

P⁺Ps P_iC₇P₁₁P_iP⁺C₇P⁺C, Cr C₇C₇C, P₇P₆IC-: *Peptostreptococcus* spp., *Clostridium* spp., *Bacteroides* spp., *Fusobacterium* spp., *Porphyromonas*, *Bilophila*, *Helicobacter pylori*, *Prevotella* spp., *Veilonella*.

[illegible]

***P°P·P°C°PjPsPrC-CΠ P· C-PSC€PëPjPë P»C-PeP°CḡCfCHPePëPjPë
P·P°CfPsP±P°PjPë C,P° C-PSC€C- PIPëPrPë PIP·P°C°PjPsPrC-PNë.***

PḡPSC,P°P±CfCfPSPëPNë PμC,,PμPeC,, P†CfPSCfC° P±P°PiP°C,Ps P»C-PeP°CḡCfCHPePëC...
P·P°CfPsP±C-PI, CΠPeC- P·P°PiCfCfPeP°CḡC,CH P°PSC,P°P±CfCfPSCf CḡPμP°PeC†C-Cḡ PSP°
P°P»PePsPiPsP»CH, C- C—C...PSC° PsPrPSPSc†P°CfPSPμ P·P°CfC,PsCfCfPIP°PSPSCΠ P·
P°P»PePsPiPsP»PμPj PSPμ CḡPμPePsPjPμPSPPrCfC°C,CHCfCΠ.

PḡPsPjP±C-PSP°C†C-C—, C%Ps PSPμ CḡPμPePsPjPμPSPPrCḡCḡC,CHCfCΠ.

P°PëCfCfP»CHC,,C-CḡP°Pj. PμPsPIC-PrPsPjP»CΠP»Pë PiCḡPs PIPëPiP°PrPePë
PiPsCfC,CḡPëC... C,CḡP°PSP·PëC,PsCḡPSPëC... CḡPsP·P»P°PrC-PI P·
PjP°CḡPμPSPSCΠPj (PiPsCfC,CḡPëPNë PSP°PiP°Pr PjP°CḡPμPSPSCΠ,
CfPiP»CfC,P°PSC-CfC,CH CfPIC-PrPsPjPsCfC,C-) Cf PiP°C†C-C°PSC,C-PI, CΠPeC-
PiCḡPëPNëPjP°P»Pë PsPrPSPSc†P°CfPSPs PjPμC,CḡPsPSC-PrP°P·PsP» C-
PrPëCfCfP»CHC,,C-CḡP°Pj.

PḡP»PePsPiPsP»CH (Cf CfPeP»P°PrC- PSP°PiPsC—PI P°P±Ps CΠPe PrPsPiPsPjC-PḡPSP°
CḡPμC†PsPIPëPSP°). PkPμ CfP»C-Pr PIPḡPëPIP°C,Pë P°P»PePsPiPsP»CHPSC- PSP°PiPsC— C,P°
PiCḡPëPNëPjP°C,Pë PiCḡPμPiP°CḡP°C,Pë, CΠPeC- PjC-CfC,CΠC,CH CfPiPëCḡC,, PiC-Pr C†P°Cf
P»C-PeCfPIP°PSPSCΠ C,P° PiCḡPsC,CΠPiPsPj PiCḡPëPSP°PNëPjPSC- C%Pμ PsPrPSPsPiPs
PrPSCΠ PiC-CfP»CΠ PNëPsPiPs P·P°PeC-PSC†PμPSPSCΠ C†PμCḡPμP· PjPsPḡP»PëPIPμ
PIPëPSPëPePSPμPSPSCΠ PrPëCfCfP»CHC,,C-CḡP°PjPsPiPsPrC-P±PSPsPiPs
(P°PSC,P°P±CfCfPSPsPiPs PμC,,PμPeC,Cf) PiCḡPëPiP»PëPIPë, PμCḡPëC,PμPjP°,
P±P»CḡPIP°PSPSCΠ, C,P°C...C-PeP°CḡPrC-CΠ). PḡP»C-Pr P±CḡP°C,Pë PrPs CfPIP°PiPë C†P°Cf
PiPsPIPSPsPiPs PIPëPIPμPrPμPSPSCΠ PiCḡPμPiP°CḡP°C,Cf P· PsCḡPiP°PSC-P·PjCf,
PICḡP°C...PsPICfCḡC†C- PiPμCḡC-PsPr PNëPsPiPs PSP°PiC-PICḡPsP·PiP°PrCf, PrPs
PiPsC†P°C,PeCf PIPḡPëPIP°PSPSCΠ P°P»PePsPiPsP»CHPSPëC... PSP°PiPsC—PI P°P±Ps
PiCḡPëPNëPsPjCf P»C-PeP°CḡCfCHPePëC... P·P°CfPsP±C-PI, CΠPeC- PjC-CfC,CΠC,CH
CfPiPëCḡC,,.

P·CfCfCfP»CHC,,P°PS. PḡPμC,CḡPsPSC-PrP°P·PsP» PjPsPḡPμ PiC-PrPIPëC%CfPIP°C,Pë
CḡC-PIPSC- P±CfCfCfP»CHC,,P°PSCf Cf PiP»P°P·PjC- PeCḡPsPIC-, C%Ps PjPsPḡPμ
PiCḡPëP·PIPμCfC,Pë PrPs P·PSP°C†PSPsPiPs C,PsPeCfPëC†PSPsPiPs PIPiP»PëPICf
P±CfCfCfP»CHC,,P°PSCf.

PḡPsPjP±C-PSP°C†C-C—, CΠPeC- PIPëPjP°PiP°CḡC,CH P·P°PiPsP±C-PḡPSPëC...
P·P°C...PsPrC-PI PiCḡPë P·P°CfC,PsCfCḡPIP°PSPSC-.

PμPμCḡPsCḡP°P»CHPSP° C,PμCḡP°PiC-CΠ P°PSC,PëPePsP°PiCfP»CΠPSC,P°PjPë.
PμPsCfPëP»PμPSPSCΠ PμC,,PμPeC,C-PI PiPμCḡPsCḡP°P»CHPSPëC...
P°PSC,PëPePsP°PiCfP»CΠPSC,C-PI C,P° PiC-PrPIPëC%PμPSPSCΠ CḡPëP·PëPeCf
PiPμPjPsCḡP°PiC-C†PSPëC... CfCfPeP»P°PrPSPμPSCḡ C†PμCḡPμP·
CfPiPsPIC-P»CHPSPμPSPSCΠ C—C...PSCḡPsPiPs PjPμC,P°P±PsP»C-P·PjCf Cf PiPμC†C-PSC†C-.
PkPμPsP±C...C-PrPSPs C†P°CfC,C-CëPμ PePsPSC,CḡPsP»CḡPIP°C,Pë CḡC-PIPSC-
PiCḡPsC,CḡPsPjP±C-PSCf C,P° P·PrC-PNëCfPSCḡPIP°C,Pë PSP°PiP»CΠPr P·P° CḡC-PIPSCΠPjPë
PḡPkP' (PjC-PḡPSP°CḡPsPrPSPsPiPs PSPsCḡPjP°P»C-P·PsPIP°PSPsPiPs
PIC-PrPSPsCëPμPSPSCΠ). P PμPePsPjPμPSPPrCfC°C,CHCfCΠ PePsCḡPëPiCfPIP°PSPSCΠ

PrPsP·Pë PîPµCḡPsCḡP°P»CHḡPSPsPiPs P°PSC,PëPePsP°PiCḡP»CḡPSC,Cḡ PîC-Pr C‡P°Cḡ
PîCḡPëPNëPsPjCḡ PjPµC,CḡPsPSC-PrP°P·PsP»Cḡ C,P° PîCḡPsC,CḡPiPsPj 8 PrPSC-PI PîC-CḡP»Cḡ
PNëPsPiPs PIC-PrPjC-PSPë.

