

866=







» 0 W 6 4 5 V 0 3 f “ L - 0 2 8 3 0 3 0 2 1 8 0 0 V

V 0 0 0 0 1

866;

S ó ngkr&l urj kt

Ngty3Nkt xaq&Nurs

866;

Yz{ gxz&Gj gs

S grj g&Gh{ 3Lgj σ

866=

V 0 0 0 0 2

9

3

9

9

3

3

XM™

300 0 ¥v 0* @ ~ ~ ~ ~ ~ ~

»Ÿ#»µ|z;E@

3Ÿ° |U

3

3

wŸjw'U
±Ÿ° |U

3

3

3

3Ÿ° " |U

3

3

3

wŸjw'U
±Ÿ° |U

3

3

3

7

7

8

8

3

3

3

wö<lyvqum|q&w
wzN4tB#u|E%#|1/2

:

wö<lyvqum|q&w
±zN4tB#u|E%#|1/2

9

3

9

9

3

3

9

3

3%wq°q|u

9

3

3

3

3

3

3

.ışAãV

< 1/2 @ S U G H

v7Q5v0Y1QWJQ: @QJEQW/H
"vRf•C3R=t|UYWR YU- x²[E]QU7

. j´»QÜ# »QU! vRQ“Uk: F»Q

+ 86 + &6&
+ 86 + &6

1/QZ; vQU
±YZ° QQQ

vQ&UvQ UY/QZ; vQ U|Q
vQ&V# Q#uQ%#|1/2>

vQ&UvQ U
±Y° QQ

3

3

3

3

3 Q&U° Q|U

3

3

3

3

=EQQ/QM/QI sfUvQ UQ@vEQWf
=Q°Q%Qk QG-Is QxBQR±S@QYRf• U³Q
vQf• U±sQV³Rz;»QG- QB|QIQE

.j'»Q# »uU! vQ° Uk E»Q

+ &6

+ 86

+ &6

+ &6

1/2Z; w' U
±Z; ° " | U

3

3

3/4U ° " | U

3

3

w' U; w' U; Y 1/2Z; w' U; | 1/2
w' U; tB#u | E%# | 1/2

w' U; w' U
±Z; ° " | U

3

a

c

3

3

3/4U ° " | U

3

3

3

z;E QUS QY

ã: »
.z. AãV

7

7

8

EXERCISES

—

—G|E|S|U|H|E|Q|Y|V

<1/2@S|U|Y|V

f|Q|@S|U|;7|Q|Q|Y°|Q|f|U

∞ ∞
∞ ∞

9

80

7

3 3 3 3

3

3

3

3

W A C Y 1 4 Z ; w r U J 1 2
v Q 2 N 4 t B # u Q 2 6 # J Q 2

8

W A C Y w r U J
± Y Z ° Q Q J

3

3

3

3

8

3 3 3 3

3

3

3

3

3

fm₃VS • μT=ΔiYmGivsf • U³R »-C

8

±Y^z ° QQJ

3

3

3

9

3

9

3XU^o • |U

3

3

3

9

3

2 a 0 2 U

v 0 s f " U z ; 5 Q U

3

3

3

3

8 ± S 2

3

3

3

www.eww

] d j u) y

S g i d z u y n

"³šć 3 4 y u s t p % 3 2 2 1 p " R [M [0 6 1 w [0 5 1 7 - G p x Ê;

"³/₄f " Ū z s t @ Y « » Q - U B S < z w f " Ū z s t a B 7 , R

WOLFF,

3

3

3

3

z;5-Ū ;%7

3/4f d v» «GW» ŸUu7k>3R-5-U.6

±SR 3/4f d ° → <YwGVw<zS> ŸU³[0]3R-5-U.7

Yulz) gxk

3/4f • U° 2ŸU¹1/2| >Y³¹3R-5-U.8

<[<f> v p 2 7 2 M [<R [2 • J [V . Y Ÿ U 3 R - 5 - U . 9

°@Vf"TYWVWQW"SR°YUR-U.10

-
-
-
-
-

3 a 2 U
 syllabuses Lz; E U w b | 2 U z s — 7 2 U

7;

| Q U Z S Q Y a Q 2 U . v R f . U ' C 7

. E Q U Z » Q V

. E Q U S Q Y

. v » E

. w @ N % k j v s Q U

. G t E ; 3 R z s U C M

. s < 1 Q » 2 U M Q - 2 U H » Q U M Q S
 . R Q 2 U

.z\$ŒY^a—ŒU±»A

T k} y&tj & {s hkxy	76 ? =	7
Znk&u} kx&l & x& gr&nd qd m	76 ?	8
G& gznks gzd &t &kgj y&nk& k} yvgvkx	:	9





3 &Hgx2F ó nury2Ki ut us ó y&il&nk& krlgk&zgk2&zn4Kj aout 2W-luxj &
[t d kxya&Vxkyy2866=4& &

3 &Hrg(m2S gxq2Ki ut us ó &nkux&&t &kzuyvki z2
Xó ngxj &H4& d 27?<8& &

3 &Hu&E2Muj l xk&2k} 4&ktk} ghrk&ktkxm&2W-luxj & t d kxya&E
Vxkyy28tj &j aout 2866= 4& &

3 &l gnr2&uhkxz&64& ks ui xgi >j &zy&xaz&y2&grk& t d kxya&Vxkyy2
7?>?2&xdt&Rutms gt 27??7& &

3 &l { t t 2Punt 2k} 4& ks ui xgi &B znk&t l d gmkj &u{ xt k&26>&H4 4&u&4 4&??9&
U-luxj & t d kxya&Vxkyy27??8& — &

3 &rykx2&Put &tj &rgmyzj 2&{ tk2k} y4& ut yza{ zaut groy& &tj & ks ui xgi &2
l gs hx& nk& t d kxya&Vxkyy&tj & t d kxyakzyluxrgnkz27?>>A&
vgvkxhgi q&j aout 27??9& &

3 &lxks gt 2Ygs { kr2&ux&t& gr& kgt d m2& ks ui xgz& &t zkxv&kzgzaut &tj &nk
l ut yza{ zaut 2&v&uuyv& &tj &{ hr& &ll&goy2& d zkx27??8&
&

3 &v&rk yv&2&tj xk} 2&u{ t j gzaity&il&ki ut us ó y2W-luxj & t d kxya&E
Vxkyy2866=4& &

3 &Wors gt 2S g&E&2&g} i kzz2&d g2&g&t 2Y{ j no& nkr&g2&nk&{ ó ó gr&vrgt kz&
nu} &u&xk|kt&muhr&ros gzk&gzgzyxv&nk 2&nus gy&{ t t k&lluqy2866=4&
&

3 &Woyz2&g{ r>j &Q&at gt 2&V{ t o2&} y4&k&d |kt zd m& ks ui xgi &2
Hrgi q} kr27??<4& &

