

P†PSC„CrP»PiP°PS P·PSPëP¶CrC" C,PuPiPiPuCH°P°C,CrCHCr C,C-P»P° PiCHPsC,ClPiPsPj 30

C...PIPëP»PëPS PïC-CÍP»C¼ PIPµPrPµPSPSC¼, P¶P°CḡPsP·PSPëP¶CÍPIP°P»CHßPSPëPN₆ PµC,,PµPeC, C,CḡPëPIP°C” PïCḡPsC,C¼PiPsPj C%PsPSP°PN₆PjPµPSC€Pµ 6 PiPsPrPëPS.

PᄡP°CḡPjP°PePsPeC-PSPµC,PëPeP°.

P”PsCḡPsCÍP»C-

P’CÍPjPsPeC,CÍPIP°PSPSC¼

PµC-CÍP»C¼ PsPrPSPsCḡP°P·PsPIPsPiPs P·P°CÍC,PscÍCÍPIP°PSPSC¼ PrPs 2 Pi PïCḡPµPiP°CḡP°C,CÍ C,P° PïC-CÍP»C¼ PiPsPIC,PscḡPSPsPiPs P·P°CÍC,PscÍCÍPIP°PSPSC¼ CÍPïCḡPsPrPsPIP¶ 24 PiPsPrPëPS C,,P°CḡPjP°PePsPeC-PSPµC,PëPeP° PïP°CḡP°C†PµC,P°PjPsP»CÍ P»C-PSC-PN₆PSP°.

P’C-PsPrPsCÍC,CÍPïPSC-CÍC,CH PïC-CÍP»C¼ PIPSCÍC,CḡC-C€PSCßPsPIPµPSPSPsC— C-PSC,,CÍP·C— 500 PjPi C,P° 1 Pi PïP°CḡP°C†PµC,P°PjPsP»CÍ C,P°PeP° P¶ CÍP°PjP°, C¼Pe C-PïC-CÍP»C¼ PIPµPrPµPSPSC¼ 1 Pi C,P° 2 Pi PïCḡPsPïP°C†PµC,P°PjPsP»CÍ (C%Ps PjC-CÍC,PëC,CH 500 PjPi C,P° 1 Pi PïP°CḡP°C†PµC,P°PjPsP»CÍ PIC-PrPïPsPIC-PrPSPs). PḡP°PeCÍPëPjP°P»CHßPSP° PePsPSC†PµPSC,CḡP°C†C-C¼ CÍ PïP»P°P·PjC- PeCḡPsPIC- (C_{max}) PrPsCÍC¼PiP°C”C,CHCÍC¼ PSP°PïCḡPëPeC-PSC†C- C-PSC,,CÍP·C-PN₆PSPsPiPs PIPµPrPµPSPSC¼ C,CḡPëPIP°P»C-CÍC,CH 15 C...PIPëP»PëPS 500 PjPi P°P±Ps 1 Pi PïP°CḡP°C†PµC,P°PjPsP»CÍ C- CÍC,P°PSPsPIPëC,CH 15 PjPePi/PjP» P°P±Ps 30 PjPePi/PjP» PIC-PrPïPsPIC-PrPSPs.

P PsP·PiPsPrC-P»

PhP±Bḡ™C”Pj CḡPsP·PiPsPrC-P»CÍ PïP°CḡP°C†PµC,P°PjPsP»CÍ CÍC,P°PSPsPIPëC,CH PïCḡPëP±P»PëP·PSPs 1 P»/PePi. PµP°CḡP°C†PµC,P°PjPsP» CÍP»P°P±Ps P·PiBḡ™C¼P·CÍC”C,CHCÍC¼ P· P±C-P»PeP°PjPë PïP»P°P·PjPë PeCḡPsPIC-. PµC-CÍP»C¼ PIPµPrPµPSPSC¼ 1 Pi PïP°CḡP°C†PµC,P°PjPsP»CÍ P·PSP°C†PSPëPN₆ CḡC-PIPµPSCß PePsPSC†PµPSC,CḡP°C†C-C— (PïCḡPëP±P»PëP·PSPs 1,5 PjPePi/PjP») P±CÍPI PICÍC,P°PSPsPIP»PµPSPëPN₆ CÍ CÍPïPëPSPSPsPjPsP·PePsPIC-PN₆ CḡC-PrPëPSC- C†PµCḡPµP· 20 C...PIPëP»PëPS PïC-CÍP»C¼ C-PSC,,CÍP·C-C—.

PḡPµC,P°P±PsP»C-P·Pj

PµP°CḡP°C†PµC,P°PjPsP» P·PSP°C†PSPsCḡ PjC-CḡPsCḡ PjPµC,P°P±PsP»C-P·CÍC”C,CHCÍC¼ PI PïPµC†C-PSC†C-, PïCḡPsC...PsPrC¼C†Pë PrPIP° PscÍPSPsPIPSPëC... C€P»C¼C...Pë: PePsPSBḡ™CḡPiP°C†C-C¼ PiP»CḡPeCÍCḡPsPSPsPIPsC— PePëCÍP»PsC,Pë C,P° PePsPSBḡ™CḡPiP°C†C-C¼ CÍC-CḡC†P°PSPsC— PePëCÍP»PsC,Pë. PhCÍC,P°PSPSC-PN₆ C€P»C¼C... C€PIPëPrPePs PSP°CÍPëC†CÍC”C,CHCÍC¼ PïCḡPë PrPsP·P°C..., C¼PeC- PïPµCḡPµPIPëC%CrCḡC,CH C,PµCḡP°PïPµPIC,PëC†PSC-. PḡPµP·PSP°C†PSP° C†P°CÍC,PëPSP° (PjPµPSC€Pµ 4 %) PjPµC,P°P±PsP»C-P·CÍC”C,CHCÍC¼ C†PëC,PsC...CḡPsPjPsPj P 450 P· CÍC,PIPsCḡPµPSPSC¼Pj PïCḡPsPjC-P¶PSPsPiPs PjPµC,P°P±PsP»C-C,CÍ (N·P°C†PµC,PëP»P±PµPSP·PsC...C-PSPsPSC-PjC-PSCÍ), C¼PePëPN₆ CÍ PSPsCḡPjP°P»CHßPSPëC... CÍPjPsPIP°C... C€PIPëPrPePs PSPµPN₆C,CḡP°P»C-P·CÍC”C,CHCÍC¼ PIC-PrPSPsPIP»PµPSPëPj PiP»CḡC,P°C,C-PsPSPsPj C- PIPëPIPsPrPëC,CHCÍC¼ C-P· CÍPµC†PµCḡ PïC-CÍP»C¼ P·PiBḡ™C¼P·CÍPIP°PSPSC¼ P· C†PëCÍC,PµC—PSPsPj C- PjPµCḡPeP°PiC,PsPiCÍCḡPëPSPsPIPsCḡ PePëCÍP»PsC,PsCḡ. PhPrPSP°Pe PïCḡPë PjP°CÍPëPIPSPsPjCÍ PsC,CḡCÍC”PSPSC- PeC-P»CHßPeC-CÍC,CH C†CHßPsPiPs C,PsPeCÍPëC†PSPsPiPs PjPµC,P°P±PsP»C-C,CÍ P·CḡPsCÍC,P°C”.

P'PëPIPμPrPμPSPSCl

РҺРμC, P°P±PsP»C-C, Pë PīP°CḡP°C†PμC, P°PjPsP»Cḡ PIPëPIPsPrCḡC, ЧҺCḡCḡ PīPsP»PsPIPSPëPj C†PëPSPsPj C-P. CḡPμC†PμCḡ. 90 % PīCḡPëPNḡPSCḡC, PsC— PrPsP·Pë PIPëPIPsPrPëC, ЧҺCḡCḡ PīCḡPsC, CḡPīPsPj 24 PīPsPrPëPS, PīPμCḡPμPIP°PḡPSPs Cḡ PIPëPīP»CḡPrC- PīP»CḡPeCḡCḡPsPSC-PrCḡ (60–80 %) C- CḡCḡP»ЧҺC,, P°C, Cḡ (20–30 %). РҺРμPSCëPμ 5 % PIPëPIPsPrPëC, ЧҺCḡCḡ Cḡ PSPμP·PjC-PSPμPSPsPjCḡ CḡC, P°PSC-. PμPμCḡC-PsPr PSP°PīC-PIPIPëPIPμPrPμPSPSCl CḡC, P°PSPsPIPëC, ЧҺ 2,7 PīPsPrPëPSPë, P·P°PīP°P»ЧҺPSPëPNḡ PeP»C-CḡPμPSCḡ бḡ“ 18 P»/PīPsPrPëPSCḡ.