P>C-C,C-PNë. PµC-PrPIPëC%oPµPSPSCḡ PePsPSC†PµPSC,CḡP°C†C-PNë P»C-C,C-Cḡ PI
PeCḡPsPIC-, CḡPeC- PjPsPḡCḡC,CH PrPsCḡCḡPiP°C,Pë C,PsPeCḡPëC‡PSPëC...
CḡC-PIPSC-PI, P· PsP·PSP°PeP°PjPë PîPµCḡPµPrPsP·CḡPIP°PSPSCḡ P»C-C,C-Cḡ.
PḡPµPsP±C...C-PrPSPs PîPµCḡPµPIC-CḡCḡC,Pë PePsPSC†PµPSC,CḡP°C†C-Cḡ P»C-C,C-Cḡ
PI PeCḡPsPIC- C,P° Cḡ CḡP°P·C- PSPµPsP±C...C-PrPSPsCḡC,C- PîCḡPsPIPµCḡC,Pë
PePsCḡPµPeC†C-Cḡ PrPsP·CḡPIP°PSPSCḡ PîCḡPµPîP°CḡP°C,Cḡ P»C-C,C-Cḡ.

PîPëPeP»PsCḡPîPsCḡPëPS. P†CḡPSCḡC” CḡPëP·PëPe PîC-PrPIPëC%oPµPSPSCḡ CḡC-PIPSC-PI
C†PëPeP»PsCḡPîPsCḡPëPSCḡ PI CḡPëCḡPsPIP°C,C†C- PeCḡPsPIC-. PîPeC%oPs
PîCḡPµPîP°CḡP°C,Pë PSPµPsP±C...C-PrPSPs PîCḡPëPNëPjP°C,Pë PsPrPSPsC‡P°CḡPSPs, CḡP»C-Pr
CḡPµC,PµP»CHḡPSPs PePsPSC,CḡPsP»CḡPIP°C,Pë CḡC-PIPSC- C†PëPeP»PsCḡPîPsCḡPëPSCḡ C,P°
PeCḡPµP°C,PëPSC-PSCḡ.

P PëC,,P°PjPîC-C†PëPS. P—PSPëPḡPµPSPSCḡ PePsPSC†PµPSC,CḡP°C†C-PNë
PjPµC,CḡPsPSC-PrP°P·PsP»Cḡ Cḡ PîP»P°P·PjC- PeCḡPsPIC- PIPSP°CḡP»C-PrPsPe
CḡC,PëPjCḡP»CḡC†C-C— PNëPsPiPs PjPµC,P°P±PsP»C-P·PjCḡ PI PîPµC‡C-PSC†C-
CḡPëC,,P°PjPîC-C†PëPSPsPj. PµC-Pr C‡P°Cḡ C,P° PîC-CḡP»Cḡ P»C-PeCḡPIP°PSPSCḡ
CḡPëC,,P°PjPîC-C†PëPSPsPj CḡP»C-Pr P·PrC-PNëCḡPSCḡPIP°C,Pë PeP»C-PSC-C‡PSPëPNë
PjPsPSC-C,PsCḡPëPSi. PḡPsPḡPµ P±CḡC,Pë PSPµPsP±C...C-PrPSPsCḡ
PePsCḡPµPeC†C-Cḡ PrPsP·CḡPIP°PSPSCḡ PjPµC,CḡPsPSC-PrP°P·PsP»Cḡ.

PµCḡPsC,PëCḡCḡPrPsPjPSC- PîCḡPµPîP°CḡP°C,Pë, CḡPeC- C” C-PSPrCḡPeC,PsCḡP°PjPë
C,,PµCḡPjPµPSC,C-PI (PeP°CḡP±P°PjP°P·PµPîC-PS, C,,PsCḡC,,PµPSC-C,PsC—PS,
C,,PµPSPsP±P°CḡP±C-C,P°P», C,,PµPSC-C,PsC—PS, PîCḡPëPjC-PrPsPS).
P—PSPëPḡPµPSPSCḡ PePsPSC†PµPSC,CḡP°C†C-PNë PjPµC,CḡPsPSC-PrP°P·PsP»Cḡ Cḡ
PîP»P°P·PjC- PeCḡPsPIC- PIPSP°CḡP»C-PrPsPe CḡC,PëPjCḡP»CḡC†C-C— PNëPsPiPs
PjPµC,P°P±PsP»C-P·PjCḡ PI PîPµC‡C-PSC†C- C-PSPrCḡPeC,PsCḡPsPj. PµC-Pr C‡P°Cḡ C,P°
PîC-CḡP»Cḡ P»C-PeCḡPIP°PSPSCḡ C-PSPrCḡPeC,PsCḡPsPj CḡP»C-Pr P·PrC-PNëCḡPSCḡPIP°C,Pë
PeP»C-PSC-C‡PSPëPNë PjPsPSC-C,PsCḡPëPSi. PḡPsPḡPµ P±CḡC,Pë PSPµPsP±C...C-PrPSPsCḡ
PePsCḡPµPeC†C-Cḡ PrPsP·CḡPIP°PSPSCḡ PjPµC,CḡPsPSC-PrP°P·PsP»Cḡ.

*PḡPsPjP±C-PSP°C†C-C—, CḡPeC- PîPsC,CḡPµP±CḡCḡC,CH PsCḡPsP±P»PëPIPsC—
CḡPIP°PiPë.*

5-PḡC,PsCḡCḡCḡP°C†PëP» (C,PµPîP°C,,CḡCḡ, PeP°PîPµC†PëC,P°C†PëPS).
P—PSPëPḡPµPSPSCḡ PeP»C-CḡPµPSCḡCḡ 5-C,,C,PsCḡCḡCḡP°C†PëP»Cḡ CḡPîCḡPëC‡PëPSCḡC”
PîC-PrPIPëC%oPµPSPSCḡ PNëPsPiPs C,PsPeCḡPëC‡PSPsCḡC,C-.B

PµPsCḡCḡCḡPµPSPSCḡ CḡC-PIPSPsPIP°PiPë PḡPḡP’ (PjC-PḡPSP°CḡPsPrPSPµ
PSPsCḡPjP°P»C-P·PsPIP°PSPµ PIC-PrPSPsCḡPµPSPSCḡ).