3 &W{ t z2&grt 2&-vruxgzaut y&t &g} &tj & yui d z&P&u} gxj y&g& ut yza{ z&j k&nkux&il& &g} 2&
Xu{ z&kj nk27??9& — &

3 &R&vy&E&ó ngxj &tj & nx&Ezgr2&rki 2&ki ut us ó y277zn4Kj aout 2&
U-luxj & t d kxya&Vxkyy2866=4& &

3 &S i Mg} 3&Nor&g{ znuxy2&mkum&gvn&@&nk& uxj &tj &zy&k&v&vrk2&Mkt i uk5
S i Mg} 3&Nor27??>2&tj &j aout 4& &

3 &S or2&Punt &z{ gxz2& z&rag>gys 2
nzzv&B } } 4 z&rag>gys 4 us 5&ys or4&zs r

3 &X&ok&E&Put g&ngt 2&k&k&p&unt 2&P& &tj &g&qu|g2&P& ut yza{ zaut gr&{ rz{ xk&tj & ks ui xgz& &{ rk2
l gs hx& nk& t d kxya&Vxkyy28667& &

3 &kt 2Gs gxzEg2tj & orags y2Hkxtgxj 2kj y4z zozgxagt oys &tj ðakEútj 2&
l gs hxj nk& t qkxyaz&vxyy27?>8&

3 &kt 2Gs gxzEg20 kwf graE&k3k -gs d kj 2
l rgxktj ut &vxyy27??84

3 &ui wf k|ork 2Grk -y& k 2l ks ui xgi E&t 2Gs kxó g&uxomá gra&xkti n&kj áaut &
d &7>9, /2& uxj ys am&kj áaut y27??>4&

vQ-U

; 6>

“ “

-GEQ; Q>>
.±Y; Q; Q;

7
8

2 Q Q;

7

S gxzd &{ znkx&dt m

8

3 Q Q;

7

8

Xuj xanf k, 3/uyk

4 Q Q;

7

8

5 Q Q;

7

766 ; 6 76

86 76

6 

7

8

7 

7

8

8 

7

8

EQUSQY

.v»E

.w@N%&v@-UyWESUJ

7: 7

GY' v6

GY' v6; ' 1/2 txB

J grzy

J { xhgt

7

8

78

8667

xkvuzkxy

ç Ó Z pÿ a iïð•: Îpð PÂ @' " 1

3 &rynzdg 2Pkg t&hknqk 2V{ hro & gt 2Vxdgzk& us gt β } us kt &t &yui &rgtj &urazó gr&nu{ mhz2
Vxd i kzut & t d kxya&V xkyy 27??>74

3 Ovtj n&ggs ungt 2t tj kxyzgtj d m&nk& { yrs & dj 2Vktmf d &
Huuqy 27??=>4&

3 Omuvr 2Vgx|kvgrm&kj 4&Gtgzus &ul&g& ut l xut zgzut &&nk&Hghx&S gypp
Xgs &ts ghn{s &yy{ k 2Vktmf d &Huuqy 27??>74&

3 &[ng 2Vgs gi ngjt xg>j &Vgx&2Put gzngt & 4&kj y 4& yza{ zaity&
gtj &t kv& gra&kyβ &yyg& &t &aut u{ x&ul&Gtj xk&h&kz&ork2
U-luxj & t d kxya&V xkyy 27??>4&

3 &[vzg 2V > qgx 2&kj 4&Vui &rg& zgz&ó g&aut 2U-luxj &t &ij &g&k&gj d my&
d &ui &urum&Gtj &ui &rg& znxuvurum&2U-luxj & t d kxya&V xkyy 27??>8&
yki utj >j &t rgxnkj &j &aut 4&

3 ONgygt 2& u&G 2&kj 4&Vurazó y>j &nk &yz&k&t &ij &g2
Xk&gj d my&t &ij > &nu|kxt s kt z>j &urazó y 2Vgnk&V{ hro g&aut y 2&666&
&

3 &[g] rk&2Punt & z&gzut 2&kj 4&{ tj gs kt z&grys >j &ntkj kx 2U-luxj &
[t d kxya&V xkyy 27??> 4&

N{ z i nd yut 2Punt 2& uj kxt & g&aut grys 2& ut z> g&V xkyy 27??> 4& &
OPgl|xkruz 2& nx&gzv&nk 2&nk&ldj { & g&aut grys& u|ks kt z>j &ij > &urazó y 27?&8; &
zu&nk&??>6y 2Vktmf d 27??>4&

OOg| &g&P{ j &vz 2&kj 4&Vurazó y&t &ij &g 2&k&gj d my&t &ui &urum&Gtj &
Yui &rg& znxuvurum&2U-luxj & t d kxya&V xkyy 27??=>4&
&

3 &[k&u&x 2& & & 4&Vnk&V} kt z&kzn& kt z{ x&G& uxj >j &h&k&utj β Gt &t z&kt g&aut gr&
ng&uz&G&yd i k&?&66& z&n&4&kj &aut 2U-luxj & t d kxya&V xkyy 2&66; 4
7?66 &

3 &[Es ró q&g 2& & r&2&h&kx&grys 2&us s { t&a&Gtj &{ rz{ xk 2& rg&x&kt ut &
Vxkyy 27??>?>4& &

3 &[Es ró q&g 2& & r&2&kj 4&Vnk& &omzy&ul& d ux&a& { rz{ xky 2U-luxj &
[t d kxya&V xkyy 27??> 4&

3 ORgt t u&E&ó ngxj 2&Vnk &Vvkg&gd m&x&k&kβ g&yz{ j &ul& &ij > &{ rz{ xk&Gtj &yui &kz&E2
U-luxj & t d kxya&V xkyy 27??=>74& &
3 OS gj gt 2&4 4&S uj kxt & &ny 2&ui q&kj & dj yβ yki { rg&xy&s >j &{ tj gs kt z&grys &t &ij &g 2&
U-luxj & t d kxya&V xkyy 27??=>4&