P”C-C,Pë

PḡP°CḡPjP°PePsPeC-PSPμC, PëPeP° PīP°CḡP°C†PμC, P°PjPsP»Cḡ Cḡ PSPμPjPsPIP»CḡC, C, P° PrC-C, PμPNḡ PīCḡP°PeC, PëC†PSPs PSPμ PIC-PrCḡC-P·PSCḡC”C, ЧҺCḡCḡ PIC-Pr C, P°PePsC— Cḡ PrPsCḡPsCḡP»PëC..., P·P° PIPëPSCḡC, PePsPj PePsCḡPsC, CëPsPīPs PīPμCḡC-PsPrCḡ PSP°PīC-PIPIPëPIPμPrPμPSPSCl P· PīP»P°P·PjPë PeCḡPsPIC- (1,5–2 PīPsPrPëPSPë). PJ PSPsPIPsPSP°CḡPsPrPḡPμPSPëC... PīPμCḡC-PsPr PSP°PīC-PIPIPëPIPμPrPμPSPSCl PrPsPICëPëPNḡ, PSC-Pḡ Cḡ PSPμPjPsPIP»CḡC, – PīCḡPëP±P»PëP·PSPs 3,5 PīPsPrPëPSPë. PμPsCḡC-PIPSCḡPSPs P· PrPsCḡPsCḡP»PëPjPë Cḡ PrC-C, PμPNḡ PIC-PePsPj PrPs 10 CḡPsPeC-PI CḡCḡC, C, C”PīPs P·PSPëPḡPμPSP° PePsPSбḡ™ ЧҺPīP°C†C-Cḡ P· PīP»CḡPeCḡCḡPsPSPsPIPsCḡ PePëCḡP»PsC, PsCḡ C, P° PīC-PrPIPëC%PμPSP° бḡ“ P·C- CḡCḡP»ЧҺC,, P°C, P°PjPë.

PḡP°P±P»PëC†Cḡ 1

PḡP°CḡPjP°PePsPeC-PSPμC, PëC†PSC- PIPμP»PëC†PëPSPë PIC-PrPīPsPIC-PrPSPs PrPs PIC-PeCḡ (CḡC, P°PSPrP°CḡC, PëP·PsPIP°PSPëPNḡ PeP»C-CḡPμPSCḡ,

* $CL_{std}/F_{PīPμCḡPsCḡP°P°}$. (P»бḡḡPīPsPr⁻¹ 70 PePī⁻¹)

P’C-Pe	РҺР°CḡP° C, C-P»P° (PePī)	$CL_{std}/F_{PīPμCḡPsCḡP°P°}$. (P».PīPsPr ⁻¹ 70 PePī ⁻¹)
40 C, PëPḡPSC-PI PIC-PeCḡ PīC-CḡP»Cḡ P·P°C†P°C, C, Cḡ	3,3	5,9
3 PjC-CḡCḡC†C- PīPsCḡC, PSP°C, P°P»ЧҺPSPsPīPs PIC-PeCḡ	6	8,8
6 PjC-CḡCḡC†C-PI PīPsCḡC, PSP°C, P°P»ЧҺPSPsPīPs PIC-PeCḡ	7,5	11,1
1 CḡC-Pe PīPsCḡC, PSP°C, P°P»ЧҺPSPsPīPs PIC-PeCḡ	10	13,6
2 CḡPsPePë PīPsCḡC, PSP°C, P°P»ЧҺPSPsPīPs PIC-PeCḡ	12	15,6
5 CḡPsPeC-PI PīPsCḡC, PSP°C, P°P»ЧҺPSPsPīPs PIC-PeCḡ	20	16,3
8 CḡPsPeC-PI PīPsCḡC, PSP°C, P°P»ЧҺPSPsPīPs PIC-PeCḡ	25	16,3

* CL_{std} бḡ“ PsC†C-PSPeP° PīCḡCḡPīPë PīP°C†C-C”PSC, C-PI C%PsPrPs CL (PeP»C-CḡPμPSCḡCḡ).

PḡCḡPsP±P»PëPIC- PīCḡCḡPīPë PīP°C†C-C”PSC, C-PI

PμP°C†C-C”PSC, Pë P· PSPëCḡPePsPIPsCḡ PSPμPrPsCḡC, P°C, PSC-CḡC, ЧҺ

$\text{P}_{\mu}\text{C}-\text{PrPIP}\ddot{\text{C}}\text{C}\%_{\text{P}}\text{PSP}^{\circ}\text{C}\ddagger\text{C}\text{rC},\text{P}\gg\text{P}\ddot{\text{E}}\text{PIC}-\text{C}\dot{\text{I}}\text{C},\text{CH}\text{ PrPs PiP}^{\circ}\text{C}\ddot{\text{H}}\text{P}^{\circ}\text{C}\ddagger\text{P}_{\mu}\text{C},\text{P}^{\circ}\text{PjPsP}\gg\text{C}\dot{\text{r}},$
 $\text{PiC}\ddot{\text{H}}\text{PsPiP}^{\circ}\text{C}\ddagger\text{P}_{\mu}\text{C},\text{P}^{\circ}\text{PjPsP}\gg\text{C}\dot{\text{r}}\text{ PiC}-\text{PrC}\ddot{\text{H}}\text{PsC}\dots\text{P}\gg\text{PsC}\ddot{\text{H}}\text{P}\ddot{\text{E}}\text{PrC}\dot{\text{r}}\text{ (PiPsPiP}_{\mu}\text{C}\ddot{\text{H}}\text{P}_{\mu}\text{PrPSP}\ddot{\text{E}}\text{PeP}^{\circ}$
 $\text{PiP}^{\circ}\text{C}\ddot{\text{H}}\text{P}^{\circ}\text{C}\ddagger\text{P}_{\mu}\text{C},\text{P}^{\circ}\text{PjPsP}\gg\text{C}\dot{\text{r}})\text{ P}^{\circ}\text{P}\pm\text{Ps PrPs C}-\text{PSC}\ddot{\text{E}}\text{P}\ddot{\text{C}}\text{C}\dots\text{PePsPjPiPsPSP}_{\mu}\text{PSC},\text{C}-\text{PI}$
 $\text{PiC}\ddot{\text{H}}\text{P}_{\mu}\text{PiP}^{\circ}\text{C}\ddot{\text{H}}\text{P}^{\circ}\text{C},\text{C}\dot{\text{r}}.\text{P}\ddot{\text{Y}}\text{C}\ddot{\text{I}}\text{P}\P\text{PeP}^{\circ}\text{ PiP}_{\mu}\text{PiP}^{\circ}\text{C},\text{PsC}\ddagger\text{P}_{\mu}\text{P}\gg\text{C}\ddot{\text{H}}\text{P}\gg\text{C}\ddot{\text{I}}\text{C}\ddot{\text{H}}\text{PSP}^{\circ}$
 $\text{PSP}_{\mu}\text{PrPsC}\dot{\text{I}}\text{C},\text{P}^{\circ}\text{C},\text{PSC}-\text{C}\dot{\text{I}}\text{C},\text{CH}.$

P'P·P°C''PjPsPrC-Cl P· C-PSC€PëPjPë P»C-PeP°CĤCÍCHPePëPjPë P·P°CÍPsP±P°PjPë C,P° C-PSC€C- PIPëPrPë PIP·P°C''PjPsPrC-PNë.

PĥCĤPsP±PμPSPμC†PëPr PIPrPIC-C†C- P·PSPëP¶CÍC'' PeP»C-CĤPμPSCÍ
PİP°CĤP°C†PμC,P°PjPsP»CÍ C€P»CĬC...PsPj P±P»PsPeCÍPIP°PSPSCĬ PNëPsPiPs
P·PIbĤ™ CĬP·CÍPIP°PSPSCĬ P· PiP»CĤPeCÍCĤPsPSPsPIPsCĤ PePëCÍP»PsC,PsCĤ, C,PsPjCÍ
PİCĤPë PePsPjP±C-PSPsPIP°PSC-PNë C,PμCĤP°PİC-C— P· PİCĤPsP±PμPSPμC†PëPrPsPj PrPsP·CÍ
PİP°CĤP°C†PμC,P°PjPsP»CÍ PİPsC,CĤC-P±PSPs P·PSPëP·PëC,Pë.

PŸP°P»C-C†PëP»P°C,Pë PjPsP¶CÍC,CH P·P±C-P»CHC€CÍPIP°C,Pë PİPμCĤC-PsPr
PSP°PİC-PIPIPëPIPμPrPμPSPSCĬ PİP°CĤP°C†PμC,P°PjPsP»CÍ P· PsCĤPiP°PSC-P·PjCÍ.

PŸP»C-Pr PrPsC,CĤPëPjCÍPIP°C,PëCÍCH PsP±PμCĤPμP¶PSPsCÍC,C- PİCĤPë
CÍCÍPjC-CÍPSPsPjCÍ P·P°CÍC,PsCÍCÍPIP°PSPSC- P»C-PeP°CĤCÍCHPePsPiPs P·P°CÍPsP±CÍ P·
PμPSP·PëPj-C-PSPrCÍPeCÍCĤC†PëPjPë P»C-PeP°CĤCÍCHPePëPjPë P·P°CÍPsP±P°PjPë
(P±P°CĤP±C-C,CÍCĤP°C,Pë, C-P·PsPSC-P°P·PëPr, PeP°CĤP±P°PjP°P·PμPİC-PS,
CĤPëC,,P°PjPİC-C†PëPS, PμC,P°PSPsP» C,P° C-PSC€C-) (PrPëPI. CĤPsP·PrC-P»
B«PμPμCĤPμPrPsP·CÍPIP°PSPSCĬB»).

