"X)->H"!4E"&(" (+ (BA)K+22"K\$)-%; " i (&* . \$. OS-%"NH+)-\$ (+*%*) (%2\$--\$1"OK"
*HS"\$ (1+2"*HS"6/-7A/%"I-)(%2\$-"7->+%\$%H)AA"OS"7A)>\$1"&(") (O)&A)OAS"7+%&&+ ("2+- "NH&>H"
HS,%HS"&@" /)A&2&\$1"&(" % \$ (&+&*K"+1\$-E") % "1\$*- . & (\$1"OK"*HS"= &%*-&>*%"; "Q(")K\$)-& ("NH&>H"*HS"
= &%*-&>*% ">+ (1 / > % *) "A)K+22"+2">\$-*&2&>)*\$1"\$. 7A+KSS%) (1"%&/%\$%7-\$& . & (&)-K"A)K+22" (+&&>\$%"
*+ "\$. 7A+KSS%"+ ("+-OS2+-\$"X)->H"!4E"*HS"*& . \$& (\$"2+-"/-7A/%*-) (%2\$-"%\$*2+-*H"& ("*H&%"
%\$>*&+ (" :D" %H)AA"OS"\$S*\$ (1\$1E"N&*H" (+&*&>\$+2"/-7A/%"7+O&1\$1"*+\$. 7A+KSS%OS"NSS("X)K"
C") (1"!9E"\$. 7A+KSS%"/O . &*%&(') (K"-@/%\$*2+-"O+A/(*)-K"/-7A/%"OK" (+A)*\$-)*H)("X)K"
!DE") (1"*HS"/-7A/%*-) (%2\$-"7->+%\$%N&*H"\$. 7A+KSS% "%H)AA"+>> / - "OS"NSS("X)K"!4") (1"X)K"
<5;"Q(")K\$)-*HS"= &%*-&>*% 1+\$%" (+*% ">+ (1 / > % *) "A)K+22"+2">\$-*&2&>)*\$1"\$. 7A+KSS%E"*HS"/-7A/%"
*-) (%2\$-"7->+%\$%N&*H"\$. 7A+KSS% "%H)AA"+>> / - "OK"X)->H"!4;"~~

~~∴;D;L ZHS(\$OS "*N+T9V"+ " . + \$7\$ %+(%H)OS"*HS%) . \$%\$(&+ &*K") (f&('E"*HS"7\$ %+("*+ "OS"
1\$>A) \$1"/-7A/%"%H)AA"OS"1\$*\$. & (\$1"OK"*HS">)"%&&('"+2"A+%; "6/>H">)"%&&('"+2"A+%; "N&AA") ["\$
7A)>\$"& ("HS"7 \$ %\$ (>\$+2)AA"7\$ %+("%NH+ "H)OS"*HS%) . \$%\$(&+ &*K") (f&(') (1"NH+ ">+ / A1"
OS")22\$>\$1"OK"*H&% "7 +>\$%& ;"~~

~~∴;D;C IHS" a / .) (" # \$ % + / - > \$ % " M22 & > \$ % " H)AA"7 +O&1\$ "N & ** \$ (" (+&&>\$") (1"\$.)&A" (+&&>\$"+ "\$) >HS "%
%/ O\$>*%+ &(O+A/(*)-K") (%2\$ E"%*) && ("HS") / - \$+2"*HS"*) (%2\$ "N&*H" \$) + ("HS \$2+ \$E") (1"
&(2+ . & ("HS" . "+2"*HS& " & 'H"*%1") . \$\$& ("N&*H"*HS"= &%* &>*% \$7 \$ % \$ (*) & OS "&2"*HS"\$>HS "+
-\$@ / \$ % % ;"~~

~~∴;D;:" Z & *H& (") 2 + / BK\$) -7\$ & + 1E"*\$>HS "%NH+ "H)OS"O\$\$ ("1\$>A) \$1"/-7A/%"2+ . ") \$ ' / A) "
7+ %&&+ ("H)AA"O\$"7 \$2\$ \$ (>\$&(" \$ / - (& (" * + " HS "% > H + A " 2 + . "NH& " H " HSK " H)OS"O\$\$ ("
%/ 7A/%\$1; "I\$)>HS "% .)K">+ . 7AS\$*"\$HS")77A&>)"%&&+ (") (K)*& . \$1 / & ("HS"2+ / "TDV"K\$) "
7\$ & + 1">+ . . \$ (>& (" + ("HS& "&(O+A/(*)-K"/-7A/%"1)*\$Tb/AK"!V; ""~~

