

P†PSCÍC,CḡCṛPεC†C-CΠ

**PrP»CΠ PjPμPrPëC‡PSPsPiPs P·P°CÍC,PsCÍCṛPIP°PSPSCΠ P»C-PεP°CḡCÍCHPεPsPiPs
P·P°CÍPsP±Cṛ**

PŸPμPḡP—P“Pḡ

(SPASGO)

PŸPεP»P°Pr:

*PrC-CḡC‡C- CḡPμC‡PsPIPëPSPë: PïP°CḡP°C†PμC,P°PjPsP», PrPëC†PëPeP»PsPjC-PSCṛ
PiC-PrCḡPsC...P»PsCḡPëPr;*

1 C,P°P±P»PμC,PεP° PjC-CÍC,PëC,CH PïP°CḡP°C†PμC,P°PjPsP»Cṛ 500 PjPi C,P°
PrPëC†PëPeP»PsPjC-PSCṛ PiC-PrCḡPsC...P»PsCḡPëPrCṛ 20 PjPi;

*PrPsPiPsPjC-PΠPSC- CḡPμC‡PsPIPëPSPë: PeCḡPsC...PjP°P»CH PeCṛPeCṛCḡCṛPrP·CΠPSPëPNε,
PΠPμP»P°C,PëPS, PSP°C,CḡC-Cḡ PjPμC,PëP»PïP°CḡP°P±PμPS (E 219), PSP°C,CḡC-Cḡ
PiCḡPsPiC-P»PïP°CḡP°P±PμPS (E 217), PSP°C,CḡC-Cḡ PjPμC,P°P±C-CÍCṛP»CHC,,C-C, (E 223),
PïPsP»C-PIC-PSC-P»PïC-CḡPsP»C-PrPsPS (Pḡ-30), PjP°PiPSC-Cḡ CÍC,PμP°CḡP°C,, C,P°P»CHPe,
PSP°C,CḡC-Cḡ PeCḡPsC...PjP°P»CHPiP»C-PεPsP»CΠC,.*

P»C-PεP°CḡCÍCHPεP° C,,PsCḡPjP°. PŸP°P±P»PμC,PεPë.

*PḡCÍPSPsPIpsc- C,,C-P·PëPePs-C...C-PjC-C‡PSC- PIP»P°CÍC,PëPIPsCÍC,C-: C,P°P±P»PμC,PεPë
PeCḡCṛPiP»C-, PïP»PsCÍPeC-, P±C-P»PsPiPs P°P±Ps PjP°PNεPΠPμ P±C-P»PsPiPs
PePsP»CHPsCḡCṛ, P· CḡPëCÍPePsCḡ P· PsPrPSPsPiPs P±PsPeCṛ, P· C,,P°CÍPePsCḡ.*

**PαP°CḡPjP°PePsC,PμCḡP°PïPμPIC,PëC‡PSP° PiCḡCṛPïP°. PḡPSP°P»PiPμC,PëPePë C,P°
P°PSC,PëPiC-CḡPμC,PëPePë. PμP°CḡP°C†PμC,P°PjPsP», PePsPjP±C-PSP°C†C-C— P±PμP·
PïCÍPëC...PsP»PμPiC,PëPeC-PI. PḡPsPr PḡTPTḡ N02B E51.**

PαP°CḡPjP°PePsP»PsPiC-C‡PSC- PIP»P°CÍC,PëPIPsCÍC,C-.

PαP°CḡPjP°PePsPrPëPSP°PjC-PεP°.

PμP°CḡP°C†PμC,P°PjPsP» PrC-C" CΠPe P·PSPμP±PsP»CḡPIP°P»CHPSPëPNε C,P°
PΠP°CḡPsP·PSPëPΠCṛPIP°P»CHPSPëPNε P·P°CÍC-P±. PḡPSP°P»PiPμC,PëC‡PSP° C,P°
PΠP°CḡPsP·PSPëPΠCṛPIP°P»CHPSP° PrC-CΠ PïP°CḡP°C†PμC,P°PjPsP»Cṛ
(PSPμPsPiC-P°C,PSPsPiPs, PSPμCÍP°P»C-C†PëP»P°C,PSPsPiPs P°PSP°P»PiPμC,PëPeP°)
PïPsPIBḡ™ CΠP·P°PSP° P· PIPïP»PëPIPsPj PiCḡPμPïP°CḡP°C,Cṛ PSP° C†PμPSC,Cḡ
C,PμCḡPjPsCḡPμPiCṛP»CΠC†C-C— Cṛ PiC-PïPsC,P°P»P°PjCṛCÍC- C,P°

P·PrP°C,PSC-ClC,CH C-PSPiC-P±CrPIP°C,Pë ClPëPSC,PµP·
PiCḡPsClC,P°PiP»P°PSPrPëPSC-PI.

P"PëC†PëPeP»PsPjC-PSCr PiC-PrCḡPsC...P»PsCḡPëPr вḡ“ C,CḡPµC,PëPSPSPëPNë P°PjC-PS.
PḡP°C” P°PSC,PëC...PsP»C-PSPµCḡPiC-C†PSCr P°PeC,PëPIPSC-ClC,CH C- P·PSPëP¶ClC”
C,PsPSCrCl PiP»P°PrPµPSCḡPePsC— PjCrClPeCrP»P°C,CrCḡPë, CrClCrPIP°C” P±C-P»CH,
P±P»PsPeCrC” P°PSC,P°PiPsPSC-ClC,PëC†PSCr P°PeC,PëPIPSC-ClC,CH.
P"PëC†PëPeP»PsPjC-PSCr PiC-PrCḡPsC...P»PsCḡPëPr PIPëP±C-CḡPePsPIPs PïP°CḡP°P»C-P·CrC”
Pḡ-C...PsP»C-PSPsCḡPµP°PeC,PëPIPSC- ClC,CḡCrPeC,CrCḡPë, P±P»PsPeCrCHC†Pë
PiPµCḡPµPrP°C†Cr C-PjPiCrP»CHCḡC-PI PiPsClC,PiP°PSPiP»C-PsPSP°CḡPSPëC...
C...PsP»C-PSPµCḡPiC-C†PSPëC... PSPµCḡPIC-PI PSP° C-PSPSPµCḡPICrCHC†C- PSPëPjPë
PµC,,PµPeC,PsCḡPSC- PsCḡPiP°PSPë. PḡPiCḡPëC†PëPSCḡC” CḡPsP·ClP»P°P±P»PµPSPSCḡ
PiP»P°PrPµPSCḡPePëC... Pjвḡ™ ClP·C-PI, PiCḡPsClPIP»ClCHC†Pë
ClPiP°P·PjPsP»C-C,PëC†PSPëPNë PµC,,PµPeC, PiCḡPë ClPiP°P·PjP°C... PiP»P°PrPµPSCḡPePëC...
Pjвḡ™ ClP·C-PI CëP»CrPSPeP°, PePëCëPµC†PSPëPeCr, P¶PsPIC†PsPIPëPIC-PrPSPëC...
CëP»ClC...C-PI, CrCḡPsPiPµPSC-C,P°P»CHPSPsC— C- ClCrPrPëPSPSPsC— ClPëClC,PµPj.

PḡP»C-PSC-C†PSC- C...P°CḡP°PeC,PµCḡPëClC,PëPePë.

PµPsPeP°P·P°PSPSCḡ.

P'PsP»CHPsPIC- ClPëPSPrCḡPsPjPë P·C- ClPiP°CḡC,PëC†PSPëPj PePsPjPiPsPSPµPSC,PsPj
CḡC-P·PSPsPiPs PïPsC...PsPrP¶PµPSPSCḡ:

- PiPsP»PsPIPSPëPNë P±C-P»CH;
- P·CrP±PSPëPNë P±C-P»CH;
- Pjвḡ™ ClP·PsPIPëPNë P±C-P»CH, PSPµPICḡP°P»PiC-Cl;
- CḡPµPIPjP°C,PëC†PSPëPNë P±C-P»CH, CḡP°PrPëPeCrP»C-C,Pë;
- PSPëCḡPePsPIP° PePsP»C-PeP°;
- PjPµPSCḡC,CḡCrP°P»CHPSPëPNë P±C-P»CH.

PµCḡPsC,PëPiPsPeP°P·P°PSPSCḡ.

P"P»P°CrPePsPjP°, C,P°C...C-PeP°CḡPrC-Cl, PSPµPiCḡPsC...C-PrPSC-ClC,CH
ClPµC†PsPIPëPIC-PrPSPëC... CëP»ClC...C-PI, PjC-P°CḡC,PµPSC-Cl, PiC-PrPIPëC%oPµPSP°
C†CrC,P»PëPIC-ClC,CH PrPs PePsPjPiPsPSPµPSC,C-PI PiCḡPµPiP°CḡP°C,Cr, C,ClP¶PeC-
PiPsCḡCrCëPµPSPSCḡ C,,CrPSPeC†C-C— PSPëCḡPsPe C,P°/P°P±Ps PiPµC†C-PSPePë,
PrPµC,,C-C†PëC,B B B B B B B B B B B B B B B B PiP»CHPePsP·Ps-6-
C,,PsClC,,P°C,PrPµPiC-PrCḡPsPiPµPSP°P·Pë, P°P»PePsPiPsP»C-P·Pj,
P·P°C...PIPsCḡCHPIP°PSPSCḡ PeCḡPsPIC-, Cr C,PsPjCr C†PëClP»C- P°PSPµPjC-Cl,
P»PµPNëPePsPiPµPSC-Cl. PhP±ClC,CḡCrPeC,PëPIPSC- P·P°C...PIPsCḡCHPIP°PSPSCḡ
C,CḡP°PIPSPsPiPs C,CḡP°PeC,Cr, CrCḡPsPiPµPSC-C,P°P»CHPSPsPiPs C,CḡP°PeC,Cr,

P¶PsPIC±PsPIPëPIC-PrPSPëC... C€P»C¼C...C-PI. PµPµPïC,PëC±PSP° PIPëC¶P°P·PeP°
C€P»C¶PSPeP° P°P±Ps PrPIP°PSP°PrC±C¼C,PëPïP°P»PsC— PePëC€PePë. P PµC,,P»C¶PeC¶-
PµP·PsC,,P°PiC-C,. P”PsC¶C,C¶P° PeC¶PsPIPsC,PµC±P°. P”PsP±C¶PsC¼PeC-C¶PSP°
PiC-PïPµC¶C,C¶PsC,,C-C¼ PïPµC¶PµPrPjC-C...C¶C¶PsPIPsC— P·P°P»PsP·Pë P·
C,PµPSPPrPµPSC†C-C”C¶ PrPs P·P°C,C¶PëPjPePë C¶PµC±PsPIPëPïC¶C¶PeP°PSPSC¼.
P”PëPSP°PjC-C±PSP° PePëC€PePsPIP° PSPµPïC¶PsC...C-PrPSC-C¶C,C¶. PÿC¼P¶PeC-
P·P°C...PIPsC¶C¶PIP°PSPSC¼ PïPµC±C-PSPePë C,P° PSPëC¶PsPe. P’C¶PsPrP¶PµPSC-
PiC-PïPµC¶P±C-P»C-C¶C¶P±C-PSPµPjC-C— (C¶PëPSPPrC¶PsPjPë P-C-P»C¶P±PµC¶P°,
P”C¶P±C-PSP°-P”P¶PsPSC¶PsPSP° C,P° P PsC,PsC¶P°).

**P’P·P°C”PjPsPrC-C¼ P· C-PSC€PëPjPë P»C-PeP°C¶C¶C¶PePëPjPë
P·P°C¶PsP±P°PjPë C,P° C-PSC€C- PIPëPrPë PIP·P°C”PjPsPrC-PNë.**

P¶C¶PsP±P»PëPIPsC¶C,C- PIP·P°C”PjPsPrC-C— PïC¶PµPïP°C¶P°C,C¶
P·C¶PjPsPIP»PµPSC- PIP»P°C¶C,PëPIPsC¶C,C¼PjPë PNëPsPiPs C¶PeP»P°PrPsPIPëC....

PµP°C¶P°C†PµC,P°PjPsP», C%Ps PIC...PsPrPëC,C¶ PrPs C¶PeP»P°PrC¶ PïC¶PµPïP°C¶P°C,C¶,
P·PjPµPSC€C¶C” PµC,,PµPeC,PëPIPsC-C¶C,C¶ PrC-C¿C¶PµC,PëPeC-PI, P° C,P°PePsP¶
P·P±C-P»C¶C€C¶C” C¶PëP·PëPe PïPµPïP°C,PsC,PsPeC¶PëC±PSPëC... C¶PµP°PeC†C-PNë PïC¶Pë
C¶C¶PjC-C¶PSPsPjC¶ PïC¶PëPNëPsPjC- P· P±P°C¶P±C-C,C¿C¶P°C,P°PjPë, PrPëC,,PµPSC-P»PsPj,
PeP°C¶P±P°PjP°P·PµPïC-PSPsPj, C¶PëC,,P°PjPïC-C†PëPSPsPj C,P° C-PSC€PëPjPë
C-PSPrC¿PeC,PsC¶P°PjPë PjC-PeC¶PsC¶PsPjP°P»C¶PSPëC... PïPµC±C-PSPePsPIPëC...
C,,PµC¶PjPµPSC,C-PI, P° C,P°PePsP¶ PïC¶PsC,PëC¶C¿PrPsPjPSPëPjPë P·P°C¶PsP±P°PjPë.
PëPIPëPrPeC-C¶C,C¶ PIC¶PjPsPeC,C¶PIP°PSPSC¼ PïP°C¶P°C†PµC,P°PjPsP»C¶ PjPsP¶Pµ
P·P±C-P»C¶C€C¶PIP°C,PëC¶C¼ PïC¶Pë C¶C¶PjC-C¶PSPsPjC¶ P·P°C¶C,PsC¶C¶PIP°PSPSC- P·
PjPµC,PsPeP»PsPïC¶P°PjC-PrPsPj C,P° PrPsPjPïPµC¶PëPrPsPSPsPj C-
P·PjPµPSC€C¶PIP°C,PëC¶C¼ PïC¶Pë C¶C¶PjC-C¶PSPsPjC¶ P·P°C¶C,PsC¶C¶PIP°PSPSC- P·
C...PsP»PµC¶C,PëC¶P°PjC-PSPsPj. P·C,,PµPeC, PrC-C— PïP°C¶P°C†PµC,P°PjPsP»C¶
PïPsC¶PëP»C¶C”C,C¶C¶C¼ PïC¶Pë PNëPsPiPs PePsPjP±C-PSP°C†C-C— P· PePsPrPµC—PSPsPj,
P°C¶PePsC¶P±C-PSPsPIPsC¶ PePëC¶P»PsC,PsC¶, C¶PePsPiPsP»P°PjC-PSPsPj,
C...P»PsC¶C,,PµPSP°PjC-PSPsPj, PïC¶PsPïC-C,,PµPSP°P·PsPSPsPj C,P° PePsC,,PµC—PSPsPj.
P¶PrPSPsC±P°C¶PSPµ P·P°C¶C,PsC¶C¶PIP°PSPSC¼ PïP°C¶P°C†PµC,P°PjPsP»C¶ P·
P°P·PëPrPsC,PëPjC-PrPëPSPsPj PjPsP¶Pµ PïC¶PëP·PIPµC¶C,Pë PrPs C¶PsP·PIPëC,PeC¶
PSPµPNëC,C¶PsPïPµPSC-C—. P¶PSC,PëPePsP°PiC¶P»C¼PSC,PSPëPNë PµC,,PµPeC,
PIP°C¶C,,P°C¶PëPSC¿C,P° C-PSC€PëC... PeC¿PjP°C¶PëPSC-PI PïPsC¶PëP»C¶C”C,C¶C¶C¼
PïC¶Pë C,C¶PëPIP°P»PsPjC¶ C¶PµPiC¶P»C¼C¶PSPsPjC¶ P·P°C¶C,PsC¶C¶PIP°PSPSC-
PïP°C¶P°C†PµC,P°PjPsP»C¶. PµC-PrPIPëC%C¶C”C,C¶C¶C¼ C¶PëP·PëPe PeC¶PsPIPsC,PµC±C-
PµPµC¶C-PsPrPëC±PSPëPNë PïC¶PëPNëPsPj PSPµ PjP°C” P·PSP°C±PµPSPSC¼.
P¶PrPSPsC±P°C¶PSPµ P·P°C¶C,PsC¶C¶PIP°PSPSC¼ PïP°C¶P°C†PµC,P°PjPsP»C¶ P·
PSPµC¶C,PµC¶PsC—PrPSPëPjPë PïC¶PsC,PëP·P°PïP°P»C¶PSPëPjPë P·P°C¶PsP±P°PjPë
P·P±C-P»C¶C€C¶C” C¶PëP·PëPe PIPëPSPëPePSPµPSPSC¼ C¶C¶PeP»P°PrPSPµPSC¶ P·
P±PsPeC¶ PSPëC¶PsPe. PµC¶Pë PsPrPSPsC±P°C¶PSPsPjC¶ P·P°C¶C,PsC¶C¶PIP°PSPSC-
PïP°C¶P°C†PµC,P°PjPsP»C¶ P· PïPµPïP°C,PsC,PsPeC¶PëC±PSPëPjPë P·P°C¶PsP±P°PjPë
P·P±C-P»C¶C€C¶C”C,C¶C¶C¼ C,PsPeC¶PëC±PSPëPNë PIPïP»PëPI PïC¶PµPïP°C¶P°C,C-PI PSP°
PïPµC±C-PSPeC¶. PÿP»C-Pr P±C¶C,Pë PsP±PµC¶PµP¶PSPëPjPë PïC¶Pë PsPrPSPsC±P°C¶PSPsPjC¶
P·P°C¶C,PsC¶C¶PIP°PSPSC- PïP°C¶P°C†PµC,P°PjPsP»C¶ P· C,,P»C¿PeP»PsPeC¶P°C†PëP»C-PSPsPj,
PsC¶PeC-P»C¶PePë C,P°PePëPNë PsPrPSPsC±P°C¶PSPëPNë PïC¶PëPNëPsPj
P°C¶PsC†C-C¶C”C,C¶C¶C¼ P· PjPµC,P°P±PsP»C-C±PSPëPj P°C†PëPrPsP·PsPj P· PIPëC¶PsPePëPj
P°PSC-PsPSPSPëPj PïC¶PsPjC-P¶PePsPj C¼Pe PSP°C¶P»C-PrPePsPj

PiC-CTjPsPiP»CrC,P°PjC-PSPsPIsPiPs P°C†PēPrPsP·Cr, PsC†PsP±P»PēPIPs Cr
PiP°C†C-C"PS C,C-PI P· C,,P°PeC,PsCTjP°PjPē CTjPēP·PēPeCr (PrPēPI. CTjPsP·PrC-P»
B«PhC†PsP±P»PēPIPsC†C,C- P·P°C†C,PsC†CrPIP°PSPSCIB»).

