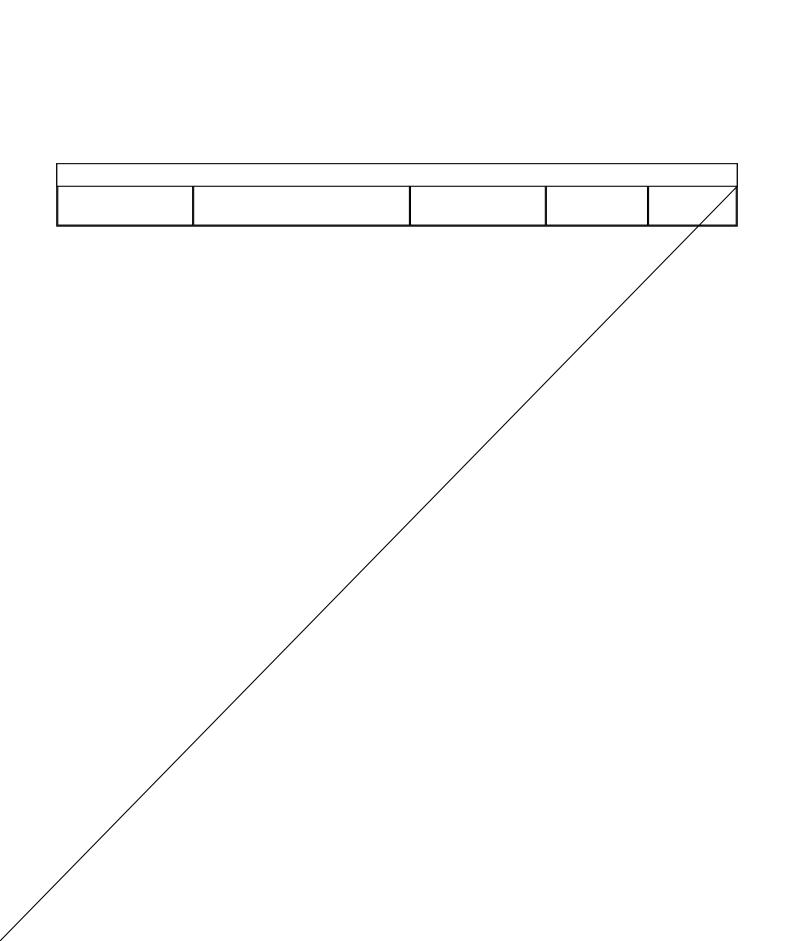


# **ARTS3131**

D`Um]b[ '5i glfU`]U

GYa YghYf'Hk c''#'&\$%



]b'k f]h]b['hc'h\Y'8YUb'UbX'dfcj]XY'U```cf][]bU``cf'WYfh]Z[YX'gi ddcfh]b['XcW a YbhUh]cb"

 $: cf'a\ cfY']bZcfa\ UhJcb'UVci\ hih\Y'UhhYbXUbWY'dfchcWc`g']b'h\Y': UWV`hmicZ5fhg'UbX'GcWJU`\\ GWJYbWYg.'\underline{\ htdg.} \#k\ k\ k''Ufhg''i\ bgk''YXi''Ui\ \#W\ ffYbHghi\ XYbhg\#UWUXYa\ JW]bZcfa\ UhJcb#dfchcWc`g![i\ JXY`]bYg\#UWUXYa\ JWJbZcfa\ UhJcb#dfchcWc`g![i\ JXY`]bYg#UWUXYa\ JWJbZcfa\ UhJcb#dfchcWc`g![i\ JXY`]$ 

