

**HUMS2007**

7ci fgY`Cj Yfj ]Yk

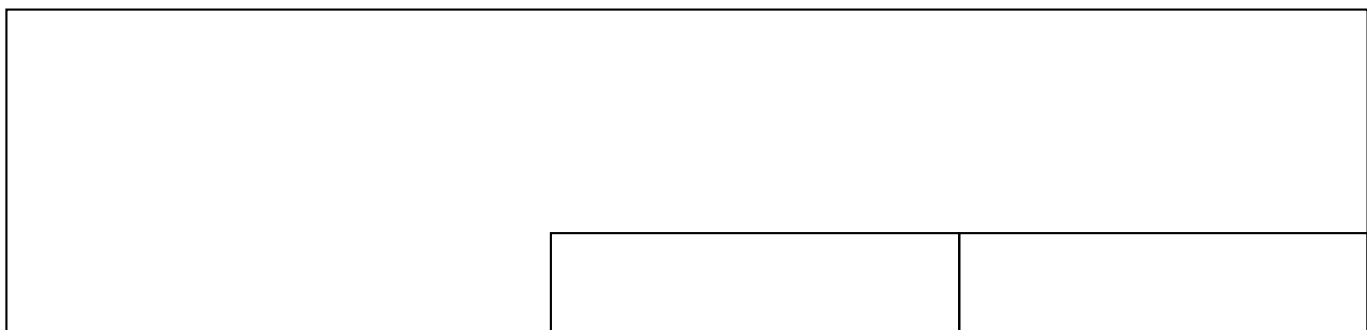
GHJZ`7cbHJW`8YHJ]`g

7cbj Ybcfg

B Ua Y	9a Uj`	5j Uj`UVj]m	@cWjhcb	D\cbY
@gU: cfX	"ZcfX4 i bgk "YXi "Ui	6miUddc]bha Ybh	' (- `A 6	

GWXcc``7cbHJW`bZcfa Uhjcb





Gi Va ]gg]cb`bchYg. `J ]U`9a U]`

Hi fb]h]b`gYH]b[ . `H\]g`]g`bchU`Hi fb]h]b`Ugg][ ba Ybh

5ggYgga Ybh' . `F YgYUfW`Gi dYfj ]gcf`5ggYgga Ybh

GHUfhXUH. `Bch5dd`]WV`Y

8YHU]`g.

Mci f`fYgYUfW`gi dYfj ]gcf`k ]``UggYgg`mci f`dYfZ`fa UbW`U[ U]bghdfcj ]XYX`W`]Hf]U" `K f]Hb`ZYXVUW`z  
fi Vf]W

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

BchUj U]UV`Y

F YWca a YbXYX`F Ygci fWg

BchUj U]UV`Y

7ci fgY`9j U`i Uh]cb`UbX`8Yj Y`cda Ybh

Gh XYbhZYXVUW\_k ]`VY [ UH\YfYX`j ]U`Ya U]`UhihY`YbX`cZhY`Wci fgY`VmihY`Wci fgY`Wcbj Ybcf`"Gh XYbfg  
k ]`VY`fYei YghYX`hc`dfcj ]XY`ZYXVUW`cb`hY]f`Ugg][ bYX`dfc`YWhf]bWi X]b[ `ei U]`micZ  
gi dYfj ]g]cb/k cf`cUX/hfUbgZfUV]`]micZfYgYUfVW`g\_]`g/\ck`Yb[ U[ ]b[ `hYmZci bX`hY`Ugg][ bYX`dfc`YVW`  
H\Ymk ]`U`gc`VY`fYei YghYX`hc`Wca a Ybhcb`hY`cj YfU`g`gfi Wi`fY`cZhY`Wci fgY`UbX`]hg`UggYgga Ybfg`"  
: YYXVUW`cb`]bX]j ]Xi U`dfc`YVWg`k ]`VY`fY`ZfYX`hc`gi dYfj ]gcf]g`hc`[ i ]XY`hYa` ]b`g`gfi Wi`f]b[ `a UH\Yf]U`Zcf  
Z hi fY`<| A G&\$+\$`fYgYUfVW`]bhYfbg`": YYXVUW`cb`hY`Wci fgY`k ]`VY`i gYX`hc`UX↑gha`cXYg`cZ  
UggYgga Ybh`