P·C,,PμPeC, PrPēC†PēPeP»PsPjC-PSCr PiC-PrCTjPsC...P»PsCTjPēPrCr PiPsC†PēP»CThCThC,Ch
P°PjP°PSC,P°PrPēPS, P°PSC,PēPiC†PēC...PsC,PēC±PSC- P°PiPμPSC,Pē,
P±PμPSP·PsPrC-P°P·PμPiC-PSPē, C-PSPiC-P±C-C,PsCTjPē PhPhPh, PSP°CTjPePsC,PēC±PSC-
P°PSP°P»PiPμC,PēPePē, PSC-C,CTjP°C,Pē C- PSC-C,CTjPēC,Pē, C†PēPjPiP°C,PsPjC-PjPμC,PēPePē,
C,CTjPēC†PēPeP»C-C±PSC- P°PSC,PēPrPμPiCTjPμC†P°PSC,Pē, C...PsP»C-PSPsP»C-C,PēPePē,
PePsCTjC,PēPePsC†C,PμCTjPsC-PrPē; P·PSPēP¶C†CThC,Ch втj“ P°PSC,P°C†PēPrPē.
P"PeC†PēPeP»PsPjC-PSCr PiC-PrCTjPsC...P»PsCTjPēPr PiPsC†PēP»CThC" PrC-CTh
PrPēPiPsPeC†PēPSCé.

PhC†PsP±P»PēPIPsC†C,C- P·P°C†C,PsC†CzPIP°PSPSCII.

PkPμPsP±C...C-PrPSPs PiPsCTjP°PrPēC,PēC†C¶ P· P»C-PeP°CTjPμPj C†C,PsC†PsPIPSPs
PjPsP¶P»PēPIPsC†C,C- P·P°C†C,PsC†CrPIP°PSPSC¶ PiCTjPμPiP°CTjP°C,Cr PiP°C†C-C"PS C,P°Pj P·
PiPsCTjCrCεPμPSPSC¶PjPē C,,CrPSPeC†C-C— PSPēCTjPsPe C- PiPμC±C-PSPePē.

PμPμCTjPμPr P·P°C†C,PsC†CrPIP°PSPSC¶Pj PiCTjPμPiP°CTjP°C,Cr PSPμPsP±C...C-PrPSPs
PiPsCTjP°PrPēC,PēC†C¶ P· P»C-PeP°CTjPμPj, C¶PeC%Ps PiP°C†C-C"PS C, P·P°C†C,PsC†PsPICrC"
PIP°CTjC,,P°CTjPēPS P°P±Ps PiPsPrC-P±PSC- PiCTjPμPiP°CTjP°C,Pē, C¶PeC- PjP°CThC,Ch
P°PSC,PēPePsP°PiCrP»C¶PSC,PSPēPNē PμC,,PμPeC,.

PμCTjPē P·P°C†C,PsC†CrPIP°PSPSC- PiP°CTjP°C†PμC,P°PjPsP»Cr PSPμPsP±C...C-PrPSPēPNē
PePsPSC,CTjPsP»Ch PeP°CTjC,PēPSPē PiPμCTjPēC,,PμCTjPēC±PSPsC— PeCTjPsPIC- i
C,,CrPSPeC†iPsPSP°P»ChPSPsPiPs C†C,P°PSCr PiPμC±C-PSPePē. PkPμ
CTjPμPePsPjPμPSPrCrC"C,ChC†C¶ P·P°C†C,PsC†PsPICrPIP°C,Pē PsPrPSPsC±P°C†PSPs P·
C-PSCεPēPjPē PiCTjPμPiP°CTjP°C,P°PjPē, C%Ps PjC-C†C,C¶C,Ch PiP°CTjP°C†PμC,P°PjPsP»,
C±PμCTjPμP· PjPsP¶P»PēPIC-C†C,Ch PiPμCTjPμPIPēC%PμPSPSC¶ PrPsP·Pē.

PμCTjPē PiCTjPēP·PSP°C±PμPSPSC- PiCTjPμPiP°CTjP°C,Cr PSP° C,PμCTjPjC-PS P±C-P»ChCεPμ 3
PrPSC-PI PiPsC,CTjC-P±PμPS PePsPSC,CTjPsP»Ch P»C-PeP°CTjC¶ P·P° C†C,P°PSPsPj
C...PIPsCTjPsPiPs.

P— PsP±PμCTjPμP¶PSC-C†C,CTh C†P»C-Pr P·P°C†C,PsC†PsPICrPIP°C,Pē C...PIPsCTjPēPj
P»C-C,PSChPsPiPs PIC-PeCr, PsC†PsP±P°Pj, C¶PeC- P·P»PsPIP¶PēPIP°CThC,Ch
P°P»PePsPiPsP»PμPj.

P— PsP±PμCTjPμP¶PSC-C†C,CTh PiCTjPēP·PSP°C±P°C,Pē PiCTjPē C†PμCTjC†PμPIC-PNē
PSPμPrPsC†C,P°C,PSPsC†C,C-, C†C,PμPSPsP·C- PiC-P»PsCTjPēC±PSPsPiPs PIC-PrPrC-P»Cr
CεP»CrPSPeP°, PiPsCTjCrCεPμPSPSC- C,,CrPSPeC†C-PNē PSPēCTjPsPe C- PiPμC±C-PSPePē.

PhPsP¶Pμ PiPsC†PēP»CThPIP°C,Pē PiP°C†C,CTjPsPμP·PsC,,P°PiPμP°P»ChPSPēPNē
CTjPμC,,P»CThPeC†.

P PēP·PēPe PiPμPiP°C,PsPeC†PēC±PSPsC— PrC-C— PiP°CTjP°C†PμC,P°PjPsP»Cr
PiC-PrPIPēC%CrC"C,ChC†C¶ Cr C...PIPsCTjPēC... P· P°P»PePsPiPsP»ChPSPēPj
CrCTjP°P¶PμPSPSC¶Pj PiPμC±C-PSPePē.

PμP°CTjP°C†PμC,P°PjPsP» PjPsP¶Pμ PIPiP»PēPIP°C,Pē PSP° CTjPμP·CrP»ChC,P°C,Pē

P»P°P±PsCḡP°C,PsCḡPSPëC... PrPsCíP»C-PrP¶PµPSCḡ PIPjC-CíC,Cr Cr PeCḡPsPIC-
PiP»CḡPePsP·Pë C,P° CíPµC‡PsPIPsC— PePëCíP»PsC,Pë.

PµPsPIC-PrPsPjP»CıP»PsCíCı PíCḡPs PIPëPíP°PrPePë PjPµC,P°P±PsP»C-C‡PSPsPiPs
P°C†PëPrPsP·Cr P· PIPëCíPsPePëPj P°PSC-PsPSPSPëPj PíCḡPsPjC-P¶PePsPj (*high anion gap
metabolic acidosis* (HAGMA)) CıPe PSP°CíP»C-PrPeCr PíC-CḡPsPiP»CrC,P°PjC-PSPsPIPsPiPs
P°C†PëPrPsP·Cr Cr PíP°C†C-C°PSC,C-PI P· C,CıP¶PePëPjPë
P·P°C...PIPsCḡCḡPIP°PSPSCıPjPë, C,P°PePëPjPë CıPe C,CıP¶PeP° PSPëCḡPePsPIP°
PSPµPrPsCíC,P°C,PSC-CíC,Cḡ C,P° CíPµPíCíPëCí, P°P±Ps Cr PíP°C†C-C°PSC,C-PI P·
PSPµPrPsC—PrP°PSPSCıPj C‡Pë PSP°CıPIPsC-CíC,Cḡ C-PSCëPëC... PíCḡPëC‡PëPS
PrPµC,,C-C†PëC,Cr PiP»CrC,P°C,C-PsPSCr (PSP°PíCḡPëPeP»P°Pr, C...CḡPsPSC-C‡PSPëPNë
P°P»PePsPiPsP»C-P·Pj), CıPeC- P·P°CíC,PsCíPsPICrPIP°P»Pë PíP°CḡP°C†PµC,P°PjPsP» Cr
C,PµCḡP°PíPµPIC,PëC‡PSC-PNë PrPsP·C- PíCḡPsC,CıPiPsPj C,CḡPëPIP°P»PsPiPs
PíPµCḡC-PsPrCr P°P±Ps PePsPjP±C-PSP°C†C-Cḡ PíP°CḡP°C†PµC,P°PjPsP»Cr C,P°
C,,P»CrPeP»PsPeCíP°C†PëP»C-PSCr. PíPeC%Ps C-CíPSCrC° PíC-PrPsP·CḡP° PSP° HAGMA
CıPe PSP°CíP»C-PrPsPe PíC-CḡPsPiP»CrC,P°PjC-PSPsPIPsPiPs P°C†PëPrPsP·Cr,
CḡPµPePsPjPµPSPrCrC°C,CḡCíCı PSPµPíP°PNëPSPs PíCḡPëPíPëPSPëC,Pë
P·P°CíC,PsCíCíPIP°PSPSCı PíP°CḡP°C†PµC,P°PjPsP»Cr C,P° PíCḡPsPIPµCíC,Pë
CḡPµC,PµP»CḡPSPëPNë PjPsPSC-C,PsCḡPëPSPi CíC,P°PSCr PíP°C†C-C°PSC,P°.
P·PëPjC-CḡCḡPIP°PSPSCı CḡC-PIPsCı 5-PsPeCíPsPíCḡPsP»C-PSCr PI CíPµC‡C- PjPsP¶Pµ
P±CrC,Pë PePsCḡPëCíPSPëPj PrP»Cı C-PrPµPSC,PëC,,C-PeP°C†C-C—
PíC-CḡPsPiP»CrC,P°PjC-PSPsPIPsPiPs P°C†PëPrPsP·Cr CıPe PsCíPSPsPIPsC—
PíCḡPëC‡PëPSPë HAGMA Cr PíP°C†C-C°PSC,C-PI P· PjPSPsP¶PëPSPSPëPjPë
C,,P°PeC,PsCḡP°PjPë CḡPëP·PëPeCr.

P— PsP±PµCḡPµP¶PSC-CíC,Cḡ PíCḡPëP·PSP°C‡P°C,Pë PíCḡPµPíP°CḡP°C, C...PIPsCḡPëPj
PíCḡPë PSP°CıPIPsCíC,C- P°CḡC,PµCḡC-P°P»CḡPSPsC— PíC-PíPsC,PµPSP·C-C—,
CíC...PëP»CḡPSPsCíC,C- PrPs P±CḡPsPSC...PsCíPíP°P·PjC-PI, P° C,P°PePsP¶ PíCḡPë
PíC-PrPIPëC%PµPSC-PNë C-PSPrPëPIC-PrCrP°P»CḡPSC-PNë C‡CrC,P»PëPIPsCíC,C- PrPs
PSPµCíC,PµCḡPsC—PrPSPëC... PíCḡPsC,PëP·P°PíP°P»CḡPSPëC... P·P°CíPsP±C-PI. PµCḡPë
C,CḡPëPIP°P»PsPjCr P·P°CíC,PsCíCíPIP°PSPSC- CíP»C-Pr PePsPSC,CḡPsP»CḡPIP°C,Pë
PeP»C-C,PëPSPSPëPNë CíPeP»P°Pr PíPµCḡPëC,,PµCḡPëC‡PSPsC— PeCḡPsPIC- C,P° CíC,P°PS
C,,CrPSPeC†C-C— PSPëCḡPsPe.

P°PëC†PëPeP»PsPjC-PS P· PsP±PµCḡPµP¶PSC-CíC,Cḡ CíP»C-Pr PíCḡPëP·PSP°C‡P°C,Pë PíCḡPë
PSPµCíPíPµC†PëC,,C-C‡PSPsPjCr PIPëCḡP°P·PePsPIPsPjCr PePsP»C-C,C- (PSPµP±PµP·PíPµPeP°
PIPëPSPëPePSPµPSPSCı PíP°CḡP°P»C-C,PëC‡PSPsC— PSPµPíCḡPsC...C-PrPSPsCíC,C-),
PíCḡPëP¶C- C,CḡP°PIPsPiPs PsC,PIPsCḡCr PrC-P°C,,CḡP°PiPjPë, C%Ps
CíCíPíCḡPsPIPsPrP¶CíC°C,CḡCíCı CḡPµC,,P»CḡPeCí·PµP·PsC,,P°PiC-C,PsPj.

PJ C...PIPsCḡPëC..., CıPeC- PíCḡPëPNëPjP°CḡC,Cḡ P°PSC,PëC...PsP»C-PSPµCḡPiC-C‡PSC-
PíCḡPµPíP°CḡP°C,Pë, PjPsP¶Pµ PIPëPSPëPeP°C,Pë PíCíPëC...PsP·, CíPíP»CrC,P°PSC-CíC,Cḡ
CíPIC-PrPsPjPsCíC,C-, P°C,P°PeCíC-Cı, PePsPjP°, PµPNëC,,PsCḡC-Cı, CíP»P°P±PeC-CíC,Cḡ,
P±PµP·CíPsPSPSCı, P·P±CrPrP¶PµPSPSCı, PSPµP°PrPµPePIP°C,PSC- PµPjPsC†C-PNëPSC-
PíCḡPsCıPIPë (CíPëPjPíC,PsPjPë P·PjPµPSCëCíCḡC,CḡCíCı PíCḡPsC,CıPiPsPj 12вḡ“24
PiPsPrPëPS PíC-CíP»Cı P·PSPëP¶PµPSPSCı PrPsP·Pë).

P— PsP±PµCḡPµP¶PSC-CíC,Cḡ PíCḡPëP·PSP°C‡P°C,Pë PíCḡPë PIPëCíPsPeC-PNë
C,PµPjPíPµCḡP°C,CíCḡC- PSP°PIPePsP»PëCëPSCḡPsPiPs CíPµCḡPµPrPsPIPëC%P°
(C‡PµCḡPµP· P·PSPëP¶PµPSPSCı PíPsC,PsPIPëPrC-P»PµPSPSCı P·CḡPsCíC,P°C°
C-PjPsPIC-CḡPSC-CíC,Cḡ PiC-PíPµCḡC,PµCḡPjC-C— C,P° C,PµPíP»PsPIPsPiPs CrPrP°CḡCr).

РµР°С†С-С"РSC,Р°Рј, СЇРёС- РёСђРёР№РјР°СђС,Сђ Р°РSP°Р»РµРµС,РёРёРё РёРsР¶РµРS
РrРµРSCђ РёСђРё Р°СђС,СђРёС,Р°С... Р»РµРёРёРsС— С„РsСђРјРё, РSPµРsР±С...С-РrРSPs
РёСђРsРёРsРSCђСђР»СђС,СђРIP°С,РёСђСЇ Р· Р»С-РёР°СђРµРј.

РќРµ РёРµСђРµРµРµР°СђРIP°С,Рё Р·Р°Р·РSP°СµРSPёС... РrРsР·.

РёРёС°Рs СђРёРјРёС,РsРјРё РSPµ Р·РSPёРёР°СђС,Сђ, СђР»С-Рr Р·РIPµСђРSCђС,РёСђСЇ РrРs
Р»С-РёР°СђСЇ.

РёРёС°Рs РёРsР»РsРIPSPёР№ Р±С-Р»Сђ СђС,Р°С" РёРsСђС,С-Р№РSPёРј, СђР»С-Рr
Р·РIPµСђРSCђС,РёСђСЇ РrРs Р»С-РёР°СђСЇ.

