

!" #&/

4;O <548G=>3> 70AB>AC20==O ;V:0@AL:>3> 70A>1C

„®

(□ IRTAL®)

!::04:

4VNG0 @5G>28=0: 0F5:;>D5=0;

1 B01;5B:0

4>?>28=8:

O4@> B01;5B:8 3;VF5@>; 48AB50@0B, =0B@VN :@>A:0@<5;>70, ?>2V4>=, F5;N;>70 :@8AB0;VG=0;

>1>;>=: A5?VDV;< 752, 1V;89 (3V?@<5;>70, F5;N;>70 :@8AB0;VG=0, B8B0=C 4V>:A84 (171), <0:@>3>;C AB50@0B).

V:0@AL:0 D>@<0. "01;5B:8, 2:@8BV ?;V2:>2>N >1>;>=:>N.

A=>2=V DV78:>-EVABV: :@C3;V, 42>>?C:;V B01;5B:8 1V;>3> :>;L>@C, 2:@8BV ?;V2:>2>N >1>;>=:>N, 4V0<5B@<< 1;87L:> 8 <<. 0 >4=>FV B01;5B:8 3@02VN20==O .

\$0@<0:>B5@0?52B8G=0 3@C?0.

5AB5@>W4=V ?@>B870?0;L=V B0 ?@>B8@52<0B8G=V 70A>18. >EV4=V >FB>2>W :8A;>B8 B0 A?>@V4=5=V @5G>28=8. >4 ""% 0116.

\$0@<0:>;>3VG=V 2;0AB82>ABV.

\$0@<0:>48=0

F5:;>D5=0: □ F5 =5AB5@>W4=89 70AV1 7 ?@>B870?0;L=8< V 7=51>;NNG8< 5D5:B0<8. 2060TBLAO, I> <5E0=V7< 4VW FL>3> ?@5?0@0BC 70A=>20=89 =0 V=3V1C20==V A8=B57C ?@>AB03;0=48=C.

\$0@<0:>:V=5B8:0.

1A>@1FVO

VA;O ?5@>@0;L=>3> ?@89>D5=0: H284:> 2A<>:BCTBLAO, 9>3> 1V>;>3VG=0 4>ABC?=VABL --<0965 100 %. V: :>=F5=B@0FVW C ?;07AO30TBLAO ?@81;87=> G5@57 1,25-3 3>48=8 ?VA;O ?@89< W6V C?>2V;L=NT 2A<>:BC20==O, 0;5 =5 2?;820T =0 9>3> ABC?V=L.

>7?>4V;

F5:;>D5=0: 7=0G=>N N 72O7CTBLAO 7 1V;:0<8 ?;07<8 (> 99,7 %). F5:;>D5=0: ?@>=8:0T C A8=>2V0;L=C @V48=C, 45 :>=F5=B@0FVO 4>AO30T ?@81;87=> 60 % :>=F5=B@0FVW 2 ?;072V. 1'T< @>7?>4V;C - ?@81;87=> 30 ;.

82545==O

15@54=V9 ?5@V>4 =0?V2282545==O AB0=>28BL 4-4,3 3>48=8. ;V@5=A AB0=>28BL5 ;VB@V2 70 3>48=C. @81;87=> 42V B@5B8=8 ?@89=OB>W 4>78 282>48BLAO 7 A5G5N, ?5@5206=> C 283;O4V :>=N3>20=8E 3V4@>:A8<5B01>;V BV2. "V;L:8 1 % >48=8G=>W ?5@>@0;L=>W 4>78 282>48BLAO C =57

F5:;>D5=0.; V<>2V@=>, <5B01>;V7CTBLAO 70 4>?><>3>N CYP2!9 4> >A=>2=>3> <5B01>;VBC 4--0F5:;>D5=0:C. ;;V=VG=0 4VO O:>3> =5VAB>B=0.

8:;>D5=0: V 4--48:;>D5=0: 1C;8 28O2;5=V A5@54 1030BL>E <5B01>;V BV2.

A>1;82V 3@C?8 ?0FVT=BV2

?0FVT=BV2 ;VB=L>3> 2V:C =5 28O2;5=> 7

?0FVT=BV2 7V 7=865=>N DC=:FVTN ?5GV=:8 2V47=0G0;>AO 1V;LH ?>2V;L=5 282545==O 0F5:;>D5=0:C ?VA;O ?@89>4=>@07>2>W 4>78. #
4>A;V465==OE ?@8 1030B>@07>2>

?0FVT=BV2 7 ;53:8< 01> A5@54=V< ABC?5=5< =8@:>2>W =54>AB0B=>ABV ;V=VG=> 7=0GCI8E 2V4AB59 C D0@<0:;>V=5B8FV ?VA;O ?@89>
4=>@07>2>W 4>78 =5 A?>AB5@V30;>AO.

;V=VG=V E0@0:B5@8AB8:8.

>:070==O.

" AB5>0@B@8B, @52<0B>W4=89 0@B@8B, 0=:V;>782=89 A?>=48;>0@B@8B B0 V=HV 70E2>@N20==O >?>@=>-.@CE>2>3> 0?0@0BC, I>
AC?@>2>46CNBLAO 1>;5< (=0?@8:;04, ?;5G>;>?0B:>289 ?5@V0@B@8B B0 V=HV ?>70AC3;>1>2V ?@>O28 @52<0B87

" @8 AB0=0E, I> AC?@>2>46CNBLAO 1>;5< (2;:NG0NG8 1V;L C ?>?5@5:>2> ?5@28==C 48A<5=>@5N).

@>B8?>:070==O.