#### 5WUXYa]W = DZcfa Uh]cb

: cf`YggYbh]U``ghi XYbh`]bZcfa Uh]cb`fY`Uh]b[ 'hc.`fYei Yghg`Zcf`YI hYbg]cb/fYj ]Yk 'cZa Uf\_g/cWW dUh]cbU``\YU`h\
UbX`gUZYhm'YI Ua ]bUh]cb`dfcWXi fYg/gdYW]U``Wcbg]XYfUh]cb`]b`h\Y`Yj YbhcZ]``bYgg`cf`a ]gUXj Ybhi fY/
ghi XYbhYei ]hmUbX`X]gUV]`]hm'UbX`ch\Yf`YggYbh]U``UWUXYa ]W]bZcfa Uh]cbž
gYY`\hdg.#k k k "Ufhg"i bgk "YXi "Ui #W ffYbhghi XYbhg#UWUXYa ]W]bZcfa Uh]cb#dfchcWc`g![i ]XY`]bYg#

## 7ci fgY 8YHJ] g

7 fYX]hDc]bhg\*\*

Gi a a UfmcZh\Y 7ci fgY

Gi VYWn5fYU. FZWSfdWS` V BWdAd S` UWE fqV [We

 $H\g^Wci fgY^Wb^U^gc^VY^gh^X^YX^jb^h^Y^Zc^ck^b[gqYW]U^gdH^cb.^3gefcS^fS^E fgVWe$ 

<ck 'Xc 'k f]hYfg' [ Yhghcf]Yg'cb'h\Y'ghU[ Y3'<ck 'Xc 'bYk 'gWf]dhg' [ Yh]bhc'dfcXi Wf]cb3'H\]g'Wci fgY '`cc\_g'Uh
k\Uh\UddYbg'k\Yb'`cWJ'`ghcf]Yg'VmWcbhYa dcfUfmk f]hYfg' [ c ']bhc'dfcXi Wf]cb"'.Mci 'k ]``YI d`cfY'WJgY
ghi X]Yg'Zfca 'h\YUhfYž'hY`Yj ]g]cb'UbX'UXUdhUh]cb']b'fYWWbh5i ghfU`]Ub'dfcXi Wf]cbgž'UbX'Wcbg]XYf'h\Y
k cf\_]b[ 'fY`Uh]cbg'VYhk YYb'k f]hYfgž'UWcfgž'X]fYWcfg'UbX'dfcXi Wfg" @YUfb]b[ 'UWh]j ]h]Yg'UfY'U`][ bYX'k ]h\
]bXi ghfmdfUWh]WW'hc'dfYdUfY'mci 'Zcf'dUfh]W]dUh]cb'Ug'U'k Y``!]bZcfa YX``]ghYbYfž'gdYWbhcf'UbX'WfYUhcf''H\Y
U]a ']g'hc'`YUfb'\ck 'WcbhYa dcfUfmdfcXi Wf]cbg'Vf]b[ '`cWJ'`ghcf]Yg'hc'[ `cVU``Ui X]YbWfg"'H\]g'Wci fgY']g'dUfh
cZh\Y'H\YUhfY'UbX'DYfZcfa UbWW'Ghi X]Yg'ghfYUa "'=hWbb'U`gc'VY'ghi X]YX']b'h\Y'5i ghfU`]Ub'Ghi X]Yg'ghfYUa "</pre>

#### 5 hith Y WcbWi glcb cZhh lg Wci fgY hh Y ghi XYbhik li VY UV Y hc

- %" 8 YgWf]VY 'h\ Y 'WcbhYl h']b 'k \]W\ 'd`UmgWf]dhg 'UfY 'dfc Xi Wf X 'UbX 'dYfZcfa YX ']b '5 i ghfu`]U
- &" 9I d`U]b`h\Y`Wcbff]Vi f]cbg`cZ\_YmUff]ghgž'Wca dUb]Yg`UbX`j Ybi Yg`hc`h\Y`XYj Y`cda YbhcZ5i ghfU`]Ub h\YUlfY
- '" ±bhYfdfYhd`UmigWf]dhg`k ]h\`U`Wf]h]WU`i bXYfghUbX]b[`cZXfUa Uh]WWcbhYbhžUffjgh]WWcbhYl hUbX Ui X]YbWYYb[U[Ya Ybh

