





A; >. 64>: +/40775T", >>A0; * <. N1", >/>; 50">+/*8. +9"A>+80"; *+A*: *K, >7>3. , . "
 +/; *75="H">+/*897>3"- 0"/>; D>4*B"A>8. / . , *70"?58*">+7>4*7*7*". 3077>"
 D0>D; *L. 20+, . T"A; . >; . /0/*T1""+, >; 00"; 0@*8**6*: *2. 1"+4B6*7750"+"
 470/; 077. 3"K, >7>3. 20+, . 3"; *64. / . 03"+/; *75=""
 R">: 7*". 6"+*35T"D8*475T"A; >?803"4"/>"4; 03B"6*, 8S2*8*+9"4"/>31"
 2/>?51"+>: 7>N"+/>; >751">?0+A02. /9"K, >7>3. 20+, 0S"?06>A*+7>+9"; *64. / . B"
 K, >7>3. , .)"B". 30S"4"4. : 0": >+ /0A", "70>?T>: . 353"/>4*; *3". "0+80D*31"
 A>+, >89, 0"K, >7>3. , *">204. : 7>"?58*": 0L. <. /7>N"A>"37>D. 3"A>6. <. B3="R1"+
 : ; 0D>N"+/>; >751"A>A; >?>4*/9">+6: */9"70, 0S": >8D>+; >270S">+7>40": 8B"
 ?0: 0Z0D>; *64. / . B1"D: 0"7*@. 3"0+/0+/407753"A*; /70; >3"+; 0: . "+/; *7"]*A*: *1"
 +, >; 001"4"/>"4; 03B"?58>" 4; >A0N+, >0">>?Z0+/4>="H">?Z03"/>D>1"2/>", "\$CCC#
 30"D>: 0"0"7*+"?58*"+>6: *7*": >+/*/>27>"0; 9067*B": >D>4>; 7>#A; *4>4*B"?*6*1"0"



%&' ()"R6"/*, >D>"4>A; >+*"70?>89@>0"0/>2707. 0"4": *77>3"+802*0="Q>; D>48B"

4>>; 0- 07. 03)">7*"4T>: . 8*"4"?>89@. 0"A8*75". 8. "K/>">/: 0897">"/"4*@0D>"

40: >3+/4*"E"(*, "K/>"/0T7. 20+, . "A; >T>: . 8>E"

F ' GH' G(I H)"P0/1"/>; D>48B"4>>; 0- 07. 03"4+0D: "*"b "K/>"*?+>8S/7">"/: 0897*B"

+/*/9B1"K/>">/: 0897>0"40: >3+/4>1">/: 0897*B", *3A*7. B1". "35"7. , *, >D>"

>/7>@07. B", "K/>30"70". 308. "4>>?Z0="

%&' ()"c58>"37>D>"L*, />; >41", >/>; 50"48. B8. "+. 897>"7*"A>8. / . , 0". ">/7>@07. B="

W; >N: d3+B"A>"7. 3". "+A; >+. 3)"48. B8. "8. ">7. "7*" />; D>48S", *, . 3# />">?; *6>3E"

R1"4"2*+/7>+/. 1">: 7.



K/>"A>#7*+/>BZ030i="R"4>/"4"K/>/"3>307/">: 7*"?"@7B"0- 0"?58*"; *6; 0@07*1"

A>/>3"4"A; B3>3"KL. ; 0"A>, *654*S/" ; *6; 0@07. 0"4/>; >N"?"@7. ="[/>1", >7027>1"

A>+80: 0SZ. 0"4+0"+>?5/. B"4564*8. "@>, ="





4>A; >+5"; 0@*8. +9"4">+7>47>3"7*">+7>40": >40; . B"30- : 0"+/; *7*3. 1"30- : 0"
 , >7, ; 0/753. "8S: 93. ="