- 3 OS gnggt 2M vxvkkz2Q ktzaky&tj &omzyß gyvki zy&l&dhkxgr& ks ui xgi €&t 0j 0j2
U-luxj & t d kxya€v xkyy286674
- 3 S gnggt 2M vxvkkz2N nkS { r0 { rz| xgr&vgn&8oy{ ky&l& d kxya€&tj & oyi xos d gzaıt &t & ks ui xgi €2
Ygnk&v { hr0 gzaıt y28668&
- 3 S u{ llk2 ngt zgr2kj 4B os kt yaıt y&l&gj 0 gr& ks ui xgi €ß vr{ xgroys 2k 0o kt yna 2k us s { t a€2
\kxyu27??84&
- 3 OT gtj €2Gnoy2Gz&nk&j nk&l&vy€ nurun€ß kyyg€y&t & ura0 y&tj & { rz| xk2
U-luxj & t d kxya€v xkyy27??64&
- 3 &S |kj z2Mg02l gray&tj &nk& ks ui xg0 &k|ur{ zaıt &
J x4Gs hjk qgx&tj &nk&l graß u|ks kt z&t & urut 0r0j 0j2 Ygnk&v { hr0 gzaıt y27??: 4
- 3 &v gxoyn 2v zk|kt S 4B nk xxi n€&tj &zy& oyi ut zkt zyß i { rz| xk&tj
znk& ura0 y&l& ut yi aı{ yt kyy&t & gyzk&yui 0z€2U-luxj & t d kxya€v xkyy27??=4
- 3 &X ggt 2F grd 0&l ks ui xgi €&tj &nk &os ay&l & d ux a€&omzy2
Ygnk&v { hr0 gzaıt y28668&
- 3 &Y g0 2k } gxi & 4B kvxkykt zgaıt y&l &nk &t zkrki z{ gr2
Znk&7??9& kan&ki z{ xky2& d zgnk27??: 4
- 3 OY d ng2S xd grd 0&l urut 0r& gyi { rd a€ß znk&ß gt r€&t mroyn gt á&tj &nk &llks d gzk &kt ngraı
d &nk &gzk & d kzkkt zn&kt z{ x€2S gt i nkyzk& t d kxya€v xkyy27??: 4
- 3 &Y dgt 2ks s gt { kr2Xgj 0 gr&9rgs B s kj d|gr&nkurum€&tj & uj kxt & ura0 y2
_grk& t d kxya€v xkyy27?>: 4&
- 3 OY { tj kx& ggt 2X gky} gx0&kgr&tj &ß gmd kj & us kt &&
nktj kx2& { rz| xk&tj & uyzı urut 0roys 2Xu{ zrkj nk27??94
- 3 OY gt g02Gı nd 2k us s { t groys & ut zkyzkj ß xkr0ut 2
s uj kxt a€&tj &ki { rgxo gzaıt 2k yzgx&v { hr0 gzaıt y27??=4

- 3 &Hxu} t 2P{ j anS 4S uj kxt 0j 0@Znk&uxomd y&il &ygat & ks ui xgi E2
U-luxj & t d kxya&v xkyy 27??: 4 &
- 3 & ut m0Z{ rau&lnrvkxd 2Znk& ut zks vuxgx&hoyzux&il &Rgzd &S kx0 g2
J { qk& t d kxya&v xkyy 27??9& &
- 3 & { t qkxr&2Pgs ky 2Xkhkmaut &t &nk& k& yB vur00 gr&yz{ mmk&t &Hur d 07?: 837?>82
\kxyu 27?>: 4& 7?>8 7?: 8 — &
- 3 &vjrkg t u 2Kj { gxi u 2Uvkt &k d y&il &Rgzd &S kx0 g@
L d k& k t z{ x d y&il &nk& v orgnk&il &g& ut z d k t z& ut znr&E k | d k } &v xkyy 28: zn 4k j aut 27??=4
- 3 &kr} d 2Pgs ky R 4Znk&S uj kxt & 0 j rk&g yz&P&G&Noyzux&E2
U-luxj & t d kxya&v xkyy 2866: 4&
- 3 &vj kg 2Xuhkxz 2Hgx0 gj ky> j &Huxj kxy&K{ xuvk&7>6637?7: 2
U-luxj & t d kxya&v xkyy 28669& 7?7: 7>66
- 3 &kg&2Pgi q 2Xkhkmaut y> j &K|ur{ zaut y&il nd g&xus &nk&7>66y&u&86662
U-luxj & t d kxya&v xkyy 28669& 8666 7>66 &
- 3 &M orks uvxkz 2Grs g 2Znk&lkxz&ngz&Hrkj y&Rgzd &S kx0 g& u} 2
\d zgnk&kvxd z&kj aut 27??: 4 &
- 3 &Ngygt 2S { yna{ r 2Znk&S { yna{ r&Ngygt &ls t d{ y&il
I us vxoyd m& g zaut groy& > j & us s { t gr&vur00 y&il & 0j & 27>>: 37?96&G& g zaut groy&
I ut y i d t i k&S 4&G t ygx&2nk& ut mxkyy> j &nk&g p&0rgs &t &nk&{ hi ut z d k t z@
S { yras y&il &g&r{ xgr&ui d z&E 2S gt ungx&v{ hr0 g zaut y 2866<4
7?96 7>>:
- 3 &Put ky 2S grj } E t &G 4Znk&R& ay&il &Rd h k z&E&S kx0 gt &Noyzux&E 7<6=37??82
U-luxj & t d kxya&v xkyy 27??: 4 7??8 7<6= &
- 3 &0& kxhu 2Puykvn 2Noyzok& k&E G l xov{ k&E uok 2
R d h x g o k &G 4N g z k x 2V g x y 27?=>4& /&
- 3 &Rnu& 2X 4U&K&S vok 2Y krlgx&v zgz&K{ xuvk@
Noyzux&il &nk& t akj 0 d m j us &7?6<386672& d zn&Kj aut 2U-luxj & t d kxya&v xkyy 286684
8667 7?6< &
- 3 &gi qktngs 2Znus gy 2Znk&i xgs hrk&ux&G l x0 g2
Xkvxd z&kj aut 2N g v k x&v k x t t o r 27??84& &
- 3 &vkgx 2V kxi d gr 2G&Noyzux&il 0j & 2U ur{ s k&E 2V k t m f d 27??6&kvxd z& &

3 & ngv gx 2 Kus 0g 26 &

5 6 7

7

8

8667 J { xhgt

Rgttu€ 7?=7 993< 8 &8& J {s utz&7?=6 <

& gyzk 8>39: & S 4T 4Vxd dgy & \gxtg>j & gyzk M[vzg&7??8 79, 387: & &9&
&nkxgxi n€ 2ygz(y>j & u) kx&nk& gyzk 7: <37<8& Gtj xk&Hkzk&rk& &ad &g&u{ zn&dj > &orgnk
4: =73 ?7& Ru{ gy& {s utz & y€yzks > & ay& v rō gza ut y

6 6 7

7

8

i gyzk

8 ? & : Hg€€ 7???

&nk&8wT vB • ° - i %

	8	Krrauzz 8669	7	79
	9	: 93<8	I ngxrky Zgŕux	S uj ky ul i đø yui đkz€
Xkznd qđ mznk v{ hrđ	:	<93>8	S đ ngkr] gr, kx	Znk đ kg ul i đø yui đkz€
<93>;	I ut zk-z&y	gr	9	

Skr|đ Skti nkx

Sktinkx 8 7 8

20t 17



8'öt 

?

Sktinkx 7; 78 ?

9'öt 



12. Öt.

Lxkkj us &lu{yk

79

Skti nkx 8<

79

13. Öt.