Pj PîP°C†C-C”PSC,C-PI, CḡPeC- PsC,CḡPëPjCḡPIP°P»Pë
P°PSC,PëP±P°PeC,PµCḡC-P°P»CHḡPSCḡ C,PµCḡP°PîC-Cḡ,
CḡPµC”CḡC,CḡCḡPIP°P»PëCḡCḡ C‡PëCḡPµP»CHḡPSC- PIPëPîP°PrPePë
PîPsCḡPëP»PµPSPSCḡ P°PeC,PëPIPSsCḡC,C- PîPµCḡPsCḡP°P»CHḡPSPëC...
P°PSC,PëPePsP°PiCḡP»CḡPSC,C-PI. PµCḡPë C†CHḡPsPjCḡ C,,P°PeC,PsCḡP°PjPë

PjPsP¶CfC,CH P±CfC,Pë PSPµP±PµP·PµC±PSPëPjPë PrP»C¶ P¶PëC,C,C¶ (PrPëPI.
C¶PsP·PrC-P» B«PµPsP±C-C±PSC- C¶PµP°PeC†C-C—B»). PJ C,P°PePsPjCf PIPëPµP°PrPeCf
PSPµPsP±C...C-PrPSPs PIC-PrPjC-PSPëC,Pë P»C-PeCfPIP°PSPSC¶
PjPµC,C¶PsPSC-PrP°P·PsP»PsPj C- C¶PsP·PµC±P°C,Pë PSP°P»PµP¶PSCf C,PµC¶P°PµC-CH.

PµPeC%Ps PSP° PµC±P°C,PeCf P»C-PeCfPIP°PSPSC¶ Cf PµP°C†C-C"°PSC,P°
P·B¶™ C¶PIP»C¶C"°C,CHCfC¶ PµPµPSPµC¶P°P»C-P·PsPIP°PSP° PµC¶PëC,PµPjP° C,P°
PµCfCfC,CfP»CHPsP·PSC- PIPëCfPëPµPë, C¶PeC- CfCfPµC¶PsPIPµPrP¶CfCHC,CHCfC¶
PµC-PrPIPëC%PµPSPSC¶Pj C,PµPjPµC¶P°C,CfC¶Pë C,C-P»P°, C¶P»C-Pr
P·P°PµC-PrPsP·C¶PëC,Pë PµCfC,C¶PëPµ PµPµPSPµC¶P°P»C-P·PsPIP°PSPëPµ
PµPeP·P°PSC,PµPjP°C,PsP·PSPëPµ PµCfC,CfP»CHPsP· (PrPëPI. C¶PsP·PrC-P»
B«PµPsP±C-C±PSC- C¶PµP°PeC†C-C—B»); Cf C¶P°P·C- C¶PsP·PIPëC,PeCf C,P°PePsC—
C¶PµP°PeC†C-C— P»C-PeCfPIP°PSPSC¶ PµC¶PµPµP°C¶P°C,PsPj PµC,C¶C-P±PSPs
PµC¶PëPµPëPSPëC,Pë, C- PSP°PrP°P»C- P·P°CfC,PsCfCfPIP°PSPSC¶
PjPµC,C¶PsPSC-PrP°P·PsP»Cf C¶Pe Cf PIPëPµP»C¶PrC- PjPsPSPsC,PµC¶P°PµC-C—,
C,P°Pe C- PI PePsPjP±C-PSP°C†C-C— P· C-PSCëPëPjPë PµC¶PµPµP°C¶P°C,P°PjPë
PµC¶PsC,PëPµPsPeP°P·P°PSPµ.

P†P· PµC¶PëPµPsPjPsPj PjPµC,C¶PsPSC-PrP°P·PsP»Cf P°CfPsC†C-CHCHC,CHCfC¶
PµCfC,C¶C- CëPeC-C¶PSC- C¶PµP°PeC†C-C—, PIPëP»CHC±P°CHC±Pë
CfPëPSPµC¶PsPj P¶C,C-PIPµPSCfP°-P"¶PsPSCfPsPSP°, CfPëPSPµC¶PsPj
P·P°C"°P»P°, PµCfC,C¶PëPµ PµPµPSPµC¶P°P»C-P·PsPIP°PSPëPµ
PµPeP·P°PSC,PµPjP°C,PsP·PSPëPµ PµCfC,CfP»CHPsP· (P"¶P·P·Pµ).
PµP°C†C-C"°PSC,P°Pj PµC,C¶C-P±PSPs PµPIC-PrPsPjPëC,Pë PµC¶Ps CfPëPjPµC,PsPjPë
C,P°PePëC... C¶PµP°PeC†C-Pµ, P° C,P°PePsP¶ CfP»C-Pr PµC¶PsPIPµPrPëC,Pë
C¶PµC,PµP»CHPSPëPµ PjPsPSC-C,PsC¶PëPSPi CëPeC-C¶Pë.

PµC¶Pë PµC¶PIC- Cf PµP°C†C-C"°PSC,P° CfPëPjPµC,PsPjC-PI CfPëPSPµC¶PsPjCf
P¶C,C-PIPµPSCfP°-P"¶PsPSCfPsPSP°, CfPëPSPµC¶PsPjCf P·P°C"°P»P°
(PSP°PµC¶PëPeP»P°Pr, PµCfC,CfPµPIP° PµC¶PIP° PIPëCfPëPµC-PI C,P°
CëPeC-C¶PSPëC... PµCfC...PëC¶C-PI P°P±Ps CfC¶P°P¶PµPSC¶ CfP»PëP·PsPIPµC—
PsP±PsP»PsPSPëPë) P°P±Ps PµPµPSPµC¶P°P»C-P·PsPIP°PSPsC— PµC¶PëC,PµPjPë C-P·
PµCfC,CfP»CHPsP·PSPëPjPë PIPëCfPëPµP°PjPë, C¶PeC-
CfCfPµC¶PsPIPµPrP¶CfCHC,CHCfC¶ PµC-PrPIPëC%PµPSPSC¶Pj
C,PµPjPµC¶P°C,CfC¶Pë C,C-P»P°, P»C-PeCfPIP°PSPSC¶ PµC¶PµPµP°C¶P°C,PsPj
PµC,C¶C-P±PSPs PµC¶PëPµPëPSPëC,Pë, P° PSP°PrP°P»C- P·P°CfC,PsCfCfPIP°PSPSC¶
PjPµC,C¶PsPSC-PrP°P·PsP»Cf C¶Pe Cf PIPëPµP»C¶PrC- PjPsPSPsC,PµC¶P°PµC-C—,
C,P°Pe C- PI PePsPjP±C-PSP°C†C-C— P· C-PSCëPëPjPë PµC¶PµPµP°C¶P°C,P°PjPë
PµC¶PsC,PëPµPsPeP°P·P°PSPµ.

P PsP·P»P°PrPë P· P±PsPeCf C†PµPSC,C¶P°P»CHPSPsC— PSPµC¶PIPµPIPµC—
CfPëCfC,PµPjPë. PJ C¶P°P·C- PµC¶PIPë CfPëPjPµC,PsPjC-PI, C...P°C¶P°PeC,PµC¶PSPëC...
PrP»C¶ PµPSC†PµC,,P°P»PsPµP°C,C-C— P°P±Ps PjPsP·PsC±PePsPIPµPµCf PëPSPµC¶PsPjCf
(PrPëPI. C¶PsP·PrC-P» B«PµPsP±C-C±PSC- C¶PµP°PeC†C-C—B»), P»C-PeCfPIP°PSPSC¶
PµP°C†C-C"°PSC,PePë PµC,C¶C-P±PSPs PSPµPµP°PµPSPs PµC¶PµPµP»C¶PSCfC,Pë, P°
P·P°CfC,PsCfCfPIP°PSPSC¶ PjPµC,C¶PsPSC-PrP°P·PsP»Cf PµC¶PëPµPëPSPëC,Pë.