F5:;>D5=0: ?@>B8?>:070=89:

" ?0FVT=B0< V7 3V?5@GCB;82VABN 4> 0F5:;>D5=0:C 01> 4> 1C4L-O:>3> 4>?>3> :>=5=B0 ?@5?0@0BC (482. @>74V; <!;:04»);

" ?0FVT=B0<, C O:8E 0F5B8;A0;VF8;>20 :8A;>B0 01> V=HV =5AB5@>W4=V ?@>B870?0;L=V 70A>18 () A?@8G8=ONBL =0?048 0AB<8, 3>AB@89
@8=VB, 0=3V>=52@>B8G=89 =01@O: 01> :@>?82O=:C, 0 B0:>6 ?0FVT=B8 7 3V?5@GCB;82VABN 4> F8E ?@5?0@0BV2;

" ?0FVT=B0< V7 H;C=:>2>-.8H:>2>N :@>2>B5G5N 01> ?5@D>@0FVTN 28@07:8 2 0=0<=57V, ?>2'O70=8<8 7 ?>?5@54=L>N B5@0?VTN =5AB5@>W4=8
<8 ?@>B870?0;L=8<8 70A>10<8 ();

" ?0FVT=B0< 7 AC?CB=L>N ?5?B8G=>N 28@07:>N 01> :@>2>B5G5N, 2 B>

" ?0FVT=B0< 7 3>AB@>N :@>2>B5G5N 01> 70E2>@N20==O<8, I> AC?@>2>46CNBLAO :@>2>B5G5N (35<>DV;VO 01> ?>@CH5==O 73>@B0==O
:@>2V);

" ?0FVT=B0< V7 70ABV9=>N A5@F52>N =54>AB0B=VABN (DC=:FV>=0;L=89 ;:0AII-IV 70 NYHA), VH5N E2>@>1>N A5@FO, 70E2>@N20==O<8
?5@8D5@8G=8E 0@B5@V9 01> 7 F5@>1@>20A:C;O@=8<8 ?>@CH5==O<8;

" ?0FVT=B0< V7 F5@>1@>20A:C;O@=8<8 70E2>@N20==O<8, O:V ?5@5=5A;8 V=AC;LB 01> <ONBL 5?V7>48 B@0=78B>@=8E VH5

" ?0FVT=B0< 7 VH5N E2>@>1>N A5@FO, O:V <ONBL AB5=>:0@4VN 01> ?5@5=5A;8 V=D0@:B :0@40;

" 4;O ;V:C20==O ?5@V>?5@0FV9=>3> 1>;N ?@8 0>@B>:>@>=0@=> ?@8 28:>@8AB0==V 0?0@0BC HBCG=>3> :@>2>>1V3C);

" ?0FVT=B0< V7 BO6:>N ?5GV=:>2>N 01> =8@:>2>N =54>AB0B=VABN;

" C ?5@V>4 3>4C20==O 3@C44N;

" 2 >AB0==V9 B@8<5AB@ 203VB=>ABV;

" ?0FVT=B0< 2V:>< 4> 18 @>:V2.

70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9.

>A;V465=L 270T<>4VW =5 ?@>2>48;>AO, 70 28=OB:>< 270T<>4VW 7 20@D0@8=>

F5:;>D5=0: <5B01>;V7CTBLAO 70 4>?><>3>N F8B>E@>in vitro?>:07CNBL, I> 0F5:;>D5=0: <>65 1CB8 V=3V1VB>@>< FL>3> D5@<5=BC. "0:8< G8=>
<, @878: D0@<0:;>V=5B8G=>W 270T<>4VW <>6;8289 ?@8 >4=>G0A=>W=><, F8<5B848=><, B>;1CB0<, D5=V;1CB07>=><, 040@>=><, =07>;>< V

AC;LD0D5=07>;>AC20==O V=H8E , 71V;LHCTBLAO @878: D0@<0:;>V=5B8G=>W 270T<>4VW 7 V=H8<8 ?@5?0@0B0<8, O:V 282>4OBLAO 7

>@30=V7< 0:B82=>W =8@:>2>W A5:@5FVW, B0:8-8 O: <5B>B@5:A0B V ?@5?0@0B8 ;VBVN. F5:;>D5=0: ?@0:B8G=> ?>2=VABN 72'O7CTBLAO 7 0;L1C< ?;07<8, V >B65 <>6;820 270T<>4VO 70 B8?<> 28BVA=5==O 7 V=H8<8 ?@5?0@0B0<8, O:V 72'O7CNBLAO 7 1V;:0<8. '5@57 =5AB0GC 4>A;V465=L D0@<0:>:V=5B8G=>W 270T<>4VW 0F5:;>D5=0:C =86G5707=0G5=0 V=D>@<0FVO '@C=BCTBLAO =0 40=8E ?@> V=HV .

!;V4 C=8:0B8 >4=>G0A=>3> 70AB>AC20==O

5B>B@5:A0B. V=3V1CNBL :0=0;LF52C A5:@5FVN<5B>B@5:A0BC; :@V< B>3>, <>65 A?>AB5@V30B8AO =525;8:0 <5B01>;VG=0 270T<>4VO, I> ?@872>48BL 4> 7<5=H5==O ;:V@5=AC <5B>B@5:A0BC. ">AC20==V 28A>:8E 4>7 <5B>B@5:A0BC A;V4 C=8:0B8 ?@87=0G5==O .

!5@F52V 3;V:>7848, 483>:A8=. <6CBL ?>A8;N20B8 A5@F52C =54>AB0B=VABL, 7=86C20B8 (\$ (H284:VABL ;:C1>G:>2>W DV;LB@0FVW) B0 V=3V1C20B8 =8@:>289 ;:V@5=A 3;V:>784V2, I> ?@872>48BL 4> 71V;LH5==O @V2=O 2 ?;07784V2 C ?;072V. !;V4 C=8:0B8 >4=>G0A=>3> 70AB>AC20==O, O:I> =5 ?@>2>48BLAO G0AB89 <=>VB>@8=3 :>=F5=B@0FV9 483>:A8=C.

@5?0@0B8 ;VBVN B0 483>:A8=. 5O:V V=3V1CNBL =8@:>289 ;:V@5=A ;VBVN V 483>:A8=C, I> ?@872>48BL 4> 71V;LH5==O :>=F5=B@0FVW 2 A8@>20BFV :@>2V >1>E @5G>28=. !;V4 C=8:0B8 >4=>G0A=>3> 70AB>AC20==O, O:I> =5 ?@>2>48BLAO G0AB89 <=>VB>@8=3 :>=F5=B@0FV9 ;VBVN V 483>:A8=C.

=B8:>03C;O=B8. V=3V1CNBL 03@530FVN B@<1>F8BV2 V ?>H:>46CNBL A;87>2C >1>;>=:C H;C=:>2>-.8H:>2>3> B@0:BC, I> <>65 ?@8725AB8 4> ?>A8;5==O 4VW 0=B8:>03C;O=V2 V 71V;LH8B8 @878: H;C=:>2>-.8H:>28E :@>2>B5G C ?0FVT=V2, O:V ?@89<0NBL 0=B8:>03C;O=B8. !;V4 C=8:0B8 >4=>G0A=>3> 70AB>AC20==O 0F5:;>D5=0:C B0 ?5@>@0;L=8E 0=B8:>03C;O=V2 :C<0@8=>2>W 3@C?8, B8:;>?V48=C B0 B@<1>;VB8:V2, O:I> =5 ?@>2>48BLAO @5B5;L=89 <=>VB>@8=3 AB0=C ?0FVT=B0.