PĥPrPSPsC†P°CÍPSPμ P·P°CÍC,PsCÍCÍPIP°PSPSCĬ PİP°CĤP°C†PμC,P°PjPsP»CÍ (4 Pi PSP°
PrPsP±CÍ PİCĤPsC,CĬPiPsPj C%PsPSP°PNëPjPμPSC€Pμ 4 PrC-P±) P·
PİPμCĤPsCĤP°P»CHPSPëPjPë P°PSC,PëPePsP°PİCÍP»CĬPSC,P°PjPë PjPsP¶Pμ
PİCĤPëP·PIPμCÍC,Pë PrPs PSPμP·PSP°C†PSPëC... P·PjC-PS PjC-P¶PSP°CĤPsPrPSPsPiPs
PSPsCĤPjP°P»C-P·PsPIP°PSPsPiPs PIC-PrPSPsC€PμPSPSCĬ (PĥPĥP'). Pj C†CHPsPjCÍ CĤP°P·C-
CÍP»C-Pr PePsPSC,CĤPsP»CĤPIP°C,Pë PĥPĥP' PİC-Pr C†P°CÍ P»C-PeCÍPIP°PSPSCĬ C,P°
PİCĤPsC,CĬPiPsPj 1 C,PëP¶PSCĬ PİC-CÍP»CĬ P·P°PIPμCĤC€PμPSPSCĬ P»C-PeCÍPIP°PSPSCĬ
P†PSC,,CÍP»PİP°PSPsPj.

PŸP»C-Pr PrPsC,CĤPëPjCÍPIP°C,PëCÍCH PsP±PμCĤPμP¶PSPsCÍC,C- PİCĤPë
PsPrPSPsC†P°CÍPSPsPjCÍ P·P°CÍC,PsCÍCÍPIP°PSPSC- P»C-PeP°CĤCÍCHPePsPiPs
P·P°CÍPsP±CÍ P· C,,P»CÍPeP»PsPeCÍP°C†PëP»C-PSPsPj, PsCÍPeC-P»CHPePë
PsPrPSPsC†P°CÍPSPëPNë PİCĤPëPNëPsPj P°CÍPsC†C-CĤC''C,CHCÍCĬ P·
PjPμC,P°P±PsP»C-C†PSPëPj P°C†PëPrPsP·PsPj P· PIPëCÍPsPePëPj P°PSC-PsPSPSPëPj
PİCĤPsPjC-P¶PePsPj CĬPe PSP°CÍP»C-PrPePsPj PİC-CĤPsPiP»CÍC,P°PjC-PSPsPIPsPiPs
P°C†PëPrPsP·CÍ, PsCÍPsP±P»PëPIPs CÍ PİP°C†C-C''PSC,C-PI P· C,,P°PeC,PsCĤP°PjPë
CĤPëP·PëPeCÍ (PrPëPI. CĤPsP·PrC-P» B«PĥCÍPsP±P»PëPIPsCÍC,C-
P·P°CÍC,PsCÍCÍPIP°PSPSCĬB»).

PĥCÍPsP±P»PëPIPsCÍC,C- P·P°CÍC,PsCÍCÍPIP°PSPSCĬ.

PĥPμPsP±C...C-PrPSPs P±CÍC,Pë PsP±PμCĤPμP¶PSPëPj PİCĤPë
PİCĤPëP·PSP°C†PμPSPSC- C,P° P·P°CÍC,PsCÍCÍPIP°PSPSC- P†PSC,,CÍP»PİP°PSCÍ,
C%PsP± CÍPSPëPePSCÍC,Pë PİPsPjPëP»PsPe CÍ PrPsP·CÍPIP°PSPSC- C†PμCĤPμP·
PİP»CÍC,P°PSPëPSCÍ PjC-P¶ PjC-P»C-PİCĤP°PjP°PjPë (PjPi) C- PjC-P»C-P»C-C,CĤP°PjPë
(PjP»), C%Ps PjPsP¶Pμ PİCĤPëP·PIPμCÍC,Pë PrPs PIPëPİP°PrPePsPIPsPiPs
PİPμCĤPμPrPsP·CÍPIP°PSPSCĬ C,P° P»PμC,P°P»CHPSPsPiPs PSP°CÍP»C-PrPeCÍ.
PŸP»C-Pr PİPμCĤPμPePsPSP°C,PëCÍCH CÍ C,PsPjCÍ, C%Ps PİCĤPëP·PSP°C†PμPSPs C,P°
PIPIPμPrPμPSPs PIC-PrPİPsPIC-PrPSCÍ PrPsP·CÍ. PĥCĤPë PİCĤPëP·PSP°C†PμPSPSC-

PSP_μPsP±C...C-PrPSPs PIPeP°P·P°C,Pë P·P°PiP°P»CHbPSCr PrPsP·Cr PI
PjC-P»C-PiC₇P°PjP°C... C- PsP±b₇™C°Pj P·P°PiP°P»CHbPSPsC— PrPsP·Pë PI
PjC-P»C-P»C-C,C₇P°C....

P P_μPePsPjP_μPSPPrCrC°C,CHbCrC₇ P·P°CrC,PsCrPsPICrPIP°C,Pë P_iP_μC₇PsC₇P°P»CHbPSCr
C,,PsC₇PjCr P_iP°C₇P°C†P_μC,P°PjPsP»Cr, C₇Pe C,C-P»CHbPePë C,P°PePëPNë CrP_iPsCrC-P±
P·P°CrC,PsCrCrPIP°PSPSC₇ CrC,P°PSP_μ PjPsP₇P»PëPIPëPj.

P°P»C₇ CrPSPëPePSP_μPSPSC₇ C₇PëP·PëPeCr P_iP_μC₇P_μPrPsP·CrPIP°PSPSC₇
PSP_μPsP±C...C-PrPSPs P±CrC,Pë PIP_iP_μPIPS_μPSPëPj Cr C,PsPjCr, C°%Ps C-PSCëC-
P_iC₇PëP·PSP°C†P_μPSC- P»C-PeP°C₇CrCHbPeC- P·P°CrPsP±Pë PSP_μ PjC-CrC,C₇C,CHb
P_iP°C₇P°C†P_μC,P°PjPsP» P°P±Ps P_iC₇PsP_iP°C†P_μC,P°PjPsP».

P PëP·PëPe CrC₇P°P₇P_μPSPSC₇ P_iP_μC†C-PSPePë P·C₇PsCrC,P°C° P_iC₇Pë
P_iC₇PëP·PSP°C†P_μPSPSC- P†PSC,,CrP»PiP°PSCr PI PrPsP·P°C..., PIPëC°%PëC... PIC-Pr
C₇P_μPePsPjP_μPSPPrPsPIP°PSPëC....

P₇P»C-PSC-C†PSC- CrPëPjP_iC,PsPjPë CrCëPePsPrP₇P_μPSPSC₇ P_iP_μC†C-PSPePë (Cr C,PsPjCr
C†PëCrP»C- P±P»PëCrPeP°PIPëC†PSPëPNë PiP_μPiP°C,PëC,, P_iP_μC†C-PSPePsPIP°
PSP_μPrPsCrC,P°C,PSC-CrC,CHb, C...PsP»P_μCrC,P°C,PëC†PSPëPNë PiP_μPiP°C,PëC,,
C†PëC,PsP»C-C,PëC†PSPëPNë PiP_μPiP°C,PëC,, P·P°P·PIPëC†P°PNë, PIP_iP_μC₇CëP_μ
CrP_iPsCrC,P_μC₇C-PiP°C₇C,CHbCrC₇ C†P_μC₇P_μP· PrPIP° PrPSC- P_iC-CrP»C₇
P·P°CrC,PsCrCrPIP°PSPSC₇ P_iC₇P_μPiP°C₇P°C,Cr P· PrPsCrC₇PiPSP_μPSPSC₇Pj P_iC-PeP°
C†P_μC₇P_μP·

4b₇°6 PrPSC-PI. P—P°CrC,PsCrCrPIP°PSPSC₇ P°PSC,PëPrPsC,Cr PjP°C° P±CrC,Pë
P_iC₇PëP·PSP°C†P_μPSP_μ C₇PePSP°PNëCëPIPëPrCëP_μ.