H>/"/>D: *0"37>D. T"?58"4>A; >+1"0"8S: 0N1", >/>; 50": *80, . ">/A>8. / . . .)"
 hV"2/>"+>?+/4077>"A; >. 6>@8>E"G0N+/4. /0897>"8. "/0"A; . 2. 751", >/>; 50"?58. "
 >6402075"4", *20+/40">+7>4*7. N": 8B"4/>; - 07. B"4"R; *, 1"K/>"?58">
 : 0N+/4. /0897>"/*, ". 8. "70/E"[/>"70"80, *4+/4>Ei ="F BD, >"D>4>; B1": 03*8. "
 ; ; 0D. 3. "+8>4*3. 1"7>"B"+, * - 0)"hP0"80, *4+/4>"8. Ei ="R"A>/>3"A>: /40; : . 8>+91"
 2/>": *1"K/>"80, *4+/4>1"*K/>">67*2*0/1"2/>": * - 0"7*">2079"45+>, >3"+0; 9067>3"
 0; >470", 0: *"/>; D*@. 1"4">?Z03#/>1"; 0: , >": >T>: B/1"/*, . 0"4>A; >+5"4>63>- 75="

 H>A; >+5"4>N75". "3. ; *XCC)!\$)CCY"3>D0/"; 0@*/9+B">: 7>+/>; >7701"70"A; >+/"7*"

 >+7>40"A; 0: A>8>- 07. B1"70"L *, />41". ": 8B"7*+"K/>"?58">A; 0: 080775N"0; >, ="[/>"

 67*2. /1"2/>"4"/>; D>480"3>- 0/"?5/9"/>- 0"+*3>01"A>K/>30"70- 7>1", *, "

 D>4>; . /+B1"0: 4>. /91"0/; >. /9"47. 3*7. 0". "A>: T>: . /9", "; *6753"*+A0, / *3"

 />; D>4>D>"46*. 3>: 0N+/4. B"?>800"47. 3*/0897>". "?>800">+/>; >- 7>="H>/K/>/"

 4>/0; >, "B"A>37S1"35"K/>"470/; . ">?+0- : *8. "+, >880D*3. ="I 7">+/*8+B"0"7*+"A>"

 . />D0"K/. T"+>?5/. N="

%&' () [/>"?58"A0; 45N"/*, >N"64>7>, ": 8B"4*+ ". 8. ", *, *B



A>8. / . , >N"D>+0: *; +/4*="H"R; * , 01"K/>">+>40; @077>">204. : 7>1"?58"4>A; >+"70"

8. 27>+/. 1"*A>8. / . , . "?>800"45+>, >D>"0; >47B1"A>K/>30"4>/="

%&' ()" (* , "A; >. +T>: . 8. "A0; 0D>4>; 5">"4+/0A807. . "&>+ . . "4"HQI E" ` />"6*: 0; - . 4*8>"

4+/0A807. 01"A>#4*@030"3707. SE"c58>"8. "0"4*+">Z0Z07. 01"2/>"

*: 3. 7. +/; *<. B"c0@*"A5/*8*+9"A>3>29"4+/0A807. S"&>+ . . "4"HQI ". "4+B20+, . "

+>: 0N+/4>4*/91", * , 1">?+/4077>"D>4>; B1"A; 0: A>8*D*S/"*30; . , *7+, . 0", >880D. "

4"7*@. T"A; 0: 5: 0Z. T". 7/0; 49SE"

F ' GH' G (I H)"P0"0"307B"7037>- , >"+4>0>?; *67>01"3>- 0/1"3707. 01"7>"4>/"K/. "4>/"

D>: 5"XCC)!a)CCY"



R"K/>/"4*8"4+0"4; 03B"; *6; *+/*8+B="R"+7*2*8*": 8B"7*+"K/>"?58"/*, >N"
 >2079"?>89@>N"4>A; >+) "V"A>: : 0; - , *">7*"4"203E"hf 5"; *: 5"4. : 0/9"&>++. S"4"
 HQI i="P">0+8. "7*3"6*: *S"//*, . 0"4>A; >+5)"hQ>": 0N+/4. /0897>"8. "; *: 5E"R8. "
 2/>1"7*A; . 30; Ei "P">+>"4; 030703"K/>">Z0Z07. 0"307B8>+9". "307B8>+9"
 +>40; @077>"4": ; 0D0S"+/>; >70="F 5"7*2*8. "A>7. 3*/91"2/>"8S?>0"
 A; . +>0: . 707. 0", "/*, >30"0; >47S"+>D8*@07. B"/; 0?00"/: >, *6*/089+/4"/>D>1"2/>"
 /5"+0; 90607"4"+4>. T"7*30; 07. BT1"2/>"/5"A; . +>0: . 7. @9+B". "XCC)!e)CCY"
 +3>- 0@9"45A>87B/9"+4>. ">?B6*/089+/4*1"2/>"/5"?0: 0@9". 30/9"70>?T>: . 350"
 6*, >75": 8B"K/>D>="