%V=>;>=>2V 0=B81V>B8:8. □>A;V465==O =0 B20@8=0E ?>:07CNBL, I> ?V4281CNBL @878: AC4<, ?>2'O70=8E V7 70AB>AC20==O< EV=>;>=>28E 0=B81V>B8:V2. 0FVT=B8, O:V ?@89<0NBL V EV=>;>=>2V 0=B81V>B8:8, <0NBL ?V42815=89 @878: @>728B:C AC4<.

=B8B@<1>F8B0@=V 70A>18 B0 A5;5:B82=V V=3V1VB>@8 72>@>B=>3> 70E?>:5==O A5@>B=>V=C (!). @8 >4=>G0A=>AC20==V 7 71V;LHCNBL @878: :@>2>B5GV 7V H;C=:>2>-.8H:>2>3> B@0:BC (482. @>74V;«A>1;82>ABV 70AB>AC20==O»).

><1V=0FVW, I> 28<030NBL ?V41>@C 4>78 V >15@56=>ABV ?@8 70AB>AC20==V:

5B>B@5:A0B. !;V4 <0B8 =0 C207V <>6;82C 270T<>4VN B0 <5B>B@5:A0BC, =02VBL ?@8 =87L:V9 4>7V <5B>B@5:A0BC, >A>1;82> C ?0FVT=V2 7 ?>@CH5==O<8 DC=:FVW =8@>:. @8 >4=>G0A=>=B@>;N20B8 ?>:07=8:8 DC=:FVW =8@>:. >B@V1=0 >15@56=VABL, O:I> B0<5B>B@5:A0B ?@89 <0;8AO ?@>B03<< 24 3>48=, >A:V;L:8 :>=F5=B@0FVO <5B>B@5:A0BC <>65 71V;LH8B8AO, I> 71V;LH8BL B>:A8G=VABL 40=>3> ?@5?0@0BC.

?>A?>@8=, B0:@>;V @8 >4=>G0A=>A?>@8=<< 01> B0:@>;V< A;V4 2@0E>2C20B8 @878: ?V42815=>W =5D@>B>:A8G=>ABV G5@57 7=865==O CB2>@5==O =8@:>2>3> ?@>AB0F8;:V=C. ">4=>G0A=> :>=B@>;N20B8 ?>:07=8:8 DC=:FVW =8@>:.

=HV 0=0;L35B8:8, , 2::NG0NG8 A5;5:B82=V V=3V1VB>@8 F8:;>:A835=078-2. !;V4 C=8:0B8 >4=>G0A=>3> 70AB>AC20==O 42>E 01> 1V;LH5 (2 B> 2>W :8A;>B8), B> F5 71V;LHCT G0AB>BC 28=8:=5==O ?>1VG=8E O28I.

VD5?@8AB>=. =5 A;V4 ?@89<0B8 ?@>B03<< 8-12 4=V2 ?VA;O ?@89>=C, >A:V;L:8 <>6CBL 7<5=H8B8 5D5:B =C.

>@B8:>AB5@>W48. @>AB0T @878: 28=8:=5==O 28@07:8 01> :@>2>B5GV 7V H;C=:>2>-.8H:>2>3> B@0:BC (482. @>74V;«A>1;82>ABV 70AB>AC20==O»).

VC@5B8:8. F5:;>D5=0:, O: V V=HV , <>65 ?@83=VGC20B8 0:B82=VABL 4VC@5B8:V2, <>65 7<5=HC20B8 4VC@5B8G=89 5D5:B DC@>A5B65, =5>1EV4=> @53C;O@=> :>=B@>;N20B8 220BFV :@>2V.

F5:;>D5=0: =5 ?;>8202 =0 :>=B@>;L 0@B5@V0;L=>3> B8A:C ?@8 >4=>G0A=>AC20==V 7 15=4@>D;C0784<, E>G0 =5 <>6=0 28:;NG8B8 270T<>4VW 7 V=H8<8 4VC@5B8:0<8.

=B83V?5@B5=782=V ?@5?0@0B8. <>6CBL B0:>6 7<5=HC20B8 5D5:B 3V?>B5=782=8E ?@5?0@0BV2. 4=>G0A=5 70AB>AC20==O V=3V1VB>@V2 \$ 01> 0=B03>=VABV2 @5F5?B>@V2 0=3V>B5=78=C II V <>65 ?@8725AB8 4> ?>@CH5==O DC=:FVW =8@>.: 878: 28=8:=5==O 3>AB@>W =8@>:2>W =54>AB0B=>ABV, O:0 70728G09<0T >1>@>B=89 E0@0:B5@, 7@>AB0T C 45O:8E ?0FVT=BV2 7 ?>@CH5==O<8 DC=:FVW =8@>.: =0?@8:;04 C ;VB=VE 01> 7=52>4=5=8E ?0FVT=BV2. ">4=>G0A=>AC20==V 7 A;V4 4>B@815@56=>ABV, >A>1;82> ;VB=V< ?0FVT=B028==V A?>6820B8 =5>1EV4=C :V;L:VABL @V48=8 V ?5@51C20B8 ?V4 2V4?>2V4=8< =03;04<< (:>=B@>;L DC=:FVW =8@>.: =0 ?>G0B:C >4=>G0A=>3> 70AB>AC20==O V ?5@V>48G=> 2 E>4V ;V:C20==O).

V?>3;V:518. ;V=VG=V 4>A;V465==O ?>:07CNBL, I> 48:;>D5=0: <>6=0 70AB>A>2C20B8 @07>< 7 ?5@>@0;L=8<8 3V?>3;V:52V4><;5==O ?@> 3V?>3;V:5D5=0:C A;V4 ?@>25AB8 :>@5:FVN 4>7 ?@5?0@0BV2, O:V <>6CBL 28:;8:0B8 3V?>3;V:5 84>2C48=. @8 >4=>G0A=>2C48=C 7@>AB0T @878: 35<0B>;>3VG=>W B>:A8G=>ABV. 40=V ?@> 71V;LH5==O @878:C 28=8:=5==O 35<0@B@>7V2 V 35<0B><< C (+)-?0FVT=BV2 7 35<>DV;VTN, O:V >B@82C48= B0 V1C?@>D5=.

A>1;82>ABV 70AB>AC20==O.