P_μP°C₇P°C†P_μC,P°PjPsP» PjPsP₇P_μ PIPëPeP»PëPeP°C,Pë C,C₇P₇PeC- CëPeC-C₇PSC-
C₇P_μP°PeC†C-C—. P_μP°C†C-C°PSC,C-PI CrP»C-Pr P_iPsC-PSC,,PsC₇PjCrPIP°C,Pë P_iC₇Ps
C₇P°PSPSC- P_iC₇PsC₇PIPë PsP·PSP°Pe CrP_μC₇PNëPsP·PSPëC... CëPeC-C₇PSPëC...
C₇P_μP°PeC†C-PNë C,P° Cr C₇P°P·C- P_iPsC₇PIPë PIPëCrPëPiP°PSC₇ P°P±Ps P±CrPrCHb-
C₇PePëC... C-PSCëPëC... PsP·PSP°Pe P_iC-PiP_μC₇C†CrC,P»PëPIPsCrC,C-
P·P°CrC,PsCrCrPIP°PSPSC₇ P»C-PeP°C₇CrCHbPePsPiPs P·P°CrPsP±Cr CrP»C-Pr
PSP_μPiP°PNëPSPs P_iC₇PëPiPëPSPëC,Pë.

P_μPsPIC-PrPsPjP»C₇P»PsCrC₇ P_iC₇Ps PIPëPiP°PrPePë PjP_μC,P°P±PsP»C-C†PSPsPiPs
P°C†PëPrPsP·Cr P· PIPëCrPsPePëPj P°PSC-PsPSPSPëPj P_iC₇PsPjC-P₇PePsPj (*high anion gap
metabolic acidosis* (HAGMA)) C₇Pe PSP°CrP»C-PrPeCr P_iC-C₇PsPiP»CrC,P°PjC-PSPsPiPsPiPs
P°C†PëPrPsP·Cr Cr P_iP°C†C-C°PSC,C-PI P· C,C₇P₇PePëPjPë P·P°C...PIPsC₇CHbPIP°PSPSC₇PjPë,
C,P°PePëPjPë C₇Pe C,C₇P₇PeP° PSPëC₇PePsPIP° PSP_μPrPsCrC,P°C,PSC-CrC,CHb C,P°
CrP_μP_iCrPëCr, P°P±Ps Cr P_iP°C†C-C°PSC,C-PI P· PSP_μPrPsCrC,P°C,PSC-Pj
C...P°C₇C†CrPIP°PSPSC₇Pj C†Pë PrP_μC,,C-C†PëC,PsPj PiP»CrC,P°C,C-PsPSCr P· C-PSCëPëC...
P_iC₇PëC†PëPS (PSP°P_iC₇PëPeP»P°Pr, C...C₇PsPSC-C†PSPëPNë P°P»PePsPiPsP»C-P·Pj), C₇PeC-
P»C-PeCrPIP°P»PëCrC₇ P_iP°C₇P°C†P_μC,P°PjPsP»PsPj Cr C,P_μC₇P°PiP_μPIC,PëC†PSC-PNë
PrPsP·C- P_iC₇PsC,C₇PiPsPj C,C₇PëPIP°P»PsPiPs PiP_μC₇C-PsPrCr P°P±Ps
PePsPjP±C-PSP°C†C-C°C₇ P_iP°C₇P°C†P_μC,P°PjPsP»Cr C,P° C,,P»CrPeP»PsPeCrP°C†PëP»C-PSCr.
P_μC₇Pë P_iC-PrPsP·C₇C- PSP° HAGMA C₇Pe PSP°CrP»C-PrPsPe
P_iC-C₇PsPiP»CrC,P°PjC-PSPsPiPsPiPs P°C†PëPrPsP·Cr C₇P_μPePsPjP_μPSPPrCrC°C,CHbCrC₇
PSP_μPiP°PNëPSP_μ P_iC₇PëPiPëPSP_μPSPSC₇ P_iC₇PëPNëPsPjCr P_iP°C₇P°C†P_μC,P°PjPsP»Cr C,P°
C₇P_μC,P_μP»CHbPSP_μ CrP_iPsCrC,P_μC₇P_μP₇P_μPSPSC₇ P·P° CrC,P°PSPsPj P_iP°C†C-C°PSC,P°.
P°PëP·PSP°C†P_μPSPSC₇ C₇C-PIPS₇ 5-PsPeCrPsP_iC₇PsP»C-PSCr PI CrP_μC†C-

PjPsP¶Pµ P±CfC,Pë PIP°P¶P»PëPIPëPj PrP»C¶ PIPëC¶PIP»PµPSPSC¶
PïC-C¶PsPiP»CfC,P°PjC-PSPsPIPsPiPs P°C†PëPrPsP·Cf C¶Pe PsC¶PSPsPIPsC—
PïC¶PëC†PëPSPë HAGMA Cf PïP°C†C-C”PSC,C-PI P· PjPSPsP¶PëPSPSPëPjPë
C,,P°PeC,PsC¶P°PjPë C¶PëP·PëPeCf.

PïPeC%Ps PïC¶PëPµPsPj C,,P»CfPeP»PsPeC¶P°C†PëP»C-PSCf PïC¶PsPrPsPIP¶CfC”C,CHC¶C¶
PïC-C¶P»C¶ PïC¶PëPïPëPSPµPSPSC¶ PïC¶PëPµPsPjCf PïP°C¶P°C†PµC,P°PjPsP»Cf,
PrPsC†C-P»CHPSPs PïPµC¶PµPePsPSP°C,PëC¶CH Cf PIC-PrC¶CfC,PSPsC¶C,C-
C¶PëPiPSP°P»C-PI HAGMA, PsC¶PeC-P»CHPePë C-C¶PSCfC” PjPsP¶P»PëPIC-C¶C,CH
P·P±PµC¶PµP¶PµPSPSC¶ PeP»C-PSC-C†PSPsC— PeP°C¶C,PëPSPë HAGMA (PrPëPI.
C¶PsP·PrC-P» B«P·P·P°C”PjPsPrC-C¶ P· C-PSC€PëPjPë P»C-PeP°C¶C¶CHPePëPjPë
P·P°C¶PsP±P°PjPë C,P° C-PSC€C- PIPëPrPë PIP·P°C”PjPsPrC-PµB»).

PïPe Cf PIPëPïP°PrPeCf PIC¶C-C... C-PSC,,CfP·C-PµPSPëC... C¶PsP·C†PëPSC-PI Cf
C¶PeP»C¶PSPëC... C,,P»P°PePsPSP°C... (PïP»C¶C€PeP°C...) C¶P»C-Pr PïP°PjPb¶™ C¶C,P°C,Pë
PïC¶Ps PSPµPsP±C...C-PrPSC-C¶C,CH PjPsPSC-C,PsC¶PëPSPiCf PïC¶PsC†PµPrCfC¶Pë
PIPIPµPrPµPSPSC¶ P»C-PeP°C¶C¶CHPePsPiPs P·P°C¶PsP±Cf, PsC¶PsP±P»PëPIPs PI
PeC-PSC†C- C-PSC,,CfP·C-C— (PrPëPI. C¶PsP·PrC-P» B«PÿPïPsC¶C-P±
P·P°C¶C,PsC¶CfPIP°PSPSC¶ C,P° PrPsP·PëB»).

P— PsP±PµC¶PµP¶PSC-C¶C,CH P·P°C¶C,PsC¶PsPICfCHC,CH PïC¶PµPïP°C¶P°C, PïC¶Pë
PSP°C¶PIPSPsC¶C,C- Cf PïP°C†C-C”PSC,P°:

— PïPµPïP°C,PsC†PµP»C¶P»C¶C¶PSPsC— PSPµPrPsC¶C,P°C,PSPsC¶C,C-,
C...PIPsC¶PsP±Pë P-PëP»CHP±PµC¶P°;

— C,C¶P¶PePsC— PSPëC¶PePsPIPsC— PSPµPrPsC¶C,P°C,PSPsC¶C,C- (PrPëPI.
C¶PsP·PrC-P»Pë B«PαP°C¶PjP°PePsPeC-PSPµC,PëPeP°B» C,P° B«PÿPïPsC¶C-P±
P·P°C¶C,PsC¶CfPIP°PSPSC¶ C,P° PrPsP·PëB»);

— C...C¶PsPSC-C†PSPsPiPs P°P»PePsPiPsP»C-P·PjCf;

— P·PSPëP¶PµPSPSC¶ C¶PµP·PµC¶PICf PïP»CHC,P°C,C-PsPSCf PI PïPµC†C-PSC†C-,
C†PµC¶PµP· C...C¶PsPSC-C†PSPµ PSPµPrPsC—PrP°PSPSC¶, P°PSPsC¶PµPeC¶C-C¶,
P±CfP»PµPjC-C¶ P°P±Ps PeP°C...PµPeC¶C-C¶;

— P·PSPµPIPsPrPSPµPSPSC¶;

— PrPµC,,C-C†PëC,Cf PïP»CHPePsP·Ps-6-C,,PsC¶C,,P°C,PrPµPiC-PrC¶PsPiPµPSP°P·Pë
(C%Ps PjPsP¶Pµ C¶PïC¶PëC†PëPSPëC,Pë PïPµPjPsP»C-C,PëC†PSCf P°PSPµPjC-C¶).

