() 8 UHY cZ9a d'cma Ybh

# CZÚWY'cZ'h\Y'DfYg]XYbh

5X a lb]qhfUh] i Y CZÚWY

DÚ J.X.S. Dc.Wyfm(1--\*) DfyglXybhUbXDfcZ/ggcfcZ7\f]gl]Ub Gi XJYg6.G, I b]j YfglmcZ5`UVLa UUh6]fa]b[\Ua/A.8]j.,; fUWH\Yc`c[]Wb GYa]bUfm/A.8]j., Gci l\k YgMfb6UlllghH\Yc`c[]Wb GYa]bUfm/A.5., HM Ug7\f]gl]Ub I b]j YfglmzD\.8., I b]j YfglmcZHM UgUh5f`]b[-lcb/5XX]l\cbU gli Xm8fYk I b]j Yfglm

DYYAbb Ci `VfYU\\ (1--+) 5 gglgtbhk h\YDfYglXYbhZcf 7ca a i b]lmUbXHfi gYYFYU\]cbg 6.G, 6Y\\Y 7c``Y[ Y/A .6.5., C\_`U\ca U7]lmI b]j Yfglm

C]bXmMYfYX]h. (1--\*) 91 YWHj Y5 gglgHbhlc h YDfYglXYbh MYUb]YR]Wa Ub (1--, ) 91 YWHj YGWMHI'mlc h YDfYglXYbh

7Uadig AlblghflYg

TcXXE. BřUXm(1--\*) A jblgtYf le lhYI blj YfglmUbX-bgfi Wicf cZ7\flgt]Ub Qi XJYg 6.G, I bleb I blj Yfglm(A.8.)j., Gci lhk YgtYfb 6Udlt]ghtNYc`c[ ]Wo QYa ]bUfm

Ji ']YBfUXÚYX(200)) 7Ua di gA ]b]gfm5ggcVJUY.

AbXmPYH][fYk (200() 8 | fYMcf cZChi XYbhA | b|gf]Yg 6.5., I b|cb I b|j Yfg|lm5 XX|H;cbU ghi Xm Cci h\Yfb 6Ud|ghH\Yc`c[]Wr GYa |bUfm

MUDXmBYh N ji Yb (2003) 5 Xa |b|gfUlji Y5 gglglUbh

5h\`Yh]Wg

DU JXB`UWgleW (1-+3) 8 JfYWlef cZ5 lk`YlfWgUbXDfcZYggef cZD\ngJW 9Xi Wlfjcb. 6.G., I b]cb I b]j Yfg|lm/A .9X, I b]j Yfg|lmcZA Ya d\]g/9X8., I b]j Yfg|lmcZCci lk\Yfb A ]gg]gg]dd].

Tca a m5UXYf (1-, \*) 5 ggc VJUY 5 l\ `Yr]V8 ]fYWlcf. 6.5., I b]cb I b]j Yfglma'A .9X, I b]j YfglmcZ A Ya d\]g

Shhj b A`xf]X| Y(2000) Gdcflg=bZcfa Uljcb 8 |fYMcf. 6.G, I b]cb I b]j Yfglm ThfYgJT\ca Ug(2002) 5 Xa |b]gfUljj Y5 gg]glUbhlc h\Y8 |fYMcf cZ5 h\Yl]Ug

# °°CZÚWY'cZ'h\Y'Dfcjcgh

5X a ]b]ghfUh] j Y CZÚWY

CUTUD. SUXXYgcb (1-, 2) Dfcj cghUXJ JWDfYgJXYbhZcf 5 WXYa JW5 Xa JbJgfUljcb UXDfcZ/ggf cZB i fgJb[. 8]d`ca U, 6UdlljghA Ya cf]U < cgd]lU CWcc`cZB i fgJb[/6.GB., I bJcb I bJj YfgJlmrA.GB., I bJj YfgJlmrcZHbbYggYY < YUl\x GVYbWg7 YbHMf/D\.8., I bJj YfgJlmrcZ: `cf]XU

Ja a mH. DU lg(1-+, ) J | WDfcj cghlbXI blj YfglmDfcZ/ggcf cZ7\Ya | gffm6.G, I blcb I blj Yfglm/D\.8., I blj YfglmcZ=`)bc]g/5 XX|HjcbU gli XmI blj YfglmcZ: `cf]XU CU\_F]X[ Y5ggc-WLHXI blj YfglHYg 5f[ cbbYB UlcbU @UvcfUrcfm< Ufj UXI blj YfglmubXCl ZcfXI blj Yfglm 9bl `UbX