!;V4 C=8:0B8 >4=>G0A=>3> 70AB>AC20==O ?@5?0@0BC 5@B0;® V , 2:;NG0NG8 A5;5:B82=V V=3V1VB>@8 F8:;>:A835=078-2. 51060=V 5D5:B8 <>6=0 725AB8 4> : =5B@820;>3> 70AB>AC20==O =86G>W 5D5:B82=>W 4>78 4;O :>=B@>;N A874V; «!>AV1 70AB>AC20==O B0 4>78» B0 =86G5 @878:8, ?>2O70=V 7V H;C=:>2>-.8H:>28< B@0:B><< B0 A5@F52>-AC48==>N A8AB5<>N). ?;82 =0 H;C=:>2>-.8H:>289 B@0:B (" @>2>B5G0, 28@07:0 01> ?5@D>@0FVO (" 7 ;5B0;L=8< =0A;V4:<< A?>AB5@V30;8AO ?@8 ?@89>4 ;V:C20==O, O: 70 =0O2=>ABV =5157?5G=8E A8 =570;56=> 2V4 =0O2=>ABV 2 0=0<=57V A5@9>7=>W 30AB@>V=B5AB8=0;L=>W ?0B>;>3VW. 878: :@>2>B5GV, CB2>@5==O 28@07:8 V ?5@D>@0FVW (" 7@>AB0T 7V 71V;LH5==O< 4>78 C ?0FVT=BV2 7 28@07:>N 2 0=0<=57V, >A>1;82> O:I> 2>=0 AC?@>2>46C20;0AO :@>2>28;82<< 01> ?5@D>@0FVTN (482. @>74V; «@>B8?>:070==O»), B0 C ;VB=VE ?0FVT=BV2. &8< ?0FVT=B0< A;V4 ?@89<0B8 ?@>AB>; 01> V=3V1VB>@8 ?@>B>==>W ?>6 ?>4V1=0 B5@0?VO =5>1EV4=0 ?0FVT=B0<, O:V 70AB>A>2CNBL =525;8:V 4>78 0F5B8;A0;VF8;>2>W :8A;>B8 (0A?V@8=C) G8 V=H8E ?@5?0@0BV2, O:V =530B82=> 2?;820NBL =0 AB0= H;C=:>2>-.8H:>2>3> B@0:BC (482. @>74V;« 70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»). 0FVT=B8 V7 70E2>@N20==O<8 (" 2 B>3> 2V:C, ?>28==V ?>2V4<<;OB8 ?@> 1C4L-O:V =5728G=V A8<8, ?>2'O70=V 7 (" (>A>1;82> H;C=:>2>-.8H:>2C :@>2>B5GC), C B>G0B:>2>1;82>W >15@56=>ABV A;V4 4>B@8<□70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»). @8 28=8:=5==V :@>2>B5GV 01> 28@07:8 (" C ?0FVT=BV2, O:V ?@89<0NBL ?@5?0@0B 5@B0;®, ;V:C20==O ?>28==> 1CB8 ?@8?8=5=>. /5@F52>-AC48==V V F5@51@>20A:C;O@=V 5D5:B8

;O ?0FVT=BV2 7 0@B5@V0;L=>N 3V?5@B5=7VTN B0/01> 70ABV9=>N A5@F52>N =54>AB0B=VABN ;53:>3> 01> ?>3> ABC?5=O =5>1EV4=V 2V4?>2V4=89 <=>VB>@8=3 B0 >A>1;82V 2:07V2:8, B> ?>2V4<<;O;>AO ?@> 70B@8@30=V7FV9>20=8E 7 ?@89><<< . ;V=VG=V 4>A;V465==O B0 5?V45;>3VG=V 40=V ?>:07CNBL, I> 45O:V (>A>1;82> ?@8 ?@89>:8E 4>7 V B@820;>AC20==V) 45I> 71V;LHCNBL @878: 0@B5@V0;L=8E B@> <1>B8G=8E O28I (=0?@8:;04, V=D0@:B :0@40 G8 V=AC;LB). 0FVT=B0< V7 A5@F52>N =54>AB0B=VABN (DC=:FV=>0;L=89 ;:0A I 70 NYHA), 7 D0:B>@0<8 @878:C 4;O A5@F52>-AC48==>W A8AB5<8 (=0?@8:;04, 0@B5@V0;L=0 3V?5@B5=7VO, 3V?5@;V?V45289 4V015B V :C@V==O) A;V4 4>B@8A>1;82>W >15@56=>ABV ?@8 ?@89>D5=0:C. A:V;L:8 =5A?@8OB;8289 2?;82 =0 A5@F52>-AC48==C A8AB5AB0T @07>< 7 ?V428I5==O< 4>78 V B@820;>ABV ;V:C20==O, A;V4 70AB>A>2C20B8 28==V ?5@V>48G=> ?5@53;O40B8AO. F5:;>D5=0: A;V4 70AB>A>2C20B8 7 >15@56=VABN V ?V4 @5B5;L=8< <548G=8< =03;04<< ?0FVT=B0< ?@8 =02545=8E =86G5 AB0=0E (>A:V;L:8 VA=CT 703@>70 703>AB@5==O 70E2>@N20==O) (482. @>74V;«>1VG=V @50:FVW»):

□ c8<8, I> A2V4G0BL ?@> =0O2=VABL 70E2>@N20==O H;C=:>2>-.8H:>2>3> B@0:BC, 2:;NG0NG8 9>3> 25@E=V V =86=V 2V44V;8;