P·PjC-C¶C, PrPsPiPsPjC-P¶PSPëC... C¶PµC†PsPIPëPS

PïPµPµ P»C-PeP°C¶C¶CHPePëPµ P·P°C¶C-P± PjC-C¶C,PëC,CH 0,011 PjPjPsP»CH (P°P±Ps
0,25 PjPi) PSP°C,C¶C-C¶ PSP° PrPsP·Cf 1 PjP».

PïPµPµ P»C-PeP°C¶C¶CHPePëPµ P·P°C¶C-P± PjC-C¶C,PëC,CH 1,1 PjPjPsP»CH (P°P±Ps
25 PjPi) PSP°C,C¶C-C¶ PSP° PrPsP·Cf 100 PjP». PÿP»C-Pr P±CfC,Pë PsP±PµC¶PµP¶PSPëPj
PïC¶Pë P·P°C¶C,PsC¶CfPIP°PSPSC- PïP°C†C-C”PSC,P°Pj, C¶PeC- PrPsC,C¶PëPjCfCHC,CHC¶C¶
PrC-C”C,Pë P· PePsPSC,C¶PsP»CHPsPIP°PSPëPj PIPjC-C¶C,PsPj PSP°C,C¶C-C¶.

P”Ps C¶PeP»P°PrCf P»C-PeP°C¶C¶CHPePsPiPs P·P°C¶PsP±Cf PIC...PsPrPëC,CH

C,C-P»P° P±C-P»CHC€Pμ 33 PePi P·P°CfC,PsCfPsPICrCfC,CH CḡPsP·C‡PēPS Cr PīP»CfC€PeP°C... PīPs 100 PjP».

P°P»CfC PrC-C,PμPNē P· PjP°CfPsCf C,C-P»P° PjPμPSC€Pμ 33 PePi P·P°CfC,PsCfPsPICrCfC,CH CḡPsP·C‡PēPS Cr PīP»CfC€PeP°C... PīPs 20 PjP» C,P° 50 PjP».

P°PsP·CrPIP°PSPSCf P·P°P»PμP¶PēC,CH PIC-Pr PjP°CfPē C,C-P»P° PīP°C†C-C°PSC,P°.

PŷP°P±P»PēC†Cf 2

PḡP°CfP° C,C-P»P° PīP°C†C-C°PSC,P°	PḡPrPSPsCḡP°P·PsPIP° PrPsP·P°	PḡP±ḡḡ™C°Pj PSP° PsPrPēPS PīCḡPēPNēPsPj	PḡP°PeCfPēPjP°P»CHPSPēPNē PsP±ḡḡ™C°Pj P†PSC,,CrP»PīP°PSCr (10 PjPi/PjP») PSP° PsPrPēPS PīCḡPēPNēPsPj PIC-PrPīPsPIC-PrPSPs PrPs PīPμCḡC...PSC-C... PjPμP¶ PjP°CfPē C,C-P»P° PrP»Cf PīCḡCrPīPē (PjP»)***	PḡP°PeCfPēPjP°P»CHPSP° PrPsP±PsPIP° PrPsP·P°****
≤ 10 PePi*	7,5 PjPi/PePi	0,75 PjP»/PePi	7,5 PjP»	30 PjPi/PePi
> 10 PePi ḡḡ™ ≤ 33 PePi	15 PjPi/PePi	1,5 PjP»/PePi	49,5 PjP»	60 PjPi/PePi, PSPμ PīPμCḡPμPīPēC%CrCfC‡Pē 2 Pi
> 33 PePi ḡḡ™ ≤ 50 PePi	15 PjPi/PePi	1,5 PjP»/PePi	75 PjP»	60 PjPi/PePi, PSPμ PīPμCḡPμPīPēC%CrCfC‡Pē 3 Pi
PḡP°CfP° C,C-P»P° PīP°C†C-C°PSC,P°	PḡPrPSPsCḡP°P·PsPIP° PrPsP·P°	PḡP±ḡḡ™C°Pj PSP° PsPrPēPS PīCḡPēPNēPsPj	PḡP°PeCfPēPjP°P»CHPSPēPNē PsP±ḡḡ™C°Pj PSP° PsPrPēPS PīCḡPēPNēPsPj**	PḡP°PeCfPēPjP°P»CHPSP° PrPsP±PsPIP° PrPsP·P°****
> 50 PePi, P·P° PSP°CfPIPSPsCfC,C- C,,P°PeC,PsCḡC-PI CḡPēP·PēPeCr CḡPsP·PīPēC,PeCr PīPμPīP°C,PsC,PsPeCfPēC‡PSPsCfC,C-	1 Pi	100 PjP»	100 PjP»	3 Pi
> 50 PePi, PīCḡPē PIC-PrCfCfC,PSPsCfC,C- C,,P°PeC,PsCḡC-PI CḡPēP·PēPeCr CḡPsP·PīPēC,PeCr PīPμPīP°C,PsC,PsPeCfPēC‡PSPsCfC,C-	1 Pi	100 PjP»	100 PjP»	4 Pi

* PḡPμPrPsPSPsC€PμPSC- PSPsPIPsPSP°CḡPsPrP¶PμPSC-: PrP°PSC- PīCḡPs P±PμP·PīPμPeCr C,P° PμC,,PμPeC,PēPIPSC-CfC,CH PrP»Cf PSPμPrPsPSPsC€PμPSPēC... PSPsPIPsPSP°CḡPsPrP¶PμPSPēC... PIC-PrCfCfC,PSC- (PrPēPI. CḡPsP·PrC-P» B«PαP°CḡPjP°PePsPeC-PSPμC,PēPeP°B»).

** PḡP°C†C-C°PSC,Pē P· PSPēP¶C‡PsCf PjP°CfPsCf C,C-P»P° PīPsC,CḡPμP±CfCfC,CH PjPμPSC€PēC... PsP±ḡḡ™C°PjC-PI.

PḡC-PSC-PjP°P»CHPSPēPNē C-PSC,PμCḡPIP°P» PjC-P¶ PīPμPrPμPSPSCfPjPē PīPsPIPēPSPμPS CfC,P°PSPsPIPēC,Pē 4 PīPsPrPēPSPē. PḡCfCḡCf P»C-PeCrPIP°PSPSCf P·P°P·PīPēC‡P°PNē PSPμ PīPμCḡPμPīPēC%CrC° 4 C-PSC,,CrP·C-PNē PīCḡPsC,CfPīPsPj 24 PīPsPrPēPS.

PḡC-PSC-PjP°P»CHPSPēPNē C-PSC,PμCḡPIP°P» PjC-P¶ PīCḡPēPNēPsPjP°PjPē Cr PīP°C†C-C°PSC,C-PI P· PSPēCḡPePsPIPsCf PSPμPrPsCfC,P°C,PSC-CfC,CH C,CfP¶PePsPiPs CfC,CrPīPμPSCf PjP°C° CfC,P°PSPsPIPēC,Pē C%PsPSP°PNēPjPμPSC€Pμ 6 PīPsPrPēPS.

*** PḡP°PeCfPēPjP°P»CHPSP° PrPsP±PsPIP° PrPsP·P°: PjP°PeCfPēPjP°P»CHPSP° PrPsP±PsPIP° PrPsP·P° PīCḡPēP·PSP°C‡PμPSP° PrP»Cf PīP°C†C-C°PSC,C-PI, CfPeC- PSPμ PsC,CḡPēPjCrCfC,CH C-PSC€C- P»C-PeP°CḡCfCHPeC- P·P°CfPsP±Pē, C%Ps PjC-CfC,CfC,CH PīP°CḡP°C†PμC,P°PjPsP», C- PjP°C° P±CfC,Pē PIC-PrPīPsPIC-PrPSPēPj

C†PëPSPsPj C†PëPsC†PëPiPsPIP°PSP° C† C†P°P·C- P†C†PëPNëPsPjC† C,P°PëPëC...
P†C†PµP†P°C†P°C,C-PI.

