

**Р†РќРŸРŸР РЈРЉР!Р†РІ**

**РrР»CП РjРµРrРёC‡PSPsPiPs Р•Р°CГC,PsCГCfPIP°PSPSCП Р»C-РeР°CГCГЧРePsPiPs Р•Р°CГPs±CГ**

**РµРђРќРќРќР“Р†Рќ**

**(PANANGIN)**

**РŸРeР»Р°Рr Р»C-РeР°CГCГЧРePsPiPs Р•Р°CГPs±CГ:**

*РrC-CГC‡C- CГРµC‡PsPIPёPSPё:* РjР°РiPSC-CГ Р°CГРiР°CГР°PiC-PSP°C,, РeР°Р»C-CГ Р°CГРiР°CГР°PiC-PSP°C,;

1 С,Р°Р±P»РµC,РeР°, РiРeCГРёC,Р° РiР»C-РiРePsPiPsCГ PsP±PsP»PsPSPePsCГ,  
РjC-CГC,РёC,СГ 140 РjРi РjР°РiPSC-CГ Р°CГРiР°CГР°PiC-PSP°C,CГ (CГ РiРёРiР»CПРrC- 175  
РjРi РjР°РiPSC-CГ Р°CГРiР°CГР°PiC-PSP°C,CГ С,РµC,СГР°PiC-РrCГР°C,CГ)  
РµРePiC-РiР°Р»РµPSC,PSPs 11,8 РjРi Mg<sup>2</sup>;

158 РjРi РeР°Р»C-CГ Р°CГРiР°CГР°PiC-PSP°C,CГ (CГ РiРёРiР»CПРrC- 166,3 РjРi РeР°Р»C-CГ Р°CГРiР°CГР°PiC-PSP°C,CГ РiРµРjC-РiC-РrCГР°C,CГ) РµРePiC-РiР°Р»РµPSC,PSPs 36, 2 РjРi РЉ;

*РrPsPiPsРjC-Р¶PSC- CГРµC‡PsPIPёPSPё:* РeCГРµРjPSC-CГ РrC-PsРeCГРёРr РePsP»PsC—РrPSPёP№ P±РµР•РiPsРrPSPёP№; РeCГРµC...РjР°Р»CГ РeР°CГC,PsPiР»CПPSPёP№;  
РiPsPiC-РrPsPS; РjР°РiPSC-CГ CГC,РµР°CГР°C,; С,Р°Р»CГРe; РeCГРµC...РjР°Р»CГ РeCГРeCГCГРrР•CПPSPёP№; РjР°РeCГРµPsPiPsP» 6000; С,РёC,Р°PSCГ РrC-PsРeCГРёРr, Р• 171;  
РePsPiPsP»C-РjРµCГ PsCГPSPsPiРё РjРµC,Р°РeCГРёР»Р°C,CГ (РµCГРrCГР°PiC-C, Р• 100).

**Р»C-РeР°CГCГЧРeР°C C,,PsCГРjР°.B** РŸР°Р±P»РµC,РeРё, РiРeCГРёC,C- РiР»C-РiРePsPiPsCГ PsP±PsP»PsPSPePsCГ.

*РќCГPSPsPiPSC- C,,C-Р•РёРePs-C...C-РjC-C‡PSC- РiР»Р°CГC,РёРiPsCГC,C-:* РeCГРeCГРiР»C- РrPiPsPsРiCРeР»C- С,Р°Р±P»РµC,РeРё, РiРeCГРёC,C- РiР»C-РiРePsPiPsCГ PsP±PsP»PsPSPePsCГ, РjР°Р№P¶Рµ Р±C-Р»PsPiPs РePsP»CГРµCГ, Р• РrРµC%Ps Р±P»РёCГРeCГC‡PsCГ C- Р•Р»РµРiРeР° PSPµCГC-РiPSPsCГ РiPsPiРµCГC...PSPµCГ, РjР°Р№P¶Рµ Р±РµР°РiР°C...CГ.

**Р°Р°CГРjР°РePsC,РµCГР°РiРµPiC,РёC‡PSP° РiCГCГРiР°.B B** РГC-PSPµCГР°Р»CГPSC-CГРµC‡PsPIPёPSPё. РµCГРµРiР°CГР°C,Рё C-PSCёРёC... РjC-PSPµCГР°Р»CГPSPёC... CГРµC‡PsPIPёPS. РЉPsРr РђРŸРГВ Рђ12РŸ РГ.