—

yzkxkuz&rd m

s &ns gqdt m

0,07, 0,09, 0,12, 0,15, 0,20, 0,25, 0,30, 0,35, 0,40, 0,45, 0,50, 0,55, 0,60, 0,65, 0,70, 0,75, 0,80, 0,85, 0,90, 0,95, 1,00

+ 96
+ 86
& 86
+ 96

<

zšAãV

Gpu{ xt groys & zerkhuuq

914yW7S»W4BUC»V

³ Gj gs 2M/z{ gxzgtj & uE/kzkx& rgxq4866</4Pu{ xt groys @Znk& ks ui xgzó & xglz&
Tk) &uxq@-luxj & tqkxy&Vxkyy& &

³ &HuEt zut 2Xuhkxz&866; /4Znk& k) 2F k) &Pu{ xt groys @
I ut |kxygzait y& an&Gs kxó gáy&Hkyz& ut 3ó zait & xzkxy& k) &uxq&d zgnk&

2 0 7

Qu|gi n>j &Xuyktyzkr&8667/OPu{ xt groys &l&kxdó gzaút Ö :
S ut aux&V/u) kx>j &lló k&uó k&u&nk&uó krkyy <

8

@zxuj { i zaút @/gvkx&Zxgoy>j &/kuvrk&Zxgoy@Gt 8668 Nu{ yzut
U|kx|k}

] uu| } gxj 7?=: Grr znk Vxkyó kt z&y S kt Hkxtyzkd 9

3 0 7

7: S kti nkx&866</OH{ o| d m>j & yd m&gi qmu{ tj 79
Ld j d m& { rzq gzd m>j & yd m&u{ xi ky

8

4 0 7

Grr&nk&Vxkyó kt z&y&S kt

7

Hxgj € 866: Znk&l gxk>j &Ngtj rd m ul Yu{ xi ky :
R{ ki nzk|krj 866: Ld j d m>j & { rzq gzd mYu{ xi ky

5017

8 66 8666 7;

S kt i nkx 866< Xkgj &S gznks gzo y lux&znk Xkvuxzcx :

& kgty2 Hgyo & gri { rgzaut y

Gt gr€ d m&G| kxgnky S uj ky>j & kj ogt &

S uxk&ut &S gzn Vkyut gro d m&T { s hkxy

S k&ex 8668 Yus k&rks kt zy&il & gzg&Gt gr€gy 9

8

Nu{ yzut 866: 2J ud m&nk& us v{ zcx Gygyzky &kvuxzd m& zux€ 76

10 0t 07

zktj &yzuxky

78

8 7 Nu{ yzut 866: : 9 77

Yvxbgj ynkky

8

11 0t 07

8 7

J gzhgyk & gt gnky 8 7 Nu{ yzut 866: < ;

Nu{ yzut 866: 2kzdmj gzy Tuz&ut&nk&@zkxtkz =

Nu{yzut Qzuj {izait @vgvkvx&Zxgoy&tj &/kuvrk&Zxgoy@Gt &|kx|dk}

8668

Nu{yzut 89

Znk&zn0 y>j &Gi i { xgi €&l Q |kyzongzq k&Pu{ xt grayS

] gzkxmgzk 8669

y{x|k&yuz€

8

Nu{yzut &866: / Vxulkyyaut grāy&vvtj o-ky

G&nuxz&0 zuxj { i zaut &u&S gvvd m& gzg G&nuxz&0 zuxj { i zaut &u&vzgyzo gr&ulz} gxk

s gvvd m&ulz} gxk

YVYY

8 Öt • E

7

YVYY

Qxw 866: W{ gragzqk& gyk Yz{j €S knuj y d T k) yxuus &kykgxi n&tj &kvuzd m

Uxgr&tj &dk &lyzuxky Mj d m\ uó k&u znk \ uó krkyy < Lui { y&Mu{ vy& k) yxuus &zék

8

” Qxw 866: 2Kznt umxgvnó &Pu{ xt grys >
Q | ktzqk& qó &S gvvd m ? “

9 Öt • E

1

8668

Nu{yzut “ ” 76

Q | kyzoqzd m&nk&Mu|kxts ktz&Znk&P{j ó gr&Eyzs

8

8668

Nu{yzut

Q | kyzoqzd m&nk&Mu|kxts ktz&@Rg) &Ktluxi ks ktz

:
;
<
=
>
?

%ŸzRf“U³•Sž/da V=9x7z Vonne T. Chua ;»•Hz : »||9E@U;ŠyA x9
Diliman • S 1/4K|| 42/24;W6@ < 1/8~U=“ Ê

ws<LY< @EQLVOT#QÖH ²UuQ x3 Z»Q²Uz;EQ/ :»QM
fEsV(Cx)SLWQ b|XVWQf i 3 Z»V#Qf•U

.E@Uz»V

.E@UŠIY





9. Öt.

766

;

10. Öt.

Xu{ yn

26 Öt

Yzma, 866< \gazd mgs 8667 7= 8=

27 Öt

Ykt 7?>= 8? 8>

28 Öt

29 Öt

7666

30 Öt

C:Ö, GÖ, LÖ, SÖ

8666

- + 86
- + 96
- + 86
- + 96

fmsOY. »RLw“ “ †xvvsf I "3 Z»»V#w/f“ UjvsUY [E@UjvsT
 .E@UjZ»»V
 E@UjS IY

3 <gt 20kttkzn&7?<: /<gt &ut &znkgzk2Nlgs ut j y) uxzn&vktmf d 4.7??6/&vul&ky2Rutj ut & T ó q&Nkxt &Huuqy& 7??6 7?<: &

3 & vj &vk2Punt &7??7/&Wjj &Puhy4&yygy>j & x&ó gys 2Rutj ut &vktmf d &Grgt z&ó ut znr&A Rakxg&E&k|&k} A&Rutj ut &k|&k} &ul&Huuqy&T k} &uxq&k|&k} &ul&Huuqy&Az os ky&Rakxg&E& Y{vvrks ktz&4 khy&ky&krk|gtz&gz&ut gr& khy&ky&4& &gyk&ul & Q& } } 4jxyi u{ ti &u&xm&G&zy& l u{ ti &v>j & } } 4 { rz{ xk 4nu| 4 q&J kv&g&x&s ktz&ul & { rz{ xk 2&S kj &v>j &v&vuz/4

flu@YZ>²U=5 SZ>•J»VL -GEWj [F>
1 Öt•E

2 Öt•E

3 Öt•E

xk|&k} d m

huuq&k|&k}

; 66

Qk&hrk 866<

79

4 Öt•E

Xuj &Grkt

5 Öt•E

ÖHktkj ó zGtj kxyut

8

6 Öt • E

11 0t

8

[vj 0k

12 0t

13 0t

14 0t

I rj k&Pgs ky>j & { xxkt z&Pu{ xt grays &ut &Z\&gnky

15 0t

—

Xuhkxz&N{mkky

; 66

16 0t

17 0t

Qkttkzn&Z>

Jg|q &Xks tóq
R&t &lgxhkx

Jg|q &nus yut

18 Öt 

dzx|&) kk


R&t &lgxhkx

19 Öt 

8

20 Öt 

hx&ld m

28- 21 Öt 

.-E₀ -H

3 & kt z k x & u x & l m o z g r & k s u i x g i e p & z v & } } 4 k s u i x g z o s k j u 4 u x n 5 &