PµC¶Ps PIPëPµP°PrPePë C¶PsP·PIPëC,PeCf PµPSC†PµC,,P°P»PsPµP°C,C-C—

PiPsPIC-PrPsPjP»CjP»Pë PI CjP°PjPeP°C...

PiC-CÍP»CjCjPµC"CI' C, CjP°C†C-PNëPSPsPiPs PSP°PiP»CjPTrCr P·P°

PiCjPµPiP°CjP°C, PsPj. PjCjC-Pj C†CHbPsPiPs, CI'PiPsCI' C, PµCjC-PiP°P»PëCI' Cj

PIPëPiP°PrPePë P·PjC-PS PSP° PjP Pj, PiPsPIbTm CjP·P°PSPëC... P·

PµPSC†PµC,,P°P»PsPiP°C,C-C"CH (PrPëPI. CjPsP·PrC-P»B B«PµPsP±C-C†PSC-

CjPµP°PeC†C-C-B»). P"C-P»CjPSPePë CrCjP°P¶PµPSCb PSP°PNëC†P°CI' C,C-CëPµ

P»PsPeP°P»C-P·CrCjC,CHCI' Cj PI PjPsP·PsC†PeCr (PsCI'PsP±P»PëPIPs PI

P·CrP±C†P°CI' C,PsPjCr CjPTrCjC-) C,P° Cr PIP°P»PëPeCr PjPsP·PsP»PëCI' C,PsPiPs

C,C-P»P°. PJ P±C-P»CHCëPsCI' C,C- PIPëPiP°PrPeC-PI PµPSC†PµC,,P°P»PsPiP°C,C-Cj

C,P° P·PjC-PSPë PSP° PjP Pj P·PSPëPeP°P»Pë PiC-CÍP»Cj PiCjPëPiPëPSPµPSPSCj

P»C-PeCrPIP°PSPSCj PiCjPµPiP°CjP°C,PsPj. P"CrP¶Pµ CjC-PrPePs P±CrP»Pë

PiPsPIC-PrPsPjP»PµPSPSCj PiCjPs P»PµC,P°P»CHbPSC- PIPëPiP°PrPePë.

PjP»C-Pr P·PrC-PNëCI'PSCbPIP°C,Pë PjPsPSC-C,PsCjPëPSPi CI' C,P°PSCr

PiP°C†C-C"PSC,C-PI C%oPsPrPs PjPsP¶P»PëPIPëC... PsP·PSP°Pe

PµPSC†PµC,,P°P»PsPiP°C,C-C— P°P±Ps C%oPsPrPs P·P°PiPsCI' C,CjPµPSPSCj

CI'PëPjPiC,PsPjC-PI Cr CjP°P·C- PSP°CjPIPSsCI' C,C- CjPsP·P»P°PrC-PI P· P±PsPeCr

P|PáPj.

PJ CjP°P·C- CjPsP·PIPëC,PeCr P°CI'PµPiC,PëC†PSPsPiPs PjPµPSC-PSPiC-C,Cr PiC-Pr

C†P°CI' P»C-PeCrPIP°PSPSCj PiCjPµPiP°CjP°C,PsPj PiPsPIC,PsCjPSPµ

PiCjPëP·PSP°C†PµPSPSCj PjPµC,CjPsPSC-PrP°P·PsP»Cr PSPµ

CjPµPePsPjPµPSPTrCrC"C,CHCI' Cj, P° PrP»Cj PiP°C†C-C"PSC,C-PI C-P·

CI'PµCjPµPNëPsP·PSPëPj C-PSC,,PµPeC†C-PNëPSPëPj P·P°C...PIPsCjCjPµPIP°PSPSCjPj

PiPsC,CjC-P±PSPs PiCjPsPIPµCI' C,Pë PiPsPIC,PsCjPSCr PsC†C-PSPeCr

CI'PiC-PIPIC-PrPSPsCëPµPSPSCj PePsCjPëCI' C,CH/CjPëP·PëPe.

P PsP·P»P°PrPë P· P±PsPeCr PiPµCjPëC,,PµCjPëC†PSPsC— PSPµCjPIPsPIPsC—

CI'PëCI' C,PµPjPë. PjP»C-Pr P·PrC-PNëCI'PSCbPIP°C,Pë PjPsPSC-C,PsCjPëPSPi CI' C,P°PSCr

PiP°C†C-C"PSC,C-PI C%oPsPrPs PjPsP¶P»PëPIPëC... PsP·PSP°Pe PiPµCjPëC,,PµCjPëC†PSPsC—

PSPµPNëCjPsPiP°C,C-C—, PsCI'PsP±P»PëPIPs PiCjPë PrPsPIPiPsC,CjPëPiP°P»PsPjCr

P»C-PeCrPIP°PSPSC- PiCjPµPiP°CjP°C,PsPj P°P±Ps Cr CjP°P·C- PSP°CjPIPSsCI' C,C-

C,CjP¶PePsC—, C...CjPsPSC-C†PSPsC— P°P±Ps PiCjPsPiCjPµCI' CrCjC†PsC—

PiPµCjPëC,,PµCjPëC†PSPsC— PSPµPNëCjPsPiP°C,C-C—.

P PsP·P»P°PrPë P· P±PsPeCr PiCI'PëC...C-PePë. PµC-CÍP»Cj P·P°CI' C,PsCI'CrPIP°PSPSCj

PiPµCjCëPsC— PrPsP·Pë PiCjPµPiP°CjP°C,Cr Cr PiP°C†C-C"PSC,C-PI PjPsP¶CrC,CH

PIPëPSPëPePSCrC,Pë PiCI'PëC...PsC,PëC†PSC- CjPµP°PeC†C-C—, PI C,PsPjCr C†PëCI'P»C-

PiPsPIPµPrC-PSPeP° CI'P°PjPsPiPsCëPePsPrP¶PµPSPSCj, PsCI'PsP±P»PëPIPs PiCjPë

PSP°CjPIPSsCI' C,C- PI P°PSP°PjPSPµP·C- PiCI'PëC...C-C†PSPëC... CjPsP·P»P°PrC-PI (PrPëPI.

CjPsP·PrC-P» B«PµPsP±C-C†PSC- CjPµP°PeC†C-C-B»). PJ C†CHbPsPjCr PIPëPiP°PrPeCr

PiPsC,CjC-P±PSPs PiCjPëPiPëPSPëC,Pë P»C-PeCrPIP°PSPSCj PjPµC,CjPsPSC-PrP°P·PsP»PsPj,

PiPsPIC-PrPsPjPëC,Pë P»C-PeP°CjCj C,P° PSPµPiP°PNëPSPs PIP¶PëC,Pë PIC-PrPiPsPIC-PrPSC-

P»C-PeCrPIP°P»CHbPSC- P·P°C...PsPrPë.