**Р°Р°CГРjР°РePsP»PsPiC-C‡PSC- РiР»Р°CГC,РёРiPsCГC,C-.**

*PαP°CḡPjP°PePsPrPëPSP°PjC-PeP°*. P†PsPSPë PeP°P»C-Cḡ C- PjP°PiPSC-Cḡ CΠPe  
PIP°P¶P»PëPIC- PIPSCrC,CḡC-C€PSCḡPsPeP»C-C,PëPSPSC- PeP°C,C-PsPSPë  
PIPeP»CḡC†P°CḡC,CḡCḡCΠ Π CḡPsP±PsC,Cr CḡCΠPrCr C,,PμCḡPjPμPSC,C-PI, Cr  
PïCḡPsC†PμCḡ P·PI'CΠP·CrPIP°PSPSCΠ PjP°PeCḡPsPjPsP»PμPeCrP» P·  
CḡCrP±C†PμP»CḡP»CΠCḡPSPëPjPë PμP»PμPjPμPSC,P°PjPë C- Π PjPμC...P°PSC-P·Pj  
Pj'CΠP·PsPIPsPiPs CḡPePsCḡPsC†PμPSPSCΠ PSP° PjPsP»PμPeCrP»CΠCḡPSPsPjCr CḡC-PIPSC-  
PŸPïC-PIPIC-PrPSPsC€PμPSPSCΠ PïPsP·P°- C- PIPSCrC,CḡC-C€PSCḡPsPeP»C-C,PëPSPSPsC-  
PePsPSC†PμPSC,CḡP°C†C-C— C-PsPSC-Π PeP°P»C-Cḡ, PeP°P»CḡC†C-Cḡ, PSP°C,CḡC-Cḡ C-  
PjP°PiPSC-Cḡ PIP°P»PëPIP°C” PSP° CḡPePsCḡPsC,P»PëPICr P·PrP°C,PSC-CḡC,Cḡ  
PjC-PsPeP°CḡPrP°. PḡCḡPïP°CḡC,P°C, CΠPe PμPSPrPsPiPμPSPSP° CḡPμC†PsPIPëPSP° C”  
PïPμCḡPμPSPsCḡPSPëPePsPj C-PsPSC-Π PeP°P»C-Cḡ C,P° PjP°PiPSC-Cḡ, PjP°C”  
PIPëCḡP°P¶PμPSPëPμ P°C,,C-PSC-C,PμC, PrPs PeP»C-C,PëPS, PμPsPiPs CḡPsP»C-  
PïC-PrPrP°CḡC,CḡCḡCΠ PrPëCḡPsC†C-P°C†C-C— P»PëC€Pμ PSPμP·PSP°C†PSPsCḡ  
PjC-CḡPsCḡ. P'PSP°CḡP»C-PrPsPe C†CḡPsPiPs C-PsPSPë PïCḡPsPSPëPeP°CḡC,Cḡ Cr  
PIPSCrC,CḡC-C€PSCḡPsPeP»C-C,PëPSPSPëPμ PïCḡPsCḡC,C-Cḡ Cr PIPëPiP»CΠPrC-  
PePsPjPiP»PμPeCḡPSPëC... CḡPïPsP»CrPe. PḡP°PiPSC-Cḡ P°CḡPïP°CḡC,P°C, C,P° PSP°C,CḡC-Cḡ  
P°CḡPïP°CḡC,P°C, PïPsPeCḡP°C%oCḡCḡC,Cḡ PjPμC,P°P±PsP»C-P·Pj PjC-PsPeP°CḡPrP°.  
PḡPμPrPsCḡC,P°C,PSC-Pμ PIPjC-CḡC, PeP°P»C-Cḡ C- PjP°PiPSC-Cḡ Π PsCḡPiP°PSC-P·PjC-  
PïC-PrPIPëC%oCḡC” CḡPëP·PëPe CḡPsP·PIPëC,PeCr P°CḡC,PμCḡC-P°P»CḡPSPsC-  
PïC-PïPμCḡC,PμPSP·C-C—, P°C,PμCḡPsCḡPeP»PμCḡPsC,PëC†PSPsPiPs CrCḡP°P¶PμPSPSCΠ  
PePsCḡPsPSP°CḡPSPëC... CḡCrPrPëPS, PïPsCḡCrC€PμPSCḡ CḡPëC,PjCr CḡPμCḡC†CΠ,  
PïP°C,PsP»PsPiC-C— PjC-PsPeP°CḡPrP°.

*PαP°CḡPjP°PePsPeC-PSPμC,PëPeP°*.