Gi Va ]gg]cb 'cZ5ggYgga YbhiHUg\_g

Hi fb]h]b 'Gi Va ]gg]cb

≠Zmci 'YbWci bHYf'U'dfcV'Ya 'k \Yb'UHYa dh]b[ 'hc'gi Va ]hmc i f'Ugg][ ba YbhiHfci [ \ 'Hi fb]h]bž'd'YUgY  
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'- ' , ) " ' ' %cf'Ya U] 'H'Ya 'cb'YI HYfbU'HY'hgi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh  
\ci fg'UfY' , .\$Ua '—%\$. \$\$da 'cb'k YY\_XUmg'UbX'-. .\$Ua '—) . \$\$da 'cb'k YY\_YbXg'f1 \*) 'XUmg'U'mYUfL" ≠Zmci  
UfY'i bUV'Y'hc'gi Va ]hmc i f'Ugg][ ba YbhiXi Y'hc'U'Zi 'hk ]H'Hi fb]h]b'mci 'a UmiUdd'mZcf'Ub'YI HYbg]cbž'Vi hmc i  
a i ghfYH]b'mci f'h]W\_Yhbi a VYf'Zca '9I HYfbU'Gi ddcfhfU'cb[ 'k ]H'UbmicH'Yf'fY'Y] UbhXcW a YbfgL'hc

# 5 WUXYa ]W< cbYgmiUbX`D`U[ ]Uf]ga

D`U[ ]Uf]ga ]g`i]b[ `hY`k cfXg`cf]XYUg`cZc`hYfg`UbX`dFYgYbh]b[ `hYa`Ug`mci`f`ck`b`" #WUb`hU`Y`a`Ubm`Zc`fa`g`z`Zc`a`XY`]VYfUHY`WX`YU]b[ `hc`UW]XYbhU`m`Wc`dm]b[ `Zc`a`U`gci`fW`k`]h`ci`hUW`bck`YX[ `Ya`Ybh`

I BGK ` [ fci dg`d`U[ ]Uf]ga ]bhc`hY`Zc`ck ]b[ `WU]Y[ cf]Yg.

7 cdm]b[ .`i`g]b[ `hY`gUa`Y`cf`j`Yfmg]a`]Uf`k`cfXg`hc`hY`cf][ ]bU`hY`hcf`]XYU`k`]h`ci`hUW`bck`YX[ ]b[ `hY`gci`fW`cf`i`g]b[ `ei`c`hU]cb`a`Uf`g`"H\`g`U`gc`Udd`Y]g`hc`]a`U[ `Yg`z`Ufh`UbX`XYg][ `b`dfc`YWg`z`Ug`k`Y`Ug`dFYgYbhU]cbg`k`YfY`gca`YcbY`dFYgYbh]`Ubch`Yf`g`]XYUg`cf`k`cfXg`k`]h`ci`hWYX]h`

#Uddfcdf]UHY`dUfUd`fUg]b[ .`7`U]b[ ]b[ `U`Zk`k`cfXg`UbX`d`fUgYg`k`\]Y`a`cghm`fYU]b]b[ `hY`cf][ ]bU`ghf`W`fY`UbX`#`f`dfc[ `fYgg]cb`cZ]XYUg`cZ`hY`cf][ ]bU`z`UbX`]bZc`fa`U]cb`k`]h`ci`hUW`bck`YX[ `Ya`Ybh`H\`g`U`gc`Udd`Y]g`]b`dFYgYbhU]cbg`k`YfY`gca`YcbY`dUfUd`fUgYg`Ubch`Yf`g`]XYUg`cf`k`cfXg`k`]h`ci`hWYX]h`UbX`hc`d]YW]b[ `hc[ `Y`h`Y`f`ei`c`h`g`UbX`dUfUd`fUgYg`]bhc`U`bYk`k`c`Y`z`k`]h`ci`hUddfcdf]UHY`fY`ZfYbW]b[ "