R"7**+*3>3": 0801"4>/"0N2*+1"35"A>7. 3*031"2/>"/; 0?>4*7. B". "MUV". "
 ' Ml", *+*SZ. 0+B"6*, >7>: */0897>N"; 0L>; 351">7. "?58. "4">37>D>3">A; *4: *75=" "
 R"+0N2*+"35": 08*03"4">/7>@07. . "/0T"+/; *71", >/>; 50"A; . +>0: . 7BS+/+B", "HQI 1"
 *?+>8S/7>"/>"- 0"+*3>01"A; 0, ; *+7>"A>7. 3*B1"2/>": 7>": 08>"A>+/*4. /9"A>: A. +9"
 A>: "A; >/>, >8>3">"A; . +>0: . 707. . 1"*": ; 0D>0": 08>"45A>87B/9"+4>. "
 >?B6*/089+/4*="

P>": 8B"/>D>1"2/>?5"K/*"K4>8S<. B"A; >. 6>@8*o"4>#A0; 45T1"
 A>/; 0?>4*8>+9"37>D>"4; 0307. 1"*"4>#4/>; 5T1"+>40; @077>">204. : 7>1"2/>"4"
 A>6. <. . "7*@. T"*30; . , *7+, . T", >880D"?58>"37>D>"40Z0N1", >/>; 50"?58. 1"70"
 , *, "D>4>; B/1">7. "- 0"+*3. "D>4>; B/)"hrstuvwxyz{|}~i="Q*3"70"?58>"
 ; *<. >7*8975T"/; 0?>4*7. Nl"; *<. >7*8975T">?>+7>4*7. N="P*A; . 30; 1"4>A; >+ "
 , >/>; 5N", *+*8+B": >+/0A*", "; 0+0; +*3)"A>7. 3*0/01"; 0+0; +5"4". . +/>; . 20+, . ". "4"



; *3, *T": 0N+/40SZ0N" (>7+/. /0<. . "b "K/>"; 0+0; +51", >/>; 50"A; . 7*: 80- */"

7*; >: 01", >7/; >8. ; 0S/+B"D>+0: *; +/4>3="I ?0+A02. /9": >+/0A"35"3>- 031"7>"35"

70"3>- 03": *4*/9"30- : 07*; >: 750"A; *4*". "D*; *7/ . . 1"7. ">: 7**+;/; *7**"4"6: ; *4>3"



; *47>", "802@0301"+"/>2, . "6; 07. B". 3077>"; 57, *1"+"/>2, . "6; 07. B"

, >7, 0; 07/7>N"+; 0: 5". "A; >2. T"40Z0N=""

R"70+, >89, >"+8>4"?0, 4*897>">": ; 0D>N"+/>; >701"+, * - 031"70"A0; 0D>4>; >4="

P0"A0; 0D>4>; 7*B"+/>; >7***?+>8S/7>"2d/, >"+80: >4*8**6**D; *L. , >3"

A>8. /. 20+, . T"+>?5/. N="Q>"0+/'9", *, "/>89, >"2/>#/>"A; >. +T>: . 8>"7**

A>8. /. 20+, >3"0; >4701"7*@. "A0; 0D>4>; 5"b "67*0/01", *, "0"3*@. 75"D8>T70/"

3>/>; 1", >D: *"0"700", >72*0/+B"?076. 71"/>"A>". 70; <. . ">7**A; >06- *0/"0Z0"

, *, >0#/>"4; 03B". ">+/*7*48. 4*0/+B="*7*+/*, "XCC)\$C)CCY"?58>"70+, >89, >"; *61"

7*2. 7*B">/"/*, . T"4* - 75T"KA>T"b "4* - 7>N">+/*7>4, . 1": 8. /0897>N">+/*7>4, . 1"

+4B6*77>N"+. 640+/753", >7L8. , />3"+%; 06. 0N1", >D: *"A0; 0D>4>; 5"

A; . >+/*7>4. 8. +9"A; *, /. 20+, . "7**D>: ="W>/>3"0"7*+"?58": 8. /08975N"A0; 0; 54"