Cnbh\JUPckY`JLinbY(1-+\*). I blj YfglmDfcZvggcfcZ@tb[iU,Y,UbX5ggcVJUYDfcjcghZcf=bhYfbUfcbUUbX=bhYfW'lifUQiX]yg6.5., A [ggggdd]7c``Y[Y/A.5.UbXD\.8., @ci ]gUbUQtUYI blj Yfglm:5XX[h]cbUgiXmJUbXYfV]`hI blj YfglmI blj YfglmcZ?YbliWmUbXH\YQaaYfeblihYcZ=bhYfW'lifU7caaib]Wh]cb.

CUfc` Jc\bgcb (1--+) Dfc[fUb 7ccfX]bUfcf, =bgh hi hYZcf =bhMfbUh]cbU UbX=bhMfW'hi fU Gh X]Yg 6.5., I b]cb I b]j Yfg]hm

# 5WUXY a JW 7YbhYf

JbyButvyf Bythg(1-+() FY[]gftf. 6.5., I b]cb I b]j Yfglma(A.9X, I b]j YfglmcZA Ya d\]g/5 XX[h]cbU gh XmI b]j YfglmcZA Ya d\]g

Ab]HUTcXX (2000) 5 gglgdbhFY[]glftf. 5.G, >UWgcb GtHY7ca a i b]lm7c``Y[Y/6.G UbX A .5.9X, I b]cb I b]j Yfglm

A`]WFUffUf (1--+) GWMHIfm5.G, >UWgcb GHHY7ca a i b]lm7c``Y[ Y

Ji XmT\ca Ug(2002) 5 WXYa |WFYWfXg 6.5., I b|cb I b|j Yfg|m

7YbhYf'Zcf'BYk'GhiXYbhg

Si gl.b H. HeddYf (1-, -) 7c-8 |fYWicf. 6.G, I b|cb I b|j Yfglma'A .5.H, I b|j YfglmcZA Ya d\ |g/5XX|li|cbU ghi Xm,I b|j YfglmcZA Ya d\ |g

S\\ffmil[| bcf(1--\*) 7c-8|f\text{fMtcf. 6.G, I b]cb I b]j \text{Yfglm:(A .9X, I b]j \text{Yfglm:(ZA Ya d\]g/5X-X]h]cbU gli XmI b]j \text{Yfglm:(ZA Ya d\]g

7cadih]b['GYfj]WYg

Jc\b DU JXBU\Ua (1-, () 5 ggc\UUY J ]WDfYgJXYbhZcf =bZcfa Uljcb GnglYa g 6.G, I b]cb I b]j Yfg|m/A.G,; Ycf[]U=bgl|li hYcZHWbc\c[m]

KÚYĐ MWW\ YfHY (1-, 1) 8 JfYWicf cZ7ca di l·]b[ GYfj JWgUbX5Xa ]b]g|fUl-jj Y7ca di l·]b[ Gi d-dcfh 6.G, I b]cb I b]j Yfg]lm

Gk nb BY` (200() CZÚWGi dYfj ]gcf.

M]WUY HUY(2001) 8 JfYMcf cZD7 G ddcfh

C\f|gJc\bgcb (2002) HWWbc c[mGi ddcfhA UbU Yf.

Ccbb]YMU Yfg(1-, 1) Gngha g5bUngh 6.G, I b]cb I b]j Yfghm

ReVJb NU Y (2000) 8 fYWicf cZHUblb[ UbXCb']bY=bgffi Wijcb. 6.G9., UbXA .9X, I blj YfglmcZ A Ya d\lg

Ci fhPUf]g\ (1--2) 8 |fYMcf cZB Ylk cf\_ Gi ddcfh 6.G, I b|cb I b|j Yfg|lm

BfUXSYUrcb (1---) B Yłk cf\_ 9b[ ]bYYf. 6.G, I b]cb I b]j Yfglm

MJWUY Sa Jh. (2001) GnghYa g5bUngh 6.G, I blj YfglmcZBcfh. 5 W. U: `cfYbW.