P" PµPjP°C,PsP»PsPiC-C†PSC- PµC,,PµPeC,Pë. PJ PiP°C†C-C"PSC,C-PI P·

PSP°CjPIPSsC-CÍ C,CH PI P°PSP°PjPSPµP·C- CjPsP·P»P°PrC-PI P· P±PsPeCr CI'PëCI' C,PµPjPë

PeCjPsPIC- C,P° Cr PiP°C†C-C"PSC,C-PI, CjPeC- PsC,CjPëPjCrCjC,CH PiCjPµPiP°CjP°C, Cr

PIPëCI'PsPePëC... PrPsP·P°C... C,P°/P°P±Ps PIPiCjPsPrPsPIP¶ C,CjPëPiP°P»PsPiPs

$\text{P}_{\mu}\text{P}^{\circ}\text{C}\dagger\text{C}-\text{C}''\text{PSC}, \text{P}^{\circ}\text{P}_{\text{j}} \text{C}-\text{P} \cdot \text{C}\dot{\text{I}}\text{P}\ddot{\text{e}}\text{PSPrC}\dot{\text{H}}\text{PsP}_{\text{j}}\text{PsP}_{\text{j}} \text{P}_{\text{b}}\text{PsPePeP}_{\mu}\text{PN}_{\text{e}}\text{PSP}^{\circ} \text{C}\dot{\text{I}}\text{P}\gg\text{C}-\text{Pr}$
 $\text{P}\ddot{\text{i}}\text{PsC}\dot{\text{H}}\text{P}_{\mu}\text{PePsP}_{\text{j}}\text{P}_{\mu}\text{PSPrC}\dot{\text{r}}\text{PIP}^{\circ}\text{C}, \text{P}\ddot{\text{e}} \text{C}\dot{\text{r}} \text{PIP}\ddot{\text{e}}\text{P}\text{P}^{\circ}\text{PrPeC}\dot{\text{r}} \text{P}\ddot{\text{i}}\text{PsC}\dot{\text{I}}\text{PIP}\ddot{\text{e}} \text{P}\pm\text{C}\dot{\text{r}}\text{PrCH}\text{-C}\dot{\text{I}}\text{PeP}\ddot{\text{e}}\text{C}...$
 $\text{C}\dot{\text{I}}\text{P}\ddot{\text{e}}\text{P}_{\text{j}}\text{P}\ddot{\text{i}}\text{C}, \text{PsP}_{\text{j}}\text{C}-\text{PI} \text{P}_{\text{j}}\text{PsP}\P\gg\text{P}\ddot{\text{e}}\text{PIP}\text{P}\ddot{\text{i}}\text{Ps} \text{P}\ddot{\text{i}}\text{PsC}\dot{\text{H}}\text{C}\dot{\text{r}}\text{C}\P\text{P}_{\mu}\text{PSPSC}\dot{\text{I}} \text{C}_{,,}\text{C}\dot{\text{r}}\text{PSPeC}\dagger\text{C}-\text{C}-$
 $\text{P}\ddot{\text{i}}\text{P}_{\mu}\text{C}\dagger\text{C}-\text{PSPeP}\ddot{\text{e}} \text{PSP}_{\mu}\text{P}\text{P}\text{P}^{\circ}\text{PN}_{\text{e}}\text{PSPs} \text{P}\ddot{\text{i}}\text{PsPIC}-\text{PrPsP}_{\text{j}}\text{P}\ddot{\text{e}}\text{C}, \text{P}\ddot{\text{e}} \text{P}\ddot{\text{i}}\text{C}\dot{\text{H}}\text{Ps} \text{C}\dagger\text{P}_{\mu} \text{C}\dot{\text{I}}\text{PIP}\text{S}\text{C}''\text{P}_{\text{j}}\text{C}\dot{\text{r}}$
 $\text{P}\gg\text{C}-\text{PeP}^{\circ}\text{C}\dot{\text{H}}\text{C}\dot{\text{H}} \text{C}, \text{P}^{\circ} \text{P}\ddot{\text{i}}\text{C}\dot{\text{H}}\text{P}\ddot{\text{e}}\text{P}\ddot{\text{i}}\text{P}\ddot{\text{e}}\text{PSP}\ddot{\text{e}}\text{C}, \text{P}\ddot{\text{e}} \text{P}\ddot{\text{i}}\text{C}\dot{\text{H}}\text{P}\ddot{\text{e}}\text{PN}_{\text{e}}\text{PsP}_{\text{j}} \text{P}_{\text{j}}\text{P}_{\mu}\text{C}, \text{C}\dot{\text{H}}\text{PsPSC}-\text{PrP}^{\circ}\text{P} \cdot \text{PsP}\gg\text{C}\dot{\text{r}}$
 $(\text{PrP}\ddot{\text{e}}\text{PI} \cdot \text{C}\dot{\text{H}}\text{PsP} \cdot \text{PrC}-\text{P}\gg \text{B}\ll\text{P}_{\mu}\text{PsP}\pm\text{C}-\text{C}\dagger\text{PSC}- \text{C}\dot{\text{H}}\text{P}_{\mu}\text{P}^{\circ}\text{PeC}\dagger\text{C}-\text{C}-\text{B}\gg).$

$$P'P^{\circ}PiC-C,PSC-C\dot{I}C,CH.$$
$$P''PsPrC\acute{z}PIP^{\circ}PSPSC\downarrow PiC\hbar C\acute{z}PrPrC\hbar.$$

РнРμC,CḡPsPSC-PrP°P·PsP» PμPeCΓPeCḡPμC,CrC" C,CḡCΓCḡ Cr PiCḡCrPrPSPμ
PjPsP»PsPePs. PJ P·PiBḡ™ CḡP·PeCr P· C†PëPj PSPμPsP±C...C-PrPSPs CrPSPëPeP°C,Pë
P·P°CΓC,PscΓCΓPIP°PSPSCḡ C†CḡPsPiPs P»C-PeP°CḡCΓCḡPePsPiPs P·P°CΓPsP±Cr Cr
PiPμCḡC-PsPr PiPsPrCΓPIP°PSPSCḡ PiCḡCrPrPrCḡ.

$P-PrP^{\circ}C, PSC-C\acute{I}C, CH\ PIP\ddot{P}\gg P\ddot{e}PIP^{\circ}C, P\ddot{e}\ PSP^{\circ}\ C\epsilon PIP\ddot{e}PrPeC-C\acute{I}C, CH\ C\grave{H}P\mu P^{\circ}PeC\ddagger C-C- P\ddot{i}C\grave{H}P\ddot{e}$
 $PeP\mu C\grave{H}C\acute{z}PIP^{\circ}PSPSC- P^{\circ}PIC, PsC, C\grave{H}P^{\circ}PSC\acute{I}P\ddot{i}PsC\grave{H}C, PsPj\ P^{\circ}P\pm Ps\ C-PSC\epsilon P\ddot{e}PjP\ddot{e}$
 $PjP\mu C...P^{\circ}PSC-P\cdot PjP^{\circ}PjP\ddot{e}.$