~~∴;D;`" d""IHS"2+AA+N&("7 +>\$1/ \$ % "%H)AA"OS"/%\$1"\$S\$>\$7*NHS \$& (" "
>+ (2A&>"N&*H">+ . 7\$AA(' " \$)%(%; " a +N\$OS E"*HS"\$7 +O&&+ (%"1+ ("*)77AK"+1\$>A))&&+ (" "
+2"/-7A/%"%*)22")%>H+ + A) (1") (&(O+A/(*)-K") (%2\$ "NHS" \$ "HS"+*)A" / . OS "+2"= &%* &>*% "
7+ %&&+ (%H)"%"+*O\$\$ (" \$1 / > \$ 1; "IHS"7 +O&&+ ("N+ / A1")77AK"+ (AK"&2"*HS"+*)A" / . OS "+2"
>+ / (%\$& ("7+ %&&+ (%H)OS"O\$\$ (" \$1 / > \$ 1; "~~

∴;D;`;! "ZHS("HS"(/.0\$ "2"\$AS . \$(*)K">+/(%\$A+ "7+%%&*%+(%"&%"-\$1/>\$1"&(")(+(BA)K"+22"%&*/)*)&+(" T%>H++A">A+% / \$E">+(%+A&1)*&+(E"+ "+0\$ %*)22&('VE"HS"AS)%*"%\$(&+ "\$AS . \$(*) K">+/(%\$A+ T%V" NH+"&%) \$">\$1\$(&A\$1")(1"\$S7\$ &\$(>\$1")%"")>A)%%+ + . "\$\$)>HS "N&AA"O\$"1\$>A) \$1"%/-7A/%") (1"7A)>\$1"& ("HS"%/-7A/%"\$)\$>HS "7++A;"

"

"

6*\$7"!%H)AA"0\$'k("(\\$0 /) K"!%*) (1%H)AA>+(>A/1\$"+(" ?7 &A"!5*H;" ? (K"7+%&&+ ("*H)*
N)%7+%\$1"\\$0 /) K"!%*+)2*\$ "0/"0\$2+ \$" ?7 &A"!5*H"%H)AA"0\$7) *+2"6*\$7!" ;F>>(>&\$%"
H)\$H\$ =&&* &>*N)%".)1\$)N) -\$+2"7 &+ "*" "\\$0 /) K"!%*E"NH&H" +>> /- \$1"1/ & ("*H\$"
>/- \$(*%>H+ +A"K\$) E"%H)AA"0\$'k(>A/1\$1"1/ & ("6*\$7!" ; ?0)&A)0!\$7+%&&+ (%%H)AA"0\$")%" "
-\$%/A*"+2"M(\$B6*+7"%*)22k('E-\$*k \$. \$(*, \$%&')&+ (%"(+&>\$%) (1") (K"+*H\$ - \$) %+ (%2+ "
NH&H"O)>> (>&\$%"\$S&%* ; "IHS" =&&* &>*%H)AA">+ . 7A\$*\$H\$M(\$B6*+7"%*)22k('7 +>\$%%"OK" (+ "
A)*\$ "%H) (" \\$0 /) K"!4*H%+ "%H)*%*H+%\$7+%&&+ (%".)K"O\$'k(>A/1\$1"*H\$6*\$7!"7 +>\$%%" ? (K"
%/0%\$@/\$(*O)>> (>&\$%" +>> /- & ("')2*\$ " ?7 &A"!5*H"N&AA"0\$".)1\$)O)&A)0!\$*+ " \$.)k(& (" "
%/-7A/%"*\$)>H\$-%"

!!!