3 & n g z n g s & l u { y k & z v & } } 4 n g z n g s n u { y k 4 u x n 4 q & &

3 & e h k x p u { x t g r o y s 4 k z & z v & } } 4 e h k x p u { x t g r o y z 4 k z 5 & &

3 & l g x z & k t z k x & u x & p u { x t g r o y s & t j & x g { s g & z v & } } 4 g x z k t z k x 4 u x n &
&

3 & l u { m s i m o r & 8 6 6 ; / 4 m u h g r & g x x g z d k y & u x & r u i g r & { j d k t i k y 4 z n k & d k s g t
l u t l k x k t i k & u t & g x x g z d k & p u { x t g r o y s 4 g | g o g h r k & z & z v & } } 4 i m o r k v u x z 4 u x n 5
t d k s g t y v k k i n 4 j l & &

3 & k , k q d k r & g q { t o k & 7 ? ? 9 / 4 u { z & l & i x o g & k y z k x t & k j u & z k x k u z e v k y & n g v k & g n k y 4
&

3 & k j u & & g r { k y & u 4 & 7 & g | g o g h r k & z & z v & } } 4 k j u g r z 4 u x n 5 k g j d m e x u u s 5
g x z o r k 7 6 > 4 n z r & &

3 & m u h g r & p u { x t g r o y z & z v & } } 4 m u h g r u { x t g r o y z 4 u x n 5 k h 3 u t z k t z 5 i j k - 4 n z

3 & j k v k t j k t z & k j u & k t z k x & z v & } } 4 i j e s k j u 4 u x n 5 z 5 i j k - 4 n z s r & &

3 & y z a { z k & u x & g x & t j & k g i k & k v u x z d m & z v & } } 4 v x 4 k z

3 & z k x t g z a i t g r & p u { x t g r o y z & k z u x q & & - • g

3 & kvuxzkxy>y&xt z&xky' } } 4yl 4uxn& &

3 & nk&{ yz&g&t &hxugj i gyz&t n& uxvuxgz&ut &y&nk& &kj &g&kvuxz'5; 5&66=&j &ut &g|g&ghrk&g& & nzz& } } 4jhi 4kz&4{ 5&t 5& kj &g&xkvuxz&5&uz&xky&5&66=5&7&6?7&?4&z

3 & nk& &zk&xt gz&ut gr& kt z&x&dux&Pu{ xt groyz' } } 4t kz&4uxn&l oki zux&4 gyv-&EV&CK&zn&0 y& &

3 & nk& &zk&xt gz&ut gr& k} y&g&lkz&6& yza{ z& ' } } 4k} yyg&lkz&€4 us 5& &

3 & nk& &us k& uty&kt y{ y& us s { t&0 gz&ut &dux&l k|kruvs ktz' } } 4k|i us s i utmkyy&4uxn&5 } uxj hgt q&5{ hr&0 4gyv&E& s gi xu&C&9, & s &0 xu&C: 9& &

3 & nk& & uxj &hgt q&v&xupki zy& &lvkxgz&ut y' } } 4 uxj hgt q&4uxn'HL=[7>=PS 6& &

3 & xgt yv&g&kti &6& &zk&xt gz&ut gr' } } 4xgt yv&g&kti &€4uxn' &

3 & r& &ngt t&kx, &866: /4& uxk&ort & k} y& &-vrux&t m&nk& uxj &l& uxk&ort & ux&xkyvutj ktzy&4& n&0 gmu& & Zn&k& t&q&kxy&€&l& n&0 gmu&v&xky&4&

3 & t kyi u&0 yza{ z& &ux&y&gz&yz&0 y&5&R&ak&xgi &€&gz&yz&0 y' |g&g&ghrk&g&z& nzz& } } 4 q&4 tkyi u&4uxn' | 4/nvE[XRe&C: 86. , [XReJ UCJ UeZUV&0 , [XRe YKI Z&UT C&867& - &

3 & t&akj & gz&ut y&l k|kruvs ktz&v&xum&xg& ' } } 4 tj v&4uxn' &

3 & 4&gs ky&v&uzz&kx&866: /4& kj &g&R&ak&xgi &€&9&j &j& 4&nu{ ygtj &lgay&2& G&v&gnk V{ hr&0 gz&ut y&4& &

3 & uxj &Gyyui &gz&ut &l& & us s { t&€&hxugj i gy&z&xy' nzz& } } 4js gxi 4uxn' &

96

::

\gt < t kqkt

8 7

3 Öt

\gt < t kqkt = <

4 Öt

Ynuks gqkx&tj & unkt

= 8

5 Öt

>9 Vxky&gyy&u&nk& uxrx 866; @ xgomS i l u{ xx€

6 Öt

7

9

I ngzngs &Nu{ yk

Q zxt gzaıt gr&Pu{ xt groyz& kz} uxq

Ngt t kx,

=

7 Öt

8

??>?

M} d t &Ykgzrk&cs ky :

G&l kgj r&l gr&l&nk& sj

8 0t

“ ”

S i Mtr 866:

9 0t

hrumy

I  h kxp{ xt groy 4 kz

10 0t

hrum

—

Xkvuzd m lux & ngt nk @ G& Ngt j huux & lux & Rui gr Pu{ xt groy zt & xgy & xkgy

11 0t

776

S   q& Pgi qyut

Rd k& xus & Hgmj gj

  yza{ z k& lux&] gx
& gxz& l kt z k& lux

‘ ’

gt j & Vkgj k& Xkvuzd m
Pu{ xt groy & gt j & xg{ s g

S gq{ t   k 7??9

12 0t

yzkxkuz   ky

Muhgr Pu{ xt groy

13 0t

ut rd k

Q zkxt gzaıt gr&vxd i orky&ul&vulkyyaıt gr&znó y&t &Pu{ xt groyz
Q zkxt gzaıt gr& kt zkx&ux&Pu{ xt groyz

14 Öt • 

19. Öt. 

Qj kvktj kt zS kj q& kt zxx

20. Öt. 

\d ui { x 8669

9

GS GXI

21. Öt. 

22. Öt. 

GS GXI

23. Öt. 

Mv t @ 7??? | { rz { xk & { rz { xky

24. Öt. 

Zxgt yv gxt i € @ zxt g zait gr

25. Öt. 