PḡP°PiPSC-Pμ

P—P°PiP°P»CḡPSPëPμ P·P°PïP°Cḡ PjP°PiPSC-Cḡ Π PsCḡPiP°PSC-P·PjC- P»CḡPrPëPSPë  
PjP°CḡPsCḡ C,C-P»P° 70 PePi CḡC,P°PSPsPIPëC,Cḡ Π CḡPμCḡPμPrPSCḡPsPjCr 24 Π (1000  
PjPjPsP»Cḡ); P±C-P»CḡC€Pμ 60 % PjP°PiPSC-Cḡ PïCḡPëPïP°PrP°C” PSP° PeC-CḡC,PePsPICr  
C,PeP°PSPëPSCr C- P±P»PëP·CḡPePs 40 % - B PSP° CḡPePμP»PμC,PSC- Pj'CΠP·Pë C,P°  
C-PSC€C- C,PeP°PSPëPSPë. P'P»PëP·CḡPePs 1 % P·P°PiP°P»CḡPSPsPiPs P·P°PïP°CḡCḡ  
PjP°PiPSC-Cḡ Π PsCḡPiP°PSC-P·PjC- P·PSP°C...PsPrPëC,CḡCḡCΠ Π  
PïPsP·P°PeP»C-C,PëPSPSC-Pμ CḡC-PrPëPSC-, PïPμCḡPμPIP°P¶PSPs Π CḡPëCḡPsPIP°C,C†C-  
PeCḡPsPIC-. Pj P·PrPsCḡPsPIPëC... PrPsCḡPsCḡP»PëC... P»CḡPrPμPμ PIPjC-CḡC, PjP°PiPSC-Cḡ  
Π CḡPëCḡPsPIP°C,C†C- PeCḡPsPIC- PïPμCḡPμP±CḡPIP°C” Π PrC-P°PïP°P·PsPSC- 0,7-1,10  
PjPjPsP»CḡP/P».

P PμPePsPjPμPSPrPsPIP°PSP° PSPsCḡPjP° CḡPïPsP¶PëPIP°PSPSCΠ PjP°PiPSC-Cḡ P· C—P¶PμCḡ  
PrP»CΠ C†PsP»PsPIC-PeC-Π CḡC,P°PSPsPIPëC,Cḡ 350 PjPi PSP° PrPsP±Cḡ, PrP»CΠ P¶C-PSPsPe  
- 280 PjPi PSP° PrPsP±Cḡ. PμPsC,CḡPμP±P° Π PjP°PiPSC-C— P·CḡPsCḡC,P°C” PïC-Pr C†P°Cḡ  
PIP°PiC-C,PSPsCḡC,C- C,P° PïCḡCrPrPSPsPiPs PIPëPiPsPrPsPICrPIP°PSPSCΠ.

PḡP°PiPSC-Pμ P°P±CḡPsCḡP±CḡC”C,CḡCḡCΠ P·C- C€P»CḡPSPePsPIPs-PePëC€PePsPIPsPiPs  
C,CḡP°PeC,Cr C€P»CΠC...PsPj P°PeC,PëPIPSsPiPs C,CḡP°PSCḡPïPsCḡC,Cr. PḡCḡPSPsPIPSPëPj  
CḡPμPiCrP»CΠC,PsCḡPsPj P±P°P»P°PSCḡCr PjP°PiPSC-Cḡ Π PsCḡPiP°PSC-P·PjC- C”  
PSPëCḡPePë. 3-5 % C-PsPSC-P·PsPIP°PSPsPiPs PjP°PiPSC-Cḡ PIPëPIPsPrPëC,CḡCḡCΠ  
PSPëCḡPeP°PjPë.

P—P±C-P»CḡC€PμPSPSCΠ PsP±Bḡ™ C”PjCr CḡPμC†C- (PSP°PïCḡPëPeP»P°Pr, PïCḡPë  
C,PμCḡP°PïC-C— PIPëCḡPsPePsPμC,,PμPeC,PëPIPSpëPjPë PïPμC,P»CḡPsPIPëPjPë  
PrC-CrCḡPμC,PëPeP°PjPë) PïCḡPëP·PIPsPrPëC,Cḡ PrPs P·P±C-P»CḡC€PμPSPSCΠ

РµРєСГРєСНРµСГС-С— С-РsPSC-Р·РsPIP°PSPsPiPs РjР°PiPSC-СН. РїРєС%oPs Р°Р±СГРsСНР±СГС-СЦ РjР°PiPSC-СН Рl С,РsPSPePsРjСГ РlС-РrРrС-Р»С- РeРeСeРµРµС±PSPeРeР° Р·PSPeР¶СГС”С,СНСГГЦЦ, РїРsРrР°Р»СНСeР° РlС-РiPsРjР°PiPSC-С”РjС-СЦ РlСНРeР·РlPsРrРeС,СН РrРs Р·РjРµPSCeРµPSPSCЦ РNеPsPiPs РµРєСГРєСНРµСГС-С— (< 0,5 РjРjPsР»СН /РrPsР±СГ).