$P\mu P^{\circ}C\ddagger C-C''PSC, C-PI\ P\ddot{i}PsC, C\grave{H}C-P\pm PSPs\ P\ddot{i}PsP\ddot{i}P\mu C\grave{H}P\mu PrP\ddot{e}C, P\ddot{e}\ P\ddot{i}C\grave{H}Ps\ C\grave{H}P\ddot{e}P\cdot P\ddot{e}Pe$
 $PIP\ddot{e}PSP\ddot{e}PePSP\mu PSPSC\grave{I}\ P\cdot P^{\circ}P\ddot{i}P^{\circ}PjPsC\grave{H}PsC\ddagger P\mu PSPSC\grave{I},\ C\acute{I}P\ddot{i}P\gg C\acute{I}C, P^{\circ}PSPsC\acute{I}C, C-$
 $C\acute{I}PIC-PrPsPjPsC\acute{I}C, C-, P\ddot{i}P^{\circ}P\gg C\grave{H}C\ddagger P\ddot{e}PSP^{\circ}C\ddagger C-PN_{\epsilon}, C\acute{I}C\acute{r}PrPsPj\ C, P^{\circ}\ C\grave{H}PsP\cdot P\gg P^{\circ}PrC-PI$
 $P\cdot PsC\grave{H}C\acute{r}.\ Pj\ C\grave{H}P^{\circ}P\cdot C- P\ddot{i}PsC\grave{I}PIP\ddot{e}\ C, P^{\circ}PeP\ddot{e}C... C\acute{I}P\ddot{e}PjP\ddot{i}C, PsPjC-PI\ P\ddot{i}P^{\circ}C\ddagger C-C''PSC, P^{\circ}Pj\ PSP\mu$
 $C\acute{I}P\gg C-Pr\ PeP\mu C\grave{H}C\acute{r}PIP^{\circ}C, P\ddot{e}\ C, C\grave{H}P^{\circ}PSC\acute{I}P\ddot{i}PsC\grave{H}C, PSP\ddot{e}PjP\ddot{e}\ P\cdot P^{\circ}C\acute{I}PsP\pm P^{\circ}PjP\ddot{e}\ P^{\circ}P\pm Ps$
 $P\ddot{i}C\grave{H}P^{\circ}C\ddagger C\grave{H}PIP^{\circ}C, P\ddot{e}\ P\cdot PjP\mu C...P^{\circ}PSC-P\cdot PjP^{\circ}PjP\ddot{e}.$

$P\ddot{Y}P\ddot{i}PsC\acute{I}C-P\pm\ P\cdot P^{\circ}C\acute{I}C, PsC\acute{I}C\acute{z}PIP^{\circ}PSPSC\grave{I}\ C, P^{\circ}\ PrPsP\cdot P\ddot{e}.$

$P\mu C\grave{H}P\mu P\ddot{i}P^{\circ}C\grave{H}P^{\circ}C, PrPsP\cdot PIPsP\gg C\grave{I}C''C, CHC\acute{I}C\grave{I}\ P\cdot P^{\circ}C\acute{I}C, PsC\acute{I}PsPIC\acute{r}PIP^{\circ}C, P\ddot{e}\ PrP\gg C\grave{I}\ P$
 $P\gg C-PeC\acute{r}PIP^{\circ}PSPSC\grave{I}\ C, C-P\gg CHPeP\ddot{e}\ PrPsC\grave{H}PsC\acute{I}P\gg P\ddot{e}C... P\ddot{i}P^{\circ}C\ddagger C-C''PSC, PsPe.$

$P^{\circ}P^{\circ}PiC-PSP^{\circ}P\gg CHPSP\ddot{e}PN_{\epsilon}\ C\acute{I}C\acute{r}P\ddot{i}PsP\cdot P\ddot{e}C, PsC\grave{H}C-PN_{\epsilon}\ C\acute{I}P\gg C-Pr\ PIPIPsPrP\ddot{e}C, P\ddot{e}$
 $PiP\gg P\ddot{e}P\pm PsPePs\ C\acute{r}\ P\ddot{i}C-C...PIC\acute{r}.$

$P\mu PsPeP^{\circ}P\cdot P^{\circ}PSPSC\grave{I}$	$P\ P^{\circ}P\cdot PsPIP^{\circ}\ PrPsP\cdot P^{\circ}$	$P_{\mu}C\grave{H}P^{\circ}C, PSC-C\acute{I}C, CH\ P\ddot{i}C\grave{H}P\ddot{e}PN_{\epsilon}PsPjC\acute{z}$	$P\ddot{y}C\grave{H}P\ddot{e}PIP^{\circ}P\gg C-C\acute{I}C, CH\ P\gg C-PeC\acute{z}PIP^{\circ}PSPSC\grave{I}$	$PhPrPSPsC\ddagger P^{\circ}C\acute{I}PSP\ddot{e}PN_{\epsilon}\ P\ddot{i}C\grave{H}P\ddot{e}PN_{\epsilon}PsPj\ C-P\cdot C, P^{\circ}P\pm P\gg P\mu C, PsPIP^{\circ}PSP\ddot{e}PjP\ddot{e}\ C_{\mu}, PsC\grave{H}PjP^{\circ}PjP\ddot{e}\ PjP\mu C, C\grave{H}PsPSC-PrP^{\circ}P\cdot PsP\gg C\acute{z}$
$P\ddot{y}C\grave{H}P\ddot{e}C...PsPjPsPSP^{\circ}PrPSP\ddot{e}PN_{\epsilon}\ PIP^{\circ}PiC-PSC-C,$	1	1 $C\grave{H}P^{\circ}P\cdot PSP^{\circ}\ PrPsP\pm C\acute{r}$	10 $PrPSC-PI$	$P_{\mu}\ PSP\mu PsP\pm C...C-PrPSP\ddot{e}Pj$
$P\acute{k}P\mu C\acute{I}P\ddot{i}P\mu C\ddagger P\ddot{e}C_{\mu}C\ddagger PSC-PIP^{\circ}PiC-PSC-C, P\ddot{e}$	$PIP^{\circ}PiC-PSP^{\circ}P\gg CHPSP\ddot{e}PN_{\epsilon}\ C\acute{I}C\acute{r}P\ddot{i}PsP\cdot P\ddot{e}C, PsC\grave{H}C-PN_{\epsilon}$		7 $PrPSC-PI$	$P-P^{\circ}C\acute{I}C, PsC\acute{I}PsPIC\acute{r}C''C, CHC\acute{I}C\grave{I}\ C\acute{r}\ C\grave{H}P^{\circ}P\cdot C- PSP\mu PsP\pm C...C-PrPSPsC\acute{I}C, C-$

$P\grave{H}P\pm C\acute{I}PsP\gg C\grave{H}C, PSPs\ PSP\mu PsP\pm C...C-PrPSP\ddot{e}Pj\ C''\ PsPrPSPsC\ddagger P^{\circ}C\acute{I}PSP\mu$
 $P\gg C-PeC\acute{r}PIP^{\circ}PSPSC\grave{I}\ C\acute{I}C, P^{\circ}C, P\mu PIPsPiPs\ P\ddot{i}P^{\circ}C\grave{H}C, PSP\mu C\grave{H}P^{\circ}\ P\ddot{i}P^{\circ}C\ddagger C-C''PSC, PeP\ddot{e},$
 $PSP^{\circ}PIC-C, CH\ C\acute{r}\ C\grave{H}P^{\circ}P\cdot C- PIC-PrC\acute{I}C\acute{r}C, PSPsC\acute{I}C, C- C\acute{r}\ PSC\grave{H}PsPiPs$
 $C\acute{I}P\ddot{e}PjP\ddot{i}C, PsPjC-PI\ C-PSC_{\mu}, P\mu PeC\ddagger C-C-.$