*Р—Р°СђС,РsСђСђРIP°РSPSCЇ Сђ РёРµСђС-РsРr РIP°РёС-С,РSPsСђС,С- Р°Р±Рs
РёРsРrСђРIP°РSPSCЇ РёСђСђРrСђ.*

РµСђРµР°СђС, РSPµ Р·Р°СђС,РsСђРsРёСђРIP°С,Рё Р¶С-РSPёРј Сђ РёРµСђС-РsРr
РIP°РёС-С,РSPsСђС,С- Р°Р±Рs РёРsРrСђРIP°РSPSCЇ РёСђСђРrСђ.

*Р—РrР°С,РSC-СђС,Сђ РIP°Р»РёРIP°С,Рё РSP° СёРIPёРrРёС-СђС,Сђ СђРµР°С-С— РёСђРё
РёРµРµСђСђРIP°РSPSC- Р°РёС,РsС,СђР°СђСђРёРsСђС,РsРј Р°Р±Рs С-РSCёРёРјРё
РјРµС...Р°РSC-Р·РјР°РјРё.*

Р°СђР°С...РsРёСђСђСµРё, С°Рs РёСђРµРµР°СђС, Сђ СµСђС,Р»РёРIPёС...
С...РIPsСђРёС... РјРsР¶Рµ Р·РSPёР¶СђРIP°С,Рё СёРIPёРrРёС-СђС,Сђ
РёСђРёС...РsРјРsС,РsСђРSPёС... СђРµР°С-Р№, РSP° РёРµСђС-РsРr
С,РµСђР°С— РёСђРµРµР°СђС,РsРј РёСђР°С°РµСђСµСђ СђС,СђРёРјР°С,РёСђСЇ РёС-Рr
РёРµРµСђСђРIP°РSPSCЇ С,СђР°СђСђРёРsСђС,РSPёРј Р·Р°СђСРsР±Р°РјРё С,Р°
СђРsР±РsС,Рё Р· С-РSCёРёРјРё РјРµС...Р°РSC-Р·РмР°РмРё, С°Рs
РёРsС,СђРµРµРµРµСђС,Сђ РёРsРSCµРµС,СђР°С-С— СђРIP°РёРё.

РŸРёРsСђС-Р± Р·Р°СђС,РsСђСђРIP°РSPSCЇ С,Р° РrРsР·Рё.

РµСђРµР°СђС, РёСђРёР№РјР°СђС,Рё РIPSCђС,СђС-СёРSCђРs, Р·Р°РёРёРIP°СђСµРё
РSPµРIPµР»РёРёРsСђ РёС-Р»СђРёС-СђС,Сђ СђС-РrРёРSPё (200 РјР»).

*Р"РsСђРsСђР»РёРј С- РrС-С,СЇРј РёС-РёРsРј РёС-Рr 15 СђРsРёС-Рё: 1 С,Р°Р±РµРµС,С†С-
Р·Р»Р¶РSPs РёС-Рr РёРsСђС,СђРsС,Рё Р±РsР»Сђ, РёС-Рr 1 РrРs 4 СђР°С-Рё РSP°
РrРsР±Сђ.*

*Р"С-С,СЇРј РёС-РёРsРј РёС-Рr 7 РrРs 13 СђРsРёС-Рё: ½ С,Р°Р±РµРµС,РёРё РёС-Рr 1 РrРs 2
СђР°С-Рё РSP° РrРsР±Сђ;*

*Р"С-С,СЇРј РёС-РёРsРј РёС-Рr 13 РrРs 15 СђРsРёС-Рё: 1 С,Р°Р±РµРµС,РёР° РёС-Рr 1 РrРs 3
СђР°С-Рё РSP° РrРsР±Сђ.*

РёР°РёСђРёРмР»СђРSP° РrРsР±РsРIP° РrРsР· РrР»СЇ РrРsСђРsСђР»РёРёС...Б

СГГ,Р°PSPsPIPëC,CH 2 C,Р°P±P»PµC,PePë 4 CГP°P·Pë PSP° PrPsP±CГ.

PÿPµCГPjC-PS P»C-PeCГPIP°PSPSCЦ PIPëP·PSP°C±P°C” P»C-PeP°CГ
C-PSPrPëPIC-PrCГP°P»CHbPSPs, P·P°P»PµP¶PSPs PIC-Pr CГC,Р°PSCГ C,Р° CГPµP°PeCГC-C—
C...PIPsCГPsPiPs.

P”C-C,Pë.

PµCГPµPïP°CГP°C, PSPµ PïCГPëP·PSP°C±P°C,Pë PrC-C,CЦPj PIC-PePsPj PrPs 7
CГPsPeC-PI.

PµPµCГPµPrPsP·CзPIP°PSPSCЦ.

PÿPëPjPiC,PsPjPë PïPµCГPµPrPsP·CзPIP°PSPSCЦ, P·CзPjPsPIP»PµPSC-
PiP°CГP°CГPµC,Р°PjPsP»PsPj. PjCГP°P¶PµPSPSCЦ PïPµC±C-PSPePë PjPsP¶P»PëPIPµ CГ
PrPsCГPsCГP»PëC..., CЦPeC- PïCГPëPµPSCЦP»Pë 10 Pi C- P±C-P»CHbCëPµ
PïP°CГP°CГPµC,Р°PjPsP»CГ, C,Р° CГ PrC-C,PµPµ, CЦPeC- PïCГPëPµPSCЦP»Pë
P±C-P»CHbCëPµ 150 PjPi/PePi PjP°CГPë C,C-P»P°. Pj PïP°CГC-C”PSC,C-PI P·
C,,P°PeC,PsCГP°PjPë CГPëP·PëPeCГ (C,CГPëPIP°P»Pµ P»C-PeCГPIP°PSPSCЦ
PeP°CГP±P°PjP°P·PµPiC-PSPsPj, C,,PµPSPsP±P°CГP±C-C,PsPSPsPj,
C,,PµPSC-C,PsC—PSPsPj, PïCГPëPjC-PrPsPSPsPj, CГPëC,,P°PjPiC-CГPëPSPsPj,
P·PIC-CГPsP±PsC”Pj P°P±Ps C-PSCëPëPjPë P»C-PeP°CГCГCHbPePëPjPë
P·P°CГPsP±P°PjPë, C%Ps C-PSPrCГPeCГCГ,CH C,,PµCГPjPµPSC,Pë PïPµC±C-PSPePë;
CГPµPiCГP»CЦCГPSPµ PIP¶PëPIP°PSPSCЦ PSP°PrPjC-CГPSPëC...
PeC-P»CHbPePsCГC,PµPµ PµC,Р°PSPsP»CГ; PiP»CГC,Р°C,C-PsPSPsPIP°
PeP°C...PµPeCГC-CЦ (CГPsP·P»P°PrPë C,CГP°PIP»PµPSPSCЦ,
PjCГPePsPIC-CГCГPëPrPsP·, P’PГP-C-PSC,,PµPeCГC-CЦ, PiPsP»PsPr,
PeP°C...PµPeCГC-CЦ) P·P°CГC,PsCГCГPIP°PSPSCЦ 5 Pi P°P±Ps P±C-P»CHbCëPµ
PïP°CГP°CГPµC,Р°PjPsP»CГ PjPsP¶Pµ PïCГPëP·PIPµCГC,Pë PrPs CГCГP°P¶PµPSPSCЦ
PïPµC±C-PSPePë.

PÿPëPjPiC,PsPjPë PïPµCГPµPrPsP·CГPIP°PSPSCЦ CГ PïPµCГCëC- 24 PiPsPrPëPSPë:
P±P»C-PrC-CГC,CH, PSCГPrPsC,Р°, P±P»CHbPIP°PSPSCЦ, P°PSPsCГPµPeCГC-CЦ C,Р°
P°P±PrPsPjC-PSP°P»CHbPSPëPµ P±C-P»CHb. PjCГP°P¶PµPSPSCЦ PïPµC±C-PSPePë PjPsP¶Pµ
CГC,Р°C,Pë CЦPIPSPëPj C±PµCГPµP· 12-48 PiPsPrPëPS PïC-CГP»CЦ
PïPµCГPµPrPsP·CГPIP°PSPSCЦ. PµPsP¶CГC,CH PIPëPSPëPeP°C,Pë PïPsCГCëPµPSPSCЦ
PjPµC,Р°P±PsP»C-P·PjCГ PiP»CHbPePsP·Pë C,Р° PjPµC,Р°P±PsP»C-C±PSPëPµ P°CГPëPrPsP·.
PµCГPë C,CЦP¶PePsPjCГ PsC,CГCГC”PSPSC- PïPµC±C-PSPePsPIP°
PSPµPrPsCГC,Р°C,PSC-CГC,CH PjPsP¶Pµ PïCГPsPiCГPµCГCГPIP°C,Pë PI
PµPSCГPµC,,P°P»PsPïP°C,C-CГ, PeCГPsPIPsPIPëP»PëPIPë, PiC-PiPsPiP»C-PePµPjC-CГ, PePsPjCГ
C,Р° P»PµC,Р°P»CHbPSPëPµ PSP°CГP»C-PrPsPe. P”PsCГC,CГP° PSPëCГPePsPIP°
PSPµPrPsCГC,Р°C,PSC-CГC,CH P· PiPsCГC,CГPëPj PSPµPeCГPsP·PsPj PeP°PSP°P»CHbCГC-PI
PjPsP¶Pµ PïCГPsCЦPIP»CЦC,PëCГCЦ CГPëP»CHbPSPëPj PïPsPiPµCГPµPePsPIPëPj P±PsP»PµPj,
PiPµPjP°C,CГCГC-C”CГ, PïCГPsC,PµC—PSCГCГC-C”CГ C- CГPsP·PIPëPSCГC,PëCГCЦ
PSP°PIC-C,CH PïCГPë PIC-PrCГCГC,PSPsCГC,C- C,CЦP¶PePsPiPs CГCГP°P¶PµPSPSCЦ

РiРµC†C-PSPePë. P°C-PrP·PSP°C†P°P»PëCÍCЦ C,P°PePsP¶ CÍPµCЦC†PµPIP° P°CЦPëC,PjC-CЦ C,P° PiP°PSPeCЦPµP°C,PëC,.

PµCЦPë C,CЦPëPIP°P»PsPjC† P·P°CÍC,PsCÍC†PIP°PSPSC- PiCЦPµPiP°CЦP°C,C† C† PIPµP»PëPePëC... PrPsP·P°C... P· P±PsPeC† PsCЦPiP°PSC-PI PeCЦPsPIPsC,PIPsCЦPµPSPSCЦ PjPsP¶Pµ CЦPsP·PIPëPSC†C,PëCÍCЦ P°PiP»P°CÍC,PëC†PSP° P°PSPµPjC-CЦ, PiP°PSC†PëC,PsPiPµPSC-CЦ, P°PiCЦP°PSC†P»PsC†PëC,PsP·, PSPµPNëC,CЦPsPiPµPSC-CЦ, P»PµPNëPePsPiPµPSC-CЦ, C,CЦPsPjP±PsC†PëC,PsPiPµPSC-CЦ. PµCЦPë PiCЦPëPNëPsPjC- PIPµP»PëPePëC... PrPsP· P· P±PsPeC† C†PµPSC,CЦP°P»CЦPSPSC— PSPµCЦPIPsPIPsC— CÍPëCÍC,PµPjPë - P·P°PiP°PjPsCЦPsC†PµPSPSCЦ, PiCÍPëC...PsPjPsC,PsCЦPSPµ P·P±C†PrP¶PµPSPSCЦ C- PiPsCЦC†C€PµPSPSCЦ PsCЦC-C°PSC,P°C†C-C—; P· P±PsPeC† CÍPµC†PsPIPëPrC-P»CЦPSPSC— CÍPëCÍC,PµPjPë - PSPµC,,CЦPsC,PsPeCÍPëC†PSC-CÍC,CЦ (PSPëCЦPePsPIP° PePsP»C-PeP°, C-PSC,PµCЦCÍC,PëC†C-P°P»CЦPSPëPNë PSPµC,,CЦPëC,, PeP°PiC-P»CЦCЦPSPëPNë PSPµPeCЦPsP·).

PµCЦPë PiPµCЦPµPrPsP·C†PIP°PSPSC- PSPµPsP±C...C-PrPSP° C€PIPëPrPeP° PjPµPrPëC†PSP° PrPsPiPsPjPsPiP°. PµP°C†C-C°PSC,P° CÍP»C-Pr PSPµPiP°PNëPSPs PrPsCÍC,P°PIPëC,Pë C† P»C-PeP°CЦPSCЦ, PSP°PIC-C,CЦ CЦPeC%Ps PIC-PrCÍC†C,PSC- CЦP°PSPSC- CÍPëPjPiC,PsPjPë PiPµCЦPµPrPsP·C†PIP°PSPSCЦ. PŸPëPjPiC,PsPjPë PjPsP¶C†C,CЦ P±C†C,Pë PsP±PjPµP¶PµPSC- PSC†PrPsC,PsCЦ C,P° P±P»CЦPIP°PSPSCЦPj P°P±Ps PjPsP¶C†C,CЦ PSPµ PIC-PrPsP±CЦP°P¶P°C,Pë C,CЦP¶PePsCÍC,C- PiPµCЦPµPrPsP·C†PIP°PSPSCЦ C†Pë CЦPëP·PëPeC† C†CЦP°P¶PµPSPSCЦ PsCЦPiP°PSC-PI. PŸP»C-Pr CЦPsP·PiP»CЦPSC†C,Pë P»C-PeC†PIP°PSPSCЦ P°PeC,PëPIPsPIP°PSPëPj PIC†PiC-P»P»CЦPj, CЦPeC%Ps PSP°PrPjC-CЦPSP° PrPsP·P° PiP°CЦP°C†PµC,P°PjPsP»C† P±C†P»P° PiCЦPëPNëPSCЦC,P° C† PjPµP¶P°C... 1 PiPsPrPëPSPë. PµPsPSC†PµPSC,CЦP°C†C-CЦ PiP°CЦP°C†PµC,P°PjPsP»C† C† PiP»P°P·PjC- PeCЦPsPIC- CÍP»C-Pr PIPëPjC-CЦCЦPIP°C,Pë C†PµCЦPµP· 4 PiPsPrPëPSPë P°P±Ps PiC-P·PSC-C€Pµ PiC-CÍP»CЦ PiCЦPëPNëPsPjC† (P±C-P»CЦC€ CЦP°PSPSC- PePsPSC†PµPSC,CЦP°C†C-C— C° PSPµ PrPsCÍC,PsPIC-CЦPSPëPjPë). P»C-PeC†PIP°PSPSCЦ N- P°C†PµC,PëP»C†PëCÍC,PµC—PSPsPj PjPsP¶Pµ P±C†C,Pë P·P°CÍC,PsCÍPsPIP°PSPs PiCЦPsC,CЦPiPsPj 24 PiPsPrPëPS PiC-CÍP»CЦ PiCЦPëPNëPsPjC† PiP°CЦP°C†PµC,P°PjPsP»C†, P°P»Pµ PjP°PeCÍPëPjP°P»CЦPSPëPNë P·P°C...PëCÍPSPëPNë PµC,,PµPeC, PSP°CÍC,P°C° PiCЦPë PNëPsPiPs P·P°CÍC,PsCÍC†PIP°PSPSC- PiCЦPsC,CЦPiPsPj 8 PiPsPrPëPS PiC-CÍP»CЦ PiCЦPëPNëPsPjC†. P·C,,PµPeC,PëPIPsC-CÍC,CЦ P°PSC,PëPrPsC,C† CЦC-P·PePs P·PSPëP¶C†C°C,CЦCÍCЦ PiC-CÍP»CЦ C†CЦPsPiPs C†P°CÍC†. PµCЦPë PSPµPsP±C...C-PrPSPsCÍC,C- PiP°C†C-C°PSC,C† PIPSC†C,CЦC-C€PSCЦPsPIPµPSPSPs CÍP»C-Pr PIPiPsPrPëC,Pë N-P°C†PµC,PëP»C†PëCÍC,PµC—PS P·PiC-PrPSPs P·C- PIC†C,P°PSPsPIP»PµPSPëPj PiPµCЦPµP»C-PePsPj PrPsP·. PµCЦPë PIC-PrCÍC†C,PSPsCÍC,C- P±P»CЦPIP°PSPSCЦ PjPsP¶PSP° P·P°CÍC,PsCÍPsPIC†PIP°C,Pë PjPµC,C-PSPSC-PS PiPµCЦPsCЦP°P»CЦPSPs CЦPe PIC-PrPiPsPIC-PrPSC† P°P»CЦC,PµCЦPSP°C,PëPIC† C† PIC-PrPrP°P»PµPSPëC... CЦP°PNëPsPSP°C... PiPsP·P° P»C-PeP°CЦPSPµCЦ.

PŸPëPjPiC,PsPjPë PiPµCЦPµPrPsP·C†PIP°PSPSCЦ, P·C†PjPsPIP»PµPSC- PrPëC†PëPeP»PsPjC-PSC† PiC-PrCЦPsC...P»PsCЦPëPrPsPj. PŸP°C...C-PeP°CЦPrC-CЦ, P±CЦP°PrPëPeP°CЦPrC-CЦ, P°CЦPëC,PjC-CЦ, P·PjC-PSP° C†P°CÍC,PsC,Pë PrPëC...P°PSPSCЦ, CÍC†C...C-CÍC,CЦ C† CЦPsC,C-, P·P±C†PrP¶PµPSPSCЦ, CÍPsPSP»PëPIC-CÍC,CЦ, PIC,CЦP°C,P° P°PePsPjPsPrP°C†C-C—, C,,PsC,PsC,,PsP±C-CЦ, CÍC†PrPsPjPë.