□=002=VABL 2 0=0κ=57V 28@07:8, :@>2>B5GV 01> ?5@D>@0FVW H;C=:>2>-.8H:>2>3> B@0:BC;
□ 28@07:>289 :>;VB;
□ E2>@>10 @>=0;
□ AE8;L=VABL 4> :@>2>B5G, !(A8AB5<=89 G5@2>=89 2>2G0:), ?>@DV@VO B0 ?>@CH5==O 35<>?>57C V 35<>AB07C.
?;82 =0 ?5GV=:C V =8@:8
@89>< <>65 A?@8G8=8B8 4>7>70;56=C @54C:FVN CB2>@5==O ?@>AB03;0=48=C V @0?B>2C =8@:>2C =54>AB0B=VABL. 06;82VABL
?@>AB03;0=48=V2 4;O 70157?5G5==O =8@:>2>3> :@>2>B>:C A;V4 2@0E>2C20B8 ?@8 70AB>AC20==V ?@5?0@0BC ?0FVT=B0< 7 ?>@CH5==O<
DC=:FVW A5@FO, =8@>: 01> ?5GV=:8, >A>10<, O:V >B@8
!;V4 4>B@815@56=>ABV ?@8 70AB>AC20==V ?@5?0@0BC ?0FVT=B0< 7 ?>@CH5==O<8 DC=:FVW ?5GV=:8 V =8@>: ;53:>3> 01> ?>3> ABC?5=O, 0
B0:>6 ?0FVT=B0< 7 V=H8<8 AB0=0<8, I> AC?@>2>46CNBLAO 70B@8N @V48=8 2 >@30=V7AC20==O <>65 ?@8725AB8 4> ?>@CH5==O DC=:FVW
=8@>: V 4> 70B@86 A;V4 4>B@815@56=>ABV ?@8 70AB>AC20==V ?@5?0@0BC 5@B0;® ?0FVT=B0<, O:V ?@89<0NBL 4VC@5B8:8, 01> >A>10< 7
?V428I5=8< @878:>< 3V?>2>;51EV4=0 D5=0:C.
0AB>AC20==O 0F5:;>D5=0:C A;V4 ?@8?8=8B8, O:I> 2V4E8;5==O ?>:07=8:V2 DC=:FVW ?5GV=:8 2V4 =>@<8 715@V30NBLAO 01> ?>A8;NNBLAO,
@>72820NBLAO ;;V=VG=V A8<8 70E2>@N20=L ?5GV=:8 01> 28=8:0NBL V=HV ?@>O28 (5>78=>DV;VO, 28A8?0==O). 5?0B8B<>65 @>728=CB8AO
157 ?@>4@><0;L=8E A8AC20==O C ?0FVT=V2 7 ?5GV=:>2>N ?>@DV@VTN <>65 A?@>2>:C20B8 =0?04.
!8AB5<=89 G5@2>=89 2>2G0: B0 7@N20==O A?>;CG=>W B:0=8=8
?0FVT=V2 V7 A8AB5<=8< G5@2>=8< 2>2G0:>< B0 70A5?B8G=>3> <5=V=3VBC (482. @>74V;«>1VG=V @50:FVW»).
V?5@GCB;82VABL B0 H:V@=V @50:FVW
/: V V=HV , ?@5?0@0B 5@B0;® <>65 A?@8G8=8B8 0;5@3VG=V @50:FVW, 2;;NG0NG8 0=0DV;0:B8G=V/0=0DV;0:B>W4=V @50:FVW, =02VBL O:I>
?@5?0@0B ?@89<0TBLAO 2?5@H5. "06:V H:V@=V @50:FVW (45O:V 7 O:8E <>6CBL ?@8725AB8 4> ;5B0;L=>3> =0A;V4:C), 2;;NG0NG8
5:AD>;V0B82=89 45@<0B8B, A8=4@< !BV25=A0-6>=A>=0 B0 B>:A8G=89 5?V45@<0;L=89 =5:@>;V7, ?VA:O ?@89>AB5@V30;8AO 4C65 @V4:>
(482. @>74V;«>1VG=V @50:FVW»). 0928I89 @878: 28=8:=5==O F8E @50:FV9 C ?0FVT=V2 A?>AB5@V30TBLAO =0 ?>G0B:C 70AB>AC20==O
?@5?0@0BC, B0:>6 @>728B>: F8E =51060=8E @50:FV9 A?>AB5@V30TBLAO ?@>BO3< ?5@H>3> 465=L =0 A;87>2V9 >1>;>=FV ?>@>6=8=8 @>B0
01> V=H8E >7=0: 3V?5@GCB;82>ABV A;V4 ?@8?8=8B8 ?@89< 0F5:;>D5=0:C.
>A>1;828E 28?04:0E, ?@8 2VB@O=V9 2VA?V<>6CBL 28=8:=CB8 CA:;04=5==O: A5@9>7=V V=D5:FVW H:V@8 V<O:8E B:0=8=. 0 F59 G0A =5 <>6=0
28:;NG0B8 @>;L C ?>3V@H5==V ?5@51V3C F8E V=D5:FV9. ">® ?@8 2VB@O=V9 2VA?V.
5<0B>;>3VG=V ?>@CH5==O
F5:;>D5=0: <>65 28:;8:0B8 >1>@>B=5 V=3V1C20==O 03@530FVW B@<1>F8BV2 (482. @>74V;«□70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0
V=HV 2848 270T<>4V9»).
>@CH5==O 7 1>:C 48E0;L=>W A8AB5<8
!;V4 4>B@815@56=>ABV ?@8 ?@89> ?@89>< <>65 A?@>2>:C20B8 @>728B>: @0?B>2>3> 1@>=E>A?07
0FVT=B8 ;VB=L>3> 2V:C
!;V4 4>B@815@56=>ABV ?@8 70AB>AC20==V ?@5?0@0BC ;VB=V< ?0FVT=B0< (2V:< 2V4 65 @>:V2), >A:V;L:8 C =8E G0ABVH5 28=8:0NBL
?>1VG=V O28I0 (>A>1;82> :@>2>B5G0, ?@>@82 H;C=:>2>-.8H:>2>3> B@0:BC) ?@8 ?@89>
"@820;5 70AB>AC20==O
AV ?0FVT=B8, O:V >B@8W4=8<8 ?@>B870?0;L=8<8 ?@5?0@0B0<8, ?>28==V 7=0E>48B8AL ?V4 @5B5;L=8< <548G=8< =03;O4>< (7030;L=89 0=0;V7
:@>2V, DC=:FV>=0;L=V ?5GV=:>2V B0 =8@:>2V B5AB8).

0AB>AC20==O C ?5@V>4 203VB=>ABV 01> 3>4C20==O 3@C44N.

03VB=VABL

5<0T 40=8E ?@> 70AB>AC20==O 0F5;:>D5=0:C ?V4 G0A 203VB=>ABV.

=3V1C20==O A8=B57C ?@>AB03;0=48=C <>65 =5A?@80B;82> 2?;820B8 =0 ?5@51V3 203VB=>ABV B0/01> @>728B>: 5<1@V>=0/?;>40.

0=V 5?V45;>3VG=8E 4>A;V465=L 2:07CNBL =0 71V;LH5==O @878:C 28:84=O, @>728B:C ?>@>:C A5@FO V 30AB@>H878AC ?VA;O 70AB>AC20==O V=3V1VB>@V2 A8=B57C ?@>AB03;0=48=C =0 @0==VE 5B0?0E 203VB=>ABV. 1A>;NB=89 @878: @>728B:C ?>@>:C A5@FO 7@>AB0T 7<5=H =V6 1 % 4> ?@81;87=> 1,5 %. 878: 71V;LHCTBLAO 7V 71V;LH5==O< 4>78 V B@820;>ABV ;V:C20==O.