4"+4B6. "+/031"2/>"4"\$CCe"D>: 0"7*@. "; 0, >4>: . /08. "&>++. . 1" (*6*T+/*7**". "

c08>; 0++ . ">?kB4. 8. ">"+>6: *7. . "Q*3>- 077>D>"+>S6**". "A0; 0D>4>; 5"

A; . >+/*7>4. 8. +9"7*: >8D>=""

F 5"A; . +>0: . 7. 8. +9", "HQI " *?+>8S/7>"20: >31"A>/>30"2/>"4>/"4"/>"

4; 03B1"4"/0"30+B<51"0"7*+"?58>": >+/*/>27>"?06>?8*27>0"70?>1"7*+, >89, >">7>"

3>- 0/"?5/9"?06>?8*2753"4"30- : 07*; >: 7>N"A>8. / . , 0="H"K/. "30+B<5"4+0"?58>"

>/7>+. /0897>"A>, >N7>1"7>", *, "/>89, >"35"A; . +>0: . 7. +91"+7>4**"2/>#/>"

7*2*8>+9="Q*", "2/>1"0+8. "?5"35"70"0+A08. "A>", *, . 3#/>"A; . 2. 7*31": * - 0"

/0T7. 20+, . 31"B": 03*S1"35": >"+. T"A>; "?5"408. "K/. "A0; 0D>4>; 5="* . ?>"408. 1"

8. ?>">/, *6*8. +9">/"K/>N". : 0. 1"+, >; 00"4+0D>=""



%&' ()"Q>"0+/9"A>802*0/+B1"45"A>A*8. "4">, 7>="

F ' GH' G(I H)"F 5"A>A*8. "4">, 7>1"/*, "+8>- . 8. +9", *; /5="G*1"4">?Z031"T>; >@>1"2/>"

/*, "A>802. 8>+91", *, "D>4>; . /+B="

%&' ()"G*1"45">?; */. 8. "47. 3*7. 0"7*">: 7. ". 6", 8S2045T"+>?5/. N"4"A>8. / . , 01"

, >/>; 50"+4B6*75"+<40/753. "; 04>8S<. B3. "4"A>+/>+>40/+, >3"A; >+;/ *7+/40="

XCC)\$)\$CCY"H>"37>D>31"A>; ; *N70N"30; 0"4>"37>D. T": ; 0D. T"+L0; *T1"A>2/. "4>"

4+0T1">7. ". 308. ", >8>+*897>0"67*207. 0": 8B". 630707. B"A>8. / . , 1"A>40: 07. B"

. "/*, ": *800="I /; *6. 8. +9"8. ">7. "7*"4*@0N": 0B/0897>+/. E"H5"0- 0">?; */. 8. "

47. 3*7. 0"7*"A; ><0+ "A0; 0D>4>; 75N1"45"3>- 0/0"0Z0"7037>D>; *+, *6*/9">"

/>31", *, "4"4*@0N"+L0; 0"?58. "4>+A; . 7B/5"<40/750"; 04>8S<. .)"4"•, ; * . 70". 8. "

4"(5; D56+/*70E"

F ' GH' G(I H)"P0"0"7*+/*31"D: 0">204. : 7>0"48. B7. 0"?58>"b "K/>"%; 06. B1"•, ; * . 7*="

%; 06. B"b "A>+, >89, 0"A>+80"/>D>1", *, ">+;/ *B"L *6*", >7L8. , /"?58**6*40; @07*1"

. "?58. "+: 08*75"4+0"A>+80: 0SZ. 0": 0N+/4. B1"+4B6*7750"+; *6; 54>3"

K, >7>3. 20+, . T">/7>@07. N"b "%; 06. B"6*B4. 8*">"/>31"2/>">7*7*30; 07**

?8>, . ; >4*/9"A0; 0D>4>; 5">"A; . +>0: . 707. . "&>+ . . ", "HQI ="[/>"?8>, *: **@8**": >"

A>+80: 70D>"3>307/*1". "6: 0+9"7*: >1"; *: . "+A; *40: 8. 4>+/. 1", >7027>1">/30/. /91"

2/>">7*"?58**A; 0>?; *6>4*7**4"70, 0S": >D>4>; 077>+/9"30- : 0"&>+ . 0N". "