PµPµCЦPµPrPsP·C†PIP°PSPSCЦ C...P°CЦP°PeC,PµCЦPëP·C†C°C,CЦCÍCЦ PrPIPsC,,P°P·PSC-CÍC,CЦ: CÍPiPsC†P°C,PeC† PIPëPSPëPeP°C° P·P±C†PrP¶PµPSPSCЦ C†PµPSC,CЦP°P»CЦPSPSC— PSPµCЦPIPsPIPsC— CÍPëCÍC,PµPjPë, C%Ps

$P - P \pm P_s P_e C \acute{e} C \acute{I} P \ddot{e} C \acute{I} C, P_{\mu} P_j P \ddot{e} P_e C \acute{I} P_s P I C - : Pr Cr P \P P_{\mu} C \acute{I} C - Pr P_e P_s e \acute{I} "$
 $P_i P_{\mu} P_j P_s P \gg C - C, P \ddot{e} C \ddagger P S P^{\circ} P^{\circ} P S P_{\mu} P_j C - C \ddot{I}, C \acute{I} C r P \gg C H C, P_i P_{\mu} P_j P_s P_i P \gg P_s P \pm C - P S P_{\mu} P_j C - C \ddot{I} C -$
 $P_j P_{\mu} C, P_i P_{\mu} P_j P_s P_i P \gg P_s P \pm C - P S P_{\mu} P_j C - C \ddot{I} (C \ddagger C - P^{\circ} P S P_s P^{\cdot}, P^{\cdot} P^{\circ} P r P \ddot{e} C \acute{e} P_e P^{\circ}, P \pm P_s P \gg C - P I$
 $C \acute{I} P_{\mu} C \acute{I} C \ddagger C -), C, C \acute{I} P_s P_j P \pm P_s C \ddagger P \ddot{e} C, P_s P_i P_{\mu} P S C - C \ddot{I}; Cr P_i P_s P_s P r P \ddot{e} P S P_s P_e P \ddot{e} C \dots$
 $P_i P \ddot{e} P_i P^{\circ} P r P_e P^{\circ} C \dots e \acute{I} " P^{\circ} P_i P \gg P^{\circ} C \acute{I} C, P \ddot{e} C \ddagger P S P^{\circ} P^{\circ} P S P_{\mu} P_j C - C \ddot{I}, P_i P^{\circ} P S C \ddagger P \ddot{e} C, P_s P_i P_{\mu} P S C - C \ddot{I},$
 $P S P_{\mu} P N_e C, C \acute{I} P_s P_i P_{\mu} P S C - C \ddot{I}, P^{\circ} P_i C \acute{I} P^{\circ} P S C r P \gg P_s C \ddagger P \ddot{e} C, P_s P^{\cdot}, P \gg P_{\mu} P N_e P_e P_s P_i P_{\mu} P S C - C \ddot{I}.$

$P - P_{\pm} P_s P_e C \acute{z} C, C \bar{H} P^{\circ} P I P S P_s P i P_s C, C \bar{H} P^{\circ} P e C, C \acute{z}: P S C \acute{r} P r P_s C, P^{\circ}, C \acute{r} C \acute{r} C \dots C - C \acute{r} C, C \bar{H} C \acute{r}$

[illegible]

PÿPµCŦPjC-PS PïCŦPëPŕP°C,PSPsCŦC,C-.

3 C₇PsPeP₆.

PJPjPsPIPë P·P±PμCḤC-PiP°PSPSCı.

$$P-P \pm P_{\mu} C_7 H_7 C - P i P^{\circ} C, P e \quad C r \quad P S P_{\mu} P r P s C l^{\prime} C, C r P i P S P s P j C r \quad P r P \gg C l \quad P r C - C, P_{\mu} P N_2 \quad P j C - C l^{\prime} C \dagger C - .$$

$P-P \pm P_{\mu} C_7 C - P_i P^{\circ} C, P_e P_i P_s C_7 P_e P_i C - P S P^{\circ} P \gg C H P S C - P N_e C r P_i P^{\circ} P_e P_s P_i C \uparrow C - P_i C_7 P_e C, P_{\mu} P_j P_i P_{\mu} C_7 P^{\circ} C, C r C_7 C - P S P_{\mu} P_i P_e C \% P_{\mu} 30 P_s P_{\check{Y}}.$

PJPiP°PεPsPIPεP°.

$\text{P}\mu\text{Ps } 10 \text{ C}, \text{P}^0\text{P}\pm\text{P}\gg\text{P}\mu\text{C}, \text{PsPe } \text{C}\acute{\text{r}} \text{ P}\pm\text{P}\gg\text{C}-\text{C}\acute{\text{r}}\text{C}, \text{P}\mu\text{C}\overline{\text{C}}\text{H}_5\text{C}-$, $\text{P}\bar{\text{i}}\text{Ps } 1 \text{ P}^0\text{P}\pm\text{Ps } 10 \text{ P}\pm\text{P}\gg\text{C}-\text{C}\acute{\text{r}}\text{C}, \text{P}\mu\text{C}\overline{\text{C}}\text{H}_5\text{C}-\text{PI } \text{C}\acute{\text{r}} \text{ PePsC}\overline{\text{C}}\text{H}_5\text{PsP}\pm\text{C}\dagger\text{C}-$.

РљР°С, РјРіРѕСђС-Сђ РІС-РѓРіСѓСђРєСѓ.

$$P'P_{\mu}P \cdot C\bar{H}P_{\mu}C^{\dagger}P_{\mu}P\ddot{C}, P^{\circ} \text{ в } \bar{H}'' C, P^{\circ}P \pm P \gg P_{\mu}C, P\epsilon P\ddot{e} \text{ в } \dots - 10.$$
$$P-P^{\circ} C_7H_{10}PuC \uparrow Pu\ddot{P}iC, PsPj B_7H^{+} C, P^{\circ}P \pm P \gg PuC, PeP\ddot{e} B_{n-100}.$$

P'PëCḦPsP±PSPëPε.

$$\text{P}^{\text{h}}\text{PSP}^{\circ}\text{PSC}, \text{P}^{\circ} \text{P}^{\text{h}}\text{P}\mu\text{PrC}-\text{PeP}\mu\text{P}^{\circ}\text{C}^{\text{h}} \text{P}^{\circ}\text{C}-\text{P}^{\text{j}}\text{C}-\text{C}, \text{P}\mu\text{Pr}.$$
$$\text{P}_{\text{H}}\text{C}-\text{C}\overset{\cdot}{\text{I}}\text{C}\overset{\cdot}{\text{I}}\text{P}_{\text{u}}\text{P}\cdot\text{PSP}^{\circ}\text{C}\dots\text{P}_{\text{s}}\text{P}\text{r}\text{P}\overset{\cdot}{\text{I}}\text{P}_{\text{u}}\text{PSPSC}\overset{\cdot}{\text{I}}\text{P}\overset{\cdot}{\text{I}}\text{P}\overset{\cdot}{\text{e}}\text{C}\overset{\cdot}{\text{H}}\text{P}_{\text{s}}\text{P}\pm\text{PSP}\overset{\cdot}{\text{e}}\text{P}_{\text{e}}\text{P}^{\circ}\text{C},\text{P}^{\circ}\text{P}\text{N}_{\text{o}}\text{P}_{\text{s}}\text{P}\overset{\cdot}{\text{I}}\text{P}_{\text{s}}$$

Р°РгСђРµСђР° РјС-СђС†Сђ РїСђРѕРІР°РгР¶РµРѕРѕСђ РгС-СђР»СђРѕРѕСђСђС-,С-.

РђР°Рє 17 РђР», РђРїСђРѕ С,,СђРг РїР°СђРє Р РѕСђРг, Р Р†Р†РђРђ Р†РѕРгР°СђС,СђС-Р°Р»
Р•СђС-Р°, РјРгС-РѕРї Р'С-С...Р°Сђ, РёСђС-РїР°РѕРѕР°Р°Р°Р°Сђ-335002
(Р Р°РгР¶Р°СђС,Р°Рѕ), Р†РѕРгС-Сђ.

Р-Р°СђРІРѕРєРє.

РђРѕР°С,Р° РђРµРгС-РєРµР°Сђ Р>С,Рг.

**РђС-СђС†РµР°Р°Р°Р°Р°Р°Р° Р°Р°СђРІРѕРєРєР°Р° С,Р°/Р°Р±Рѕ
РїСђРµРгСђС,Р°РІРѕРєРєР°Р° Р°Р°СђРІРѕРєРєР°Р°.**

РђСђС, 1, 2 РђС,РµР№СєРѕ РђРѕСђС,, Р†РјРїРµСђС-Р°Р» Р'Р°СђС,,, РђР°СђРѕРјРµРг
Р РѕР°Рг, Р»СђР»>С...Р°Рј, Р»РѕРѕРгРѕРѕ, Р'РµР»»РєРєР°Р° Р'СђРєС,Р°РѕС-Сђ.

Р†РѕСђС,СђСђРєС†С-Сђ

РгР»Сђ РјРµРєРѕРѕРѕРѕ Р°Р°СђС,РѕСђСђРІР°РѕРѕСђ Р»С-РєР°СђСђСђРєРѕРѕРѕ

P·P°CÍPSP±Cí

PŸPµPħP—P“Pħ

(SPASGO)

PŸPeP»P°Pr:

PrC-CHC#C- CĤPµC#PsPIPëPSPë: PïP°CĤP°C†PµC,P°PjPsP», PrPëC†PëPeP»PsPjC-PSCí
PiC-PrCĤPsC...P»PsCĤPëPr;

1 C,P°P±P»PµC,PeP° PjC-CÍC,PëC,CH PïP°CĤP°C†PµC,P°PjPsP»Cí 500 PjPi C,P°
PrPëC†PëPeP»PsPjC-PSCí PiC-PrCĤPsC...P»PsCĤPëPrCí 20 PjPi;

PrPsPiPsPjC-PŸPSC- CĤPµC#PsPIPëPSPë: PeCĤPsC...PjP°P»CH PeCíPeCíCĤCíPrP·CŸPSPëPNë,
PŸPµP»P°C,PëPS, PSP°C,CĤC-CH PjPµC,PëP»PïP°CĤP°P±PµPS (E 219), PSP°C,CĤC-CH
PiCĤPsPiC-P»PïP°CĤP°P±PµPS (E 217), PSP°C,CĤC-CH PjPµC,P°P±C-CÍCíP»CHC„C-C, (E 223),
PïPsP»C-PiC-PSC-P»PiC-CĤPsP»C-PrPsPS (PĤ-30), PjP°PiPSC-CH CÍC,PµP°CĤP°C,, C,P°P»CHPe,
PSP°C,CĤC-CH PeCĤPsC...PjP°P»CHPiP»C-PePsP»CŸC,,.

P·C-PeP°CĤCÍCHPeP° C„PsCĤPjP°. PŸP°P±P»PµC,PePë.

PħCÍPSPsPIPS- C„C-P·PëPePs-C...C-PjC-C#PSC- PIP»P°CÍC,PëPIPsCÍC,C-: C,P°P±P»PµC,PePë
PeCĤCíPiP»C-, PïP»PsCÍPeC-, P±C-P»PsPiPs P°P±Ps PjP°PNëPŸPµ P±C-P»PsPiPs
PePsP»CHPsCĤCí, P· CĤPëCÍPePsCH P· PsPrPSPsPiPs P±PsPeCí, P· C„P°CÍPePsCH.

PαP°CĤPjP°PePsC,PµCĤP°PïPµPIC,PëC#PSP° PiCĤCíPïP°. PħPSP°P»PiPµC,PëPePë C,P°
P°PSC,PëPiC-CĤPµC,PëPePë. PµP°CĤP°C†PµC,P°PjPsP», PePsPjP±C-PSP°C†C-C— P±PµP·
PiCÍPëC...PsP»PµPiC,PëPeC-PI. PĤPsPr PħTPŸ N02B E51.

PαP°CĤPjP°PePsP»PsPiC-C#PSC- PIP»P°CÍC,PëPIPsCÍC,C-.

PαP°CĤPjP°PePsPrPëPSP°PjC-PeP°.

PµP°CĤP°C†PµC,P°PjPsP» PrC-C” CŸPe P·PSPµP±PsP»CHPIP°P»CHPSPëPNë C,P°
PŸP°CĤPsP·PSPëPŸCíPIP°P»CHPSPëPNë P·P°CÍC-P±. PħPSP°P»PiPµC,PëC#PSP° C,P°
PŸP°CĤPsP·PSPëPŸCíPIP°P»CHPSP° PrC-CŸ PïP°CĤP°C†PµC,P°PjPsP»Cí
(PSPµPsPiC-P°C,PSPsPiPs, PSPµCÍP°P»C-C†PëP»P°C,PSPsPiPs P°PSP°P»PiPµC,PëPeP°)
PiPsPiBĤ™ CŸP·P°PSP° P· PIP°P»PëPIPsPj PiCĤPµPïP°CĤP°C,Cí PSP° C†PµPSC,CĤ
C,PµCĤPjPsCĤPµPiCíP»CŸC†C-C— Cí PiC-PiPsC,P°P»P°PjCíCÍC- C,P° P·PrP°C,PSC-CÍC,CH
C-PSPiC-P±CíPIP°C,Pë CÍPëPSC,PµP· PiCĤPsCÍC,P°PiP»P°PSPrPëPSC-PI.

P”PëC†PëPeP»PsPjC-PSCí PiC-PrCĤPsC...P»PsCĤPëPr BĤ” C,CĤPµC,PëPSPSPëPNë P°PjC-PS.

Р_НР°С” Р°PSC,РёС...PsP»C-PSPµC_ТPiC-C†PSC_Г Р°РёC,РёPIPSC-C_ГС,С_Н С- Р·PSPёP¶C_ГС”
C,PsPSC_ГС_Г PiP»P°PrPµPSC_НРёPsC— PjC_ГС_ГРёC_ГР»P°С,С_ГС_ТРё, С_ГС_ГС_ГPIP°С” Р±C-P»С_Н,
Р±P»PsРёC_ГС” Р°PSC,Р°PiPsPSC-C_ГС,РёC†PSC_Г Р°РёC,РёPIPSC-C_ГС,С_Н.
Р”РёC†РёРёР»PsPjC-PSC_Г PiC-PrC_ТPsC...P»PsC_ТРёPr PIPёP±C-C_ТРёРёPsPIPs PiP°C_ТР°P»C-P·C_ГС”
Р_Н-C...PsP»C-PSPsC_ТРµP°РёC,РёPIPSC- С_ГС,С_ТС_ГРёC,С_ГС_ТРё, Р±P»PsРёC_ГС_ТС†Рё
PiPµC_ТРµPrP°C†C_Г С-PjPiC_ГР»С_НС_ГС-PI PiPsC_ГС,PiP°PSPiP»C-PsPSP°C_ТPSPёC...
C...PsP»C-PSPµC_ТPiC-C†PSPёC... PSPµC_ТPIC-PI PSP° С-PSPSPµC_ТPIC_ГС_ТС†C- PSPёPjРё
РµC,,РµРёC,PsC_ТPSC- PsC_ТPiP°PSPё. PŸPiC_ТРёC†РёPSCЦC” С_ТPsP·C_ГР»P°P±P»РµPSPSCЦ
PiP»P°PrPµPSC_НРёРёC... Pjв_Т™ CЦP·C-PI, PiC_ТPsCЦPIP»CЦC_ТС†Рё
C_ГPiP°P·PjPsP»C-C,РёC†PSPёP_Н РµC,,РµРёC, PiC_ТРё C_ГPiP°P·PjP°С... PiP»P°PrPµPSC_НРёРёC...
Pjв_Т™ CЦP·C-PI CёP»C_ГР»PSPёP°, РёРёCёPµC†PSPёРёC_Г, P¶PsPIC†PsPIPёPIC-PrPSPёC...
CёP»CЦC...C-PI, С_ГС_ТPsPiPµPSC-C,P°P»С_НPSPsC— C- С_ГС_ГPrPёPSPSPsC— С_ГРёC_ГС,РµPj.

Р_ЛР»C-PSC-C†PSC- C...P°C_ТР°РёC,РµC_ТРёC_ГС,РёРёРё.

РµPsРёP°P·P°PSPSCЦ.

Р’PsP»С_НPsPIC- С_ГРёPSPPrC_ТPsPjРё Р·C- С_ГPiP°C_ГС,РёC†PSPёPj РёPsPjPiPsPSPµPSC,PsPj
C_ТС-P·PSPsPiPs PiPsC...PsPrP¶PµPSPSCЦ:

- PiPsP»PsPIPSPёP_Н Р±C-P»С_Н;
- Р·C_ГР±PSPёP_Н Р±C-P»С_Н;
- Pjв_Т™ CЦP·PsPIPёP_Н Р±C-P»С_Н, PSPµPIC_ТР°P»PiC-CЦ;
- C_ТРµPIPjP°С,РёC†PSPёP_Н Р±C-P»С_Н, C_ТР°PrPёРёC_ГР»C-C,Рё;
- PSPёC_ТРёРёPsPIP° РёPsP»C-РёP°;
- PjРµPSC_ГС,С_ТС_ГР°P»С_НPSPёP_Н Р±C-P»С_Н.