PµP°C†C-C''PSC,Pë P· PSPëC†PëPsPIPsC† PSPµPrPsC†C,P°C,PSC-C†C,C†

PµP°C†C-C''PSC,P°Pj P· PSPëC†PëPsPIPsC† PSPµPrPsC†C,P°C,PSC-C†C,C†
PjC-PSC-PjP°P»CHBPSPëPNë C-PSC,PµC†PIP°P» PjC-P¶ PëPsP¶PSPëPj P†C†PëPNëPsPjPsPj
P»C-PëP°C†C†CHBPëPsPiPs P·P°C†PsP±C† P†PsPIPëPSPµPS P±C†C,Pë
PIC†C,P°PSPsPIP»PµPSPëPNë P·PiC-PrPSPs C,P°P±P»PëC†C- 3:

PÿP°P±P»PëC†C¶ 3

P¶P»C-C†PµPSC† PëC†PµP°C,PëPSC-PSC† (CL _{cr})	P†PSC,PµC†PIP°P» PjC-P¶ P·P°C†C,PsC†C†PIP°PSPSC¶Pj P»C-PëP°C†C†CHBPëPsPiPs P·P°C†PsP±C†
CL _{cr} ≥ 50 PjP»/C...PI	4 PiPsPrPëPSPë
CL _{cr} 10Б†"50 PjP»/C...PI	6 PiPsPrPëPS
CL _{cr} < 10 PjP»/C...PI	8 PiPsPrPëPS

PµP°C†C-C''PSC,Pë P· P†PµC†C-PSPëPsPIPsC† PSPµPrPsC†C,P°C,PSC-C†C,C†

PµP°C†C-C''PSC,P°Pj P· C...C†PsPSC-C†PSPsC† P†PµC†C-PSPëPsPIPsC†
PSPµPrPsC†C,P°C,PSC-C†C,C† P°P±Ps PëPsPjP†PµPSC†PsPIP°PSPëPj P°PëC,PëPIPSPëPj
P·P°C...PIPsC†C†PIP°PSPSC¶Pj P†PµC†C-PSPëPë, P· P†PµP†P°C,PsC†PµP»C†P»C¶C†PSPsC†
PSPµPrPsC†C,P°C,PSC-C†C,C†, C...C†PsPSC-C†PSPëPj P°P»PëPsPiPsP»C-P·PjPsPj,
P†P°C†C-C''PSC,P°Pj, C¶PëC- C...C†PsPSC-C†PSPs PSPµPrPsC—PrP°C†C,C† (PSPëP·CHBPëC-
P·P°P†P°C†Pë P†PµC†C-PSPëPsPIPsPiPs P†P»C†C,P°C,C-PsPSC†), P†P°C†C-C''PSC,P°Pj P·
PrPµPiC-PrC†P°C,P°C†C-C''C†, C...PIPsC†PsP±PsC† P-PëP»CHBP±PµC†P°, PjP°C†PsC†
C,C-P»P° PjPµPSC€Pµ 50 PëPi Б†" PjP°PëC†PëPjP°P»CHBPSP° PrPsP±PsPIP° PrPsP·P° PSPµ
P†PsPIPëPSPSP° P†PµC†PµPIPëC%°C†PIP°C,Pë 3 Pi (PrPëPI. C†PsP·PrC-P»
B«PhC†PsP±P»PëPIPsC†C,C- P·P°C†C,PsC†C†PIP°PSPSC¶B»).

PµP°C†C-C''PSC,Pë P»C-C,PSCHBPsiPs PIC-PëCž

PµP°C†C-C''PSC,Pë P»C-C,PSCHBPsiPs PIC-PëC† P·P°P·PIPëC†P°PNë PSPµ
P†PsC,C†PµP±C†C†C,C† PëPsC†PµPëC†C— PrPsP·Pë P»C-PëP°C†C†CHBPëPsPiPs
P·P°C†PsP±C†.

PÿP†PsC†C-P± P·P°C†C,PsC†C†PIP°PSPSC¶

P PsP·C†PëPS P†P°C†P°C†PµC,P°PjPsP»C† P·P°C†C,PsC†C†PIC†C"°C,CHC†C¶ C† PIPëPiP»C¶PrC-
15-C...PIPëP»PëPSPSPsC— PIPSC†C,C†C-C€PSCHBPsiPIPµPSPSPsC— C-PSC,,C†P·C-C—.

PµP°C†C-C''PSC,Pë P· PjP°C†PsC† C,C-P»P° ≤ 10 PëPi

Б†ÿ PµP»C¶C€PëC† P· P†PSC,,C†P»PiP°PSPsPj PSPµ P†C-PrPIC-C€C†C†C,C† PrP»C¶
C-PSC,,C†P·C-C— C†PµC†PµP· PSPµPIPµP»PëPëPëPNë PsP±Б†™C"°Pj P»C-PëP°C†C†CHBPëPsPiPs
P·P°C†PsP±C†, C¶PëPëPNë PSPµPsP±C...C-PrPSPs P·P°C†C,PsC†C†PIP°C,Pë.

P PsP·PIP_μPrP_μPSPëPN₂ C₇PsP·C₄PëPS PSP_μPsP±C...C-PrPSPs PIC-P·C₇P°P»CH₃PSPs
PsPiP»C₄IPSC₇C,Pë PiP_μC₇P_μPr P·P°C₇C,P₅C₇C₇PIP°PSPSC₄Pj, PSP_μ C₇P»C-Pr
PIPëPePsC₇PëC₇C,P₅PIC₇PIP°C,Pë C₇ C₇P°P·C- PIPëC₄PIP»P_μPSPSC₄ PIPeP»C₇C₄P_μPSCH₃
P°P±Ps PsC₇P°PrC₇.

P''C-C,Pë.

P—P°CÍC,PsCÍPsPICrCñC,CH P· PíPµCñC€PëC... PrPSC-PI P¶PëC,C,CÍ. PkPµ
P·P°CÍC,PsCÍPsPICrCñC,CH PSPµPrPsPSPsC€PµPSPëPj PSPsPiPsPSP°CñPsPrP¶PµPSPëPj.

PµPµCñPµPrPsP·C¿PIP°PSPSCÍ.

P PëP·PëPe CrCñP°P¶PµPSPSCÍ PíPµC±C-PSPePë (PIPeP»CñC±P°CñC±Pë
P±P»PëCÍPeP°PIPëC±PSPëPNë PíPµPíP°C,PëC,, PíPµC±C-PSPePsPICr
PSPµPrPsCÍC,P°C,PSC-CÍC,CH, C...PsP»PµCÍC,P°C,PëC±PSPëPNë PíPµPíP°C,PëC,,
C±PëC,PsP»C-C,PëC±PSPëPNë PíPµPíP°C,PëC,) P·CñPsCÍC,P°C" PI PsCÍC-P± P»C-C,PSCHPsPiPs
PIC-PeCr, PjP°P»PµPSCHPePëC... PrC-C,PµPNë, PíP°C±C-C"PSC,C-PI C-P·
P·P°C...PIPsCñCñPIP°PSPSCÍPjPë PíPµC±C-PSPePë, Cr PIPëPíP°PrPeP°C...
C...CñPsPSC-C±PSPsPiPs P°P»PePsPiPsP»C-P·PjCr, PíCñPë PSP°CÍPIPSPsCÍC,C-
P°P»C-PjPµPSC,P°CñPSPsC— PrPëCÍC,CñPsC,,C-C— C,P° PI PsCÍC-P±, CÍPeC-
PíCñPëPNëPjP°CñC,CH PµPSP·PëPj-C-PSPrCrPeCrCñC±C- PíCñPµPíP°CñP°C,Pë. Pj
P·P°P·PSP°C±PµPSPëC... PIPëPíP°PrPeP°C... PíPµCñPµPrPsP·CrPIP°PSPSCÍ PjPsP¶Pµ P±CrC,Pë
P»PµC,P°P»CHPSPëPj.

PŸPëPjPiC,PsPjPë P·Bñ™ CÍPIP»CÍCñC,CHCÍCÍ PíCñPsC,CÍPiPsPj PíPµCñC€PëC...
24 PiPsPrPëPS C,P° PíCñPsCÍPIP»CÍCñC,CHCÍCÍ PSCrPrPsC,PsCñ, P±P»CñPIP°PSPSCÍPj,
P°PSPsCñPµPeCÍC-C"Cñ, P±P»C-PrC-CÍC,Cñ, P±PsP»PµPj Cr P¶PëPiPsC,C-.

PµPµCñPµPrPsP·CrPIP°PSPSCÍ Cr PrPsCñPsCÍP»PëC... PjPsP¶Pµ P±CrC,Pë PíCñPë
PsPrPSPsCñP°P·PsPiPsPjCr PIPiPµPrPµPSPSC- PI PrPsP·C- 7,5 Pi C,P° P±C-P»CHC€Pµ, Cr
PrC-C,PµPNë Bñ" PI PrPsP·C- 140 PjPi/PePi PjP°CÍPë C,C-P»P°. PµCñPë C±CHPsPjCr
CñPsP·PIPëPIP°C"C,CHCÍCÍ C±PëC,PsP»C-P· PíPµC±C-PSPePë, C%Ps PjPsP¶Pµ CÍC,P°C,Pë
PíCñPëC±PëPSPsCñ CñPsP·PIPëC,PeCr PíPsPiPsPiPs C,P° PSPµP·PIPsCñPsC,PSPsPiPs
PSPµPeCñPsP·Cr, C%Ps P·C- CÍPIPsPiPs P±PsPeCr PIPëPeP»PëPeP°C" PíPµC±C-PSPePsPICr
PSPµPrPsCÍC,P°C,PSC-CÍC,CH, PjPµC,P°P±PsP»C-C±PSPëPNë P°C±PëPrPsP·,
PµPSC±PµC,,P°P»PsPíP°C,C-Cñ, C%Ps PjPsP¶CÍC,CH PíCñPëP·PIPµCÍC,Pë PrPs PePsPjPë C,P°
P»PµC,P°P»CHPSPsPiPs PSP°CÍP»C-PrPeCr PíP°C±C-C"PSC,P°. PµCñPsC,CÍPiPsPj
12-48 PiPsPrPëPS P·CñPsCÍC,P°C" CñC-PIPµPSCH PíPµC±C-PSPePsPIPëC...
C,CñP°PSCÍP°PjC-PSP°P· (P°P»P°PSC-PSP°PjC-PSPsC,CñP°PSCÍC,,PµCñP°P·Pë,
P°CÍPíP°CñC,P°C,P°PjC-PSPsC,CñP°PSCÍC,,PµCñP°P·Pë),
P»P°PeC,P°C,PrPµPiC-PrCñPsPiPµPSP°P·Pë, P±C-P»C-CñCrP±C-PSCr C,P°
P·PjPµPSC€CrC"C,CHCÍCÍ CñC-PIPµPSCH PíCñPsC,CñPsPjP±C-PSCr.