3 &lkxhkxz2Punt &8666/2Vxgi zojd m&Muhgr&Pu{ xt groys @K-vruxd m&kvuxzd m&Qy{ ky2L ui gr&vkyy&
&

3 & urk2X ó ngxj &8666/2A us s { t ó gzout &t &Rgzd &Gs kxó g@Pu{ xt groys 2S gyy&S kj @> j &ui d z€2&
] as d m&ut 2I kr4&V i nurgxr€&kyu{ xi ky4

&

3 &Lu-2Kro ghkzn> j & ggyhuxj 2V|σ|α&8668/2Rgzd &Vurazó y2Muhgr&S kj @2[t d kxyα€&ul &Zk-gy&
Vxky4& &

3 &Ngi qkz2Xuhkxz&8667/2H{ σj d m&g&S u|ks ktz&lux&S kj @& & ks ui xgzozout 4Q &V4&V noroy> j &
Vxupki z& kt yuxkj 4V xupki z& kt yuxkj 86672V k|kt & zuxky4

&

3 &Ngi qkz2Xuhkxz> j & gxxurr2I σrags &866</2&Xks gqd m&S kj @Znk&Vz{ mnrk&zu& ks ui xgzok&
V{ hró & us s { t ó gzout 2X u{ zrkj nk4

- 3 &xs yzutm&uh&8668/2& u|kxd m&Mu|kxt s ktz&G& d o y&Ngtj huuq&ux&Pu{ xt grozy& Hrgi q} km&V{ hroynd m& &
- 3 &xs yzutm&uh&866: /2& u|kxd m&Vuraz& y&G&Ngtj huuq&ux&Pu{ xt grozy&2 Hrgi q} km&V{ hroynd m& &
- 3 &Vkrull&X& o ngj &7??>/2&Vuraz& gr& us s { t o gzaat &VX&@uraz& y&2&Vxky&2>j &V{ hr& o& t& G&S k& o& g&2&Rg} xkti k& Kxrhg{ s &Gyyui &qzky& &
- 3 &l uuq&2&Z& os uzn&E&7??>/2&Mu|kxt d m&| an&znk&T k} y&@Znk&T k} y&S kj &g&Gy&g&Vuraz& gr&O yza{ zait & [t d kxy&af&ul & n& o gmu&Vxky& &
- 3 &Znk& n& o gmu&S gt { gr&ul & z&rk&2&: zn&kj &4&8669/4& &
- 3 &Znk&Gyyui &qzky &Vxky& &z&rk&huuq&866</4& &
- 3 &H{ , gt &2&Hgx&E&8669/2&Xkmt y>j &V u} kxy&@Znk&Vz{ i z{ xk&ul &O zxt gzaat gr&ki { x&af&2& l gs hxj nk& & t d kxy&af&Vxky& &
- 3 & &t&zkj &T gzaaty&ki ut us o >j &V ui &gr& us s oyya&t&866</2&Gtt{ gr&K|d& } &ul& k|kruvs ktzy& d &Vuhgro gzaat &Tj &Xkmt gr&O zknxgzaat &T &znk& u{ t zdky&ul &znk&YI G&Xkmt & [t&zkj &T gzaaty&V{ hr& o gzaaty& &
- 3 & uxj &Hgt q&866: /2&Vuhgr&ki ut us o &Vxuyvki zy&866: @ Xkgro d m&znk& k|kruvs ktz&Vxus gy&ul &znk& un&g&Gmktj g&866: & uxj &Hgt q&V{ hr& o gzaaty&4 866: 866: 866:



Vkxrull&??> Gxs yzutm86682866: 9

3 Öt • E

Vkxrull&??> Gxs yzutm86682866: :

4 Öt • E

84 Vkrull&??> & .l { xxgt &tj &gxq86662Gxs yzutm866: ;

5 Öt • E

Vkxrull&??> & .l { xxgt &tj &gxq86662Gxs yzutm866: <

6 Öt • E

[takj & gzwty&66<

.l { xxgt &tj &gxq&666

=

7

8 Öt • E;

Nu} gxj &66: Gxs yzutm&668 H{ , gt &669 ?

9 Öt • E;

VkxruII&??> 77

11 Öt. 

15 0t 07

Gxs yzcut 866: Rg|xgqgy>j &Zxg{ muzz8666 7<

16 0t 07

87

9

8; 66

Vxdkyy8668 Rg|xgqgy>j &Zxg{ muzz8666 7=
Mpxi @&Hkg{ j u{ ~866;

17 0t 07

Vxdkyy8668 Rg|xgqgy>j &Zxg{ muzz8666 7>
Mpxi @&Hkg{ j u{ ~866;

18 0t 07

Vxdkyy 8668 Rg|xgqgy>j &Zxg{ muzz8666 7?
Mpxi @&Hkg{ j u{ ~ 866;

190t



3 Z » x² U # w / f • U v s t U y w / f • U k | E s U v s t
 n Q • U Y » Y L V Q • † x w Q f I

3 & gt & lA\Ngq

Lgs 060kgrn0 zkxtgzut gr

Hr{s <

9 Öt. 

hkgz

=; 6

Hr{s ;

10 Öt. 

76

Hr{s 77

11 Öt. 

Hr{s 77

12 Öt. 

7;

Hr{s 78

13A ê A1

Ruj kx 9

14. $\hat{\sigma}_t^2 = \frac{1}{2}$

15. $\hat{\sigma}_t^2 = \frac{1}{2}$

Q zkmx|kxt s ktzgr>kr&ut & ros gzk& ngtnk
Ru|krui q 866= nzzv@3 } } 4wi i 4 n

4 Öt 

Oéuzu

5 Öt 

7

6 Öt 

76

Lxøtj s gt

8

7 Öt 

³ <math>477837874</math> ki <math>477837874</math> xazkt <math>477837874</math> u<math>477837874</math> nd<math>477837874</math> kj <math>477837874</math> ks ux<math>477837874</math> u{ tj g<math>477837874</math> v<math>477837874</math>

3 &hxt|lkrj &zk} gzx&&?></4& xad m&ux& os y>j & \4/ os ut & &i n{ yzkx20 i 4& k} & uxq4&

3 & { yh{ nkx4&4& uhkxz4&5 kj & & gt { gr& d mk& gs kxg&g ku&xuj { i zaut 4& ui gr&v&kyy4&Rutj ut & 7??9&v4: 37; 8&

3 &ghd m&Ru(d&4&Nu) &u& u& us s { t a&E&gj a&8668/4& tkyi u&v{ hr& gza&t 2& T k} & km&

3 &xgykx2& urd & & yz&gj g&g yzkv u& ut & 4& us s { t a&E&gj a&N>j huuq&8667/4& [tkyi u

3 & gkyktkk& k 4&v{ r&4&N&k& & y&nk& & k} y& @&G&gj a& & k} y& & gt { gr4& tkyi u&t u& gzk&

-GEWj [E>>
1 Öt GE

8; >38>? 7>637? = Jus d&ó q 7?3 ; I nxykr 8

2 Öt GE

=73=< Mu{n 9

3 Öt GE

<>3>< S gkytkkkx 7=; 37== Mu(n

4 0t 0E

7783787 Ktm& 0Luj yut ; 63=: Hu0j 9>3 ? S gkytkkkx ;
: 96 ;; Jus d 0 q l xks kx 7=93867 :>3 > _uxq

5 0t 0E

70t 67

s { rzæxgi q&dk }

vgt

ruuv

i { zy

Gj uhk&{j æut

H&urrd m YUZ \U

\j ku&nuuzd m&ngyó y

Kmgt &kk& gtj gi k 77

nzv @s s kx4 y{ lxkyt u&j { 5i i gt j gi k&ngyó y5nuuzd m&ns

866= ;

11 Öt • E

Gj uhk&{j æut

893 7 M{ n 786379= S gkykt kx 7:

" = = vW\$

3 0 1 7

>

g{ znuxd m

NZS R

Lu{ yz <

4 0 1 7

, d k

vnuzuynuv

g{j au d z k x | d k } d m

Mors ux

78 7

9 Öt • E

hrumy

, d k

7;

, d k

Lu{yz ?