РµC_ТPsC,РёPiPsРёP°P·P°PSPSCЦ.

Р”P»P°C_ГРёPsPjP°, C,P°С...C-РёP°C_ТPrC-CЦ, PSPµPiC_ТPsC...C-PrPSC-C_ГС,С_Н
C_ГРµC†PsPIPёPIC-PrPSPёC... CёP»CЦC...C-PI, PjC-P°C_ГС,РµPSC-CЦ, PiC-PrPIPёC%РµPSP°
C†C_ГС,P»РёPIC-C_ГС,С_Н PrPs РёPsPjPiPsPSPµPSC,C-PI PiC_ТРµPiP°C_ТР°С,С_Г, C,CЦP¶РёC-
PiPsC_ТС_ГСёPµPSPSCЦ C,,С_ГР»PSPёC†C-C— PSPёC_ТPsРё C,P°/P°P±Ps PiPµC†C-PSPёРё,
PrPµC,,C-C†РёC,B B B B B B B B B B B B B B B B PiP»С_НРёPsP·Ps-6-
C,,PsC_ГС,,P°С,PrPµPiC-PrC_ТPsPiPµPSP°P·Рё, Р°P»РёPsPiPsP»C-P·Pj,
Р·P°С...PIPsC_ТС_ТPIP°PSPSCЦ РёC_ТPsPIC-, С_Г C,PsPjC_Г C†РёC_ГР»C- Р°PSPµPjC-CЦ,
P»РµP_НРёPsPiPµPSC-CЦ. Р_НР±C_ГС,С_ТС_ГРёC,РёPIPSC- Р·P°С...PIPsC_ТС_ТPIP°PSPSCЦ
C,С_ТР°PIPSPsPiPs C,С_ТР°РёC,С_Г, С_ГС_ТPsPiPµPSC-C,P°P»С_НPSPsPiPs C,С_ТР°РёC,С_Г,
P¶PsPIC†PsPIPёPIC-PrPSPёC... CёP»CЦC...C-PI. РµPµPiC,РёC†PSP° PIPёC_ТР°P·РёP°
CёP»C_ГР»PSPёP° Р°P±Ps PrPIP°PSP°PrC†CЦC,РёPiP°P»PsC— РёРёCёРёРё. Р РµC,,P»С_НРёC_Г-
РµP·PsC,,P°PiC-C,. Р”PsC_ГС,С_ТР° РёC_ТPsPIPsC,РµC†P°. Р”PsP±C_ТPsCЦPёC-C_ГР»PSP°
PiC-PiPµC_ТС,С_ТPsC,,C-CЦ PiPµC_ТРµPrPjC-C...С_ГС_ТPsPIPsC— Р·P°P»PsP·Рё Р·

C, P_μPSPrP_μPSC†C-C"CH PrPs P·P°C, C₇P_μP_μPjPeP_μ C†P_μC†PsPIP_μPiC†C†PeP°PSPSC†. P"PePSP°PjC-C†PSP° PeP_μC_μPePsPIP° PSP_μPiC₇PsC...C-PrPSC-C†C, CH. P₇C†P_μ¶PeC- P·P°C...PIPSC₇CHPIP°PSPSC† P_μP_μC†C-PSPeP_μ C, P° PSP_μC₇PsPe. P'CHPsPrP_μ¶P_μPSC- PiC-PiP_μC₇P±C-P»C-C₇C†P±C-PSPrPjC-C— (C†P_μPePSP_μCHPsPjP_μ P-C-P»CHP±P_μC₇P°, P"C†P±C-PSP°-P"¶PsPSC†PsPSP° C, P° P PsC, PsC₇P°).

P'P·P°C" PjPsPrC-C† P· C-PSC€PePjP_μ P»C-PeP°C₇C†CHPeP_μPjP_μ P·P°C†PsP±P°PjP_μ C, P° C-PSC€C- PIP_μPrP_μ PIP·P°C" PjPsPrC-PN_μ.

PhC†PsP±P»P_μPIPsC†C, C- PIP·P°C" PjPsPrC-C— PiC₇P_μPiP°C₇P°C, C† P·C†PjPsPIP»P_μPSC- PIP»P°C†C, P_μPIPsC†C, C†PjP_μ PN_μPsPiPs C†PeP»P°PrPsPIP_μC....

P_μP°C₇P°C†P_μC, P°PjPsP», C%Ps PIC...PsPrP_μC, CH PrPs C†PeP»P°PrC† PiC₇P_μPiP°C₇P°C, C†, P·PjP_μPSC€C†C" P_μC,, P_μPeC, P_μPIPsC-C†C, CH PrC-C₇C₇P_μC, P_μPeC-PI, P° C, P°PePsP¶ P·P±C-P»CHC€C†C" C₇P_μP_μPe PiP_μPiP°C, PsC, PsPeC†P_μPeC†PSP_μC... C₇P_μP°PeC†C-PN_μ PiC₇P_μ C†C†PjC-C†PSPsPjC† PiC₇P_μPN_μPsPjC- P· P±P°C₇P±C-C, C₇C₇P°C, P°PjP_μ, PrP_μC,, P_μPSC-P»PsPj, PeP°C₇P±P°PjP°P·P_μPiC-PSPsPj, C₇P_μC,, P°PjPiC-C†P_μPePSPsPj C, P° C-PSC€PePjP_μ C-PSP_μC†PeC, PsC₇P°PjP_μ PjC-PeC₇PsC†PsPjP°P»CHPSP_μC... PiP_μC†C-PSPePsPIP_μC... C,, P_μC₇PjP_μPSC, C-PI, P° C, P°PePsP¶ PiC₇PsC, P_μC†C†PrPsPjPSP_μPjP_μ P·P°C†PsP±P°PjP_μ. P_μPIPsPrP_μPeC-C†C, CH PIC†PjPsPeC, C†PIP°PSPSC† PiP°C₇P°C†P_μC, P°PjPsP»C† PjPsP¶P_μ P·P±C-P»CHC€C†PIP°C, P_μC†C† PiC₇P_μ C†C†PjC-C†PSPsPjC† P·P°C†C, PsC†C†PIP°PSPSC- P· PjP_μC, PsPeP»PsPiC₇P°PjC-PrPsPj C, P° PrPsPjPiP_μC₇P_μPePrPsPSPsPj C- P·PjP_μPSC€C†PIP°C, P_μC†C† PiC₇P_μ C†C†PjC-C†PSPsPjC† P·P°C†C, PsC†C†PIP°PSPSC- P· C...PsP»P_μC†C, P_μC₇P°PjC-PSPsPj. P·C,, P_μPeC, PrC-C— PiP°C₇P°C†P_μC, P°PjPsP»C† PiPsC†P_μPeP»CHC" C, CHC†C† PiC₇P_μ PN_μPsPiPs PePsPjP±C-PSP°C†C-C— P· PePsPrP_μC—PSPsPj, P°C†PePsC₇P±C-PSPsPIPSC₇ PeP_μC†P»PsC, PsC₇, C†PePsPiPsP»P°PjC-PSPsPj, C...P»PsC₇C,, P_μPSP°PjC-PSPsPj, PiC₇PsPiC-C,, P_μPSP°P·PsPSPsPj C, P° PePsC,, P_μC—PSPsPj. PhPrPSPsC†P°C†PSP_μ P·P°C†C, PsC†C†PIP°PSPSC† PiP°C₇P°C†P_μC, P°PjPsP»C† P· P°P·P_μPrPsC, P_μPjC-PrP_μPePSPsPj PjPsP¶P_μ PiC₇P_μPeP·PIP_μC†C, P_μ PrPs C₇PsP·PIP_μC, PeC† PSP_μPN_μC, C₇PsPiP_μPSC-C—. PhPSC, P_μPePsP°PiC†P»C†PSC, PSP_μPN_μ P_μC,, P_μPeC, PIP°C₇C,, P°C₇P_μPePSC₇ C, P° C-PSC€PeC... PeC₇PjP°C₇P_μPePSC-PI PiPsC†P_μPeP»CHC" C, CHC†C† PiC₇P_μ C, C₇P_μPePIP°P»PsPjC† C₇P_μPiC†P»C†C₇PSPsPjC† P·P°C†C, PsC†C†PIP°PSPSC- PiP°C₇P°C†P_μC, P°PjPsP»C†. P_μC-PrPIP_μC%CrC" C, CHC†C† C₇P_μPeP·P_μPe PeC₇PsPiPsC, P_μC†C-. P_μP_μC₇C-PsPrP_μPeC†PSP_μPN_μ PiC₇P_μPN_μPsPj PSP_μ PjP°C" P·PSP°C†P_μPSPSC†. PhPrPSPsC†P°C†PSP_μ P·P°C†C, PsC†C†PIP°PSPSC† PiP°C₇P°C†P_μC, P°PjPsP»C† P· PSP_μC†C, P_μC₇PsC—PrPSP_μPjP_μ PiC₇PsC, P_μPeP·P°PiP°P»CHPSP_μPjP_μ P·P°C†PsP±P°PjP_μ P·P±C-P»CHC€C†C" C₇P_μPeP·P_μPe PIP_μPePSP_μPSPSC† C†C†PeP»P°PrPSP_μPSC₇ P· P±PsPeC† PSP_μC₇PsPe. P_μC₇P_μ PsPrPSPsC†P°C†PSPsPjC† P·P°C†C, PsC†C†PIP°PSPSC- PiP°C₇P°C†P_μC, P°PjPsP»C† P· PiP_μPiP°C, PsC, PsPeC†P_μPeC†PSP_μPjP_μ P·P°C†PsP±P°PjP_μ P·P±C-P»CHC€C†C" C, CHC†C† C, PsPeC†P_μPeC†PSP_μPN_μ PIP_μP»P_μPI PiC₇P_μPiP°C₇P°C, C-PI PSP° PiP_μC†C-PSPeC†. P_μP»C-Pr P±C†C, P_μ PsP±P_μC₇P_μ¶PSP_μPjP_μ PiC₇P_μ PsPrPSPsC†P°C†PSPsPjC† P·P°C†C, PsC†C†PIP°PSPSC- PiP°C₇P°C†P_μC, P°PjPsP»C† P· C,, P»C₇PeP»PsPeC†P°C†P_μPeP»C-PSPsPj, PsC†PeC-P»CHPeP_μ C, P°PeP_μPN_μ PsPrPSPsC†P°C†PSP_μPN_μ PiC₇P_μPN_μPsPj P°C†PsC†C-CHC" C, CHC†C† P· PjP_μC, P°P±PsP»C-C†PSP_μPj P°C†P_μPrPsP·PsPj P· PIP_μC†PsPeP_μPj P°PSC-PsPSPSP_μPj PiC₇PsPjC-P¶PePsPj C†Pe PSP°C†P»C-PrPePsPj PiC-C₇PsPiP»C†C, P°PjC-PSPsPiPs P°C†P_μPrPsP·C†, PsC†PsP±P»P_μPIPs C† PiP°C†C-C" PSC, C-PI P· C,, P°PeC, PsC₇P°PjP_μ C₇P_μPeP·P_μPeC† (PrP_μPI. C₇PsP·PrC-P» B«PhC†PsP±P»P_μPIPsC†C, C- P·P°C†C, PsC†C†PIP°PSPSC†B»).

P·C,, P_μPeC, PrP_μPeC†P_μPeP»PsPjC-PSC† PiC-PrC₇PsC...P»PsC₇P_μPrC† PiPsC†P_μPeP»CHC₇C, CH

*P°PjP°PSC, P°PrPëPS, P°PSC, PëPiCÍPëC...PsC, PëC±PSC- P°PiPμPSC, Pë,
P±PμPSP·PsPrC-P°P·PμPíC-PSPë, C-PSPiC-P±C-C, PsCḡPë PḡPḡPḡ, PSP°CḡPePsC, PëC±PSC-
P°PSP°P»PiPμC, PëPePë, PSC-C, CḡP°C, Pë C- PSC-C, CḡPëC, Pë, CÍPëPjPíP°C, PsPjC-PjPμC, PëPePë,
C, CḡPëC†PëPeP»C-C±PSC- P°PSC, PëPrPμPíCḡPμCÍP°PSC, Pë, C...PsP»C-PSPsP»C-C, PëPePë,
PePsCḡC, PëPePsCÍC, PμCḡPsC—PrPë; P·PSPëP¶CíCḡC, Cḡ Bḡ“ P°PSC, P°C†PëPrPë.
P”PëC†PëPeP»PsPjC-PSCí PiC-PrCḡPsC...P»PsCḡPëPr PíPsCÍPëP»CḡC” PrC-Cḡ
PrPëPiPsPeCÍPëPSCé.*

PḡCÍPsP±P»PëPIPsCÍC, C- P·P°CÍC, PsCÍCéPIP°PSPSCII.

PḡPμPsP±C...C-PrPSPs PíPsCḡP°PrPëC, PëCÍCII P· P»C-PeP°CḡPμPj CÍC, PsCÍPsPIPSPs
PjPsP¶P»PëPIPsCÍC, C- P·P°CÍC, PsCÍCíPIP°PSPSCII PíCḡPμPíP°CḡP°C, Cí PíP°C†C-C”PSC, P°Pj P·
PíPsCḡCíCëPμPSPSCII PjPë C, CíPSPeC†C-C— PSPëCḡPsPe C- PíPμC†C-PSPePë.

PμPμCḡPμPr P·P°CÍC, PsCÍCíPIP°PSPSCII Pj PíCḡPμPíP°CḡP°C, Cí PSPμPsP±C...C-PrPSPs
PíPsCḡP°PrPëC, PëCÍCII P· P»C-PeP°CḡPμPj, CII PeC%Ps PíP°C†C-C”PSC, P·P°CÍC, PsCÍPsPICíC”
PIP°CḡC, P°CḡPëPS P°P±Ps PíPsPrC-P±PSC- PíCḡPμPíP°CḡP°C, Pë, CII PeC- PjP°CḡC, Cḡ
P°PSC, PëPePsP°PiCíP»CII PSC, PSPëPNḡ PμC, PμPeC,.

PμCḡPë P·P°CÍC, PsCÍCíPIP°PSPSC- PíP°CḡP°C†PμC, P°PjPsP»Cí PSPμPsP±C...C-PrPSPëPNḡ
PePsPSC, CḡPsP»Cḡ PeP°CḡC, PëPSPë PíPμCḡPëC, PμCḡPëC±PSPsC— PeCḡPsPIC- i
C, CíPSPeC†iPsPSP°P»CḡPSPsPiPs CÍC, P°PSCí PíPμC†C-PSPePë. PḡPμ
CḡPμPePsPjPμPSPPrCíC”C, CḡCÍCII P·P°CÍC, PsCÍPsPICíPIP°C, Pë PsPrPSPsC±P°CÍPSPs P·
C-PSCëPëPjPë PíCḡPμPíP°CḡP°C, P°PjPë, C%Ps PjC-CÍC, CII C, Cḡ PíP°CḡP°C†PμC, P°PjPsP»,
C±PμCḡPμP· PjPsP¶P»PëPIC-CÍC, Cḡ PíPμCḡPμPIPëC%PμPSPSCII PrPsP·Pë.

PμCḡPë PíCḡPëP·PSP°C±PμPSPSC- PíCḡPμPíP°CḡP°C, Cí PSP° C, PμCḡPjC-PS P±C-P»CḡCëPμ 3
PrPSC-PI PíPsC, CḡC-P±PμPS PePsPSC, CḡPsP»Cḡ P»C-PeP°CḡCII P·P° CÍC, P°PSPsPj
C...PIPsCḡPsPiPs.

P— PsP±PμCḡPμP¶PSC-CÍC, Cḡ CÍP»C-Pr P·P°CÍC, PsCÍPsPICíPIP°C, Pë C...PIPsCḡPëPj
P»C-C, PSCḡPsPiPs PIC-PeCí, PsCÍPsP±P°Pj, CII PeC- P·P»PsPIP¶PëPIP°CḡC, Cḡ
P°P»PePsPiPsP»PμPj.

P— PsP±PμCḡPμP¶PSC-CÍC, Cḡ PíCḡPëP·PSP°C±P°C, Pë PíCḡPë CÍPμCḡC†PμPIC-PNḡ
PSPμPrPsCÍC, P°C, PSPsCÍC, C-, CÍC, PμPSPsP·C- PíC-P»PsCḡPëC±PSPsPiPs PIC-PrPrC-P»Cí
CëP»CíPSPeP°, PíPsCḡCíCëPμPSPSC- C, CíPSPeC†C-PNḡ PSPëCḡPsPe C- PíPμC†C-PSPePë.

PḡPsP¶Pμ PíPsCÍPëP»CḡPIP°C, Pë PíP°CÍC, CḡPsPμP·PsC, P°PiPμP°P»CḡPSPëPNḡ
CḡPμC, P»CḡPeCÍ.

P PëP·PëPe PíPμPíP°C, PsPeCÍPëC±PSPsC— PrC-C— PíP°CḡP°C†PμC, P°PjPsP»Cí
PíC-PrPIPëC%CíC”C, CḡCÍCII Cí C...PIPsCḡPëC... P· P°P»PePsPiPsP»CḡPSPëPj
CíCḡP°P¶PμPSPSCII Pj PíPμC†C-PSPePë.