∴;4;!∴:"Q2")AA*H+%\$-\$2\$-\$1"2+)"7+%&*k+("1\$>A&("\$*H\$"+22\$-2+ "\$H\$7+%&*k+("A\$)O&("+"7A)>\$-\$(\$*
7+%&A0A\$E*\$H\$("\$H\$7+%&*k+("N&AA"O\$&(>+7+)*\$1"(&*\$+*\$H\$%/7A/%"7+>+\$%&;"

∴;4;!∴:"6\$A\$>*k+(("2+.")-+("*\$H\$>)(1&1)*\$%"H)AA"O\$".)1\$"OK"*H\$="&%* &>*7 &(>&7)A"+"
1\$%&'(\$T%VE"O)\$%1"+(")(1"2+AA+N&("\$*H\$"\$>+.".\$(1)*k+(("2+."*\$H\$&(\$ O&N"7)(\$A;"IHS"
&(\$ O&N"7)(\$A"+1\$%&'(\$T%V"%H)AA"&(>A/1\$d"

);" IHS"7 &(>&7)A"+ "1\$%&'(\$S\$]"

0;" 0)'&(&('B/(&*".\$.O\$T%VE"2+."*\$H\$%>H++A"%&SE"\$A\$>\$1"OK"*H\$O)'&(&('"/(&*%&*)22"
)%&&'(\$1")*\$*H\$%>H++A"%&\$]7 &+&K"%H)AA"O\$"*+&(>A/1\$'→)1\$"A\$O\$A") (1,+ "%/O\$>")\$)E"
NHS"\$)77A&>)OAS;"

>?"(\$NAK"+7\$(\$1"%&*\$%E"6J I ?"N&AA")77+&(*7)(\$A".\$.O\$-%;"

1;" M*\$H\$ "7) *k>&7)(%"/./%)AAKB)'-\$1"/7+("OK"*H\$7 &(>&7)A") (1"6J I ?B-\$7-\$%\$(\$)*&O\$%"+(" *H\$>+."&*\$S\$;"

∴;4;9" _____"

JA)%% + + . "7+%&*k+(&*\$H)*"O\$>+."\$")O)&A)OAS"+ "+7\$(")%)"-\$%/A*" +2"&(B=&%* &>*7\$-.)(\$(\$*
>A)%% + + . "\$>)>H\$ %&))>>\$7&('7+%&*k+(&%)*)+*\$H\$ "%&*\$%,\$1\$7) *.\$(\$%E"7\$ "∴;4;!N&AAE")2*\$") (K"
A+>)A")%&&'(. \$(\$>H)('\$%E"O\$&(>+7+)*\$1"(&*\$+*\$H\$%/7A/%"7++A;"

PA&'&O&AA&*K"2+-"*-)(%2\$d"-i (&*".\$.O\$-%"/%*"\$.S\$*" . &(& . / ."SS7\$-&\$(>\$") (1"@/)&2&>)*k+(" -
-\$@/&-\$.\$(\$%") (1".)K" (+*"O\$&("7-+O)*k+(-K"%&)* /%&("+-1\$-""OS"\$A&'&OAS"2+-"*-)(%2\$-&(&(*+
O)>)(*"7+%&*k+(&E"\$S>\$7"*H)*"7-+O)*k+(-K"/(&*".\$.O\$-%".)K")77AK"2+-"O)>)(*"7+%&*k+(&
2+-"*H\$%>H++A"K\$)-&("NH&>H"*H\$K")-\$"

1;"

!D"

"
0;" ~~0) ')&(&('B/(k*" . \$. 0\$ T%VE"2 + . "H\$">H++A"%k*\$E"%\$A\$>*\$1"OK"H\$"0) ')&(&('"/ (k*"%)22"~~
~~)%&k' (\$1)"*H\$">H++A"%&k*\$J"7 &+ &k*K"%H)AA"0\$ + "k (>A/1\$' -)1\$"A\$0\$A") (1, + "%/0^\$>*) - \$)E"~~
~~NH\$ "\$)77A&>)0A\$;"~~
"
>;" ~~?*"(\$NAK"+7\$(\$1"%&k*\$%E"6JI?"N&AA")77+k(*7)(\$A" . \$. 0\$-%;"~~
"
1;" ~~M*H\$ "7) *k>k7)(%/" . /*/)AKB) ' \$\$1"/7+("OK"H\$"7 &(>k7)A") (1"6JI?B \$7 \$%\$(*)&k0\$%" + ("~~