### РљР°Р»Р»-РNе

Р—Р°РlР°Р»СНPSPeРNе Р·Р°РlР°СГ РeР°Р»С-СН Рl РsСНРlР°PSC-Р·РjС- Р»СНРrРePSPe РjР°СГРsСН С,С-Р»Р°Р° 70 РeРl СГС,Р°PSPsPIPeС,СН Рl СГРµСНРµPSCНPsРjСГ 140 Рl (3570 РjРjPsР»СН). Р—Р°РlР°Р»СНPSPeРNе Р·Р°РlР°СГ РeР°Р»С-СН РrРµС%oPs РjРµPSCeРeРNе СГ Р¶С-PSPsРe, PSC-Р¶ СГ С±PsР»PsPSC-РeС-Рl, С- PSpµP·PSP°С±PSPsСН РjС-СНРsСН Р·PSPeР¶СГС”С,СНСГГЦЦ Р· РlС-РePsРj. 2 % Р·Р°РlР°Р»СНPSPsPiPs Р·Р°РlР°СГ РeР°Р»С-СН Рl РsСНРlР°PSC-Р·РjС- Р·PSP°С...РsРrРeС,СНСГГЦЦ РiPsР·Р° РeР»С-С,РePSP°РjРe, Р° СНРµСeС,Р° 98 % - РlСГРµСНРµPSC- РeР»С-С,РePS.

РhРlС,РeРjР°Р»СНPSP° PSPsСНРjР° СГРiPsР¶РeРlР°PSPSCЦ РeР°Р»С-СН Р· С-Р¶РµСН СГС,Р°PSPsPIPeС,СН 3-4 Рl (75-100 РjРjPsР»СН) PSP° РrPsР±СГ. РhСГPSPsPSPeРNе СeР»СЦС... РlРeРlРµPSPSCЦ РeР°Р»С-СН - PSPeСНРePsPSPeРNе (Р±Р»РeР·СНРePs 90 % РeР°Р»С-СН РlРeРlРµPSPeС,СНСГГЦЦ PSPeСНРeР°РjРe С%oPsPSPSCЦ). Р РµСeС,Р° 10 % РlРeРlРµPSPeС,СНСГГЦЦ С±РµСНРµ· СeР»СГPSPePsPSPeРeРeСeРlРµPSPeРNе С,СНР°РeС,. РёР°РeРeРj С±РePSPsРj, PSPeСНРeРe РlС-РrРiPsPSC-РrР°СН,СН Р·Р° РrPsPSPeСГС,СНРePsPSPeРNе РiPsРjРµPSPeСГС,Р°Р· РeР°Р»С-СН, Р° С,Р°РePsР¶ Р·Р° РlРjС-СГС, РeР°Р»С-СН Рl СГРeСНРePSPeС,СГС- РeСНРsPSC-. Рj РePsСНРeС,РePsСГС,СНРePsPSC-РNе РiРµСНСГРiРµРeС,РePSC- РlРjС-СГС, РeР°Р»С-СН Рl РeСНРePSC- С,Р°РePsР¶ СНРµPµCГР»СНСГГЦЦ РsР±РjС-PSPsРj РeР°Р»С-СН РjС-Р¶ РlРSCГС,СНС-СePSCНPsРeР»С-С,РePSPSPeРj С- РiPsР·Р°РeР»С-С,РePSPSPeРj РlСНРeСГС,РsСНРsРj.

### РљР»Р»-PSC-С±PSC- С...Р°СНР°РeС,РµСНРeСГС,РeРeРe.

### РµPsРeР°Р·Р°PSPSCЦ.

Р”PsРrР°С,РePsPSPeС РµСНР°РlС-СЦ РlСНРe С...СНРsPSC-С±PSPeС... Р·Р°С...PSPsСНРlР°PSPSCЦС... СГРµСНРµСГЦЦ (РlСНРe СГРµСНРµСГPµPSC-РNе PSpµPSPeСГС,Р°С,РSPsСГС,С-, Рl РiPsСГС,С-PSC,,Р°СНРeС,РSPeРNе РiРµСНРeС-РsРr), РiPsСНРeСeРµPSPSCЦС... СНРeС,РjСГ СГРµСНРµСГЦЦ, PSp°СГР°РjРiРµСНРµPSPeСeР»СГPSPsС±РePsPSPeС... Р°СНРeС,РjС-СЦС..., Р·Р° СНРµPµPSPeРjРµPSPrР°СГС-С”СН Р»С-РeР°СНЦЦ.

Р”PsРrР°С,РePsPSPeС РµСНР°РlС-СЦ РlСНРe Р»С-РeСГРlР°PSPSC- РlСНРµPSPeС,Р°РjРe PSp°РiРµСНСГС,СЦPSPeРe, Р·Р° СНРµPµPSPeРjРµPSPrР°СГС-С”СН Р»С-РeР°СНЦЦ.

РїРe РrPsPSPePSPµPSPSCЦ РrPs РrС-С”С,Рe РrР»СЦ Р·Р±С-Р»СНСeРµPSPSCЦ СНС-РlРSC-Рl РjР°PiPSC-СН С- РeР°Р»С-СН Рl РsСНРlР°PSC-Р·РjС-.