PμP°CḡP°C†PμC, P°PjPsP» PjPsP¶Pμ PíPíP»PëPIP°C, Pë PSP° CḡPμP·CíP»CḡC, P°C, Pë
P»P°P±PsCḡP°C, PsCḡPSPëC... PrPsCÍP»C-PrP¶PμPSCḡ PíPjC-CÍC, Cí Cí PeCḡPsPIC-
PíP»CḡPePsP·Pë C, P° CÍPμC±PsPiPsC— PePëCÍP»PsC, Pë.

PμPsPIC-PrPsPjP»CII P»PsCÍCII PíCḡPs PíPëPíP°PrPePë PjPμC, P°P±PsP»C-C±PSPsPiPs
P°C†PëPrPsP·Cí P· PíPëCÍPsPePëPj P°PSC-PsPSPSPëPj PíCḡPsPjC-P¶PePsPj (*high anion gap*)

metabolic acidosis (HAGMA)) CИPe PSP°CTP»C-PrPeCp
 PiC-CTHPsPiP»CpC,P°PjC-PSPsPIPsPiPs P°CTPePrPsP·Cp Cp PiP°CTC-C"PSC,C-PI P·
 C,CИP¶PePePjPe P·P°C...PIPsCTHPIP°PSPSCИPjPe, C,P°PePePjPe CИPe C,CИP¶PeP°
 PSPeCTHPePsPiP° PSPµPrPsCTC,P°C,PSC-CTC,CH C,P° CTµPiCTPeCT, P°P±Ps Cp
 PiP°CTC-C"PSC,C-PI P· PSPµPrPsC—PrP°PSPSCИPj CPe PSP°CИPIPSC-CTC,CH C-PSCePeC...
 PiCTHPeCPePS PrPµC,,C-CTPeC,Cp PiP»CpC,P°C,C-PsPSCp (PSP°PiCTHPePeP»P°Pr,
 C...CTHPsPSC-CpPSPePM P°P»PePsPiPsP»C-P·Pj), CИPeC- P·P°CTC,PsCTPsPICpPiP°P»Pe
 PiP°CTHP°CTµC,P°PjPsP» Cp C,PµCTHP°PiPµPIC,PeCpPSC-PM PrPsP·C- PiCTHPsC,CИPiPsPj
 C,CTHPePIP°P»PsPiPs PiPµCTHC-PsPrCp P°P±Ps PePsPjP±C-PSP°CTC-CH
 PiP°CTHP°CTµC,P°PjPsP»Cp C,P° C,,P»CpPeP»PsPeCTP°CTPeP»C-PSCp. PiPeC%Ps
 C-CTPSCpC" PiC-PrPsP·CTHP° PSP° HAGMA CИPe PSP°CTP»C-PrPsPe
 PiC-CTHPsPiP»CpC,P°PjC-PSPsPIPsPiPs P°CTPePrPsP·Cp, CTµPePsPjPµPSPpCpC,CHCTCИ
 PSPµPiP°PM°PSPs PiCTHPePiPePSPeC,Pe P·P°CTC,PsCTCpPiP°PSPSCИ
 PiP°CTHP°CTµC,P°PjPsP»Cp C,P° PiCTHPsPiPµCTC,Pe CTµµC,PµP»CHPSPePM
 PjPsPSC-C,PsCTHPePSPi CTC,P°PSCp PiP°CTC-C"PSC,P°. P°PePjC-CTHPIP°PSPSCИ
 CTHC-PIPSCИ 5-PsPeCTPsPiCTHPsP»C-PSCp PI CTµCpC- PjPsP¶Pµ P±CpC,Pe
 PePsCTHPeCTPSPePj PrP»CИ C-PrPµPSC,PeC,,C-PeP°CTC-C—
 PiC-CTHPsPiP»CpC,P°PjC-PSPsPIPsPiPs P°CTPePrPsP·Cp CИPe PsCTPSPsPIPsC—
 PiCTHPeCPePSPe HAGMA Cp PiP°CTC-C"PSC,C-PI P· PjPSPsP¶PePSPSPePjPe
 C,,P°PeC,PsCTHP°PjPe CTHPeP·PePeCp.

P— PsP±PµCTHPµP¶PSC-CTC,CH PiCTHPeP·PSP°CTP°C,Pe PiCTHPµPiP°CTHP°C, C...PIPsCTHPePj
 PiCTHPe PSP°CИPIPSPsCTC,C- P°CTC,PµCTHC-P°P»CHPSPsC— PiC-PiPsC,PµPSP·C-C—,
 CTC...PeP»CHPSPsCTC,C- PrPs P±CTHPsPSC...PsCTPiP°P·PjC-PI, P° C,P°PePsP¶ PiCTHPe
 PiC-PrPiPeC%PµPSC-PM C-PSPrPePIC-PrCpP°P»CHPSC-PM CpCpC,P»PePIPsCTC,C- PrPs
 PSPµCTC,PµCTHPsC—PrPSPeC... PiCTHPsC,PeP·P°PiP°P»CHPSPeC... P·P°CTPsP±C-PI. PµCTHPe
 C,CTHPePIP°P»PsPjCp P·P°CTC,PsCTCpPiP°PSPSC- CTP»C-Pr PePsPSC,CTHPsP»CHPIP°C,Pe
 PeP»C-C,PePSPSPePM CTPeP»P°Pr PiPµCTHPeC,,PµCTHPeCpPSPsC— PeCTHPsPIC- C,P° CTC,P°PS
 C,,CpPSPeCTC-C— PSPeCTHPsPe.

P°PeCTPePeP»PsPjC-PS P· PsP±PµCTHPµP¶PSC-CTC,CH CTP»C-Pr PiCTHPeP·PSP°CTP°C,Pe PiCTHPe
 PSPµCTPiPµCTPeC,,C-CpPSPsPjCp PiPeCTHP°P·PePsPIPsPjCp PePsP»C-C,C- (PSPµP±PµP·PiPµPeP°
 PiPePSPePSPµPSPSCИ PiP°CTHP°P»C-C,PeCpPSPsC— PSPµPiCTHPsC...C-PrPSPsCTC,C-),
 PiCTHPeP¶C- C,CTHP°PIPsPiPs PsC,PIPsCTCp PrC-P°C,,CTHP°PiPjPe, C%Ps
 CTCTPiCTHPsPIPsPrP¶CpC,CHCTCИ CTHPµC,,P»CHPeCT-PµP·PsC,,P°PiC-C,PsPj.

Pj C...PIPsCTHPeC..., CИPeC- PiCTHPePM°PjP°CTC,CH P°PSC,PeC...PsP»C-PSPµCTHPiC-CpPSC-
 PiCTHPµPiP°CTHP°C,Pe, PjPsP¶Pµ PiPePSPePeP°C,Pe PiCTPeC...PsP·, CTPiP»CpC,P°PSC-CTC,CH
 CTPIC-PrPsPjPsCTC,C-, P°C,P°PeCTC-CT, PePsPjP°, PµPM°C,,PsCTHC-CT, CTP»P°P±PeC-CTC,CH,
 P±PµP·CTPsPSPSCИ, P·P±CpPrP¶PµPSPSCИ, PSPµP°PrPµPePIP°C,PSC- PµPjPsCTC-PM°PSC-
 PiCTHPsCИPIPe (CTPePjPiC,PsPjPe P·PjPµPSCeCTCTC,CHCTCИ PiCTHPsC,CИPiPsPj 12B¶"24
 PiPsPrPePS PiC-CTP»CИ P·PSPeP¶PµPSPSCИ PrPsP·Pe).

P— PsP±PµCTHPµP¶PSC-CTC,CH PiCTHPeP·PSP°CTP°C,Pe PiCTHPe PiPeCTPsPeC-PM
 C,PµPjPiPµCTHP°C,CpCTHC- PSP°PIPePsP»PeCpPSCHPsPiPs CTµCTHPµPrPsPiPeC%P°
 (CpµCTHPµP· P·PSPeP¶PµPSPSCИ PiPsC,PsPiPePrC-P»PµPSPSCИ P·CTHPsCTC,P°C"
 C-PjPsPIC-CTHPSC-CTC,CH PiC-PiPµCTHC,PµCTHPjC-C— C,P° C,PµPiP»PsPIPsPiPs CpPrP°CTCp).

PµP°CTC-C"PSC,P°Pj, CИPeC- PiCTHPePM°PjP°CTC,CH P°PSP°P»PiPµC,PePePe PePsP¶PµPS
 PrPµPSCHP PiCTHPe P°CTC,CTHPeC,P°C... P»PµPiPePsC— C,,PsCTHPjPe, PSPµPsP±C...C-PrPSPs
 PiCTHPsPePsPSCCTCp»CHC,CpPiP°C,PeCTCИ P· P»C-PeP°CTHPµPj.

$\text{P}\ddot{\text{Y}}\text{P}_{\mu}\text{C}\ddot{\text{H}}\text{P}_{\text{J}}\text{C}-\text{PS} \text{ P}\gg\text{C}-\text{PeC}\dot{\text{r}}\text{PIP}^{\circ}\text{PSPSC}\dot{\text{U}} \text{ PIP}\ddot{\text{e}}\text{P}\cdot\text{PSP}^{\circ}\text{C}\ddot{\text{r}}\text{P}^{\circ}\text{C}'' \text{ P}\gg\text{C}-\text{PeP}^{\circ}\text{C}\ddot{\text{H}}$
 $\text{C}-\text{PSPrP}\ddot{\text{e}}\text{PIC}-\text{PrC}\dot{\text{r}}\text{P}^{\circ}\text{P}\gg\text{CHbPSPs}, \text{P}\cdot\text{P}^{\circ}\text{P}\gg\text{P}_{\mu}\text{P}\ddot{\text{U}}\text{PSPs} \text{ PIC}-\text{Pr} \text{ C}\dot{\text{r}}\text{C}, \text{P}^{\circ}\text{PSC}\dot{\text{r}} \text{ C}, \text{P}^{\circ} \text{C}\ddot{\text{H}}\text{P}_{\mu}\text{P}^{\circ}\text{PeC}\dot{\text{r}}\text{C}-\text{C}-$
 $\text{C}\dots\text{PIPsC}\ddot{\text{H}}\text{PsPiPs}.$

$\text{P}\ddot{\text{C}}\text{H}\text{P}\mu\text{P}\ddot{\text{i}}\text{P}^\circ\text{C}\ddot{\text{H}}\text{P}^\circ\text{C}, \text{PSP}\mu\text{P}\ddot{\text{i}}\text{C}\ddot{\text{H}}\text{P}\ddot{\text{e}}\text{P}\cdot\text{PSP}^\circ\text{C}\ddagger\text{P}^\circ\text{C}, \text{P}\ddot{\text{e}}\text{PrC}-\text{C}, \text{C}\ddot{\text{I}}\text{PjPIC}-\text{PePsPjPrPs}$ 7 $\text{C}\ddot{\text{H}}\text{PsPeC}-\text{PI}.$

PuPμCḤPμPṚPsP·CǎPIP°PSPSCЦ.

PŸPëPjPìC,PsPjPë PìPµCĤPµPrPsP·CžPIP°PSPSCĬ, P·CžPjPsPIP»PµPSC-
PìP°CĤP°C†PµC,P°PjPsP»PsPj. PjCĤP°P¶PµPSPSCĬ PìPµC‡C-PSPePë PjPsP¶P»PëPIPµ Cr
PrPsCĤPsCĬP»PëC..., CĬPeC- PìCĤPëPNëPSCĬP»Pë 10 Pì C- P±C-P»CHC€Pµ
PìP°CĤP°C†PµC,P°PjPsP»Cr, C,P° Cr PrC-C,PµPNë, CĬPeC- PìCĤPëPNëPSCĬP»Pë
P±C-P»CHC€Pµ 150 PjPi/PePi PjP°CĬPë C,C-P»P°. Pj PìP°C†C-C”PSC,C-PI P·
C,,P°PeC,PsCĤP°PjPë CĤPëP·PëPeCr (C,CĤPëPIP°P»Pµ P»C-PeCrPIP°PSPSCĬ
PeP°CĤP±P°PjP°P·PµPìC-PSPsPj, C,,PµPSPsP±P°CĤP±C-C,PsPSPsPj,
C,,PµPSC-C,PsC—PSPsPj, PìCĤPëPjC-PrPsPSPsPj, CĤPëC,,P°PjPìC-C†PëPSPsPj,
P·PIC-CĤPsP±PsC”Pj P°P±Ps C-PSC€PëPjPë P»C-PeP°CĤCĬCHPePëPjPë
P·P°CĬPsP±P°PjPë, C%Ps C-PSPrCrPeCrCĤC,CH C,,PµCĤPjPµPSC,Pë PìPµC‡C-PSPePë;
CĤPµPìCrP»CĬCĤPSPµ PIP¶PëPIP°PSPSCĬ PSP°PrPjC-CĤPSPëC...
PeC-P»CHPePsCĬC,PµPNë PµC,P°PSPsP»Cr; PìP»CrC,P°C,C-PsPSPsPIP°
PeP°C...PµPeCĬC-CĬ (CĤPsP·P»P°PrPë C,CĤP°PIP»PµPSPSCĬ,
PjCrPePsPIC-CĬC†PëPrPsP·, P’P†P>-C-PSC,,PµPeC†C-CĬ, PìPsP»PsPr,
PeP°C...PµPeCĬC-CĬ) P·P°CĬC,PsCĬCrPIP°PSPSCĬ 5 Pì P°P±Ps P±C-P»CHC€Pµ
PìP°CĤP°C†PµC,P°PjPsP»Cr PjPsP¶Pµ PìCĤPëP·PIPµCĬC,Pë PrPs CrCĤP°P¶PµPSPSCĬ
PìPuC‡C-PSPePë.

PŸPĖPjPĭC,PſPjPĕ PĭPµCĤPµPrPsP·CŕPIP°PSPSCĬ Cŕ PĭPµCĤCĖC- 24 PiPsPrPĕPSPĕ:
 P±P»C-PrC-CĬC,CH, PSCŕPrPsC,P°, P±P»CĤPIP°PSPSCĬ, P°PSPsCĤPµPeCĬC-CĬ C,P°
 P°P±PrPsPjC-PSP°P»CHPSPĖPNĕ P±C-P»CH. PjCĤP°P¶PµPSPSCĬ PĭPµC±C-PSPePĕ PjPsP¶Pµ
 CĬC,P°C,Pĕ CĬPIPSPĖPj C±PµCĤPµP· 12-48 PiPsPrPĕPS PĭC-CĬP»CĬ
 PĭPµCĤPµPrPsP·CŕPIP°PSPSCĬ. PĥPsP¶CŕC,CH PIPĖPSPĖPeP°C,Pĕ PĭPsCĤCŕCĖPµPSPSCĬ
 PjPµC,P°P±PsP»C-P·PjCŕ PiP»CĤPePsP·Pĕ C,P° PjPµC,P°P±PsP»C-C±PSPĖPNĕ P°C†PĕPrPsP·.
 PµCĤPĕ C,CĬP¶PePsPjCŕ PsC,CĤCŕC”PSPSC- PĭPµC±C-PSPePsPIP°
 PSPµPrPsCĬC,P°C,PSC-CĬC,CH PjPsP¶Pµ PĭCĤPsPiCĤPµCĬCŕPIP°C,Pĕ PI
 PµPSC†PµC,,P°P»PsPĭP°C,C-CĤ, PeCĤPsPIPsPIPĖP»PĖPIPĖ, PiC-PĭPsPiP»C-PePµPjC-CĤ, PePsPjCŕ
 C,P° P»PµC,P°P»CHPSPĖPNĕ PSP°CĬP»C-PrPsPe. P”PsCĬC,CĤP° PSPĖCĤPePsPIP°
 PSPµPrPsCĬC,P°C,PSC-CĬC,CH P· PiPsCĬC,CĤPĖPj PSPµPeCĤPsP·PsPj PeP°PSP°P»CHC†C-PI
 PjPsP¶Pµ PĭCĤPsCĬPIP»CĬC,PĕCĬCĬ CĬPĖP»CHPSPĖPj PĭPsPĭPµCĤPµPePsPIPĖPj P±PsP»PµPj,
 PiPµPjP°C,CŕCĤC-C”CĤ, PĭCĤPsC,PµC—PSCŕCĤC-C”CĤ C- CĤPsP·PIPĖPSCŕC,PĕCĬCĬ
 PSP°PIC-C,CH PĭCĤPĖ PIC-PrCĬCŕC,PSPsCĬC,C- C,CĬP¶PePsPiPs CŕCĤP°P¶PµPSPSCĬ
 PĭPµC±C-PSPePĕ. P’C-PrP·PSP°C±P°P»PĕCĬCĬ C,P°PePsP¶ CĬPµCĤC†PµPIP° P°CĤPĖC,PjC-CĬ
 C,P° PĭP°PSPeCĤPµP°C,PĕC,.