P1/>)*&+("OK*H\$a / .)("#\$%+ /->\$%M22k>E"/7+("H\$-\$>+ . . \$(1)*&+ ("2%*)22"ASOSA"
k(%* />*&+ (")1 . k(k%*)*+ %;"IHS\$ \$)%+(%2+ ") (K" \$>+ . . \$(1\$1*)(%2\$ "+*H\$*H)("2+ "
-\$)%+(%"+2% / 7A/%%H)AA"OS"1\$&(\$)\$1&("N k&k('"OK*H\$a / .)22"ASOSA" k(%* />*&+ (")A"
)1 . k(k%*)*+ %") (1"1\$AAOS \$1"*+ "H\$a / .)("#\$%+ /->\$%M22k>\$"NH&H"%H)AA"7 +O&1\$")>+7K"
+ "H\$")22\$>\$1\$>H\$ %;"6 />H"7\$ %+((\$A%H)AA"OS*)(%2\$ \$1&(*+) ("SS&%&('"O)> (>K" k(""
NH&H"*H\$K"N&AA"OS")OAS"+7\$ 2+ . . " + "\$22\$>*&O\$AK;"

"

" ?%"+ + ("%) (")1 . k(k%*)*+ "*")(%2\$ "%%O&k('">+(%&1\$ \$1"OK*H\$a / .) ("#\$%+ /->\$%"
=7) * . \$(E"O / ("AS%*%*H) ("H& *K" T<5V" N+ [k('"1)K"%2+ . "H\$ k(k%*)*&+ ("2"*H\$"
)1 . k(k%*)*&OS*) (%2\$ E"*H\$"%&\$")1 . k(k%*)*+ "+" a / .) ("#\$%+ /->\$%" \$7 \$%\$ (*)&OS" T+ (AK"
OK"1&\$>*&+ ("2"*H\$a / .) ("#\$%+ /->\$%"=7) * . \$(*"N&AA" . \$\$*"N&H"*H\$"\$. 7A+K\$\$"+d"

"

);" Q(2+ . ."H\$"\$. 7A+K\$\$"+2"*H\$"7 +OAS .]"

"

O;" PS7 \$%%" \$)%+(%*H)*") (")1 . k(k%*)*&OS*) (%2\$ "%%O&k('">+(%&1\$ \$1") (1"NH)*")>*&+ (%"
N+ /A1"AS)1"*+) (")1 . k(k%*)*&OS*) (%2\$ -]"

"

" ZH\$(\$OS "7+%&OASE">\$ *&2k>)*\$1\$. 7A+K\$\$%"N&AA" (+*OS" . +OS1"N&H+ /"*H\$& ">+(%\$(E) ("1"
N&AA"OS"&OS(")AA")O)AA"OAS"+7*&+ (%)*%+ "NH&H"%&\$*H\$K"N&AA"OS" . +OS1;"IHS"7) *&O\$")' "\$"
H)")1 . k(k%*)*&OS*) (%2\$ %" .)K"OS"\$22\$> /)\$1"N&H" + "N&H+ /"\$. 7A+K\$\$">+(%\$(;"

"

IHS"=k%*-&>* .)K*-) (%2\$-)" / (k* . \$. OS-"O\$>)/%"+2%/O%*) (1)-1"7\$-2+- .)(>\$"+-+*H\$-"
>+(>\$-("%-\$')-1k('H&%H\$-")O&A&*K"*+ %/ >>\$%2/AAK"7\$-2+- . "H\$1 / *&\$%"+2"H&%H\$- "7+%&k&+ (:"
IHS-\$)%+(%"+2- "H\$*"-) (%2\$-%H)AA"OS"7 +O&1\$1"*+ "H\$a / (k* . \$. OS-"&("N-k&k('")%"+ + (" "
2\$)%&OAS"7-k+ -"*+ "H\$*"-) (%2\$-;" ? "%&\$")1 . k(k%*)*+ -" + " a / .) ("#\$%+ /->\$%"-\$7-\$%\$ (*)&OS"
%H)AA" . \$\$*"N&H"*H\$"/ (k* . \$. OS-"*+ "SS7A)& ("H\$-\$)%+(%"+2- "H\$*"-) (%2\$-)"%"+ + (")2\$)%&OAS"
7-k+ -"*+ "H\$*"-) (%2\$-;" i (k* . \$. OS-%%H)AA"OS*"-) (%2\$--\$1& (*+ "SS&%&('"O)> (>&\$%"+2- "NH&H"
*H\$K")-\$"@ /)A&2&\$1:"