PñP»C-PSC-C±PSC- CÍPëPjPiC,PsPjPë CrC€PePsPrP¶PµPSPSCÍ PíPµC±C-PSPePë
PíCñPsCÍPIP»CÍCñC,CHCÍCÍ C±PµCñPµP· PrPIC- PrPsP±Pë C,P° PrPsCÍCÍPiP°CñC,CH
PjP°PeCÍPëPjCrPjCr C±PµCñPµP· 4-6 PrPSC-PI.

PkPµPIC-PrPeP»P°PrPSC- P·P°C...PsPrPë

- PSPµPiP°PNëPSP° PiPsCÍPíC-C,P°P»C-P·P°C±C-CÍ;
- PIPëP·PSP°C±PµPSPSCÍ PePsPSC±PµPSC,CñP°C±C-C— PíP°CñP°C±PµC,P°PjPsP»Cr PI
PíP»P°P·PjC- PeCñPsPIC- CÍPePsPjPsPiP° C€PIPëPrC€Pµ PíC-CÍP»CÍ
PíPµCñPµPrPsP·CrPIP°PSPSCÍ PrPs PíPsC±P°C,PeCr P»C-PeCrPIP°PSPSCÍ;
- PIPSCrC,CñC-C€PSCHPsPiPµPSPSPµ P°P±Ps PíPµCñPsCñP°P»CHPSPµ

P·P°CÍC,PsCÍCÍPIP°PSPSCÍ P°PSC,PëPrPsC,CÍ, N·P°C†PµC,PëP»C†PëCÍC,PµC—PSCÍ (NAC), PİPs PjPsP¶P»PëPIPsCÍC,C-, PSPµ PİC-P·PSC-CëPµ PSC-P¶ C†PµC¶PµP· 10 PiPsPrPëPS PİC-CÍP»CÍ PİPµC¶PµPrPsP·CÍPIP°PSPSCÍ. NAC PjPsP¶PSP° P·P°CÍC,PsCÍPsPICÍPIP°C,Pë C- PİC-P·PSC-CëPµ, C†PµC¶PµP· 10 PiPsPrPëPS PİC-CÍP»CÍ PİPµC¶PµPrPsP·CÍPIP°PSPSCÍ, PsPrPSP°Pë P»C-PëCÍPIP°PSPSCÍ PjP°C” C,C¶PëPIP°C,Pë PrPsPICëPµ;

- CÍPëPjPİC,PsPjP°C,PëC†PSPµ P»C-PëCÍPIP°PSPSCÍ;

- PİPµC¶PµPr PİPsC†P°C,PePsPj P»C-PëCÍPIP°PSPSCÍ PSPµPsP±C...C-PrPSPs PİC¶PsPIPµCÍC,Pë PİPµC†C-PSPePsPIC- C,PµCÍC,Pë C,P° PİPsPIC,PsC¶C¶PIP°C,Pë C—C... PePsP¶PSC- 24 PiPsPrPëPSPë;

- CÍ P±C-P»C¶CëPsCÍC,C- PIPëPİP°PrPeC-PI C¶C-PIPµPSCH PİPµC†C-PSPePsPIPëC... C,C¶P°PSCÍP°PjC-PSP°P· PİPsPIPµC¶C,P°C¶C,C¶CÍCÍ PrPs PSPsC¶PjP°P»C¶PSPëC... PİPsPeP°P·PSPëPeC-PI P·P° PsPrPëPS-PrPIP° C,PëP¶PSC- P· PİPsPIPSPëPj PIC-PrPSPsPIP»PµPSPSCÍPj C„CÍPSPëC†C-C— PİPµC†C-PSPePë. P’ PsPeC¶PµPjPëC... PIPëPİP°PrPeP°C... PjPsP¶Pµ P±CÍC,Pë PİPsC,C¶C-P±PSP° C,C¶P°PSCÍPİP»P°PSC,P°C†C-CÍ PİPµC†C-PSPePë.

PµPsP±C-C†PSC- C¶PµP°PeC†C-C—.

PİPe C- CÍ C¶P°P·C- P·P°CÍC,PsCÍCÍPIP°PSPSCÍ C-PSCëPëC... P»C-PëP°C¶CÍCHPePëC... P·P°CÍPsP±C-PI, C%Ps PjC-CÍC,CÍC,C¶ PİP°C¶P°C†PµC,P°PjPsP», PİPsP±C-C†PSC- C¶PµP°PeC†C-C— PIPëPSPëPeP°P»Pë C†P°CÍC,Ps (³ 1/100 B¶” < 1/10), C¶C-PrPePs (³ 1/10000 – < 1/1000), PrCÍP¶Pµ C¶C-PrPePs (< 1/10000), C†P°CÍC,PsC,P° PSPµPIC-PrPsPjP° (PSPµ PjPsP¶P»PëPIPs PsC†C-PSPeC,Pë P·P° PSP°CÍPIPSPëPjPë PrP°PSPëPjPë).

PÿP°P±P»PëC†CÍ 4

PÿPëCÍC,PµPjPë PsC¶PİP°PSC-PI	P§P°CÍC,PsC,P°	PµPsP±C-C†PSC- C¶PµP°PeC†C-C—
P— P±PsPeCÍ CÍPëCÍC,PµPjPë PeC¶PsPIC- C,P° P»C-PjC„P°C,PëC†PSPsC— CÍPëCÍC,PµPjPë	P”CÍP¶Pµ C¶C-PrPePs	PÿC¶PsPjP±PsC†PëC,PsPİPµPSC-CÍ, P»PµPNëPePsPİPµPSC-CÍ, PSPµPNëC,C¶PsPİPµPSC-CÍ
P— P±PsPeCÍ C-PjCÍPSPSPsC— CÍPëCÍC,PµPjPë	P”CÍP¶Pµ C¶C-PrPePs	P¶PSP°C„C-P»P°PeC,PëC†PSPëPNë CëPsPe*, C¶PµP°PeC†C-C— PİC-PİPµC¶C†CÍC,P»PëPIPsCÍC,C-*
PµPsC¶CÍCëPµPSPSCÍ PsP±PjC-PSCÍ C¶PµC†PsPIPëPS, PjPµC,P°P±PsP»C-P·PjCÍ	P§P°CÍC,PsC,P° PSPµPIC-PrPsPjP°	P¶PµC,P°P±PsP»C-C†PSPëPNë P°C†PëPrPsP· P· PIPëCÍPsPePëPj P°PSC-PsPSPSPëPj PİC¶PsPjC-P¶PePsPj (HAGMA)**
P¶P°C¶PrC-P°P»C¶PSC- PİPsC¶CÍCëPµPSPSCÍ	P C-PrPePs	P¶C¶C,PµC¶C-P°P»C¶PSP° PİC-PİPsC,PµPSP·C-CÍ
	P§P°CÍC,PsC,P° PSPµPIC-PrPsPjP°	PÿP°C...C-PëP°C¶PrC-CÍ
P— P±PsPeCÍ PİPµPİP°C,PsP±C-P»C-P°C¶PSPsC— CÍPëCÍC,PµPjPë	P C-PrPePs	PµC-PrPIPëC%PµPSPSCÍ C¶C-PIPSCÍ PİPµC†C-PSPePsPIPëC... C,C¶P°PSCÍP°PjC-PSP°P·

P— P±PsPeCf C€PeC-CTjPë C,P° PïC-PrC€PeC-CTjPSPsC— PeP»C-C,PePsPIPëPSPë	P°CfP¶Pµ CTjC-PrPePs	P'PëCfPëPïP°PSPSC¶*, PeCTjPsPïPëPIB¶™ C¶PSPeP°*, C,C¶P¶PeC- C€PeC-CTjPSC- CTjPµP°PeC†C-C—***
P—P°PïP°P»CHbPSC- CTjPsP·P»P°PrPë C,P° P·PjC-PSPë Cf PjC-CfC†C- C-PSB¶™ C°PeC†C-C—	P§P°CfC,Ps	P PµP°PeC†C-C— Cf PjC-CfC†C- PIPIPµPrPµPSPSC¶ (P±C-P»CHb C,P° PïPµC±C-PSPSC¶)
	P C-PrPePs	PkPµP·PrCfP¶P°PSPSC¶
	P§P°CfC,PsC,P° PSPµPIC-PrPsPjP°	P·CTjPëC,PµPjP°, PïPsC±PµCTjPIPsPSC-PSPSC¶, CfPIPµCTjP±C-P¶

* PµPsPIC-PrPsPjP»C¶P»PsCfC¶ PïCTjPs PrCfP¶Pµ CTjC-PrPeC-CfPSC- PIPëPïP°PrPePë
CTjPµP°PeC†C-PNë PïC-PïPµCTjC±CfC,P»PëPIPsCfC,C- Cf PIPëPïP»C¶PrC-
P°PSP°C,,C-P»P°PeC,PëC±PSPsPiPs C€PsPeCf, PeCTjPsPïPëPIB¶™ C¶PSPePë, PIPëCfPëPïP°PSCb,
C°%Ps PïPsC,CTjPµP±CfCThC,CHb PïCTjPëPïPëPSPµPSPSC¶ P»C-PeCfPIP°PSPSC¶.