%; 06. 0N"0; 0D08. ; >4*7. B"70, >/>; 5T"46*. 375T"A; >?803"4"+L0; 0"/*3>- 077>D>"

; 0D08. ; >4*7. B". "4>"37>D>3"?8*D>: *; B"- 0+/, >30": *4807. S"+>+/>; >75"

' 4; >A0N+, >D>"M>S6*". "M>0: . 7d775T"U /*/>4="Q>"0+/91"0+8. "?5"K/>D>": *4807. B"



70"?58>1"/>"%; 06. B". 308*"A; *4>"40/>1"*7*@0"A; . +>0: . 707. 0", "HQI ="H+0"

A; >. +T>: . /", >7+07+0+>3". "4; B: "8. "D; 06. 7+, . 0"A0; 0D>4>; Z. , . ">/+/0A. 8. "?5"



/>; D>45N"; 0- . 3">: 7>30". "?0; 0/0"7*" +0?B">?B6*/089+/4>1"2/>"45"70"?0: 0/0"0D>"
A; 0: +/*48B/9": ; 0D>30". "/* , >0"- 0">?B6*/089+/4>"?0; 0/0"A0; 0: ": ; 0D. 3="H5"
: >8- 75"45?; */9="XCC)\$e)CCY"V"0, ; *. 7+, . 0", >880D. "+7*2*8*"7*3"D>4>; . 8. 1"2/>)"
hV"45"70"?>N/0+91", >D: *"4+0"A; >. 6>N: 0/1"35"45?0; 03"4*+i ="F 5"67*8. 1"2/>">7. "
/>"- 0"+*3>0"D>4>; B/"7*@. 3", >880D*3". 6"c; S++08B1"2/>)"hH5"70"?0+A>, >N/0+91"



70?>89@>N">?6>; "7*". 3077>">+>/; 0: 7. 20+/4>". "/>; D>48S"4"+L0; 0"+089+, >D>"
 T>6BN+/4"E"

F ' GH' G(I H)"P0"B"/>D: *"7*270"+"h7>- 0, "c0@*i1"A>/>30"2/>"+"K/>D>1"+>?+/4077>"
 D>4>; B1"4+B". +/>; . B". "7*2*8*+9="hP>- , . "c0@*i "A0; 4>7*2*897>"A; . @8. "4"
 &>++. S)"2/>"/*, >0"h7>- , . "c0@*i E" [/>"20/40; /. 75", 0; . <5"4"D80?>, >N"
 6*3>; >6, 01", >/>; 50"A; . T>: . 8. "4"&>++. S"4"4. : 0"D03*7. /*; 7>N"A>3>Z. "
 +7*2*8*="J"6*+/*8"/>/"A0; . >: "4; 0307. 1", >D: *"4"30+B<"370"?58>"A>8>- 07>1", *, "
 7**>/<*": 40T": 0/0N1": 4*", . 8>D; *33*"K/. T"h7>- 0, i". , . 8>D; *33"+*T*; *="I 7. "
 ?58. ">2079"A>A08B; 751"A>+, >89, 0"?>89@0"0+/9"4"D>; >: 0"F >+, 40">+>?>"?58>"
 7020D>="Q*", . 0"?58. "4; 0307*="V", >D: *"0- 0"A; >D; *335"?58. ">+/*7>48075". 8. "
 >7. "?58. "+>, ; *Z0751"; 57>27*B": >8B"*30; . , *7+, >N"A/. <5". 3077>"4"L>; 30"
 7>- 0, o"A>2030"K/>"A; >. 6>@8>E"W/>/>30"2/>"/0T7>8>D. B"?58**45?; *7**
 +/; */0D. 20+, . "/*, . 3">?; *6>31"2/>"4"A/. <0"+*3>0": ; *D><077>0"3B+>": 8B"
 8S: 0N1", >/>; 50"+2. /*S/1"2/>"/>7. "40: 0/"6: >; >45N">?; *6"- . 67. "b "K/>"D; 0: , *1"
 **7>- , . "7. , />"70"0+/1"A>K/>30"7>- , . "+/>B/" : 0@04>": 8B"/0T1", />"A; 0: A>2. /*0/"
 : . 0/. 20+, >0"A. /*7. 0="V": 8B"7*+1", />"A; 0: A>2. /*0/"A>?>89@0"3B+*4, 0+7>D>1"
 - . ; 7>D>1"7*+", *, "; *6"K/. "7>- , . ">2079"+. 897>"0+;/; *. 4*S/"XCC)\C)CCY"