B20@8= ?@89<< V=3V1VB>@V2 A8=B57C ?@>AB03;0=48=C ?@872>48BL 4> ?@5- V ?>ABVW 703815;V ?;>40 B0 A<5@B=>ABV 5<1@V>=0 V ?;>40. 0 4>40B>: 71V;LHCTBLAO :V;L:VABL 28?04:V2 @V7=8E 204, 2;:NG0NG8 ?>@>: A5@FO, C B20@8=, O:V >B@8@8 A8=B57C ?@>AB03;0=48=C ?@>B03<< >@30=>35=57C.

@>B03<< ?5@H>3> V 4@C3>3> B@8<5AB@V2 203VB=>ABV ?@5?0@0B8, I> D5=0:; =5 ?@87=0G0NBL 157 =030;L=>W =5>1EV4=>ABV. /:I> 0F5;:>D5=0: ?@89<0T 6V=:0, O:0 ?;:0=CT 203VB=VABL 01> ?5@51C20T 2 ?5@H>□ <0:A8<0;L=> :>@>B:>N.

@>B03<< B@5BL>3> B@8<5AB@C 203VB=>ABV 2AV V=3V1VB>@8 A8=B57C ?@>AB03;0=48=C:

□ <>6CBL 2?;820B8 =0 ?;V4, <0NG8 :0@4V>-;535=52C B>:A8G=VABL (?5@54G0A=5 70:@8BBO 0@B5@V0;L=>W ?@>B>:8 V ;535=520 3V?5@B5=7VO);

□ <>6CBL 2?;820B8 =0 ?;V4, A?@8G8=ONG8 48ADC=:FVN =8@>;, O:0 <>65 @>728=CB8AO 4> =8@>:2>W =54>AB0B=>ABV 7 <0;>2>44O

6V=:8 2 :V=FV 203VB=>ABV B0 =02>=0@>465=>3> ?@5?0@0B <>65 2?;820B8 =0 B@820;VABL :@>2>B5GV G5@57 0=B803@530=B=89 5D5:B, O:89 <>65 @>728=CB8AO =02VBL ?VA;O 70AB>AC20==O 4C65 =87L:8E 4>7;

?@5?0@0B <>65 V=3V1C20B8 A:>@>G5==O <0B:8, ?@872>4OG8 4> 70B@8;>3V2 01> 70BO6=8E ?;>3V2.

"0:8< G8=><, 70AB>AC20==O 0F5;:>D5=0:C ?@>B8?>:070=> 2 B@5BL>@>B8?>:070==O B0 «A>1;82>ABV 70AB>AC20==O»).

5@V>4 3>4C20==O 3@C44N

5<0T V=D>@<0FVW ?@> ?@>=8:=5==O 0F5;:>D5=0:C 2 3@C4=5 <>:>: . 4=0: =5 2V47=0G0;>AO ?>3> ?@>=8:=5==O 3> @04V>V7>B>?>< (C14)

0F5;:>D5=0:C 2 <>:>: IC@V2.

/: V V=HV , 0F5;:>D5=0: C =57=0G=V9 :V;L:>ABV 284V;OTBLAO C 3@C4=5<>:>:, B> ?@5?0@0B ?@>B8?>:070=> 70AB>A>2C20B8 6V=:0< C ?5@V>4 3>4C20==O 3@C44N, I>1 C=8:=CB8 =51060=>3> 2?;82C =0 =5<>2;O.

\$5@B8;L=VABL

5@B0;®, O: V V=HV V=3V1VB>@8 A8=B57C F8;:>:A835=078/?@>AB03;0=48=C, <>65 7=86C20B8 D5@B8;L=VABL V =5 @5:>5=4CTBLAO 6V=:0<, O:V ?;0=CNBL 203VB=VABL. V=:0<, O:V <0NBL B@C4=>IV V7 70G0BBO< 01> ?@>E>4OBL 4>A;V465==O D5@B8;L=>ABV, A;V4 ?@8?8=8B8 70AB>AC20==O ?@5?0@0BC 5@B0;®.

40B=VABL 2?;820B8 =0 H284:VABL @50:FVW ?@8 :5@C20==V 02B>B@0=A?>@B<< 01> V=H8<8 <5E0=V7<0<8.

0FVT=B8, C O:8E A?>AB5@V30NBLAO B0:V O28I0, O: A;01:VABL, 70?0<>@>G5==O, 25@B83> 01> V=HV A8<8 7 1>:C F5=B@0;L=>W =5@2>2>W A8AB5<8, ?@8 ?@89>28==V :5@C20B8 02B>B@0=A?>@B<< 01> V=H8<8 =5157?5G=8<8 <5E0=V7<0<8.

!/?>AV1 70AB>AC20==O B0 4>78.

5@B0;®, B01;5B:8, 2:@8BV ?;V2:>2>N >1>;>:=>N, ?@87=0G5=V 4;O ?5@>@0;L=>3> 70AB>AC20==O, V WE A;V4 70?820B8 =5<5=H5 =V6 ½A;:O=:8 @V48=8. 5@B0;® 1060=> ?@89<0B8 7 W65N.

51060=V O28I0 <>6=0 725AB8 4> B@820;VABL ?@89>@>74V; «A>1;82>ABV 70AB>AC20==O»).

>@>A;V
0:A8<0;L=0 @5:><5=4>20=0 4>70 AB0=>28BL 200<3 =0 4>1C 70 420 ?@89><8 ?> 100 <3 (1 B01;5B:0 2@0=FV V 1 - 225G5@V).

0FVT=B8 ;VB=L>3> 2V:C

!;V4 @5B5;L=> A?>AB5@V30B8 70 AB0=> B0:8E ?0FVT=V2, B> C =8E G0ABVH5 A?>AB5@V30NBL ?>@CH5==O DC=:FVW =8@>:, ?5GV=:8, A5@F52>-AC48==V ?>@CH5==O, B0:>6 2>=8 G0ABVH5 >B@8@N20=L, I> ?V428ICT @878: @>728B:C A5@9>7=8E =0A;V4:V2 ?>1VG=8E @50:FV9. @8 =5>1EV4=>ABV ?@87=0G5==O WE ?>B@V1=> 70AB>A>2C20B8 2 /: ?@028;>, 7=865==O 4>78 =5 ?>B@V1=5. !;V4 @5B5;L=> A?>AB5@V30B8 70 ?0FVT=B0<8 4;O A2>TG0A=>3> 28O2;5==O H;C=:>2>-.8H:>2>W :@>2>B5GV =0 B;V B5@0?VW , 0 B0:>6 4>B@8<5=40FV9, >?8A0=8E C @>74V; « A>1;82>ABV 70AB>AC20==O».