$P_{\mu}P^{\circ}PeC\acute{I}P\ddot{e}PjP^{\circ}P\gg CHPSP^{\circ}\ C, C\grave{H}P\ddot{e}PIP^{\circ}P\gg C-C\acute{I}C, CH\ P\gg C-PeC\acute{r}PIP^{\circ}PSPSC\grave{I}$
 $P\ddot{i}C\grave{H}P\mu P\ddot{i}P^{\circ}C\grave{H}P^{\circ}C, PsPj\ P_{\mu}C-C\acute{I}C, PsP\gg^{B^{\circ}}\ PSP\mu\ P\ddot{i}PsPIP\ddot{e}PSPSP^{\circ}$
 $P\ddot{i}P\mu C\grave{H}P\mu PIP\ddot{e}C\%C\acute{r}PIP^{\circ}C, P\ddot{e}\ 10\ PrPSC-PI, P^{\circ}\ PeC-P\gg CHPeC-C\acute{I}C, CH\ PeC\acute{r}C\grave{H}C\acute{I}C-PI$
 $P\gg C-PeC\acute{r}PIP^{\circ}PSPSC\grave{I}\ B\grave{H}''\ 2-3\ PSP^{\circ}\ C\grave{H}C-Pe.$

$P''C-C, P\ddot{e}.$

$P\mu C\grave{H}P\mu P\ddot{i}P^{\circ}C\grave{H}P^{\circ}C, P\ddot{i}C\grave{H}PsC, P\ddot{e}P\ddot{i}PsPeP^{\circ}P\cdot P^{\circ}PSPs\ P\cdot P^{\circ}C\acute{I}C, PsC\acute{I}PsPIC\acute{r}PIP^{\circ}C, P\ddot{e}\ PrP\gg C\grave{I}\ P$
 $P\gg C-PeC\acute{r}PIP^{\circ}PSPSC\grave{I}\ PrC-C, P\mu PN_{\epsilon}.$

PμPμCḡPμPrPsP·CžPIP°PSPSCḡ.

PμPμCḡPsCḡP°P»CHḡPSPëPNḡ PiCḡPëPNḡPsPj PjPμC,CḡPsPSC-PrP°P·PsP»Cḡ Cḡ PrPsP·C- PrPs 12
Pi P±CḡPI P·P°C,,C-PeCḡPsPIP°PSPëPNḡ PiCḡPë CḡPiCḡPsP±C- CḡCḡC—C†PëPrCḡ C,P°
PIPSP°CḡP»C-PrPsPe PIPëPiP°PrPePsPIPsPiPs PiPμCḡPμPrPsP·CḡPIP°PSPSCḡ. PḡPsP¶Pμ
CḡPiPsCḡC,PμCḡC-PiP°C,PëCḡCḡ P»PμPNḡPePsPiPμPSC-Cḡ, PSPμPNḡCḡPsPiP°C,C-Cḡ,
P°C,P°PeCḡC-Cḡ, P±P»CḡPIP°PSPSCḡ, P»PμPiPeP° PrPμP·PsCḡC-C°PSC,P°C†C-Cḡ.

P»C-PeCžPIP°PSPSCḡ. PḡCḡPeC-P»CHḡPePë CḡPiPμC†PëC,,C-C†PSPëPNḡ P°PSC,PëPrPsC,
PjPμC,CḡPsPSC-PrP°P·PsP»Cḡ PSPμPIC-PrPsPjPëPNḡ, CḡPμPePsPjPμPSPrPsPIP°PSPs
PiCḡPsPIPsPrPëC,Pë CḡPëPjPiC,PSPjP°C,PëC†PSCḡ C,PμCḡP°PiC-Cḡ.

PμPsP±C-C†PSC- CḡPμP°PeC†C-C—.

P— P±PsPeCž C,CḡP°PIPsPsPiPs C,CḡP°PeC,Cž: PSPμP·PSP°C†PSC- CḡPsP·P»P°PrPë
CḡP»CḡPSPePsPIPs-PePëCḡPePsPIPsPiPs C,CḡP°PeC,Cḡ (P±C-P»CHḡ PI PμPiC-PiP°CḡC,CḡC-C—,
PSCḡPrPsC,P°, P±P»CḡPIP°PSPSCḡ, PrC-P°CḡPμCḡ), P·P°PiP°P»PμPSPSCḡ CḡP»PëP·PsPIPsC—
PsP±PsP»PsPSPePë CḡPsC,PsPIPsC— PiPsCḡPsP¶PSPëPSPë, PiP»PsCḡPëC, C-P·
CḡCḡC...C-CḡC,Cḡ Cḡ CḡPsC,C-, CḡC,PSPjP°C,PëC,, CḡPjP°PePsPIC- CḡPsP·P»P°PrPë
(PjPμC,P°P»PμPIPëPNḡ PiCḡPëCḡPjP°Pe Cḡ CḡPsC,C-), P°PSPsCḡPμPeCḡC-Cḡ, P·PjC-PSP°
PePsP»CHḡPsCḡCḡ P°P±Ps P·PjC-PSP° P·PsPIPsC-CḡPSCḡPsPiPs PIPëPiP»CḡPrCḡ CḡP·PëPeP°
(PjC-PePsP·), PsP±PeP»P°PrPμPSPëPNḡ CḡP·PëPe, PiP°PSPeCḡPμP°C,PëC,, C%Ps PjP°C”
PsP±PsCḡPsC,PSPëPNḡ C...P°CḡP°PeC,PμCḡ.

P— P±PsPeCž CḡPeC-CḡPë C,P° C—C— PiPsC...C-PrPSPëC...: PiCḡPëPiP»PëPIPë P·
PiC-PiPμCḡPμPjC-C°Cḡ, CḡPIPμCḡP±C-P¶, PIPëCḡPëPiPë, CḡPeC- PjPsP¶CḡC,CHḡ
CḡCḡPiCḡPsPIPsPrP¶CḡPIP°C,PëCḡCḡ PiCḡPsPiP°CḡPSPëC†PμCḡ,
PeCḡPsPiPëPiḡḡ™ CḡPSPeP°, P°PSPiC-PsPSPμPICḡPsC,PëC†PSPëPNḡ PSP°P±CḡCḡPe,
P°PSP°C,,C-P»P°PeC,PëC†PSPëPNḡ CḡPsPe (PrPëPI. CḡPsP·PrC-P»
B«PḡCḡPsP±P»PëPIPsCḡC,C- P·P°CḡC,PSCḡCḡPIP°PSPSCḡB»), PrCḡP¶Pμ
CḡC-PrPeC-CḡPSC- PIPëPiP°PrPePë PiPsCḡC,CḡPsPiPs
PiPμPSPμCḡP°P»C-P·PsPIP°PSPsPiPs PμPeP·P°PSC,PμPjP°C,PSP·PSPsPiPs
PiCḡCḡC,CḡP»CHḡPsP·Cḡ (PrPëPI. CḡPsP·PrC-P» B«PḡCḡPsP±P»PëPIPsCḡC,C-
P·P°CḡC,PSCḡCḡPIP°PSPSCḡB»), C,PSPeCḡPëC†PSPëPNḡ PμPiC-PrPμCḡPjP°P»CHḡPSPëPNḡ
PSPμPeCḡPsP»C-P· (CḡPëPSPrCḡPsPj P»P°C”P»P°), C,,C-PeCḡPsPIP°PSP°
C,PSPeCḡPëPePsPrPμCḡPjC-Cḡ, CḡPëPSPrCḡPsPj
PŸC,C-PIPμPSCḡP°ḡḡ”P”P¶PsPSCḡPsPSP° C,P° PjCḡP»CHḡC,PëC,,PsCḡPjPSP°
PμCḡPëC,PμPjP°.