P>">7. ">2079": 0@045="R", >D: **4", >7<0"qC#T"D>: >4"4+/*8"4>A; >+>"/>31"
 2/>"7*3"?5"7*: >"+4>0"A/. <04>: +/4>", *, #/>"; *64. 4*/91"A>/>30"2/>"/70"A>#
 : ; 0D>30", *, "3>- 7>"A; >, >; 3. /9"+/; *70">+"!aC"3. 88. >7*3. "A>/; 0?. /080NE"

I



A>/; 0?807. . "?58*70"?>800"aC_1"*4+0">+/*897>0"?58". 3A>; /="G*1"K/>"?58">
704>63>- 7>="R", >D: *"35"D>4>; . 8. "+"A/. <04>: *3. ". "+"/03. ". 740+>; *3. 1"
, >/>; 50"?58. "D>/>45"48>- . /9"+; 0: +/4*"4"; *64. /. 0"K/>N">/; *+8. 1", >7027>1"
>7. "A>, *654*8. "7*"<. L; 51"7*">2079"A; >+/0S", *; /. 70)"hF 5"D>/>45"
. 740+/. ; >4*/9": 079D. 1"0"7*+"0+/9"4>63>- 7>+/. "A>+/. ; >. /9"7>450"
A; >. 64>: +/4*1"7>"45"A>+3>/; . /0"7*"<0751"35"70"+3>- 03"7. , >D: **+"/*, . 3. "
<07*3. "7*"7>- , . "7*"K/>/"; 57>, "45N/. 1"0"7*+"A; >+/"70"?0: 0/"7. 20D>"
A>, 0A*/9="V"7*3"70- 7>"\D>: *1"2/>?5"K/>"A; >. 64>: +/4>"7*2*8>; *?>/*/9". "0Z0"
, *, "3. 7. 303"D>: *"#a1": 8B"/>D>1"2/>?5"A>802. /9"K/. ": 079D. ">?; */7>i ="
R740+/. <. >775N"<. , 8"70"/>D: **"?58"4"; *N>70"e#n"80/1"A>K/>30"7*2*8. +9"
/>; D>450"4>N75)"35"7*2*8. "44>: . /9">D; *7. 207. B"4"; *3, *T"7*@. T"6*, >7>4"
/>D: *@7. T"7*"44>6"A/. <5="P0"/>89, >. 6"MU V1"7>"MU V"?58. "D8*4753. "
A>+/*4Z. , *3. "A/. <51"A>K/>30">7. "A>+/. ; *: *8. "4"K/>3"A8*70"?>89@0=""
V"4", >7<0", >7<>4"4+B"K/*". +/>; . B"A0; 0; >+8*"4"A0; 0D>4>; 5"A>"HQI 1"D: 0"
*30; . , *7<5"+, *6*8.)"h, fxy1"0+8. "45"T>/ . /0"A>A*+/9"4"HQI 1"/>"45"7*3"
: >8- 75": */9"0+8>4. B1", >/>; 50"?0: 0/"A; . 038035": 8B"7*@. T"L0; 30; >4i ="€>/B"
A/. <0"4"MU V"A; >. 64>: B/"7. , *, . 0"70"L0; 30; 51"A/. <0"4"MU V"XCC)\\$)CCY"
A; >. 64>: B/">D; >3750", >3?. 7*/5"A; >35@807750"b "70". T"L0; 30; *3. ">2079"
/; 0: 7>"7*64*/91"K/>"70": >3*@7BB", 0; . <*"="R"K/>1": 0N+/4. /0897>1"?58. ">: 7. ". 6"
+*35T"/; 0: 75T"A0; 0D>4>; >4"A>": >+/0A0"7*"; 57>, ="W>2030"35": >D>("7)- 0. 2B0. 4(;). 1(" .)0.