$P_4C_7P_6$ C, $C_7P_6PIP^{\circ}P \gg PsPjCr$ P·P°C' C, $PsC'CrPIP^{\circ}PSPSC$ – $PiC_7P_4PiP^{\circ}C_7P^{\circ}C$, Cr Cr
 $PIP_4P \gg PePeP_6C \dots PrPsP \cdot P^{\circ}C \dots P \cdot P \pm PsPeCr$ $PsC_7PiP^{\circ}PSC$ –PI PeC_7PsP PsC , $PIP_6C_7P_4PSPSC$
 $PjPsP \P_4 C_7PsP \cdot PIP_6PSCrC$, $PeC'CH$ P°PiP»P°C' C, $PeC \ddagger PSP^{\circ}$ P°PSP μ PjC–C $\ddagger$,
 $PiP^{\circ}PSC \ddagger PeC$, $PsPiP_4PSC$ –C $\ddagger$, P°PiC $\ddagger$ P°PSCrP»PsC $\ddagger$ PeC, $PsP \cdot$, PSP_4PN_6C , C_7PsPiP_4PSC –C $\ddagger$,

P»PµPNεPePsPīPµPSC-Cī, C, CḡPsPjP±PsC†PēC, PsPīPµPSC-Cī. PµCḡPē PīCḡPēPNεPsPjC-
PIPµP»PēPePēC... PrPsP· P· P±PsPeCṛ C†PµPSC, CḡP°P»CHPSPsC— PSPµCḡPIPSPsC—
CṛPēCṛC, PµPjPē — P·P°PīP°PjPsCḡPsC†PµPSPSCī, PīCṛPēC...PsPjPsC, PsCḡPSPµ
P·P±CṛPrP¶PµPSPSCī C- PīPsCḡCṛCēPµPSPSCī PsCḡC-C”PSC, P°C†C-C—; P· P±PsPeCṛ
CṛPµC†PsPIPēPrC-P»CHPSPsC— CṛPēCṛC, PµPjPē — PSPµC,, CḡPsC, PsPeCṛPēC†PSC-CṛC, CH
(PSPēCḡPePsPIP° PePsP»C-PeP°, C-PSC, PµCḡCṛC, PēC†C-P°P»CHPSPēPNε PSPµC,, CḡPēC,,
PeP°PīC-P»CīCḡPSPēPNε PSPµPeCḡPsP·).

PµCḡPē PīPµCḡPµPrPsP·CṛPIP°PSPSC- PSPµPsP±C...C-PrPSP° CēPIPēPrPeP° PjPµPrPēC†PSP°
PrPsPīPsPjPsPīP°. PµP°C†C-C”PSC, P° CṛP»C-Pr PSPµPīP°PNεPSPs PrPsCṛC, P°PIPēC, Pē Cṛ
P»C-PeP°CḡPSCḡ, PSP°PIC-C, CH CīPeC%Ps PIC-PrCṛCṛC, PSC- CḡP°PSPSC- CṛPēPjPīC, PsPjPē
PīPµCḡPµPrPsP·CṛPIP°PSPSCī. PŸPēPjPīC, PsPjPē PjPsP¶CṛC, CH P±CṛC, Pē PsP±PjPµP¶PµPSC-
PSCṛPrPsC, PsCḡ C, P° P±P»CḡPIP°PSPSCīPj P°P±Ps PjPsP¶CṛC, CH PSPµ
PIC-PrPsP±CḡP°P¶P°C, Pē C, CīP¶PePsCṛC, C- PīPµCḡPµPrPsP·CṛPIP°PSPSCī C†Pē
CḡPēP·PēPeCṛ CṛCḡP°P¶PµPSPSCī PsCḡPīP°PSC-PI. PŸP»C-Pr CḡPsP·PīP»CīPSCṛC, Pē
P»C-PeCṛPIP°PSPSCī P°PeC, PēPIPSPIP°PSPēPj PICṛPīC-P»P»CīPj, CīPeC%Ps
PSP°PrPjC-CḡPSP° PrPsP·P° PīP°CḡP°C†PµC, P°PjPsP»Cṛ P±CṛP»P° PīCḡPēPNεPSCīC, P° Cṛ
PjPµP¶P°C... 1 PīPsPrPēPSPē. PḡPsPSC†PµPSC, CḡP°C†C-Cḡ PīP°CḡP°C†PµC, P°PjPsP»Cṛ Cṛ
PīP»P°P·PjC- PeCḡPsPIC- CṛP»C-Pr PIPēPjC-CḡCḡPIP°C, Pē C†PµCḡPµP· 4 PīPsPrPēPSPē P°P±Ps
PīC-P·PSC-CēPµ PīC-CṛP»Cī PīCḡPēPNεPsPjCṛ (P±C-P»CHCē CḡP°PSPSC-
PePsPSC†PµPSC, CḡP°C†C-C— C” PSPµ PrPsCṛC, PsPIC-CḡPSPēPjPē). P»C-PeCṛPIP°PSPSCī N-
P°C†PµC, PēP»C†PēCṛC, PµC—PSPsPj PjPsP¶Pµ P±CṛC, Pē P·P°CṛC, PsCṛPsPIP°PSPs
PīCḡPsC, CīPīPsPj 24 PīPsPrPēPS PīC-CṛP»Cī PīCḡPēPNεPsPjCṛ PīP°CḡP°C†PµC, P°PjPsP»Cṛ,
P°P»Pµ PjP°PeCṛPēPjP°P»CHPSPēPNε P·P°C...PēCṛPSPēPNε PµC,, PµPeC, PSP°CṛC, P°C” PīCḡPē
PNεPsPīPs P·P°CṛC, PsCṛCṛPIP°PSPSC- PīCḡPsC, CīPīPsPj 8 PīPsPrPēPS PīC-CṛP»Cī
PīCḡPēPNεPsPjCṛ. P·C,, PµPeC, PēPIPSC-CṛC, CH P°PSC, PēPrPsC, Cṛ CḡC-P·PePs
P·PSPēP¶CṛC”C, CHCṛCī PīC-CṛP»Cī C†CHPsPīPs C†P°CṛCṛ. PµCḡPē
PSPµPsP±C...C-PrPSPsCṛC, C- PīP°C†C-C”PSC, Cṛ PIPSCṛC, CḡC-CēPSCḡPsPIPµPSPSPs CṛP»C-Pr
PIPIPSPPrPēC, Pē N-P°C†PµC, PēP»C†PēCṛC, PµC—PS P·PīC-PrPSPs P·C-
PICṛC, P°PSPsPIP»PµPSPēPj PīPµCḡPµP»C-PePsPj PrPsP·. PµCḡPē
PIC-PrCṛCṛC, PSPsCṛC, C- P±P»CḡPIP°PSPSCī PjPsP¶PSP° P·P°CṛC, PsCṛPsPICṛPIP°C, Pē
PjPµC, C-PsPSC-PS PīPµCḡPsCḡP°P»CHPSPs CīPe PIC-PrPīPsPIC-PrPSCṛ
P°P»CHC, PµCḡPSP°C, PēPICṛ Cṛ PIC-PrPrP°P»PµPSPēC... CḡP°PNεPsPSP°C... PīPsP·P°
P»C-PeP°CḡPSPµCḡ.

*PŸPēPjPīC, PsPjPē PīPµCḡPµPrPsP·CṛPIP°PSPSCī, P·CṛPjPsPIP»PµPSC- PrPēC†PēPeP»PsPjC-PSCṛ
PīC-PrCḡPsC...P»PsCḡPēPrPsPj. PŸP°C...C-PeP°CḡPrC-Cī, P±CḡP°PrPēPeP°CḡPrC-Cī,
P°CḡPēC, PjC-Cī, P·PjC-PSP° C†P°CṛC, PsC, Pē PrPēC...P°PSPSCī, CṛCṛC...C-CṛC, CH Cṛ
CḡPsC, C-, P·P±CṛPrP¶PµPSPSCī, CṛPsPSP»PēPIC-CṛC, CH, PIC, CḡP°C, P°
P°PePsPjPsPrP°C†C-C—, C,, PsC, PsC,, PsP±C-Cī, CṛCṛPrPsPjPē.*

PµPµCḡPµPrPsP·CṛPIP°PSPSCī C...P°CḡP°PeC, PµCḡPēP·CṛC”C, CHCṛCī
PrPIPSC,, P°P·PSC-CṛC, Cḡ: CṛPīPsC†P°C, PeCṛ PIPēPSPēPeP°C” P·P±CṛPrP¶PµPSPSCī
C†PµPSC, CḡP°P»CHPSPsC— PSPµCḡPIPSPsC— CṛPēCṛC, PµPjPē, C%Ps
PīCḡPsCīPIP»CīC”C, CHCṛCī PSPµCṛPīPsPePsC”Pj, PīPsCīPIPSCḡ C-P»CḡP·C-PNε,
PīP°P»CḡC†PēPSP°C†C-PNε, CṛC, C-PNεPePsPīPs PjC-PrCḡC-P°P·Cṛ, C, P°C...C-PeP°CḡPrC-C—,
P°CḡC, PµCḡC-P°P»CHPSPsC— PīC-PīPµCḡC, PµPSP·C-C—. PµPsC, C-Pj
PIC-PrP±CṛPIP°C”C, CHCṛCī PīCḡPēPīPSC-C†PµPSPSCī C†PµPSC, CḡP°P»CHPSPsC—
PSPµCḡPIPSPsC— CṛPēCṛC, PµPjPē P°P¶ PrPs PePsPjP°C, PsP·PSPsPīPs CṛC, P°PSCṛ.

PJ PīPμCḡC€C- 24 PiPsPrPēPSPē Bḡ“ P±P»C-PrC-CīC,CH C€PeC-CḡPē, PSCrPrPsC,P°, P°PSPsCḡPμPeCīC-Cī, P±P»CḡPIP°PSPSCī C,P° P±C-P»CH Cr P¶PēPIPSC,C-, C±PμCḡPμP· B B B B B B B B B B B 12Bḡ“48 PiPsPrPēPS Bḡ“ CrC€PePsPrP¶PμPSPSCī PSPēCḡPsPe C- PīPμC±C-PSPePē P· CḡPsP·PIPēC,PePsPj PīPμC±C-PSPePsPIPSC— PSPμPrPsCīC,P°C,PSPsCīC,C- (PīC-PrPIPēC%PμPSPSCī P°PeC,PēPIPSPsCīC,C- PīPμC±C-PSPePsPIPēC... C,CḡP°PSCrP°PjC-PSP°P·, PrPμPiC-PrCḡPsPiPμPSP°P·Pē, P·P±C-P»CHC€PμPSPSCī PePsPSC†PμPSC,CḡP°C†C-C— P±C-P»C-CḡCrP±C-PSCr, PīCḡPsC,CḡPsPjP±C-PSCr); C,P°C...C-PeP°CḡPrC-Cī, P°CḡPēC,PjC-C—; P·PjC-PSP° C†P°CīC,PsC,Pē PrPēC...P°PSPSCī; PīP°PSPeCḡPμP°C,PēC,.

PŸCrC...C-CīC,CH C€PeC-CḡPē C,P° CīP»PēP·PsPIPēC... PsP±PsP»PsPSPsPe, PīC-PrPIPēC%PμPSPSCī PIPSCrC,CḡC-C€PSCḡPsPsC±PSPsPiPs C,PēCīPeCr, PiPsP»PsPIPSPēPNē P±C-P»CH, P·P°PīP°PjPsCḡPsC±PμPSPSCī, P·P±CrPrP¶PμPSPSCī C†PμPSC,CḡP°P»CHPSPsC— PSPμCḡPIPSPsC— CīPēCīC,PμPjPē, P·P°C,CḡPēPjPeP° CīPμC±C-.

P>C-PeCrPIP°PSPSCī: PīCḡPsPjPēPIP°PSPSCī C€P»CrPSPeP° P· PīPsPrP°P»CHC€PēPj P·P°CīC,PsCīCrPIP°PSPSCīPj P°PeC,PēPIPSPsPIP°PSPsPiPs PICrPiC-P»P»Cī, CīPēPjPiC,PsPjP°C,PēC±PSP° C,PμCḡP°PīC-Cī, PīCḡPēP·PSP°C±PμPSPSCī PjPμC,C-PsPSC-PSCr C±PμCḡPμP· 8Bḡ“9 PiPsPrPēPS PīC-CīP»Cī PīPμCḡPμPrPsP·CrPIP°PSPSCī C- B B B B B B B B B B B N-P°C†PμC,PēP»C†PēCīC,PμC—PSCr Bḡ“ C±PμCḡPμP· 12 PiPsPrPēPS (CīPe P°PSC,PēPrPsC,C-PI PrPs PīP°CḡP°C†PμC,P°PjPsP»Cr), PjPsPSC-C,PsCḡPēPSPi CīC,P°PSCr PrPēC...P°P»CHPSPsC— C,P° PeCḡPsPIPSPSPsCīPSPsC— CīPēCīC,PμPj (PSPμ PjPsP¶PSP° P·P°CīC,PsCīPsPICrPIP°C,Pē P°PrCḡPμPSP°P»C-PS). PJ CḡP°P·C- PīPsCīPIPē CīC†PrPsPj PīCḡPēP·PSP°C±P°C,Pē PrC-P°P·PμPīP°Pj.

PμPsP±C-C±PSC- CḡPμP°PeC†C-C—.

P—C¿PjPsPIP»PμPSC- PīP°CḡP°C†PμC,P°PjPsP»PsPj.

P— P±PsPeC¿ C,CḡP°PIPSPsPiPs C,CḡP°PeC,C¿: CḡC-PrPePs Bḡ“ PSCrPrPsC,P°, P±P»CḡPIP°PSPSCī, P·PSPēP¶PμPSPSCī P°PīPμC,PēC,Cr, P·P°PīPsCḡ, PrC-P°CḡPμCī P°P±Ps PjPμC,PμPsCḡPēP·Pj, PīC-PrPIPēC%PμPSPSCī P°PeC,PēPIPSPsCīC,C- PīPμC±C-PSPePsPIPēC... C,,PμCḡPjPμPSC,C-PI, CīPe PīCḡP°PIPēP»Ps, P±PμP· CḡPsP·PIPēC,PeCr P¶PsPIC,CīPSPēC†C-, PīPμPīP°C,PsPSPμPeCḡPsP· (PrPsP·PsP·P°P»PμP¶PSPēPNē PμC,,PμPeC,). PμCḡPē PrPsPIPiPsC,CḡPēPIP°P»PsPjCr PīCḡPēPNēPsPjC- P·PSP°C±PSPēC... PrPsP· PīCḡPμPīP°CḡP°C,Cr Bḡ“ P±C-P»CH PI PμPīC-PiP°CīC,CḡP°P»CHPSC-PNē PrC-P»CīPSC†C-, PīPμPīP°C,PsC,PsPeCīPēC±PSP° PrC-Cī.

P— P±PsPeC¿ CīPēCīC,PμPjPē PeCḡPsPIC-: PrCrP¶Pμ CḡC-PrPePs Bḡ“ PīPμPjPsP»C-C,PēC±PSP° P°PSPμPjC-Cī, CīCrP»CHC,,PiPμPjPsPiP»PsP±C-PSPμPjC-Cī C- PjPμC,PiPμPjPsPiP»PsP±C-PSPμPjC-Cī (C†C-P°PSPsP·, P·P°PrPēC€PeP°, P±PsP»C- PI CīPμCḡC†C-), C,CḡPsPjP±PsC†PēC,PsPīPμPSC-Cī; Cr PīPsPsPrPēPSPsPePēC... PIPēPīP°PrPeP°C... Bḡ“ P°PīP°P°CīC,PēC±PSP° P°PSPμPjC-Cī, PīP°PSC†PēC,PsPīPμPSC-Cī, PSPμPNēC,CḡPsPīPμPSC-Cī, P°PiCḡP°PSCrP»PsC†PēC,PsP·, P»PμPNēPePsPīPμPSC-Cī.

P— P±PsPeC¿ CīPμC±PsPIPēPrC-P»CHPSPsC— CīPēCīC,PμPjPē: PSPēCḡPePsPIP° PePsP»C-PeP°, P°CīPμPīC,PēC±PSP° PīC-CrCḡC-Cī, C-PSC,PμCḡCīC,PēC†C-P°P»CHPSPēPNē PīP»PsPjPμCḡCrP»PsPSPμC,,CḡPēC,, PrCrP¶Pμ CḡC-PrPePs Bḡ“ PSPμC,,CḡPsC,PsPeCīPēC±PSP° PrC-Cī, PīP°PīC-P»CīCḡPSPēPNē PSPμPeCḡPsP·.