Jobuh ub TYU i Y(2001) 5 ggc WUYB Ylk cf\_ 9b[ ]bYYf. 6.G, I b]cb I b]j Yfglm

C\f]gJc\bgcb (2002 D7 Gi ddcfhCdYVJU]gH D7 @U/g 6.5., I b]cb I b]i Yfglm

RUWY MUng(200() D7 G ddcfhCdYVJU]gli A UW@Uvg 6.G, : fYYX-< UfXYa Ub I b]j Yfgllm

MUhEgdUhU(200() ≠17A 7ccfX]bUcf.

**PU** `S]a Yf (200() ≠17A HWVb]WUb.

## CZÚWY cZ h \ Y 8 YUb cZ Gh i XYbhq

K]a VYf'mC. T\cfbVi fm(1---) 8 YUb cZChi XYblig 6.5., A YggJU\ 7c``Y[ Y/A .5., I b]j YfglmcZ @ci ]g ]``Y/D\.8. FY[ YbhI b]j Yfglm

P\m`]gDU Ybdcfh(1-, () 7ccfX]bUcf cZ7Ua di g9j Yblg/7\UdY 7ccfX]bUcf.

Ag\ YmGi |bb (2003) 5 Xa |b|gffUti Y5 gglgtUbh 6. 5., I b|cb I b|j Yfglm

LUffinRcgg(1--)) 5 gglgfUbh8 YUb cZCli XYblgUbX8 JfYMicf cZClZYlmUbX CYW/f]lmHYbbYggYY@Uk 9bZcfWa YbhHfUb]b[ 5 WXYa n/5.5.G, G\YVmClUY/7 ca a i b]lm7c``Y[ Y.

#### 7UfYYf'GYf i lWYq

JUWN Y]bYTUncf (2000) 8 |fYWlcf cZ7UfYff Gffj |Wg 6.5. UbXA .5.9X, I b]cb I b]j Yfglm RYbYf JcbYg (2002) 5 gg]gUbh8 |fYWlcf cZ7UfYff Gffj |Wg 6.G, I b]cb I b]j Yfglm

#### FYalXYbWY'@1ZY

KUh finb Sci h U` (1-, -) 8]fYMcf cZFYg|XYbW@]ZY. 6.5., A]ggggddd] 7c``Y[Y/A.F.9., Gci h-k Yghfb H\Yc`c[]W/GYa]bUfm

KY`mE``]clh(200() FYg|XYbW@|ZY8]fYMcf, A V\$ZYY. 6.5., ? ]b[ 7c``Y[ Y/A .5., 9UghHybbYggYY CHLHYI b]j Yfg|lm/A .9X, I b]j Yfg|lmcZ@ci ]g] ]``Y.

 $\hbox{\it JUYXSWi~Yf~(200() FYg]XYbW@]ZY8]fYMcf, K~UHMfg~6.5., 5~bXYfgcb~I~b]j~Yfg]lm~$ 

Aa UbXUVU` (200() FYg|XYbh@|ZY8]fYMcf, < i fh, 6.5., I b]cb I b]j Yfg|hm

G`YbbUMUfg\U`(200() GYViYHLfm

#### GUZYhm'UbX'GYW i f1hm

GYcf[YîBiHWİB`Ubleb(1--))5ggcVJUY8]fYMicfcZGUZYmUbXGYWf]lmHybbYggYY@Uk9b-ZcfWaYbhHYUb]b[5WXYam6Ug\W7f]a]bU=bjYgH][U]cb.

BcVG]Vgcb (1--+) GYWf]lmGi dYfj ]gcf.

MY]ggUHcddYf (2002) GYWHLfm6.GC.@, I b]cb I b]j Yfg]lm

#### GhiXYbh'@YUXYfg\]d'8YjY`cdaYbh

KY``bYgg'GYfj]WYg

PU `MUNY (200). 8 | fYWicf cZ < YUh GYfj | Wg

MUhBfi bYh(200() 8 fYwlicf cZh\YKY`bYgg 7YbhYf. A.G.5., K UhbYCHLYI blj Yfglm

BftbXcbBcmitb (2002) 5ggcVJtH/8 |fYWrfcZKY`bYggtbX< YtX7ctW, K ca Yb'gCcWMf. 6.G, I b|cbI b|j Yfglm