### РµСНРeС,РeРiPsРeР°Р·Р°PSPSCЦ.

РµС-РrPSPeС%oPµPSP° С±СГС,Р»РePSC-СГС,СН РrPs РrС-СНС±РeС... СНРµС±PsPSPePSPe Р°Р±Ps

PrPs P±CfPrCH-ClPePsC— P· PrPsPiPsPjC-P¶PSPëC... C¶PµC±PsPIPëPS PiC¶PµPiP°C¶P°C,Cf.

P°PScfC,C¶P° C,P° C...C¶PµPSC-C±PSP° PSPëC¶PePsPIP° PSPµPrPsCfC,P°C,PSC-CfC,CH,  
C...PIPsC¶PµP±P° PhPrPrC-CfPsPSP°, P°C,C¶C-PsPIPµPSC,C¶PëPeCfP»C¶C¶PSP°  
P±P»PsPeP°PrP° III CfC,CfPiPµPSC¶, PeP°C¶PrC-PsPiPµPSPSPëPNë C¶PsPe  
(P°C¶C,PµC¶C-P°P»CHPSPëPNë C,PëCfPe < 90 PjPj C¶C,., CfC,.)

**P°P°C°PjPsPrC-C¶ P· C-PSCëPëPjPë P»C-PeP°C¶CfCHPePëPjPë P°P°CfPsP±P°PjPë C,P°  
C-PSCëC- PIPëPrPë PIP°P°C°PjPsPrC-PNë.**

P¶PµC,C¶P°C±PëPeP»C-PSPë, ClPeC- P·P°CfC,PsCfPsPICfCHC,CH PIPSCfC,C¶C-CëPSC¶Ps,  
CfPsP»C- P·P°P»C-P°P° C- PSP°C,C¶C-CH C,,C,PsC¶PëPr PiP°P»CHPjCfCHC,CH  
PICfPjPsPeC,CfPIP°PSPSC¶ PiC¶PµPiP°C¶P°C,Cf P·C- CëP»CfPSPePsPIPs-PePëCëPePsPIPsPiPs  
C,C¶P°PeC,Cf. PµC¶Pë PePsPjP±C-PSPsPIP°PSC-PNë C,PµC¶P°PiC-C— P·  
PIPëC°PµP·P°P·PSP°C±PµPSPëPjPë P»C-PeP°C¶CfCHPePëPjPë P·P°CfPsP±P°PjPë  
PSPµPsP±C...C-PrPSP° PiPµC¶PµC¶PIP° PSPµ PjPµPSCëPµ 3 PiPsPrPëPS PjC-P¶  
PiC¶PëPNëPsPjP°PjPë. PhPrPSPSc±P°CfPSPµ P·P°CfC,PsCfCfPIP°PSPSC¶ PiC¶PµPiP°C¶P°C,Cf P·  
PeP°P»C-PNëP·P±PµC¶C-PiP°C¶C±PëPjPë PrC-CfC¶PµC,PëPeP°PjPë C,P°/P°P±Ps  
C-PSPiC-P±C-C,PsC¶P°PjPë P°PSPiC-PsC,PµPSP·PëPSPiPµC¶PµC,PIPsC¶C¶C±PsPiPs  
C,,PµC¶PjPµPSC,Cf, P±PµC,P°-P±P»PsPeP°C,PsC¶P°PjPë, C±PëPeP»PsCfPiPsC¶PëPSPsPj,  
PiPµPiP°C¶PëPSPsPj, PSPµCfC,PµC¶PµC—PrPSPëPjPë PiC¶PµC,PëP·P°PiP°P»CHPSPëPjPë  
PiC¶PµPiP°C¶P°C,P°PjPë PiC-PrPIPëC°CfC° C¶PëP·PëPe C¶PsP·PIPëC,PeCf  
PiC-PiPµC¶PeP°P»C-C°PjC-C—.

**PhCfPsP±P»PëPIPsCfC,C- P°P°CfC,PsCfCáPIP°PSPSC¶.**

PµP°PSP°PSPiC-PS, ClPe PiC¶PµPiP°C¶P°C,, C°Ps PjC-CfC,PëC,CH PeP°P»C-PNë C-  
PjP°PiPSC-PNë, PSPµPsP±C...C-PrPSPs P· PsP±PµC¶PµP¶PSC-CfC,CH  
P·P°CfC,PsCfPsPICfPIP°C,Pë PiP°C±C-C°PSC,P°Pj P· PjC-P°CfC,PµPSC-C°CH PiC¶P°PIC-Cf;  
PiC¶Pë CfC,P°PSP°C..., C°Ps PjPsP¶CfC,CH PiC¶PëP·PIPsPrPëC,Pë PrPs  
PiC-PiPµC¶PeP°P»C-C°PjC-C—, C,P°PePëC... ClPe P·PSPëP¶PµPSPSC¶ C,,CfPSPeC±C-C—  
PSPëC¶PsPe, PiPsCfC,C¶P° PrPµPiC-PrC¶P°C,P°C±C-C¶, PiPsCëPëC¶PµPSPµ  
PiPsCëPePsPrP¶PµPSPSC¶ C,PeP°PSPëPS, P·PsPeC¶PµPjP° PiC¶Pë C,ClP¶PePëC...  
PsPiC-PeP°C.... Pj C±C-C°C— PeP°C,PµPiPsC¶C-C— PiP°C±C-C°PSC,C-PI  
C¶PµPePsPjPµPSPrCfC°C,CHCfC¶ C¶PµPiCfP»C¶C¶PSPs PrPsCfP»C-PrP¶CfPIP°C,Pë  
PePsPSC±PµPSC,C¶P°C±C-CH PµP»PµPeC,C¶PsP»C-C,C-PI Cf CfPëC¶PsPIP°C,C±C- PeC¶PsPIC-.