7 c`i`g]cb.`k`cf\_]b[ `k`]h`c`hYfg`Vi`hdUgg]b[ `cZ`hY`k`cf\_]Ug`U`dYfgcb`g`]bX]j`]Xi`U`k`cf\_]7`c`i`g]cb`U`gc`]bW`i`XYg`dfcj`X]b[ `mci`f`k`cf\_]hc`Ubch`Yf`g`h`XYbhVY`Zc`fY`hY`Xi`Y`XU]Y`z`cf`Zc`f`hY`di`fdcgY`cZ`hY`a`d`U[ ]Uf]g]b[ `Uh`Ubmi]a`Y`z`dUm]b[ `Ubch`Yf`dYfgcb`hc`dYfZc`fa`Ub`UWXYa`]W]Ug`\_`z`gh`U`]b[ `cf`UW`ei`]f]b[ `Ubch`Yf`dYfgcb`g`UWXYa`]Wk`cf\_]UbX`Wc`dm]b[ ]h`z`Zf]b[ `hc`Wc`a`d`Y`h`Ubch`Yf`dYfgcb`g`k`cf\_]cf`gYY\_]b[ `dUma`Ybh`Zc`Wc`a`d`Y]b[ `UWXYa`]Wk`cf\_]`

#Uddfcdf]UHY`W]U]cb.`7`h]b[ `gci`fW`g`k`\]W\`Uj`Y`bchVYYb`fYUX`z`k`]h`ci`hUW`bck`YX[ ]b[ `hY`gYWc`bXUfm`gci`fW`Zc`a`k`\]W`\_`bck`YX[ `Y`cZ`hY`a`U`g`VYYb`c`hU]bYX`

8 i`d`]WU]cb`f]gY`Zd`U[ ]Uf]ga`E`gi`Va`]h]b[ `mci`f`ck`b`k`cf`\_`z`]b`k`c`Y`cf`]b`dUf]z`k`YfY`]h`Ug`dFY]`ci`g`m`VYYb`dFYdUfYX`cf`gi`Va`]hYX`Zc`f`Ubch`Yf`UggYgga`Ybhcf`Wc`i`fgY`Uhi`BGK`cf`Ubch`Yf`i`b]j`Yfg]h`

7 cffYW]fY`ZfYbW]b[ `dfUW]W]g.

- DUfUd`fUg]b[ `zgi`a`a`Uf]g]b[ `zYggUm`k`f]h]b[ `UbX`h]a`Y`a`UbU[ `Ya`Ybh`
- 5ddfcdf]UHY`i`gY`cZ`UbX`U]h]f]Vi`h]cb`Zc`f`U`fU]b[ `Y`cZ`a`U]h]f]U`g`]bW`i`X]b[ `hY`h]z`]a`U[ `Yg`z`Zc`fa`i`UY`UbX`Wc`bW`d]g`"

#X]j`]Xi`U`Ugg]ghU]bW`]g`Uj`U]UV`Y`cb`fYe`i`Ygh`Zc`a`H\Y`@YUfb]b[ `7`YbhY`f`h`hd.`#`k`k`"Wi`bgk`"YXi`"Ui`#`G`h`XYbh]U`fY`U`gc`fYa`]bXYX`h`Uh`W]fY`Z`i`h]a`Y`a`UbU[ `Ya`Ybh]g`Ub`]a`dc`f]U]bh`dUf]hc`Z`gh`Xm`UbX`cbY`cZ`hY`]XYbh]Z`YX`W]i`gYg`cZ`d`U[ ]Uf]ga`]g`d`cc`f`h]a`Y`a`UbU[ `Ya`Ybh`G`h`XYbh]g`g`l`ci`X`U`ck`gi`Z`W]Y`bh]h]a`Y`Zc`f`fYgYUfW`z`X`fU]Z]b[ `UbX`d`fcdYf`fY`ZfYbW]b[ `cZ`gci`fW`g`]b`dFYdUf]b[ `U`UggYgga`Ybh]h]a`g`