PU `DYgWYbYg (2000) 8 ]fYWrif cZ7ci bgY]b[ GYfj ]WgUbX5gg]gHbhDfcZ/ggcf cZDgnWc`c[ m 6.5., I blj Yfg]hmcZ: `cf]XU/Dgn8., FcgYa YUXGWcc` cZDgnWc`c[ m

C\Yfm\MYfWYf(200()GYWMLfm<YUh\GYfj]Wg

## ; Yf a Ubhc kb 7U a dig

RUDXmS\UXVI fb (2003) 91 YWHji Y 8 | fYWicf cZ; Yfa Ublck b 7 Ua di g 8 | fYWicf cZ9X G UbX 9X8..; Yfa Ublck b UbX 5 ggc V/UHYDfcZ/ggcf cZ9Xi WHjcbU @YUXYfg\]d. 6.G, : fYYX-< UfXY-a Ub I b|j Yfg|m/A.9X UbXD\.8., I b|j Yfg|mcZA | ggggddd|.

L]bXmHUbbU. (1--+) 5 gg[gHbhFY[]gffUf. 5.5., : fYYX-< UfXYa Ub I b|j Yfglm/6.DG, I b|j Yfglm cZA Ya d\]g

S\[\frac{1}{3}f^\frac{1}{3}m^\frac{1}{3}(200)\]\ \text{@VfU}\]\ \text{Ub. 6.G., I b]}\ \text{YfglmcZA Ya d\g A.@.G., HM UgK ca Yb'gI b]}\ \text{Yfglm}\]\ \text{DcbUXHc'gb] \text{Yf}\ (2003)\ FYWi ]\text{Ihf. 6.G., Gci h\Yb = \text{Dc}gI b]}\ \text{YfglmaA.6.5., I b]cb I b]}\ \text{Yfglm}\]\ \text{RUWY Ki m YbXU'\ (200)\ 8\]\ \text{FYWicf cZ7cbHbi ]b]\ \text{Gi X|Yg}\]

MUF'cf|YM|HWY`(200)) FYWdhcb|gh': |bUbV|U 5 |XGYWHUfm

BYA PenbYf (1-, (, 2001) 7ccfX|bUrcf cZA.9X, 9XG, UbX9X8. Dfc[fUa g

TYff] R]Wa cbX(200() 7ccfX]bUcf cZ7cbl]bi ]b[ Gi X]Yg

Si YTUncf (1---) 7ccfXlbUrcf cZ; fUXi UY6i glbYggDfc[fUa g

L]bXUT]lhiY(2003) 7ccfX]bUrcf cZA .5.9X Dfc[fUa.

DUbUW]`\_]bgcb (200() 7ccfX]bUcf cZB i fglb[ Dfc[fUa g

TUJh UWLEN VI fb (200() HWWbc `c[ mG ddcfh7ccfX]bUrcf,; Yfa Ublok b.

### @]VfUfm'GYfj]WYg

Shiy Yb L. BU\_Yf (1--0) 5 ggcVjUhY J JWDfYgXYbhZcf 5 WXYa JWFYgci fWg 8 JfYMcf cZh Y@-VfUmUbXDfcZ/ggcf cZ@|VfUmGrfj JWg 6.5., GLa ZcfXI b|j Yfglm: A.8|j., Gci h\Yfb 6Udljgh &'( H\Yc`c[ JWl GYa ]bUm: A.5., I b|j Yfglm:cZ? Ybhi Wm: 5 XXJh]cbU ghi XmI b|j Yfglm:cZGci h\ 7 Ufc`]bUUbXI b|j Yfglm:cZA Ya d\]g

JMUblyBmfX(1--)) Gff[Ug7ccfX]bUcf UbX7]fW'Ulcb5gggtUbh6.5., I b]cb I b]j YfglmrA.5., I b]j YfglmcZA]ggggldd]/5XX]llcbU gli Xm/A]XXYHlbbYggYYGUYI b]j Yfglm

Lcf] HUbYm(1-, +) 5 Xa |b|ghfUhj Y5 gg|ghlbh

VUYf]YHck Y` (2000) =bZcfa Ułjeb Głfj ]Wg7cefX]bUtef. 6.5., I bljeb I blj Yfgllm/A .5., I blj YfgllmcZA Ya d\]g