PµP°PSP°PSPiC-PS, C,P°P±P»PµC,PePë, PIPeC¶PëC,C- PiP»C-PIPePsPIPsCH  
PsP±PsP»PsPSPePsCH, PSPµ CfP»C-Pr PiC¶PëP·PSP°C±P°C,Pë PiP°C±C-C°PSC,P°Pj P·  
PiP°CfC,C¶PsPrCfPsPrPµPSP°P»CHPSPëPjPë PIPëC¶P°P·PeP°PjPë P°P±Ps  
PsP±CfC,C¶CfPeC±C-C°CH.

P—P°CfC,PsCfCáPIP°PSPSC¶ C± PiPµC¶C-PsPr PIP°PiC-C,PSPScfC,C- P°P±Ps  
PiPsPrCáPIP°PSPSC¶ PiC¶CáPrPrCH.

P°Ps C,PµPiPµC¶C-CëPSC¶PsPiPs C±P°CfCf PSPµ PiPsPIC-PrPsPjP»C¶P»PsCfC¶ PiC¶Ps  
P±CfPrCH-ClPePëPNë CëPeC-PrP»PëPIPëPNë PIPiP»PëPI PiC¶Pë P·P°CfC,PsCfCfPIP°PSPSC-

PiC7PµPiP°C7P°C,Cr C†C-PNε PeP°C,PµPiPsC7C-C— PiP°C†C-C”PSC,C-PI.

P—PrP°C,PSC-C†C,CH PIPiP»PëPIP°C,Pë PSP° C€PIPëPrPeC-C†C,CH C7PµP°PeC†C-C— PiC7Pë PePµC7C¿PIP°PSPSC- P°PIC,PsC,C7P°PSC†PiPsC7C,PsPj P°P±PsB C7PsP±PsC,C- P- C-PSC€PëPjPë PjPµC...P°PSC-P·PjP°PjPë.

PµC7PµPiP°C7P°C, PSPµ PIPiP»PëPIP°C” PSP° P·PrP°C,PSC-C†C,CH PePµC7C†PIP°C,Pë C,C7P°PSC†PiPsC7C,PSPëPjPë P·P°C†PsP±P°PjPë C,P° C-PSC€PëPjPë PjPµC...P°PSC-P·PjP°PjPë.

**PÿPiPsC†C-P± P·P°C†C,PsC†C¿PIP°PSPSC† C,P° PrPsP·Pë.**

P—PIPëC†P°PNεPSP° PrPsP±PsPIP° PrPsP·P° PrP»C† PrPsC7PsC†P»PëC... C†C,P°PSPsPIPëC,CH 1-2 C,P°P±P»PµC,PePë 3 C7P°P·Pë PSP° PrPsP±C†. P”PsP·C† PjPsP¶PSP° PiC-PrPIPëC%oC†PIP°C,Pë PrPs 3 C,P°P±P»PµC,PsPe 3 C7P°P·Pë PSP° PrPsP±C†. PëP»C†PSPePsPIPëPNε C†C-Pe P·PrP°C,PSPëPNε P·PjPµPSC€C†PIP°C,Pë PµC,,PµPeC,PëPIPSC-C†C,CH PiC7PµPiP°C7P°C,Cr, C,PsPjC† C7PµPePsPjPµPSP†C†C”C,CHC†C† PiC7PëPNεPjP°C,Pë C,P°P±P»PµC,PePë PiC-C†P»C† C—PrPë.

PµC†C7C† P»C-PeC†PIP°PSPSC† PIPëP·PSP°C†P°C” P»C-PeP°C7.

P”C-C,Pë. PkPµ C7PµPePsPjPµPSP†C†C”C,CHC†C† P·P°C†C,PsC†C†PIP°PSPSC† PiC7PµPiP°C7P°C,Cr PrC-C,C†Pj C†PµC7PµP· PSPµPrPsC†C,P°C,PSC-PNε PrPsC†PIC-Pr P·P°C†C,PsC†C†PIP°PSPSC†.