10 Öt • E

, d k

Yzu|gr ? >

11 Öt • E

yu{ tj yrð ky

, d k

Gj uhk Vxks d x k

Ö u | d k

L d gr l { z & x u

W{ d t 8

12 Öt • E

vuj i gyz

, d k

vuj i gyz

Lu{yz 76

13 0t 0Z

, dk

vuj i gyz

14 0t 0Z

} kh&dk

15 0t 0Z

vRf“ U

3. 2014 年 12 月 31 日

:

<

7. 2014 年 12 月 31 日

2014 年 12 月 31 日 2014 年 12 月 31 日
 .v. 2014 年 12 月 31 日

3 S ktj kr 27 486694 Lxkkj us &ul& luxs gzout 4G& us vxgzd k&kmgry{ x|kE&
Tk) & km& tkyi u4&

3 &u, kthkxm 2P 4866: 4Vxdgi >j &nk&vxkyy4T k) &uxq&W-luxj & tdkxya&Vxkyy4&
&

3 Gxzo rk&?47???4Qg ay&grq&@xkkj us &ul&-vxkyyaut >j &nk& T & ut|kt zaut &ut &nk&Xomzy&ul&nk&
l noj 4Rutj ut @Gxzo rk&?4&

3 & grj kt 2X 4 4Kj 4866640 y{ rz&g) y> &ty{ rz&u&vxkyy&xkkj us 4Xkyzut 2Ag4& uxj &vxkyy&
Lxkkj us & us s ozkk&



Zuur&lu- <39: 7 H{yydq& &H{yydq&866: 8

2 'Ot &E

9

3 'Ot &E

Zuur&lu- 9>3 8 7 H{yydq& &H{yydq&866: :

&u{tj gzauty>j &R& ay&ul&Lxkkj us &ul&&nk&vxkyy

R& nzkthkxm

7??6

4 'Ot &E

Zuur&lu- :: 3 ? 7 H{yydq& &H{yydq&866: ;

5 'Ot &E

Zuur&Hu- 739 : H{ yydq& &H{ yydq&866: < S ktj kr&8669

6 Öt

=

7 Öt

; Zuur&Hu- ; <3 = 7 H{ yydq& &H{ yydq&866: >
& xgs 866< 2] u{ tj d m& uxj y Znk&ut yz{ zout gr&ngrkt nk&uykj &@agzk&vkki n&t
rdnkxgr&ks ui xgi &xy

8 Öt

hrgyvns €

& xgs 866< 2Yk-{ gr€&k-vrö α k-vxkyyaut gtj znk < ?
i u{ xzy

9 Öt

&xzö rk Zuur&Hu- ; 63 : 7 H{ yydq& H{ yydq 866: 76
866< 7? 7? 4866< J klgs gzaüt &GHI

] grj kt 8666 Qy{ rz&rg} y@gt d y{ rz zu&xkyy&xkkj us
Xkyzut 2g4@ uxrj &Vxkyy&xkkj us &l us s azkk

10 Öt

Xuykthkxm 866: I utlg kti k>j &vxqgi € 7 77

Xknf rgzd n&nk&vxkyy :

11 0t 07

Zuur&lu- : 73 : 7

H{yydq& &H{yydq&866: 78

Hxgtj &866</@Hkz) kkt &vxq&knk>j &{hvukt g

Ki v{ q & u|@B= 8 @79379,

12 0t 07

79

13 0t 07

Zuur&lu- ?377 7

H{yydq& &H{yydq 866: 7:

14 0t 07

15 0t 07

.C 07, 009³ 0&J' SW

4 86

+ 96

=

+ ; 6

ž[G“ xE; vRf“ U Pearson j| G 1k 3/4 Tž Robert Brand j%W/z < YkE @U; ŠX. < x89
"S@ R> @ Rhodes ICEW@sžãMžs GCYRf“ U%ŸV

v@f“ Uzs@a @7

.E@Uz>@V

.E@U\$@Y

v>@E:

.v@N%@Ejv@ -UjY@S@U

Qt@E; 3Rzs@UCM

:
:

.j@S@E;C@M

3 & nxy zgt y 2k 4gt j & uxj k tyzkt m 20-4a yui gr&kyvuty dno a& uxj } q k 4i&
Pu{ xt gr&il & gyy& kj og&kzno y 27?&7/2938>-4&

3 & d gxi 3Xgi d go 2Grk -gt j xdk 4Rg&™ut zurumk& ky&pu{ xt grayky@xd i orky&z&v xgzo{ ky&
Vgxy 2k ravyky 286694& &

3 & { t t d mgs 2k xkt z&Xkznd qd n&hki zq a&a&

³ &kðh 2V 4Znk & Muhgr & Pu{ xt grayz & k} y>j & utyi &kti &k&t &g&g& uxrj &il& utlró z&Rgtngs 2&
S J @u) s gt >j &Rozkl&krj 2&668& &

³ &kðh 2V 4& & a, vgzó q 2Q 4Pu{ xt grayz & &znó y 4&N&gxi u{ xz&Kj y 4&7??<4& &

³ >j kx&S k&g& kt 2&G&t k&Kj 4&K&znó y>j &S gyy& us s { tó g&z&ut &
[zki n&Z& k&zn&xrgtj y&A&V&g&zk&g& t&g&k&xy&a&E&il&g& zki n&Z& &

³ & g&y&h&uj 2V 0|&u 4& g&zi n&j u&n&Pu{ xt grayz & & &u{ zn&S& k&xó g&@&
T k} y&G&i i u{ t&g&h&a&E&g&tj & k&s u&i x&gi &E& k} & &u&x&q&2& u&r{ s h&g&g& V 2&666& &
&

³ & g&xj 2V 4&4&6&4&Znk &@ |kt z&ut &il &Pu{ xt grayz & &znó y&@&
Znk&V&g&n&u&u&h&pk&i z&g&E&g&tj & k&E&utj &S ut z&k&g&r&S i M&r&3&M k&k&t&ÿ&g& t&g&k&xy&a&E&V&x&ky&4&666& &
&

³ & g&xj 2V 4&4&6&4&V&n&ouy&uv&nó g&r&u{ t j g&z&ut y&il & Muhgr & Pu{ xt grayz & &znó y&4&&
Pu{ xt gr&il &S g&y&S& k&j &g&g&znó y&4&666& 2&ur&4&66&2& u&4&7&2&9&3&8&7&4&&

³ & k&g|k&x&2& 4&N&4&Kj 4&Znk & Muhgr & Pu{ xt grayz &
I x&ky&q&r&2& P&@&N&gs v&z&ut &V&x&ky&2&7??>& &



1 0t &E

—

30t

Hrgi q&666

14 Öt. 666

Ygxqgxo&???
\gtj kx& kç kt

T uxj ktyzktm&???