P— P±PsPeCž PSPμCḡPIPsPIPsC— CḡPëCḡC,PμPjPë: PiPμCḡPëC,,PμCḡPëC†PSP°
CḡPμPSCḡPsCḡPSP° PSPμPNḡCḡPsPiP°C,C-Cḡ; PiPsP»PsPIPsPSPëPNḡ P±C-P»CHḡ,
P·P°PiP°PjPsCḡPsC†PμPSPSCḡ, CḡPiP»CḡC,P°PSC-CḡC,CHḡ CḡPIC-PrPsPjPsCḡC,C-,
CḡCḡPrPsPjPë, P°C,P°PeCḡC-Cḡ, CḡPsPSP»PëPIC-CḡC,CHḡ; PμPSC†PμC,,P°P»PsPiP°C,C-Cḡ*,
PiC-PrPiPsCḡC,CḡPëPNḡ PjPsP·PsC†PePsPIPsPSPëPNḡ CḡPëPSPrCḡPsPj**, P°CḡPμPiC,PëC†PSPëPNḡ
PjPμPSC-PSPiC-C, (PrPëPI. CḡPsP·PrC-P» B«PḡCḡPsP±P»PëPIPsCḡC,C-
P·P°CḡC,PSCḡCḡPIP°PSPSCḡB»).
P— P±PsPeCž PiCḡPëC...C-PePë: PiP°P»CḡC†PëPSP°C†C-C—; PiCḡPëC...PsC,PëC†PSC-

P·P°CÍC,PsCÍCfPIP°PSPSCÍB»).

P'PëPîP°PrPePë C,CIIP¶PePsC— PSPµPsP±PsCĤPsC,PSPsC—
PiPµPiP°C,PsC,PsPeCÍPëC±PSPsCÍC,C-/PiPsCÍC,CĤPsC— PiPµC±C-PSPePsPIPsC—
PSPµPrPsCÍC,P°C,PSPsCÍC,C-, PIPeP»CĤC±P°CĤC±Pë PIPëPîP°PrPePë P·
P»PµC,P°P»CHbPSPëPjPë PSP°CÍP»C-PrPeP°PjPë P· PrCfP¶Pµ CëPIPëPrPePëPj
PiPµCĤPµP±C-PiPsPj PiC-CÍP»CÍ PiPsC±P°C,PeCf CÍPëCÍC,PµPjPSPsPiPs
P·P°CÍC,PsCÍCfPIP°PSPSCÍ PjPµC,CĤPsPSC-PrP°P·PsP»Cf, PiPsPIC-PrPsPjP»CIIP»PsCÍCÍ Cí
PiP°C±C-C"PSC,C-PI C-P· CÍPëPSPrCĤPsPjPjPj PµPsPePePµPNëPSP° (PrPëPI. CĤPsP·PrC-P»
B«PhCÍPsP±P»PëPIPsCÍC,C- P·P°CÍC,PsCÍCfPIP°PSPSCÍB»).

PµPsPIC-PrPsPjP»PµPSPSCÍ PiCĤPs PiC-PrPsP·CĤCĤPIP°PSC- PiPsP±C-C±PSC-
CĤPµP°PeC±C-C—.

PµPsPIC-PrPsPjP»PµPSPSCÍ PiCĤPs PiPsP±C-C±PSC- CĤPµP°PeC±C-C— PiC-CÍP»CÍ
CĤPµC"CÍC,CĤP°C±C-C— P»C-PeP°CĤCÍCHbPePsPiPs P·P°CÍPsP±Cf PjP°C" PIP°P¶P»PëPIPµ
P·PSP°C±PµPSPSCÍ. P|Pµ PrP°C" P·PjPsPiCf PiCĤPsPIPsPrPëC,Pë PjPsPSC-C,PsCĤPëPSPi
CÍPiC-PIPIC-PrPSPsCëPµPSPSCÍ PePsCĤPëCÍC,CH/CĤPëP·PëPe PiCĤPë
P·P°CÍC,PsCÍCfPIP°PSPSC- C±CHbPsPiPs P»C-PeP°CĤCÍCHbPePsPiPs P·P°CÍPsP±Cf.
PµPµPrPëC±PSPëPj C,P° C„P°CĤPjP°C±PµPIC,PëC±PSPëPj PiCĤP°C±C-PIPSPëPeP°Pj, P°
C,P°PePsP¶ PiP°C±C-C"PSC,P°Pj P°P±Ps C—C... P·P°PePsPSPSPëPj PiCĤPµPrCÍC,P°PIPSPëPeP°Pj
CÍP»C-Pr PiPsPIC-PrPsPjP»CÍC,Pë PiCĤPs CíCÍC- PIPëPîP°PrPePë PiC-PrPsP·CĤCĤPIP°PSPëC...
PiPsP±C-C±PSPëC... CĤPµP°PeC±C-PNë C,P° PIC-PrCÍCfC,PSPsCÍC,C-
PµC„PµPeC,PëPIPSPsCÍC,C- P»C-PeP°CĤCÍCHbPePsPiPs P·P°CÍPsP±Cf C±PµCĤPµP·
PĥPIC,PsPjP°C,PëP·PsPIP°PSCf C-PSC„PsCĤPjP°C±C-PNëPSCf CÍPëCÍC,PµPjCf P·
C„P°CĤPjP°PePsPSP°PiP»CÍPrCf P·P° PiPsCÍPëP»P°PSPSCÍPj: <https://aisf.dec.gov.ua> B B

PŷPµCĤPjC-PS PiCĤPëPrP°C,PSPsCÍC,C-.

3 CĤPsPePë.

PJPjPsPIPë P·P±PµCĤC-PiP°PSPSCÍ.

P—P±PµCĤC-PiP°C,Pë PI PsCĤPëPiC-PSP°P»CHbPSC-PNë CíPiP°PePsPIC±C- PiCĤPë
C,PµPjPiPµCĤP°C,CfCĤC- PSPµ PIPëC‰Pµ 25 B°Pŷ.

P—P±PµCĤC-PiP°C,Pë Cí PSPµPrPsCÍC,CíPiPSPsPjCf PrP»CÍ PrC-C,PµPNë PjC-CÍC±C-.

PJPîP°PePsPIPeP°.

PµPs 5 CÍCfPiPsP·PëC,PsCĤC-C—PI Cí CÍC,CĤPëPiC-. PµPs 2 CÍC,CĤPëPiPë Cí
PeP°CĤC,PsPSPSC-PNë CíPiP°PePsPIC±C-.

$$P-P^{\circ} \quad C\bar{H}P_{\mu}C^{\dagger}P_{\mu}P^{\ddagger}C, P_sP_j.$$
$$P_{\text{Л}} P_{\text{J}} P_{\check{\text{Y}}} P_{\text{J}} P_{\text{Н}} \quad P_{\Gamma} P_{\bullet} P_{\triangleright} P_{\check{\text{Y}}} P_{\Gamma} P_{\text{Л}} P_{\bullet} P_{\quad} \quad P_{\sqcup} P' P_{\check{\text{Y}}} P_{\triangleright} P_{\check{\text{Y}}} P'' /$$

P_HC-ClC†PμP·PSP°C...PsPrP¶PμPSPSC¶ PIPëC¶P_SP±PSPëPeP° C,P° P°PrC¶PμC†P° PjC-ClC†C¶ PïC¶P_SPIP°PrP¶PμPSPSC¶ PNøP_SPiP_S PrC-C¶P»CHßPSP_SC†C,C-

[illegible]

SP-289 (A), RIICO Industrial area, Chopanki, Bhiwadi, Dist. Alwar (Rajasthan), India.