A0; +A0, /. 45". ">7. "A; 0, ; *+7>"67*8. 1"2/>"7. , *, >0": *4807. 0"70"6*+/*4. /"
7. , *, 0S"+/; *70"; *: . "A; . +>0: . 707. B", "HQI ">/, *6*/9+B">/"+0Z0+/40775T"
A8*7>4"+4>0D>"; *64. /. B="Q>0+/9"45?>; "?58"; >47>"/*, >N)"8. ?>"35"
+>D8*@"*03+B"7*"A; 0: 8>- 07. 0"MU V". "K/>">67*2*0/1"2/>"35"+0Z0+/40770S"
: >8S"; 57, *">+/*48B03"6*"MU V1"8. ?>"35"7*T>: . 3": ; 0D0S"L>; 3080="
H>/"K/0"L>; 3080"35"7*@8. "+A>3>Z9S": ; 0D. T"+/; *71"+A>3>Z9S"



A; >40: 07**4"+4B6. "+"*7, <. B3. 1", >/>; 50"+>6: *8. "A; >+>#7*A; >+>?">+/*7>4, 0"
70040; 077>+/. =""

V"7. , />"70"?58o"4">?0+>; >751", >3A*7. . 1", >/>; 50"70"6*"/; >70/5"
+*7, <. B3. 1", >/>; 50"4>>?Z0"/>; D0S"/>4*; *3. 1", >/>; 50"7. , *, >D>">/7>@07. B"
, "7. 3"70". 30S/1"/03"70"307001">7. "7*2*8. "A; 0: A>2. /*/9"/0"; 57, . 1", >/>; 50"
?>800"+/*?. 8975"+"/>2, . "6; 07. B"/>; D>48.)"4>64; */*+; 0: +/41": 0B/0897>+/. "
?*7, >4". "A; >2. 3. "40Z*3. ="Q>"0+>9"/>"<07/; *">7. "A0; 030+/. 8. +9"
D0>D; *L. 20+, . ="P>"/>*31"D: 0"/>, . T">Z0Z07. N"70/1">7**A; >: >8- *0/+B". "+0N2*+="
R"A>#A; 0- 7030"35"67*031"2/>"37>D. 0"*30; . , *7+, . 0"; 57, . "4*- 75": 8B"7*@. T"
K, +A>; /0; >41"*"; >++. N+, . 0"b "4*- 75": 8B"*30; . , *7+, . T1"7>"/>*, . T+/*8>"
A; >+>1"7*40; 7>01"A>3079@0=""

%&' () "F 7>D. 0", >880D. 1", />; *?>/*8"/>D: **+**": 3. 7. +/; *<. 0N1"A>: 20; . . 4*S/1"2/>"4"
>/7>@07. BT"&>++. . #V30; . . . "4; 0307"c0@*#W0/. 7**"58"?*6. +1"XCC)aC)CCY"A>"
, >/>; >30"70896B"?58>": >D>4>; . /9+B)"A>8. /. 20+, . N1". : 0>8>D. 20+, . N". "/>,"
: *800="R"?58. "A; *, /. 20+, . 0"3>307/51"D: 0"A; 06. : 07/5": >+/*/>27>"
KLL0, /. 47>"+0?B"A>, *654*8. 1"A>3>D*8. ". "/>*, ": *800"b "4"2*+>7>+/. 1"K/>"3>D8*"
?5/9"K, >7>3. , *="(">+>- *807. S1", >7, ; 0/. . . "7. , />"70"A; . 408="R6"4*@0D>"
>A5/*1"45"3>- 0/0"A; . 40+/. ", *, . 0#/>"A; . 30; 51"D: 0", >>A0; *<. B": 40T"A0; 45T"
8. <. 8. "**: 3. 7. +/; *<. N1", >>A0; *<. B"7**45+@03"0; >4701"/>*, "+, *- 031"
A>3>D*8*1"; 0@*8**4>A; >+51"A>, *654*8**": >D>4>; >+A>+>?7>+>/9E""



F ' GH' G(I H)"G*="J": 03*S1"2/>": *="J"A; . 40: 0"70+, >89, >"A; . 30; >4="H>#A0; 45T1"

; 0, >4>: . /08. "4">A; 0: 080775N"A0; . >: "4; 0307. ": *8. ", >3*7: 0"

*: 3. 7. +/; *<. B3"A>+3>/; 0/91"2/>"35"3>- 03"+: 08*/9": 8B"; *64. /. B"7*@0N"

46*. 37>N"/>; D>48. "4"A0; +A0, /. 40="W>7. 3*B1"2/>"0"7*+"4"HQI "4+0"4>A; >+5"70"