JAbbniLck Yfm(2003). 5 gglgHJbhDfcZ/ggcf cZ@|VfUmGYfj ]Wg 6.6.5., H\YI b]j YfglmcZ? Ybhi Wm/A .@G, +bX|UbUI b]j YfglmcZDi fXi YI b]j Yfglm/A .8 |j., UbXD\.8., H\YGci h\Yfb 6UdHghH\Yc`c[ |W GYa |bUfm

BYA Lnbb (1--3) 5 W/i ]ghlcbg DUfUdfc Z/gglcbU. 6.GC.@., I b]cb I b]j Yfglm

MY]ggUMccfY(1--2) FYZfYbW@]VfUf]Ub UbX HMa @YLXYfZcf Di V]WCMfj [Wg 6.5., K U\_Y: cf-YghI b]j YfglmrA .@G, I b]j YfglmrCZ? Ybhi Wm/5XX]h]cbU Chi XmI b]cbI b]j Yfglm

PUH]WUH. Mcff]g(1-+)7c``YMjcb8YjYcdaYbh@]VfUf]Ub, HM.a @YUXYfZcf@]VfUmFYgcifWgUbXDfcZ/ggcfcZ@]VfUmCYfj]Wg6.5.,Ib]cbIb]jYfg]lm/A.@G,JUbXYfV]`hIb]jYfg]lm/9X8,Ib]jYfg]lmcZAYad\]g

Shird\ Yb Mci bh(2002) 7]fW\'U]cb 7ccfX]bUcf/GYf]Ug5gg]gLbh

MUTIMP\*UHi(1-\*2) 7UHUc[]b[/5i3]bggf\\hbbar\feUflb UbX5ggc\\hbbar\frac{1}{2}\text{LHYDfcZiggef cZ@]VfUfmGYfj ]Wg 6.5., Gh``a Ub 7c``Yf Y/A.@G, I b]j Yfg|lmcZ5`UVUa U

PU`ScffY`(2000) =bhf`]VfUrm@cUbUbX7]fW/Uhcb5gggUbh6.G, I b]cb I b]j YfglmLciY`UShk Ufh(2000) 7UHc[]b[5ggcVJUh:6.G, I b]j YfglmcZHbbYggYYUhA Ufh]b

# 7c"Y[Y'cZ'5fhg'UbX'GW]YbWYg

Si rlbbYNUMig\_tin(1--+) 5 Xa ]b]gftUtj Y5 gglgtbhlic lh.Y8 Ytb. 5.5., Gci lh.Yfb 5 f\_tbgtig Iff]bUDU [ \hrin(200() 7ca a i b]Wt]cb 5 flig GYWMHfm

DYMbUDYCci fh(200() 6]c`c[ m/ 7\Ya ]gfmGYWMHfm

G`cf]UDi bWb (2001) A i g]WGYWMHfm

DUk b EggltfnU(200() 9b[ ]bYYf]b[ /A Uh./D\ng]\gGWMHfm

KUh.] G`]XYk Y` (1--, ) 7\f]gf]tb Gi X]YgGWMHfm

MUT]`nb Jc]bYf (200() 7\f]gf]tb Gi X]YgGWMHfm

Ji `]YPUHYfgcb (2001) < i a tb]lf\gGWMHfm

G]`YnWHf[ \h(200() 7\Ya ]gfmUbXD\ng\\gGWHfm

## AW5ZYY'GW\cc`'cZ'6 i g]bYgg'5X a ]b]ghfUh]cb

R. KYJN: AVg; Yf (200() 8 YUb cZh; YA V\$ZYYGWcc`cZ6i glbYgg5Xa ]blgfUljcb UbXDfcZyggcf cZA Uf\_Yljb[. 6.5. UbXA .6.5., xUWgcbj ]`YGUHYI blj YfglmA .5.G, I blj YfglmcZ5`UVUa U < i blgj ]`Y/D\.8., I blj YfglmcZ5f\_UbgUg

Ji XmLYZcf[YY(1-,\*) 5 Xa]b]gffUtjj Y5 gg]gfLbhlrc h Y8 YUb.

**WybXmVYthYm**(2001) 8]fYMrcf 7cf 5 i a b] FYU1jcbgUbX5bbi U Qi XYbhQi ddcfh 6.G6.5., I b]cb I b]j Yfg|lm

Ai VfmHUff]g(200(); ]ZgDfcWgglb[ 7ccfX]bUcf. 6.G, A i ffUmGUlYI b]j Yfglm BY [bXUMcgg(1--3) GWMHIfm5 i a b]/5bbi U; ]j ]b].