I BGK `@]VfUfmU`gc`\Ug`hY`9@G9`hc`Uj`U]UV`Y`hc`Ugg]ghmci`k`]h`mci`f`gh`XmUhi`BGK`"9@G9`]g`XYg][`bYX`hc`]bhc`Xi`W`bYk`gh`XYbh]hc`gh`Xm]b[ `Uhi`BGK`Vi`h]hW]b`U`gc`VY`U[ `fYUhfY`ZfYg`Yf`Xi`f]b[ `mci`f`



- i bXYfghUbx'mci f'f][ \hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[ ]Uf]ga ž'Wcdmf][ \hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5Ww'dhUV'Y'I gY'cZ I BGK '⇒H'F Ygci fW'g'Dc`]Wm
- VY'Uk UfY'cZh'Y'ghUbxUfXg'cZVY\Uj ]ci f'YI dYW'X'cZYj Yfmcby'j]b'h'Y'I BGK 'Wca a i b]m
- `cWJh'gYfj ]W'g'UbX'j]bZcfa Uh]cb'UVci hl BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZh'YgY'UfYUg'k ]`VY'ZJa ]]Uf'hc'mci ž'ch'Yfg'k ]`VY'byk " "; U]b]b[ 'U'gc`X'i bXYfghUbx]b[ 'cZU`h'Y fY'UH'X'UgdYW'g'cZ9@G9'k ]`Y'd'mci 'a U\_Y'h'Y'a cghcZmci f'gh X]Yg'Uhl BGK ""

[\hhd.##ji V'YW'i \]XYg" \]VfUfm'i bgk "YXi "Ui #' \]gY#JVci h' \]gY](#)

## 5 WUXYa ]WbZcfa Uh]cb

: cfYggYbh]U`gh XYbh]bZcfa Uh]cb fY`Uh]b[ `tc.

- fYei Yghg`Zcf`YI H`bg]cb/
- `UhY`gi Va ]gg]cbg`[ i ]XY`]bYg/
- fYj ]Yk `cZa Uf\_g/
- I BGK `<YU`h`UbX`GUZYmidc`]WYg/
- YI Ua ]bUh]cb`dfcW`Xi fYg/
- gdYW]U`W`bg]XYfUh]cb`]b`hY`Yj YbhicZ]`bYgg`cf`a ]gUXj Ybh fY/
- gh XYbhYei ]mUbX`X]gUV`]m/
- UbX`c`hYf`YggYbh]U`UWUXYa ]W]bZcfa Uh]cbz`gYY

[\ftdg.#k k k "Uftg"i bgk "YXi "Ui #W ffYbh\]gh XYbh\]UWUXYa \]W\]bZcfa Uh\]cb#dfc`W`g`\[ i \]XY`\]bYg#](#)

⇒ a U[ Y`7 fYX]h

GmbYf[ ]Yg`]b`Gci bX`&\$%\*`

7F ⇒ CG

7F ⇒ CG`Dfcj ]XYf`7cXY.`\$\$\$- , ;

5W\_bck`YX[ Ya YbhicZ`7ci b]fm

K Y`UW\_bck`YX[ Y`hY`6YXY[ U`dYcd`Y`k`c`UfY`hY`hfUX]h]cbU`W`ghcX]Ubg`cZ`hY`UbXg`cb`k` \]W`I`BGK  
? Ybg]b[ hcb`W]a`di`g`]g`c`W]hYX"