; 0@*S/+B1"2/>"7*3"70- 7>": 08*/9)">+6: *4*/91"A5/*/9+B">+6: */9"?>800"

+/*?. 8970S"A; *40S"+; 0: 01". "35"7*2*8. ", >7+089/*<. . "+"M>0: . 707753. "

U/*/*3. "A">4>A; >+0"4>63>- 7>D>"6*, 8S207. B">+D8*@07. B">"6*Z. /0"

A>>Z; 07. . "X70+85@75NY="MU V">: 7*". 6">2079"7037>D. T"?>89@. T"+/; *71"0"

, >/>; >No"0"&>+.. . "70/">+D8*@07. B"+"MU V1"/>2700"0"MU V"70/">+D8*@07. B"+

&>+.. 0N1". . 740+>/>; 5"D>4>; . 8. "b"*30; . , *7+, . 0". 740+>/>; 5"D>4>; . 8. 1"2/>"

/*, >0">+D8*@07. 0"3>D8>"?5". 3"A>3>29="P>"K/. "A0; 0D>4>; 5"70"?58. "

6*40; @0751">7. ": *- 01"+, *- 03"/*, 1"35"A; >408. ", >7+089/*<. S)": >"A0; 0D>4>; >4"

: 08>"70": >@8>1"A>/>30"2/>"XCC)a\$)CCY". "4"T>: 0", >7+089/*<. N"35"70"0+A08. "

7*N/. "/>2, . "+">A; . , >+7>407. N1"7*">+7>40", >/>; 5T">+D8*@07. 0"3>D8>"?5"?5/9"

45+;/>; >07>="

Q>D: *1", >D: *"35"A>A; >+. 8. "4, 8S2. /9+B"0- 0"4"?>800"45+>, . N"

A>8. /. 20+, . N"0; >40791"0- 0"?58>"A>6: 7>)"A>8. /. 20+, . N"0; >4079"0- 0"?58"70"

D>/>4">?+0- : */9/*, >D>"; >: *"40Z. ="*7*+"?58. "; *6750": ; 0D. 0". : 0. "4"

: >D>4>; 7>#A; *4>4>N"+L0; 01"7">7. ">: 7*". 6"7. T"70"?58*"4"; 06089/*/0"

; 0*8. 6>4*7*"4"+. 80"/>D>1"2/>"7*@. "A>8. /. 20+, . 0">/7>@07. B"A>@8. "4": ; 0D>3"

7*A; *4807. . ="





>D8B: 54*B+9"7**"/>1"2/>": 08*0/+B"7**"A>8. /. 20+, >3"L; >7/01"/03"?>800"2/>"7**
 A>8. /. 20+, >3"L; >7/0"4+0"?58>"?>800#30700"+A>, >N7>": >">A; 0: 08077>D>"
 4; 0307. ="W>K/>30"B"70": 03*S1"2/>1"/>"0+/91"B"70"4. : 08"+. D7*8>41"+. 8975T"A>"
 , ; *N70N"30; 0"b ">Z0/. 35T"+. D7*8>4"b ", >/>; 50"D>4>; . 8. "?5"XCC)ae)CCY">?"
 >?; */7>3="

R"F RG"b ", *, "45"A; 0, ; *+7>"67*0/01"; >++. N+, . N"F RG"b ">7"70": *4*8"
 ; 0, >307: *<. N"A>"A>4>: 0"/>D>1"+, 03"; *?>/*/91"*"+, 03"70"; *?>/*/91", *, ">7"
 : 08*0/"4">/7>@07. . "D; * - : *7)"hP0"7*: >"06: . /9"4"K/0"+/; *701"A>/>30"2/>"/*3"
 0+/9", *, . 0#/>"A; >?8035"+"4*@0N1"4>63>- 7>1"?06>A*+7>+/9S1"+
 ; *+A; >+/*; *707. 03"f, Š<Ei 1"3>- 0/"?5/91"+"203#/>"0Z0="H"K, >7>3. , 0/*, . T"
 +>40/>4"B"7. , >D: *"70"+85@*81"70"67*8". "A>K/>301"B": 03*S1". T"A; >+/>"70"?58>="

%&' ()"MA*+. ?>"?>89@>0="

"

;?@<A: *BC51@DE15A@FBGHB>*