#### CZÚWY cZ I b] j Yfg]hm 7caa i b]WUh]cbg

MUF\_KU\`Yf (200(). 5 ggcVJUHY J JWDfYgXYbhZcf I blj Yfglm7 ca a i b]WHcbg 6.5., GLa ZcfX/A.5., Bcfl\k YgHfb I blj Yfglm

T]a E`gk cfh (200() 8]fYMcf cZB Yk gUbXA YX]UFYUJcbg 6.5., I b]cb I b]j Yfglm

Mcff|gAVYfbUh.m(200() I b|j Yfg|mD\chc[fUd\Yf.

Ji Ub]HUCchbYf (1--2) 5 gggHbh8 ]fWhicf cZI b]j Yfglm7ca a i b]Whlcbg

TcXXMi ``]bg(2002) 5fh8]fWhcf. 6.: .5., < UfX]b[ I b]j Yfg]hm

M]WUY CUA XYb TFUNM(1--)) K YV 8 Yj Ycda Ybh5 [Ybh 6.G, I b]cb I b]j Yfg]hm/A .G, : `cf]XU CHLYI b]j Yfg]hm

BYJ YFmVcg(1--)) 8 JfYMcf cZI blj YfglmDfca chlcbU GfUM JYg 6.GC.@, I blcb I blj Yfglm

## CZÚWY cZ 9bfc a Ybh GYf j WYg

RJW Gf]a a (200() J JW DfYgJXYbhZcf 9bfc``a YbhGYfj JWg 6.5., DUa 6YUW 5hUbljW7c``Y[Y/A.8]j., Gci l\k YgMfb 6UdljghH\Yc`c[JW GYa]bUfm

RcVYfhGftj Yg(1-,-) 8 |fYMicf cZ9bfc ``a YbhGyfj |Wig 6.G UbXA.9X, I b]cb I b]j Yfglim

Jc\b W|bX\Ua (1---) 5 gg|g|Ubh8 |f Whicf cZ9bfc``a YbhCYfj |Wg 6.5., I b|cb I b|j Yfg|lm

Rcbb]YSa Jh. (1--,, 2000) GYb]cf 9bfc ``a Ybh7ci bgYcf. 6.G6.5., I b]cb I b]j Yfg]hm

N]\_\_] CUghYg(2001) 9bfc``a Ybh7ci bgYcf. 6.G6.5 ., I b]cb I b]j Yfglm

C\UXCcgg|Vcca (2003) 9bfc``a Ybh7ci bgY`cf. 6.5., I b]cb I b]j Yfg|lm

RcVYfhD]lcb (200() 9bfc ``a Ybh7ci bgYcf. 6.G6.5., I b]cb I b]j Yfglm

JcYGUfbYf (200() 9bfc``a Ybh7ci bgYcf. 6.5., I b]cb I b]j Yfg]hm

CfngHU S\_Yhcb (200() 9bfc``a Ybh7ci bgYcf. 6.G6.5., I b]cb I b]j Yfgllm

CfngHU TUnicf (200() 9bfc``a Ybh7ci bgYcf. 6.5., I b]cb I b]j Yfg|lm

LIgUW\ IZZb (200() 9bfc``a Ybh7ci bgYcf. 6.5., I blcb I blj Yfglm

**D]UbYLUa VYfh**(1--)) 5 dd`]Wd]cb 7`Yf\_/FYWdl]cb]gh

S\Yf] BUfXYb (1--+) 9bfc``a YbhGngfYa gDfc'YVkiA UbU Yf UbX8UU7ccfX]bUrcf.