** PJ PïC-CfP»C¶CTjPµC°CfC,CTjP°C†C-PNëPSPëPNë PïPµCTjC-PsPr, PïCTjPë
PsPrPSPsC±P°CfPSPsPjCf P·P°CfC,PsCfCfPIP°PSPSC- PïP°CTjP°C†PµC,P°PjPsP»Cf P·
C,,P»CfPeP»PsPeCfP°C†PëP»C-PSPsPj; P·P°P·PIPëC±P°PNë, P·P° PSP°C¶PIPSsCfC,C-
C,,P°PeC,PsCTjC-PI CTjPëP·PëPeCf.

*** PµPsPIC-PrPsPjP»C¶P»PsCfC¶ PïCTjPs PIPëPïP°PrPePë CfPµCTjPNëPsP·PSPëC...
C€PeC-CTjPSPëC... CTjPµP°PeC†C-PNë, C°%Ps PïPsC,CTjPµP±CfCThC,CHb PïCTjPëPïPëPSPµPSPSC¶
P»C-PeCfPIP°PSPSC¶.

PbPïPëCf PsPeCTjPµPjPëC... PïPsP±C-C±PSPëC... CTjPµP°PeC†C-PNë

*PµPµC,P°P±PsP»C-C±PSPëPNë P°C†PëPrPsP· P· PIPëCfPsPePëPj P°PSC-PsPSPSPëPj
PïCTjPsPjC-P¶PePsPj*

P'PëPïP°PrPePë PjPµC,P°P±PsP»C-C±PSPsPiPs P°C†PëPrPsP·Cf **P·** PIPëCfPsPePëPj
P°PSC-PsPSPSPëPj PïCTjPsPjC-P¶PePsPj C¶Pe PSP°CfP»C-PrPeCf
PïC-CTjPsPiP»CfC,P°PjC-PSPsPIPsPiPs P°C†PëPrPsP·Cf CfPïPsCfC,PµCTjC-PiP°P»PëCfC¶
Cf PïP°C†C-C°PSC,C-PI P· C,,P°PeC,PsCTjP°PjPë CTjPëP·PëPeCf, C¶PeC-
P·P°CfC,PsCfPsPICfPIP°P»Pë PïP°CTjP°C†PµC,P°PjPsP» (PrPëPI. CTjPsP·PrC-P»
B«PbCfPsP±P»PëPIPsCfC,C- P·P°CfC,PsCfCfPIP°PSPSC¶B»).

PµC-CTjPsPiP»CfC,P°PjC-PSPsPIPëPNë P°C†PëPrPsP· PjPsP¶Pµ PIPëPSPëPeP°C,Pë
PIPS°CfP»C-PrPsPe PSPëP·CHbPePsPiPs CTjC-PIPS¶ PïP»CfC,P°C,C-PsPSCf Cf C,P°PePëC...
PïP°C†C-C°PSC,C-PI.

PµPsPIC-PrPsPjP»PµPSPSC¶ PïCTjPs PïPsP±C-C±PSC- CTjPµP°PeC†C-C—

PµPsPIC-PrPsPjP»PµPSPSC¶ PïCTjPs PïPsP±C-C±PSC- CTjPµP°PeC†C-C— PïC-CfP»C¶
CTjPµC°CfC,CTjP°C†C-C— P»C-PeP°CTjCfCHbPePsPiPs P·P°CfPsP±Cf C°
PIP°P¶P»PëPIPëPjPë. PjPµ P·P°P±PµP·PïPµC±CfC° PïPsCfC,C-PNëPSPëPNë
PjPsPSC-C,PsCTjPëPSPi CfPïC-PIPIC-PrPSPsC€PµPSPSC¶ PePsCTjPëCfC,CHb/CTjPëP·PëPe
P»C-PeP°CTjCfCHbPePsPiPs P·P°CfPsP±Cf. PµPµPrPëC±PSPëC...
PïCTjP°C†C-PIPSPëPeC-PI PïCTjPsCfC¶C,CHb PïPsPIC-PrPsPjP»C¶C,Pë PïCTjPs
P±CfPrCHb-C¶PeC- PïC-PrPsP·CTjCThPIP°PSC- PïPsP±C-C±PSC- CTjPµP°PeC†C-C—

C†PμCḡPμP·PSP°C†C-PsPSP°P»CHbPSCr CŦPëCŦC,PμPjCŦ PŦPsPIC-PrPsPjP»PμPSCḡ.

PŸPμCḡPjC-PS PŦCḡPëPrP°C,PSPsCŦC,C-.

2 CḡPsPePë. PkPμ P·P°CŦC,PsCŦPsPICŦPIP°C,Pë PŦC-CŦP»CŦ P·P°PeC-PSC†PμPSPSCŦ C,PμCḡPjC-PSCŦ PŦCḡPëPrP°C,PSPsCŦC,C-, P·P°P·PSP°C†PμPSPsPiPs PSP° CŦPŦP°PePsPIC†C-.

PjPjPsPIPë P·P±PμCḡC-PiP°PSPSCŦ.

P—P±PμCḡC-PiP°C,Pë CŦ PSPμPrPsCŦC,CŦPŦPSPsPjCŦ PrP»CŦ PrC-C,PμPNë PjC-CŦC†C-.

P—P±PμCḡC-PiP°C,Pë PI P·P°C...PëC%PμPSPsPjCŦ PIC-Pr CŦPIC-C,P»P° PjC-CŦC†C- PŦCḡPë C,PμPjPŦPμCḡP°C,CŦCḡC- PSPμ PIPëC%Pμ 25 B°PŸ. PkPμ P·P°PjPsCḡPsPŦCŦPIP°C,Pë.

PkPμCŦCžPjC-CŦPSC-CŦC,CH.

P†PSC,,CŦP»PiP°PS PSPμ CŦP»C-Pr P·PjC-CŦCŦPIP°C,Pë P·C-PSC€PëPjPë CḡPsP·C†PëPSP°PjPë, PsPeCḡC-Pj C,PëC..., C%Ps PIPEP°P·P°PSC- CŦ CḡPsP·PrC-P»C- B«PŸPŦPsCŦC-P± P·P°CŦC,PsCŦCŦPIP°PSPSCŦ C,P° PrPsP·PëB».

PjPŦP°PePsPIPEP°.

PμPs 100 PjP» CŦ PŦP»CŦC€C†C- CŦPeP»CŦPSC-PNë P°P±Ps PŦPs 100 PjP» CŦ PŦP»CŦC€C†C- PŦPsP»C-PjPμCḡPSC-PNë. PμPs 1 PŦP»CŦC€C†C- CŦ PePsCḡPsP±C†C- P·PeP°CḡC,PsPSCŦ.

PḡP°C,PμPiPsCḡC-CŦ PIC-PrPŦCŦCŦPeCŦ.

P—P° CḡPμC†PμPŦC,PsPj.

P'PëCḡPsP±PSPëPe.

PŸPhP' B«P®CḡC-CŦ-PαP°CḡPjB»

PḡC-CŦC†PμP·PSP°C...PsPrPŦPμPSPSCŦ PIPëCḡPsP±PSPëPeP° C,P° P°PrCḡPμCŦP° PjC-CŦC†CŦ PŦCḡPsPIP°PrPŦPμPSPSCŦ PNëPsPiPs PrC-CŦP»CHbPSPsCŦC,C-.

PjPeCḡP°C—PSP°, 18030, PŸPμCḡPeP°CŦCHbPeP° PsP±P», Pj. PŸPμCḡPeP°CŦPë, PICŦP». PḡPsP±P·P°CḡCŦCHbPeP°, 108. PŸPμP». (044) 281-01-01.