5GV=:>20 =54>AB0B=VABL

;O ?0FVT=V2 7 ?5GV=:>2>N =54>AB0B=VABN ;53:>3> 01> ?>3> ABC?5=O A;V4 7<5=H8B8 4>7C 0F5;:>D5=0:C. 5:><5=4>20=0 ?>G0B:>20 4>70 AB0=>28BL 100 <3 =0 4>1C (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

8@:>20 =54>AB0B=VABL

V4ACB=O V=D>@<0FVO ?@> B5, I> ?0FVT=B0< 7 =8@:>2>N =54>AB0B=VABN ;53:>3> ABC?5=O =5>1EV4=0 :>@5:FVO 4>78 0F5;:>D5=0:C, >4=0: F8 < ?0FVT=B0< A;V4 4>B@815@56=>ABV ?@8 70AB>AC20==V ?@5?0@0BC (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

VB8.

V4ACB=V ;;V=VG=V 40=V I>4> 70AB>AC20==O ?@5?0@0BC 5@B0;® 4VBO<, B><5=4>20=89 4;O 70AB>AC20==O 2 FV9 2V:>2V9 3@C?V.

5@54>7C20==O.

5<0T 40=8E ?@> ?5@54>7C20==O 0F5;:>D5=0:> C ;N48=8.

>6;82V A8<8

>:>2=89 1V;L, =C4>B0, 1;N20==O, 1V;L C H;C=:C, 70?0<>@>G5==O, A>=:82VABL, ?>4@07=5==O H;C=:>2>-.8H:>2>3> B@0:BC, H;C=:>2>-.8H:>20 :@>2>B5G0, 4V0@50, 457>@VT=B0FVO, 71C465==O, :><0, 472V= C 2CE0E, 0@B5@V0;L=0 3V?>B5=7VO, ?@83=VG5==O 48E0==O, 2B@0B0 A2V4> <>ABV, AC4>8. # 28?04:0E B06:>3> >B@CT==O <>6CBL 28=8:0B8 3>AB@0 =8@:>20 =54>AB0B=VABL B0 C@065==O DC=:FVW ?5GV=:8.

V:C20==O

V:C20==O 3>AB@8E >B@CT=L =5AB5@>W4=8<8 ?@>B870?0;L=8<8 ?@5?0@0B0<8 ?>;O30T C 70AB>AC20==V 0=B0F84V2 (?@8 =5>1EV4=>ABV) B0 V=H>W ?V4B@8W V A8<0B8G=>W B5@0?VW B0:8E CA;:04=5=L, O: 0@B5@V0;L=0 3V?>B5=7VO, =8@:>20 =54>AB0B=VABL, AC4>8, ?>4@07=5==O A;87>2>W >1>;>=:8 H;C=:>2>-.8H:>2>3> B@0:BC V ?@83=VG5==O 48E0==O.

V:C20==O 3>AB@8E >B@CT=L ?@8 ?@89>D5=0:C 2A5@548=C ?>;O30T 2 70?>1V30==V 2A<:BC20==N ?@5?0@0BC 70 4>?><>3>N ?@><820==O H;C=:0 B0 70AB>AC20==O 0:B82>20=>3> 2C3V;:O (?>2B>@=V 4>78) 2 =091V;LH :>@>B:V B5@7C20==O. \$>@A>20=89 4VC@57, 4V0;V7 01> 35 <>?5@DC7VO <>6CBL 1CB8 =54>AB0B=L> 5D5:B82=8<8 4;O 282545==O G5@57 28A>:89 ABC?V=L 72'O7C20==O 7 1V;:0<8 V 5:AB5=A82=89 <5B01>;V7

>1VG=V @50:FVW.

(;C=:>2>-.8H:>289 B@0:B: =091V;LH G0AB> ?>1VG=V @50:FVW 1C;8 ?>2O70=V 7V H;C=:>2>-.8H:>28< B@0:B>@>74V; «A>1;82>ABV 70AB>AC20==O»). @8 70AB>AC20==V ?>2V4><<;O;>AO ?@> =C4>BC, 1;N20==O, 4V0@5N, <5B5>@87<, 70?>@, 48A?5?AVN, 1V;L C H;C=:C, <5;5=C, 1;N20==O :@>2N, 28@07:>289 AB<0B8B, 703>AB@5==O :>;VBC B0 E2>@>1C @>=0 (482. @>74V; «A>1;82>ABV 70AB>AC20==O»). V4H5 A?>AB5@V302AO 30AB@8B.

V?5@GCB;82VABL B0 H:V@=V @50:FVW:??@8 70AB>AC20==V <>6;8289 @>728B>: =5A?5F8DVG=8E 0;5@3VG=8E @50:FV9, I> ?@>O2;ONBLAO C 283;O4V 0=0DV;0:B8G=8E @50:FV9, @50:B82=>ABV 48E0;L=8E H;OEV2, 2;;NG0NG8 0AB, ?>3V@H5==O ?5@51V3C 0AB<8, 1@>=E>A?0701> 48A?=>5, @V7=8E H:V@=8E @50:FV9, 2 B> 28A8?V2 @V7=8E B8?V2, A25@156C, :@>?82'O=:8, ?C@?C@8, 0=3V>545<8, @V4H5 5:AD>;V0B82=>3> V 1C;L>7=>3> 45@<0B8BC (2 B> B0 @<=>W 5@8B5<8).

52@>;>3VG=V?>@CH5==O B0 @>7;048 >@30=V2 GCBBO: =52@8B 7>@>2>3> =5@20, 28?04:8 0A5?B8G=>3> <5=V=3VBC (>A>1;82> C ?0FVT=BV2 7 0CB>V@N20==O A?>;CG=>W B:0=8=8) 7 B0:8<8 A8<0<8, O: >=V 5<0B>;>3VG=V?>@CH5==O: 03@0=C;>F8B>7, 0?;0AB8G=0 0=5

7207:C V7 70AB>AC20==O< ?>2V4><;O;>AO ?@> @>728B>: =01@O:C, 0@B5@V0;L=C 3V?5@B5=7VN B0 A5@F52C =54>AB0B=VABL. ;V=VG=V 4>A;V465==O B0 5?V45;>3VG=V 40=V ?>:07CNBL, I> 45O:V (>A>1;82> ?@8 ?@89>:8E 4>7 V B@820;>AC20==V) 45I> 71V;LHCNBL @878: 0@B5@V0;L=8E B@><1>B8G=8E O28I (=0?@8;;04, V=D0@:B :0@40 G8 V=AC;LB) (482. @>74V; «A>1;82>ABV 70AB>AC20==O»).