CUfc` Cci flbYf (200() GYWMLfm

#### : ]bUbW]U``5]X

Je\b BfUbXh(200)) 8 |fYWhicf cZ: |bUbV|U 5 |X 6.G6.5., Hi a Ub GUHY I b|j Yfg|lm/A.6.5., K ]``]Ua K ccXgI b|j Yfg|lm

**BcW]YB]g\cd** (1--0): ]bUbVJU 5 ]XCZÚWf/@cUb 7ccfX]bUrcf.

Aa mM]``Yf (200() Gi XYbh9a d`cna Ybh7ccfX]bUcf. 6.G, I b]cb I b]j Yfg]lm

 $\mathbf{BYWmW} \mathbf{(1--0)} : \mathbf{bUbWU} 5 \mathbf{XCZ} \mathbf{(Wf/GWc)Ufg} \mathbf{d} 7 \mathbf{ccfX} \mathbf{bUcf}.$ 

BYHmPYbb]b[ lcb (2003) FYWdh]cb]gh

### I b]cb GhUh]cb

LUbUMUggYm(1--\*) 5 ggcVJUY. 6.G, 5 f\_UbgUgCHUYI b|j Yfglm Si mjYSa ]l\(\) (1-, -) 5 ggcVJUY.

**DYVV]YW\Y\hYm**(1--2) 5 ggcV|\th\.

# CZÚWY cz 6 i g]bYgg GYf j]WYg

### 5X a |b|ghfUh] j Y CZÚWY

GUfmL. CUfMf (1-1) Gyb]cf J]WDfYgJXYbhZcf 6i glbYggUbX: ]bUbVJU Gyfj ]Wg 6.G, I b]cb I b]j Yfg]m/7.D5., GUHYcZHMbbYggYY.

BY Yr mFigv Yr (1-, 3) 5 Xa |b|g|rUt|j Y 5 gg|g|tUbhlrc hv Y Gyb|cf J |W Dryg|X YbhZcf 6i g|b Ygg UbX : |bUbV|U Gyf | Wyg

BY YFmAVg\YF (200() 8] fYWicf cZ< i a Ub FYgci fWg 6.G UbXA.6.5., I b]j Yfg|lmcZBcfh\ 5`UVLa U

6 i qlbYqq CZÚWY

RcVYfhLci [gS]a dgcb (1-, 3) 5 ggcWUYJ [WDfYg]XYbhZcf 6i glbYggCYfj [Wg 6.G, I b]cb I b]i Yfgllm/A.6.5.. I bli YfgllmcZA Ya d\lg/7.D5.. GLLYcZHMbbYggYY.

SUBXFUA``Yb (1--+) 8 | FYMcf cZDUnfc`` GYfj | WgUbXDf| j UMnCZÚWf. 6.G, UbXA .5.9X, I b | cb I bli Yfglm

RUA cbUBY` (1--, ) 5 Webi blg DUMWY.

S\\( \mathbf{H} \) \( \mathbf{Dci} \) \( \mathbf{L} \) \( \mathbf{H} \) \( \mathbf{L} \) \( GHY7ca a i b]hm7c"Y] Y.

T]bUG]XXYbg(1-,)) Chi XYbh5 Wvi blg6cc\_\_YYdYf.6.G, I b]cb I b]j Yfg]lm

JMbb ZMF Hck Y` (2003): 57HG UbX 5 Xi h5 Wki blg 6cc YYdYf.

### 7c``Y[Y'GYf j]WYg'UbX'AU]`'GYf j]WYg

Pc``mSdYbVMf (1-, 2) 8 | fYMicf. WUbXUCUj Yfh(1--2) HYWb]VJUb. MUG'cf]YR]WUX(1-, () HWWb]VJUb. 6.G, I b]j Yfg|lmcZA Ya d\]g L]bXUTUricf (1--() A U]`GYfj ]Wg7`Yf\_. VUbYggUJUWgcb (1---) A U GYfj Wg7 Yf\_.

### : UW]`]h]Yq'AUbU[YaYbh

**DU JXMVBf]XY**(1--)) 8 ] **fYWi**cf cZ: UW ] h Y g MUmBfck b (200() GWMLfm

#### DUfh!h] a Y': UWi`hm

6fYbXU5 `Yl UbXYf (1--3) < ]g/ncfm >i `]U5 i gh]b (1--, ) GcV)U K cf\_ 7\Uf`Yg6U\_Yf (2003) A i g|W Fcb 6Uffm(1-, 1-, , /1--, ) D\ng|W 9Xi Whcb, KY`bYggUbXGdcfh @]gU6YbbYlh(1---) 9b[`]g\ 6fUbXcb 6cmiUb (2002) D\ng WV 9Xi WHcb, KY`bYggUbXGdcfh Ha ch\m8. 6f]lh(1--+) A Uh Ya UhW 9``Yb 6fci ggLfX (200) ) 9b[ `]g\ 7mbh ]U7Uffi h (1---) 6]c`c[ m