**PµPµC7PµPrPsP·C¿PIP°PSPSC†.B**

P’PëPiP°PrPePë PiPµC7PµPrPsP·C†PIP°PSPSC† PSPµPIC-PrPsPjC-.

P— PsPiP»C†PrC† PSP° P·PrP°C,PSC-C†C,CH PSPëC7PsPe PIPëPIPsPrPëC,Pë P·PsC7PiP°PSC-P·PjC† PIPµP»PëPeC† PeC-P»CHPeC-C†C,CH PeP°P»C-C†, P·P±C-P»CHC€PµPSPSC† PrPsP·Pë PiC7PµPiP°C7P°C,Cr PjPsP¶Pµ PiC7PëP·PIPµC†C,Pë PrPs PiC-PiPµC7PeP°P»C-C”PjC-C—, C,C-P»CHPePë C†PeC%oPs C†Pµ PiPsPI’C†P·P°PSPs P·PiPsC†C,C7PëPj P°P±Ps PIPëC7P°P¶PµPSPëPj PiPsC7C†C€PµPSPSC†Pj PIPëPIPµPrPµPSPSC† PeP°P»C-C†.

PÿPµC7P°PiPµPIC,PëC†PSPëPNε C-PSP†PµPeC† PjP°PiPSC-C† C€PëC7PsPePëPNε, C- PiC7Pë PIC-PrC†C†C,PSPsC†C,C- PSPëC7PePsIPsC— PSPµPrPsC†C,P°C,PSPsC†C,C- C,C†P¶PeC- PiPsP±C-C†PSC- PµC,,PµPeC,Pë PIPeC7P°PNε C7C-PrPeC-C†PSC-.

P—PiC-PrPSPs P· PSP°C†PePsPIPëPjPë PrP°PSPëPjPë, P·P°C†C,PsC†C†PIP°PSPSC† PiC7PµPiP°C7P°C,C-PI PjP°PiPSC-C† PiPµC7PsC7P°P»CHPSPs PjPsP¶Pµ PIPëPeP»PëPeP°C,Pë PSPµP·PSP°C†PSC- PiPsP±C-C†PSC- PµC,,PµPeC,Pë, C,P°PeC- C†Pe PrC-P°C7PµC†.

P’PµP»PëPeC- PrPsP·Pë PiC7PµPiP°C7P°C,Cr PµP°PSP°PSPiC-PS, C,P°P±P»PµC,PePë, PIPeC7PëC,C- PiP»C-PIPePsIPsC† PsP±PsP»PsPSPePsC†, PjPsP¶C†C,CH

В СГРiСГРiPëC±PëPSPëC, Pë В P·P±C-P»CНC€PµPSPSCЦ C±P°CГC, PsC, Pë  
PIPëPìPsCГPSPµPSCН C±PµCГPµP· PIPjC-CГC, PjP°PiPSC-CН.

PJ CГP°P·C- C€PIPëPrPePsPiPs PIPSCГC, CГC-C€PSCНPsPIPµPSPSPsPiPs PIPIPµPrPµPSPSCЦ  
PjPsP¶CГC, CН PiCГPSCЦPIPëC, PëCГCЦ CГPëPjPìC, PsPjPë  
PiC-PiPµCГPëP°P»C-C”PjC-C-/PiC-PiPµCГPjP°PiPSC-C”PjC-C—.

PŸPëPjPìC, PsPjPë PiC-PiPµCГPëP°P»C-C”PjC-C—: P·P°PiP°P»CНPSP° CГP»P°P±PëC-CГC, CН,  
PiP°CГPµCГC, PµP·C-C—, P±CГP°PrPëPeP°CГPPrC-CЦ, PiP°CГP°P»C-C±.  
PќP°PrP·PIPëC±P°PNëPSPs PIPëCГPSPeP° PePsPSC†PµPSC, CГP°C†C-CЦ PeP°P»C-CН PI  
PiP°P°P·PjC- PjPsP¶Pµ PiCГPëP·PIPµCГC, Pë PrPs CГPjPµCГC, C- PIC-Pr  
PiCГPëPiPSC-C±PµPSPSCЦ CГPµCГC†PµPIPSc— PrC-CЦP»CНPSPSCГC, C-, P°CГPëC, PjC-C—  
P°P±Ps P·CГPìPëPSPePë CГPµCГC†CЦ.