#### HYUW ]b[ 'GhfUhY[ ]Yg'

 $H\Y'Wci fgY'U]a g'UfY'fYU']gYX'h\fci [\'hYUW\]b['glfUhY[']Yg'h\Uh']bWi XY''YWi fYg'cb'h\Y'\]ghcfmcZ 5 i glfU']Ub'h\YUlfYz'fYUX]b[ g'cZgY'YWhYX'5 i glfU']Ub'd'Umgz'cddcfhi b]h]Yg'hc'Yb[ U[ Y'k ]h\'W ffYbh dfcXi Wf]cbgz'UbX'[ i ]XYX'fYgYUfW\'cb'_YmUff]ghgz'Wca dUb]Yg'UbX'j Ybi Yg''$ 

@YUfb]b[ 'UWjj ]hjYg'UfY'U`][ bYX'k ]h\ ']bXi ghfm\VUgYX'[ YbfYg'cZdfcXi Wjcb'XfUa Uhi f[ mz'fYgYUfW\ 'fYdcfhg UbX'k f]hjb[ 'fYj ]Yk g"'Ghi XYbhg'UfY'dfcj ]XYX'cddcfhi b]hjYg']b'hi hcf]U`g'hc'dfYgYbhh\ Y]f'fYgYUfW\ 'Ug'k cf\_!]b! dfc[ fYgqz'UbX'Wcbhf]Vi hY'hc'WUgg'X]gW qq]cbg"'

H\]g`WcaV]bUh]cb`cZhYUW\]b[`ghfUhY[]Yg`UbX``YUfb]b[`UWf]j]h]Yg`]g`W\cgYb`hc`dfYdUfY`ghi XYbhg`Zcf`UWf]jYdUff]cb`]b`5i ghfU`]Ub`h\YUhfY`Ug`\_bck`YX[YUV`Y`Uffg`k cf\_Yfg`UbX`k Y``!]bZcfa YX`gdYWfUhcfg"

## 5ggYgga Ybh

## 5ggYgga Ybh'HUg\_g

5ggYgga Ybh'tUg_	K Y][\h	8iY'8UHY	Gh XYbh@YUfb]b[ Ci hWca Yg 5ggYggYX
DYfZcfa UbWYFYj]Yk	&\$ı	&' #\$, #&\$% `%%) - `DA	% <u>*</u> (
F YgYUfW F Ydcfh	(\$1	&+#\$-#&\$% '%%) - 'DA	%ž&ž(
DfcXi Wgcb 8 fUa Uhi [ m	(\$1	&*#%\$#&\$% `%%) - `DA	%Ž Ž(

## 5ggYgga Ybh'8YhJ]`g

5ggYgga Ybh'% DYfZcfa UbWY F Yj ]Yk

GhUfh XUhY.

@Yb[h\."%%)\$"kcfXg

8YHU]`g. '5HHYbX'U'dYfZcfa UbWY'cZU'bYk '5i gHfU`]Ub'd`UmUbX'k f]HY'U'%%) \$'k cfX'h\YUHY'fYj ]Yk "'H\Y'U]a cZh\Y'fYj ]Yk "]g'hc'dfcj ]XY'U'Wf]h]WU''UWWci bhcZh\Y'd`Umfg'UWf]cbž'W\UfUWYfg'UbX'd`chž'Ug'fYU`]gYX'Vmh\Y

#### Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

Gh XYbhg UfY Yl dYWYX hc di hh\Y]f bUa Yg UbX gh XYbhbi a VYfg cb Yj YfmdU[Y cZh\Y]f Ugg][ ba Ybhg"