7\UfYg7`Uf\_ (200() 9Xi Which  $\times$  \b 7c \Y(200() 9b[ lbYYf]b[ 5bXm7ca Vg(200() 6]c`c[ m ? la VYf`m7clhYf (2003) GcVIc`c[ m FcVYfh8ibWb(200()D\ngVy ? |a VYf`| 9UgYm(2002) 7ca a i b|WAcb 5flg ? YbXU`9Ug`Ym(2003) 7\f]gh]Ub Ghi X[Yg A Uf]`mb 9V`Yb (1---) 5fh ? Um `]ddc (1--, ) 9b[ `]g\ 6UfVUfU: ck 'Yf (2001); Yfa Ub QLbXfU< Uh, Wol (1-, \*-, , /1--() 9Xi Which Y---

&'+

```
9 a Yflhig DfcZYggcfg
```

Jua YgA`YI BU | Yth(1-++) 8 Yub 9a Yf]lii g 7c``Y| YcZ5 flgUbXGWYbWgUbXDfcZYggcf 9a Yf]lii g cZ< lghcfm

L]bXUFYYYmBUFVYf (1-+)) 5 gg]gHbhDfcZ/ggcf 9a Yf]hi gcZB i fg]b[.

Hinfub E. Bufyzcch(1-)+) 7\u00dbW`cf 9a Yf]hi gubXDfczyggcf 9a Yf]hi gcZ7\f]ghlub Gh X[yg

Lci |gYBYbhYm(1-, 1) DfcZ/ggcf 9a Yf]hi gcZ9b[`]g\.

JcgYd\ B`Ugg(1-)-) DfcZYggcf 9a Yf]li gcZA i g\W

B]``G. Bci W]``cb (1-\*-) DfcZ/ggcf 9a Yf]li gcZDgnWc`c[ m

MUVYPU `]bYBf]X[Yf(1-\*)) DfcZYggcf 9a Yf]li gcZB i fg]b[.

**GYcf[YE.C'Uf\_** (1-\*2) DfcZ/ggcf 9a Yf]hi gcZ9b[']g\.

LnhiYG]i Ybg(1-+,) DfcZYggcf 9a Yf]hi gcZCcVlc`c[m

W]``]Ua HYXgdYh (1-, 2-2003) DfcZ/ggcf 9a Yf]li gcZ9Xi Wh]cb.

DU JLX IfVm(1-\*)) DfcZ/ggcf 9a Yfli gcZ7\flgt]Lb Gi X[Yg

EfbYghR. P]bgcb (1-\*-) I bij Yfg|mDfcZ/ggcf 9a Yfli gcZ9b[

MU W. Pi [\ (1-+1) DfcZ/ggcf 9a Yfli gcZA i g]W

Ci fl]ggE. SWrh(1-\*) DfcZ/ggcf 9a Yfli gcZA i g]W

Ci fl]ggE. SWrh(1-\*) DfcZ/ggcf 9a Yfli gcZB i g]bYgg5 Xa ]b

RY ]bUSUZY (1-++) 5 ggc/VLHYDfcZ/ggcf 9a Yfli gcZB i fg]b[

MI fl] yb Sa ch Yfg(1-\*-) 5 ggc/VLHYDfcZ/ggcf 9a Yfli gcZB i fg]b[

EfbYghR. Plbgcb (1-\*-) I b]j YfglmDfcZ/ggcf 9a Yf]li gcZ9b[`]g\.

Ci flyge E. SWM (1-\*)) DfcZygef 9a Yf]li gcZ6i gbYgg5 Xa ]b]gffUlcb.

RY[]bUSUZY (1-++) 5 ggcVJUYDfcZ/ggcf 9a Yf]li gcZBi fg]b[.

MUT into Sa ch. Yfg(1-\*-) 5 gglgtLbhDfcZ/ggcf 9a Yf]hi gcZ9b[ ig\.

BYbbmTi WYf (1-, -) DfcZ/ggcf 9a Yf]hi gcZ9Xi WHcb.

JcgYd\ Ti WYf (1-\*-) DfcZYggcf 9a Yf]hi gcZA Uh Ya Uh]Wg

SUbXfUW]``]Uag(1-,3)5ggcVjUYDfcZ/ggcfcZD\ng]W/9XiWh]cb.