] gyhuxj &666

Hutkzk&kxgrky&???

15 Öt. 666

] kg|kx&??>

89, 38<=

Ngxmkg|ky&669

>73??

Hkxmkx&666



¿C>[EWS@zY•-|U°E»C Antonio Brasil j° [F<<»WAKS&Ê; H@U;SX.<x89
"w>-fUY»@

i@k²UãQ#

E@U>»QV

9

:

:E@U\$@Y

.v»QÊê

Z) u& { rz{ xky&Zkrk| gart &kxy{ y&xdz
l xu) rk&866=

J us d ó q&866= 9

J us d ó q&866=

8<

9

Ngj nzt &??9

Vxó k&8668

Muyy&668

3 Öt • E;

Q zxt gzarit gr&S kj @Y&yzks y

J us d ó q&866= 7= :

Znkuxdy&l &nk &xyy

4 Öt • E;

J us d ó q&866=

17

5

5 Öt • E;

<

6 Öt • E;

J us d ó q&866=

Znk&Q zxt k&tj &nk & uxj & ó k& kh

77

=

7 Öt • E;

] khyzkx&??= Znk& uti kvz&il&S gyy&(j dtk
nzzv@5 } } 4w(kyzog4 us 5/S 4wyzEgCu, j C>?9, >687

8'öt•E;

K

J ks ui xgzó &l ngtrnk

$3Q^2X$

Indrajit Banerjee "G

P{xut mWud z GS 0

?7<: 78 9<6

d j xg p z e h g t k x p k k F g s o 4 u x m y m

=; =6&=?8&< /

Guy Berger [S&Z].

<7: 6

Mkngs yzu} t Xnuj ky

7: 6; &67%>8 >: : =&88%< >99<5-&69%<

MHkxnx f x{ 4j 4 g & z v @ f u { x t 4{ 4j 4 g 5 y z l l 5 r { €

Michael Cobden [S&Z].

H9N&G7 T Y Qd n ä y & u r k n k

s i u h j k t F j g r 4 g ?683 883 <<>

Hans-Henrik Holm [S&Z].

Pkgt S ut t kz

Urul & g r s k y & r r k & 7 7 & l O & 8 6 6 & G g x n { y

n n n F j p n 4 q : ; > ? : : 6987

Divina Frau-Meigs [S&Z].

s k o n y F } g t g j u u 4 x

Frank Morgan [S&Z].

Pu{ xT kz

T k } i g y z k & 8 9 6 >

Lxgt q & u x m g t F t k } i g y z k 4 j { 4 {

<<9?&7181: ?87

3 @ S M % L S @ [S&Z].

p g s g r k j j d k 4 g p f n s g o 4 u s

Kaarle Nordenstreng [S&Z].

Zgs vkxk 9967:

Oggxrk 4 f u x j k t y z k t n f { z g 4 o

N. Ram 'E' % & U .

Znk & l d j { & t j & k u { v V { h r o g z o u t

Ogyz{ x & l { o j d m y 2; ? & t j & < 6 & t t g & g r g o & n k t t g & 6 6 6 6 8

t x g s F z n k n d j { 4 u 4 t ? 7 4 : 4 B : 7: 8: 9 5 B : 7 9 9 : :

Kwame Karikari ; SISI 3/4 > TIC

RM&96

s l} gF glxò gut rd k4 us 4m

Alfred E. Opubor B&Z.

9=>

] GT GJ I US KJ & uxqdt m&ku{ &

grlxkj uv{ huxF €gnuu4 us

188?3?=37>76: >; 88?3?636: =>76

Mahalakshmi Jayaram j ; ESc@3%4 -XK

<6668] grgmgm&ugj ø78:

s gngrgqyns f gy@t's kj @4xm

?73 : 38: 7>8: 5 ;

vQZ»UQZ:€GQ?U;»QZ,EI]QÜ:ŠQZ

1

Xgtyluxj &tz} o

2

I u-

Rkk&Hki qkx

3

Zxk|ux&Hxu} t

4

] kyz&j &y

S gxqqt & k&Hx{ d I GXCS GI

5

T ó u& xuq

6

Yzk|k&{ u

M{ u&nut myno

7

Zes &lgs rkzz

8

Q} &s k&g&g&gxo o

9

G{ yzd	Xuykt zgr& grs ut & r ky	1
Xnuj ky	Xuhkxz& Hxgt j	2
	Gt zut u& Hxgyø	3
	_ ut t k& n{ g	4
	Puxnk& uizzo	5
Yut ø& ømø ø& ø uxkøg	T grø ø& gøgt	6
	T grø ø& gøgt	7
	Ynkxxø& ø i nøgx o	8
	Yngn& økngt & gø& kj	9
	ø u} { & ø uhu} grk	10
	Punt ø& { mui n	11
S gxzd & kyzkxmggj	Z{ j ux& rgj	12
	Z{ j ux& rgj	13
	Yzknkt & ø gj	14
Qd m& ø urknk	S ø ngkr& uhj kt	

Ramon Tuazon · YF»»
YF»»

GY@T X YZQ[ZK&L&PU[XT GRQYS &T J & US S [T O GZOUT
[t a z 6 8 G t t g v u r y & s y n o x k & / r g , g
77 Z G t t g v u r y & z 4 M k k t n o r y & v g t & P { g t Z S k z u S g t o g
=8; 3 88= =8; 3 ; <: =8; 3 <6:

xxz{ g, ut =88F €gnuu4 us
Mogens Schmidt Z⁰»⁰;





7Z{k &S a u r r y & v g x y & ; =98& x g t i k
s 4j ns o z F { t k y i u 4 u x m
19947& ; &>& 8&9

Wijayananda Jayaweera ;<⁰⁰s- [Y⁰]

7Z{k &S a u r r y & v g x y & ; =98& x g t i k
} 4j €g) k k x g F { t k y i u 4 u x m
19947& ; &>& 7&>

Mirta Lourenço »⁰⁰

7Z{k &S a u r r y & ; =98& g x y & k j k -& ; & x g t i k
199&6/7& ; &>& 8&>

s 4u{ xkti uF { tkyi u4uxm
Hara Prasad Padhy ¿⁰⁰ <€

7Z{k &S a u r r y & v g x y & ; =98& x g t i k
19947& ; &>& : & ;
n4gj n€F { tkyi u4uxm

.vYU@>

3⁰⁰

s unyktngs r08666F €gnuu4 us

v@<

z@vW%Ls@'C
z⁰⁰