PŸPëPjPìC, PsPjPë PiC-PiPµCГPjP°PiPSC-C”PjC-C—: PSCГPrPsC, P°, P±P»CНPIP°PSPSCЦ,  
CГPSP»PëPIC-CГC, CН, PiC-PiPsC, PµPSP·C-CЦ, P±CГP°PrPëPeP°CГPPrC-CЦ,  
CГP»P°P±PëC-CГC, CН, PSPµPIPëCГP°P·PSP° PjPsPIP°, PrPIPsC—PSPSCЦ PI PsC±P°C.... PµCГPë  
PrCГP¶Pµ PIPëCГPSPePëC... PìP»P°P·PjPsPIPëC... PePsPSC†PµPSC, CГP°C†C-CЦC... PjP°PiPSC-CН  
PjPsP¶Pµ CГPSP·PIPëPSCГC, PëCГCЦ PiC-PiPsCГPµC,, P»PµPeCГC-CЦ, PiP°CГP°P»C-C±  
PjCЦP·C-PI, P·CГPìPëPSPeP° PrPëC...P°PSPSCЦ C- P·CГPìPëPSPeP° CГPµCГC†CЦ.

PJ CГP°P·C- PiPµCГPµPrPsP·CГPIP°PSPSCЦ PSPµPsP±C...C-PrPSPs PIC-PrPjC-PSPëC, Pë K-, Mg<sup>2-</sup>-  
P°CГPìP°CГC, P°C, C- CГPµPePsPjPµPSPPrCГC”C, CНCГCЦ PiCГPSPiPµCГC, Pë  
CГPëPjPìC, PsPjP°C, PëC±PSPµ P»C-PeCГPIP°PSPSCЦ (PeP°P»CНC†C-CН C...P»PsCГPëPr 100  
PjPi/C...PI PIPSCГC, CГC-C€PSCНPsPIPµPSPSPs, PrC-P°P»C-P·, CЦPeC%Ps  
PSPµPsP±C...C-PrPSPs.).

***PµPsP±C-C±PSC- CГPµP°PeC†C-C—.***

P— P±PsPeCá C€P»CáPSPePsPIPs-PePëC€PePsPIPsPiPs C, CГP°PeC, Cá: PiCГPë  
P·P°CГC, PsCГCГPIP°PSPSC- PIPµP»PëPePëC... PrPsP· PiCГPµPiP°CГP°C, CГ PjPsP¶Pµ  
CГPiPsCГC, PµCГC-PiP°C, PëCГCЦ P·P±C-P»CНC€PµPSPSCЦ C±P°CГC, PsC, Pë  
PIPëPìPsCГPSPµPSCН.

P—P° PrPµCЦPePëPjPë PrP°PSPëPjPë, PjPsP¶CГC, CН PIPëPSPëPeP°C, Pë PSCГPrPsC, P°,  
P±P»CНPIP°PSPSCЦ C- P±C-P»CН PI P¶PëPIPsC, C-.

***PŸPµCГPjC-PS PiCГPëPrP°C, PSPsCГC, C-. 5 CГPSPeC-PI.***

***PJPjPsPIPë P·P±PµCГC-PiP°PSPSCЦ.B***

P—P±PµCГC-PiP°C, Pë PiCГPë C, PµPjPiPµCГP°C, CГCГC- PSPµ PIPëC%Pµ 25 °PŸ.

PµCГPµPiP°CГP°C, P·P±PµCГC-PiP°C, Pë CГ PSPµPrPsCГC, CГPìPSPsPjCГ PrP»CЦ PrC-C, PµPNë  
PjC-CГC†C-.

**PJPiP°PePsPIPeP°.**

PμPs 50 C,P°P±P»PμC,PsPe Cr PīPsP»C-PīCḡPsPīC-P»PμPSPsPIPsPjCr C,,P»P°PePsPSC- P·  
PePsPSC,CḡPsP»PμPj PīPμCḡC€PsPiPs CḡPsP·PeCḡPëC,C,Cḡ, PīPs 1B C,,P»P°PePsPSCr PIB B  
PeP°CḡC,PsPSPSC-PMëB B CrPīP°PePsPIC†C-;

P°P±Ps

PīPs 20 C,P°P±P»PμC,PsPe Cr P±P»C-CḡC,PμCḡC-; 3 (20×3) P°P±Ps 5 (20×5)  
P±P»C-CḡC,PμCḡC-PI Cr PeP°CḡC,PsPSPSC-PMë CrPīP°PePsPIC†C-.

**PљP°C,PμPiPsCḡC-Cḡ PIC-PrPīCfCḡPeCr.** P’PμP· CḡPμC†PμPīC,P°.

**P’PëCḡPsP±PSPëPe.**

P’PḡPḡ B«P”PμPrPμPsPS P C-C...C,PμCḡB».

**PњC-CḡC†PμP·PSP°C...PsPrP¶PμPSPSCḡ PIPëCḡPsP±PSPëPeP° C,P° PNëPsPiPs  
P°PrCḡPμCḡP° PjC-CḡC†Cḡ PīCḡPsPIP°PrP¶PμPSPSCḡ PrC-CḡP»CḡPSPsCḡC,C-.**

Pќ-1103, P’CrPrP°PīPμC€C,, PICrP». P”PμPjCḡPμC—, 19-21, PJPiPsCḡC%PëPSP°,