*PḥP»PμCḥPiC-CḥPSC- CḥPμP°PeC†C-C—: CḥC-PrPePs бḥ“ C€PeC-CḥPSC-
 PIPëC†PëPīP°PSPSCḐ, PIPëC†PëPīP°PSPSCḐ PSP° C†P»PëP·PsPIPëC... PsP±PsP»PsPSPeP°C...
 (P·P°P·PIPëC†P°PNḑ PiPμPSPμCḥP°P»C-P·PsPIP°PSPëPNḑ PIPëC†PëPī, PμCḥPëPjP°C,PsP·PSPëPNḑ
 PIPëC†PëPī, PeCḥPsPiPëPiḇḥ™ CḐPSPeP°), C†PIPμCḥP±C-Pḥ, PiC-PiPμCḥPμPjC-CḐ; PrC†PḥPμ
 CḥC-PrPePs бḥ“ P±CḥPsPSC...C-P°P»CHḖPSP° PsP±C†C,CḥC†PeC†C-CḐ,
 PjC†P»CHḖC,PeC,,PsCḥPjPSP° PμPeC†C†PrP°C,PëPIPSP° PμCḥPëC,PμPjP° (C† C., Cḥ.
 C†PëPSPrCḥPsPj PḦC,C-PIPμPSC†P°-P°PḥPsPSC†PsPSP°), C,PsPeC†PëC†PSPëPNḑ
 PμPiC-PrPμCḥPjP°P»CHḖPSPëPNḑ PSPμPeCḥPsP»C-P· (C†PëPSPrCḥPsPj P»P°PNḑC°P»P»P°); C†
 PiPsPsPrPëPSPsPePëC... PIPëPīP°PrPeP°C... бḥ“B P°PSP°C,,C-P»P°PeC,PëC†PSPëPNḑ C€PsPe,
 P°PSPiC-PsPSPμPICḥPsC,PëC†PSPëPNḑ PSP°P±CḥCḐPe.*

*P— P±PsPeCḑ C†PμPSC,CḥP°P»CHḖPSPsC— PSPμCḥPIPSPsC— C†PëC†C,PμPjPë:
 (P·P°P·PIPëC†P°PNḑ CḥPsP·PIPëPīP°C°C,CHḖC†CḐ PiCḥPë PiCḥPëPNḑPsPjC- PIPëC†PsPePëC...
 PrPsP·): P·P°PiP°PjPsCḥPsC†PμPSPSCḐ, PiC†PëC...PsPjPsC,PsCḥPSPμ P·P±C†PrPḥPμPSPSCḐ C-
 PiPsCḥC†C€PμPSPSCḐ PsCḥC-C°PSC,P°C†C-C—.*

*P— P±PsPeCḑ PμPSPrPsPeCḥPëPSPSPsC— C†PëC†C,PμPjPë: C† PiPsPsPrPëPSPsPePëC...
 PIPëPīP°PrPeP°C... бḥ“ PiC-PiPsPiP»C-PePμPjC-CḐ, P°Pḥ PrPs PiC-PiPsPiP»C-PePμPjC-CḥPSPsC—
 PePsPjPë.*

*P— P±PsPeCḑ PrPëC...P°P»CHḖPSPsC— C†PëC†C,PμPjPë: P±CḥPsPSC...PsC†PiP°P·Pj C†
 PiP°C†C-C°PSC,C-PI, CḥC†C,P»PëPIPëC... PrPs P°C†PiC-CḥPëPSC† C,P° PrPs C-PSC€PëC...
 PSPμC†C,PμCḥPsC—PrPSPëC... PiCḥPsC,PëP·P°PiP°P»CHḖPSPëC... P·P°C†PsP±C-PI.*

*P†PSC€C-: C† PiPsPsPrPëPSPsPePëC... PIPëPīP°PrPeP°C... бḥ“ P·P°PiP°P»CHḖPSP°
 C†P»P°P±PeC-C†C,CHḖ, PiPsC†PëP»PμPSPμ PiPsC,PsPIPëPrC-P»PμPSPSCḐ.*

*PμPsCḥCḑC€PμPSPSCḐ PjPμC,P°P±PsP»C-P·PjCḑ C,P° C...P°CḥCḥCḑPIP°PSPSCḐ:
 PjPμC,P°P±PsP»C-CḥPSPëPNḑ P°C†PëPrPsP· P· PIPëC†PsPePëPj P°PSC-PsPSPSPëPj
 PiCḥPsPjC-PḥPePsPj* (CḥP°C†C,PsC,P° PIPëPīP°PrPeC-PI бḥ“ PSPμPIC-PrPsPjP°).*

** P°PëPiP°PrPePë PjPμC,P°P±PsP»C-CḥPSPsPiPs P°C†PëPrPsP·C† P· PIPëC†PsPePëPj
 P°PSC-PsPSPSPëPj PiCḥPsPjC-PḥPePsPj CḐPe PSP°C†P»C-PrPeC†
 PiC-CḥPsPiP»C†C,P°PjC-PSPsPiPsPiPs P°C†PëPrPsP·C† C†PiPsC†C,PμCḥC-PiP°P»PëC†CḐ C†
 PiP°C†C-C°PSC,C-PI P· C,,P°PeC,PsCḥP°PjPë CḥPëP·PëPeC†, CḐPeC-
 P·P°C†C,PsC†PsPIC†PiP°P»Pë PiP°CḥP°C†PμC,P°PjPsP» (PrPëPI. CḥPsP·PrC-P»
 B«PhC†PsP±P»PëPIPsC†C,C- P·P°C†C,PsC†C†PiP°PSPSCḐB»).*
*PμC-CḥPsPiP»C†C,P°PjC-PSPsPiPëPNḑ P°C†PëPrPsP· PjPsPḥPμ PIPëPSPëPeP°C,Pë
 PIPSP°C†P»C-PrPsPe PSPëP·CHḖPePsPiPs CḥC-PIPSḐ PiP»C†C,P°C,C-PsPSC† C† C†PëC...
 PiP°C†C-C°PSC,C-PI.*

P—CḑPjPsPIP»PμPSC- PrPëC†PëPeP»PsPjC-PSCḑ PiC-PrCḥPsC...P»PsCḥPëPrPsPj.

*P— P±PsPeCḑ C€PeC-CḥPë C- PiC-PrC€PeC-CḥPSPsC— PeP»C-C,PePsPIPëPSPë:
 P°P»PμCḥPiC-CḥPSC- CḥPμP°PeC†C-C—, PiPsC†PμCḥPIPSPSC-PSPSCḐ C€PeC-CḥPë.*

*P— P±PsPeCḑ C,CḥP°PIPSPsPiPs C,CḥP°PeC,Cḑ: PSC†PrPsC,P°, C†C†C...C-C†C,CHḖ C†
 CḥPsC,C-, PiPsCḥC†C€PμPSPSCḐ C†PjP°PeC†, PIC-PrCḥC†C,C,CḐ C†PiCḥP°PiPë,
 PrPëC†PiPμPiC†C-CḐ, P·P°PiPsCḥ, P°PSPsCḥPμPeC†C-CḐ, PiC-PrPIPëC%PμPSPSCḐ
 P°PeC,PëPIPSPC†C,C- PiPμC†C-PSPePsPIPëC... C,,PμCḥPjPμPSC,C-PI, CḐPe PiCḥP°PIPëP»Ps,
 P±PμP· CḥPsP·PIPëC,PeC† PḥPsPIC,CḐPSPëC†C-, PiPμPiP°C,PsPSPμPeCḥPsP·*

(PrPsP·PsP·P°P»PμP¶PSPëPNë PμC,,PμPeC,,), P±P»CHPIP°PSPSC¶, P±C-P»CH Cí P¶PëPIPsC,C-, PjPμC,PμPsC¶PëP·Pj.

P— P±PsPeCé PsC¶PiP°PSC-PI P·PsC¶Cé: C¶PsP·CëPëC¶PμPSPSC¶ P·C-PSPëC†CH P·PIC,C¶P°C,PsC¶ P°PePsPjPsPrP°C†C-C— C- C†C†C,P»PëPIPsC†C,C- PrPs C†PIC-C,P»P°, Pïc-PrPIPëC%PμPSPSC¶ PIPSC†C,C¶C-CëPSC¶PsPsC†PSPSPiPs C,PëC†PeC†, P·P°C,C†PjP°PSPμPSPSC¶ P·PsC¶C†, PrPëPïP»PsPïc-C¶, PjC-PrC¶C-P°P·, C†PëPeP»PsPïP»PμPïc-C¶ P·PsC¶C† (PïP°C¶P°P»C-C† P°PePsPjPsPrP°C†C-C—).

P— P±PsPeCé C†PμPSC,C¶P°P»CHPSPsC— PSPμC¶PIPsPIPsC— C†PëC†C,PμPjPë: P·P°PïP°PjPsC¶PμPSPSC¶, C†PsPSP»PëPIC-C†C,CH, PiPsP»PsPIPSPëPNë P±C-P»CH, PïP°C¶PμC†C,PμP·C-C—, PïPsC¶C†CëPμPSPSC¶ C†C†C,P»PëPIPsC†C,C-, PSPμC¶PIPsP·PSC-C†C,CH, PrPëC†PeC-PSPμP·C-C¶, P»PμC,P°C¶PiC-C¶, P±PμP·C†PsPSPSC¶, P·P°PïP°P»CHPSP° C†P»P°P±PeC-C†C,CH, Pïc-PrPIPëC%PμPSP° PIC,PsPjP»CHPIP°PSC-C†C,CH, C†PëPSPePsPïP°P»CHPSC- C†C,P°PSPë (PIC,C¶P°C,P° C†PIC-PrPsPjPsC†C,C-), PsPSC-PjC-PSPSC¶, PïPsC¶C†CëPμPSPSC¶ C...PsPrPë.

P¶P»PμC¶PiC-C†PSC- C¶PμP°PeC†C-C—: CëPeC-C¶PSPëPNë C†PIPμC¶P±C-P¶, CëPeC-C¶PSC- PIPëC†PëPïP°PSPSC¶, PeC¶PsPïPëPïB¶™ C¶PSPeP°, C†C¶C,PëPeP°C¶C-C—, C†C†C...C-C†C,CH CëPeC-C¶Pë C,P° C-PSCëC- PrPμC¶PjP°C,PsP»PsPïc-C†PSC- Pïc¶PsC¶PIPë, C,C¶P¶PeC- P°P»PμC¶PiC-C†PSC- C¶PμP°PeC†C-C— P°P±Ps PjPμPrPëPeP°PjPμPSC,PsP·PSP° C-PrC-PsC†PëPSPeC¶P°P·C-C¶, PIPeP»CHC†P°CHC†Pë P°PSP°C,,C-P»P°PeC†C-C¶.

P— P±PsPeCé C†PμC¶C†PμPIPs-C†CéPrPëPSPSPsC— C†PëC†C,PμPjPë: C,PëPjC†P°C†PsIP° P±C¶P°PrPëPeP°C¶PrC-C¶, C,P°C...C-PeP°C¶PrC-C¶, P°C¶PëC,PjC-C¶, PIC-PrC†C†C,C,C¶ C†PμC¶C†PμP±PëC,C,C¶, Pïc¶PëPïP»PëPIPë.

P— P±PsPeCé C†PμC†PsPIPëPrC-P»CHPSPsC— C†PëC†C,PμPjPë: PïPsC¶C†CëPμPSPSC¶ C†PμC†PsPIPëPïcC†P°PSPSC¶, PSPμC,C¶PëPjP°PSPSC¶ C†PμC†C-, P·P°C,C¶PëPjPeP° C†PμC†C-, C-PjPïPsC,PμPSC†C-C¶.

PμC†PëC...C-C†PSC- C¶PsP·P»P°PrPë: C¶PsP·P»P°PrPë PjPsPIP»PμPSPSC¶, C†PïP»C†C,P°PSC-C†C,CH C†PIC-PrPsPjPsC†C,C- C,P°/P°P±Ps PμPjPsC†C-PNëPSPμ P·P±C†PrP¶PμPSPSC¶, PïP°P»CHC†PëPSP°C†C-C—, P·PjC-PSP° PSP°C†C,C¶PsC¶.

P— P±PsPeCé PsPïPsC¶PSPs-C¶CéC...PsPIPsC— C†PëC†C,PμPjPë C,P° C†PïPsP»CéC†PSPsC— C,PeP°PSPëPSPë: C†P»P°P±PeC-C†C,CH Cí PjB¶™ C¶P·P°C....

P— P±PsPeCé PrPëC...P°P»CHPSPsC— C†PëC†C,PμPjPë C,P° PsC¶PiP°PSC-PI PïcC¶PrPSPsC— PeP»C-C,PePë: PrPëC†PïPSPsPμ, P°PïPSPsPμ, P°C†C,,C-PeC†C-C¶, P·P°PeP»P°PrPμPSC-C†C,CH PSPsC†P°, C†C...P°PSPSC¶, Pïc-PïPμC¶PμPjC-C¶ PïPsC¶P»P°.

P·PSPPrPsPeC¶PëPSPSC- C¶PsP·P»P°PrPë: Pïc¶PëPiPSC-C†PμPSPSC¶ P»P°PeC,P°C†C-C—.

PμPsPIC-PrPsPjP»PμPSPSC¶ Pïc¶PsB PïPsP±C-C†PSC- C¶PμP°PeC†C-C—

PμPsPIC-PrPsPjP»PμPSPSC¶ Pïc¶Ps PïPsP±C-C†PSC- C¶PμP°PeC†C-C— Pïc-C†P»C¶ C¶PμC"†C,C¶P°C†C-C— P»C-PeP°C¶C†CHPePsPiPs P·P°C†PsP±C† PjP°C" PIP°P¶P»PëPIPμ P·PSP°C†PμPSPSC¶. P|Pμ PrP°C" P·PjPsPïc Pïc¶PsPIPsPrPëC,Pë PjPsPSC-C,PsC¶PëPSPi

СГРiC-PIPIC-PrPSPsC€PμPSPSCЦ PePsCґPёCГC,CH/СґPёP·PёPe PёCґPё
P·P°CГC,PsCГCрPIP°PSPSC- CГCHPsPiPs P»C-PeP°CґCГCHPePsPiPs P·P°CГPsP±Cр.
PґPμPrPёCґPSPёPj C,P° C„P°CґPjP°CГPμPIC,PёCґPSPёPj PёCґP°CГC-PIPSPёPeP°Pj, P°
C,P°PePsP¶ PёP°CГC-C”PSC,P°Pj P°P±Ps C—C...PSC-Pj P·P°PePsPSPSPёPj
PёCґPμPrCГC,P°PIPSPёPeP°Pj CГP»C-Pr PёPsPIC-PrPsPjP»CЦC,Pё PёCґPs CрCГC-
PIPёPёP°PrPePё PёC-PrPsP·CґCґPIP°PSPёC... PёPsP±C-CґPSPёC... CґPμP°PeCГC-PNё C,P°
PIC-PrCГCрC,PSPsCГC,C- PμC„PμPeC,PёPIPSPsCГC,C- P»C-PeP°CґCГCHPePsPiPs P·P°CГPsP±Cр
CґPμCґPμP· PґPIC,PsPjP°C,PёP·PsPIP°PSCр C-PSC„PsCґPjP°CГC-PNёPSCр CГPёCГC,PμPjCр P·
C„P°CґPjP°PePsPSP°PiP»CЦPrCр P·P° PёPsCГPёP»P°PSPSCЦPj: <https://aisf.dec.gov.ua/> B

PґPμCґPjC-PS PёCґPёPrP°C,PSPsCГC,C-.

3 CґPsPePё.

PjPjPsPIPё P·P±PμCґC-PiP°PSPSCЦ.

P—P±PμCґC-PiP°C,Pё Cр PSPμPrPsCГC,CрPёPSPsPjCр PrP»CЦ PrC-C,PμPNё PjC-CГCГC-.

P—P±PμCґC-PiP°C,Pё PI PsCґPёPiC-PSP°P»CHPSC-PNё CрPёP°PePsPICГC- PёCґPё
C,PμPjPiPμCґP°C,CрCґC- PSPμ PIPёC‰Pμ 30^{Ps}Pґ.

PjPёP°PePsPIPeP°.

PμPs 10 C,P°P±P»PμC,PsPe Cр P±P»C-CГC,PμCґC-, PёPs 1 P°P±Ps 10 P±P»C-CГC,PμCґC-PI Cр
PePsCґPsP±CГC-.

PґP°C,PμPiPsCґC-CЦ PIC-PrPёCрCГPeCр.

P’PμP· CґPμCГPμPёC,P° Bґ” C,P°P±P»PμC,PePё B„- 10.

P—P° CґPμCГPμPёC,PsPj Bґ” C,P°P±P»PμC,PePё B„- 100.

P’PёCґPsP±PSPёPe.

PαP»P°PjC-PSPiPs PαP°CґPjP°CГCHCґC,PёPeP°P»CГ P>C,Pr.

***PґC-CГCГPμP·PSP°C...PsPrP¶PμPSPSCЦ PIPёCґPsP±PSPёPeP° C,P° PNёPsPiPs
P°PrCґPμCГP° PjC-CГCГCЦ PёCґPsPIP°PrP¶PμPSPSCЦ PrC-CЦP»CHPSPsCГC,C-.***

P•-28, PґPёPё. PαP°C”Cґ P’CґC-PiPμPNёPr, Pґ.PГ.P”.Pґ., PґP°P»PsPrP¶P°, P P°PNёPsPS
P P°PNёPiP°Pr, PґP°C...P°CґP°C€C,CґP°, PГPґBґ” 410208, PГPSPrC-CЦ.

P—P°CΠIPSPëPε.

PḡPSP°PSC,P° PḡPμPṛC—PεPμP°Cḡ P>C,Pṛ.

**PḡC—CÍC†PμP·PSP°C...PsPṛP¶PμPSPSCΠ P·P°CΠIPSPëPεP° C,P°/P°P±Ps
PïCḡPμPṛCÍC,P°PIPSPëPεP° P·P°CΠIPSPëPεP°.**

PŸCHCḢC, 1, 2 PŸC,PμPNεC€PS PḡPsCḡC,, P†PjPïPμCḡC—P°P» P'P°CḡC,,, PŸP°CÍPSPjPμPṛ
P PsP°Pṛ, PαCÍP»C...P°Pj, P>PsPSPṛPsPS, P'PμP»PëPεP° P'CḡPëC,P°PSC—CΠ.