B01;8FV =86G5 =5A?@8OB;82V O28I0, ?@> O:V ?>2V4><;O;>AO 2 ;;V=VG=8E 4>A;V465==OE, 0 B0:>6 ?@8 70AB>AC20==V ?@5?0@0BC 5@B0;®, 73@C?>20=> 70 A8AB5<0<8 >@30=V2 V 70 G0AB>B>N 28=8:=5==O.

;0A A8AB5< >@30=V2 70 MedDRa	'0AB> >1/100, <1/10	5G0AB> >1/1000, <1/100	V4:> >1/10000, <1/1000	C65 @V4:>/>:@5
1>:C A8AB5<8 :@>2>B2>@5==O V ;VW A8AB5<8			=5	@83=VG5==O DC=:FVW :VAB:>2>3><>7:C, 3@0=C;>F8B>?5=VO, B@><1>F8B>?5=VO, =59B@>?5=VO, 35 <>;VB8G=0 0=5
1>:C VW A8AB5 <8			=0DV;0:B8G=V @50:FVW (2;;NG0NG8 H>:), 3V?5@GCB;82VABL	
>@CH5==O <5B01>;V7				V?5@:0;VT
A8EVG=V ?>@CH5==O				5?@5AVO, =5728G09=V A=8, 157A>==O
1>:C =5@2>2>W A8AB5<8	0?0<>@>- G5==O			0@5AB57VO, B@5 <>@, A>=:82VABL, 3>;>2=89 1V;L, 48A3527VO (@>7;048 A<0:>A?@89=OBBO)

1>:C >@30=V2 7>@C 1>:C >@30=V2 A;CEC			>@CH5==O 7>@C	5@B83>, 472V= C 2CE0E
1>:C A5@FO			!5@F520 =54>AB0B=VABL	V4GCBBO A5@F518BBO
1>:C AC48=			@B5@V0;L=0 3V?5@B5=7VO, ?>3V@H5==O ?5@51V3C 0@B5@V0;L=>W 3V?5@B5=7VW	V?5@5
1>:C 48E0;L=>W A8AB5<8 B0 A5@54>ABV==O			048H:0	@>=E>A?07<, AB@84>@
1>:C H;C=:>2>- :8H:>2>3> B@0:BC	8A?5?AVO, 1V;L C 682>BV, =C4>B0, 4V0@5O	5B5>@87<, 30AB@8B, 70?>@, 1;N20==O, 28@07:>289 AB> <0B8B	5;5=0, H;C=:>2>-:8H:>2V 28@07:8, 35<>@03VG=0 4V0@5O, 30AB@>V=B5AB8=0;L=0 35<>@03VO	!B<<0B8B, :@82025 1;N20==O, H;C=:>2>- :8H:>2V :@>2>B5GV, ?5@D>@0FVW :8H5G=8:C, 703>AB@5==O E2>@>18 @>=0 B0 28@07:>2>3> :>;VBC, ?0=:@50B8B
1>:C ?5GV=:8 V 6>2G=>W A8AB5 <8	V428I5==O 0:B82=>ABV ?5GV=:>28E D5@<5=BV2			#H:>465==O ?5GV=:8 (2;;NG0NG8 35?0B8B), ?V428I5==O 0:B82=>ABV ;C6=>W D>AD0B078 2 :@>2V, 6>2BO=8FO
1>:C H:V@8 B0 ?V4H:V@=>W :;VB:>28=8		!25@1V6, 28A8?, 45@ <0B8B, :@>?82O=:0	=3V>=52@>B8G=89 =01@O:	C@?C@0, 5:75<0, BO6:V @50:FVW 7 1>:C H:V@8 B0 A;87>28E >1>;>=: (2;;NG0NG8 A8=4@<< !BV25=A0-6>=A>=0 B0 B>:A8G=89 5?V45@<0;L=89 =5:@>;V7)

1>:C =8@>: V A5G>282V4=>W A8AB5<8		V428I5==O :>=F5=B@0FVW A5G>28=8 2 :@>2V, ?V428I5==O 22V		5D@>B8G=89 A8=4@> <, =8@:>20 =54>AB0B=VABL
030;L=V @>7;048 B0				01@O:, ?V428I5=0 AB> <;N20=VABL, AC4<8 <O7V2 (2 =>30E)
57C;LB0B8 ;01>@0B>@=8E 4>A;V465=L				1V;LH5==O <0A8 BV;0

=HV ?>1VG=V 5D5:B8, O:V A?>AB5@V30NBLAO ?@8 70AB>AC20==V

C65 @V4:VA=V (<1/10 000):

>@CH5==O 7 1>:C =8@>: V A5G>282V4=8E H;OE2: V=B5@AB8FV0;L=89 =5D@8B.

>@CH5==O 7 1>:C H:V@8 B0 ?V4H:V@=>W ;;VB:>28=8: 1C;L>7=V @50:FVW, 2;;NG0NG8 A8=4@>× !BV25=A0-6=>A=>0 V B>:A8G=89 5?V45@<0;L=89 =5:@>;V7 (4C65 @V4:>), D>B>A5=A81V;V70FVO.

>A>1;828E 28?04:0E, A?>AB5@V30;8AO A5@9>7=V H:V@=V V=D5:FVW B0 V=D5:FVW<'O:8E B:0=8= ?@8 ?@89>@N20==O 2VB@O=>N 2VA?>N (482. B0:>6 @>74V;8 «A>1;82>ABV 70AB>AC20==O» B0 «□70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9»).

"5@ABV.

3 @>:8.

#<>28 715@V30==O.

15@V30B8 C =54>ABC?=>

#?0:>2:0.

10 B01;5B>;, 2:@8B8E ?;V2:>2>N >1>;>=:>N, C 1;VAB5@V; 2 01> 6 1;VAB5@V2 C :0@B>==V9 C?0:>2FV.

0B53>@VO 2V4?CA:C.

0 @5F5?B>

8@>1=8:.

545>= VEB5@, C40?5HB, #3>@I8=0, 70 ;VF5=FVTN «□;

VAF57=0E>465==O.

-1103, C40?5HB, 2C;. 5<@5W, 19-21, #3>@I8=0.