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

#mci YbWci bhYf'U'dfcV'Ya k \Yb'UhYa dhJo['hc'gi Va ]hmci f'Ugg][ ba Ybhh\fci [\'Hi fb]h]bž'd'YUgY
hY'Yd\cbY'9| hYfbU'Gi ddcfhcb'-', ) "''' %cf'Ya U]'h\Ya 'cb'<u>Yl hYfbU'hY'hgi ddcfh4 i bgk "YXi "Ui"</u>"'Gi ddcfh
\ci fg'UfY', .\$\$Ua '-'%\$.\$\$da 'cb'k YY\_XUmg'UbX'-.\$\$Ua '-').\$\$da 'cb'k YY\_YbXg'fl \*) 'XUmg'U'mYUft'''#mci
UfY'i bUV'Y'hc'gi Va ]hmci f'Ugg][ ba YbhXi Y'hc'U'ZJi 'hk ]h\'Hi fb]h]b'mci 'a Um'Udd'mZcf'Ub'Yl hYbg]cbž'Vi hmci
a i ghfYhJ]b'mci f'h]W\_Yhbi a VYf'Zfca '9| hYfbU''Gi ddcfhfU'cb['k]h\'Ubmch\Yf'fY'Yj UbhXcW'a Ybhgt'hc
]bWi XY'Ug'Yj ]XYbWY'hc'gi ddcfhmci f'Yl hYbg]cb'Udd']WUh]cb'''#mci 'Ya U]''9| hYfbU''Gi ddcfhmci 'k]''
Ui hca UhJWJ'`mfYWY']j Y'U'HJW\_Yhbi a VYfž'Vi h]Zmci 'hY'Yd\cbY'mci 'k]'''bYYX'hc'gdYWJZJWJ'`mUg\_'Zcf'cbY''
Hi fb]h]b'U'gc'dfcj ]XYg'i dXUhYg'cb'h\Y]f'gmghYa 'gfUh' g'cb'Hk]hYf"

; YbYfU`mž'UggYgga YbhitUg\_g'a i ghVY'gi Va ]hhYX'Y`YWfcb]WU``mj ]U'Y]h\Yf'Hi fb]h]b'cf'U'A ccX`Y Ugg][ ba Ybh''=b']bghUbWfg'k \YfY'h\]g']g'bchdcgg]V`Yž']hk ]```VY'ghUhYX'cb'mci f'Wci fgY'g'A ccX`Y'g]hY'k ]h\U`hYfbUh]j Y'gi Va ]gg]cb'XYhU]`g"

#### @UhY 5ggYgga Ybh'DYbU`h]Yg

Gh XYbhgʻUfYʻfYgdcbg]V`YʻZcfʻh\Yʻgi Va ]gg]cbʻcZUggYgga YbhhUg\_gʻVmh\YʻfYei ]fYX`XUhYgʻUbXʻhJa Yg" 8YdYbX]b[ˈcZh\Y`YI hYbhcZXY`Um]bʻh\Yʻgi Va ]gg]cbʻcZUbʻUggYgga YbhhUg\_ʻdUghh\Y`Xi Y`XUhY`UbXʻhJa Yž

- K cf\_'gi Va ]hh'X`%\$`hc`% 'XUmg`UZhYf`h\Y`gh]di `UhYX`XYUX`]bY`k]```VY`UggYggYX`UbX`ZYYXVUW\_dfcj]XYX`Vi h'U`a Uf\_'cZnYfc`k]```VY`fYWcfXYX"`\Zh\Y`k cf\_'k ci `X`\Uj Y`fYWf]j YX`U'dUgg`a Uf\_'Vi h'Zcf h\Y``UhYbYgg`UbX`h\Y`k cf\_']g`U`Wca di `gcfm'Wci fgY`Wca dcbYbh'f\i fX`Y`fYei ]fYa Ybh\ž`U'gh XYbhk]``VY`XYYa YX`hc`\Uj Y`a Yhh\Uh'fYei ]fYa Ybh\
- K cf\_'gi Va ]hhYX`&\$`cf`a cfY`XUmg`UZhYf`h\Y`gh]di `UhYX`XYUX`]bY`k ]```bchVY`UWWdhYX`Zcf UggYgga YbhUbX`k ]```fYWY]j Y`bc`ZYYXVUW\_ža Uf\_'cf`[ fUXY"'=Zh\Y`UggYgga YbhHUg\_']g`U`Wca di `gcfm Wca dcbYbhcZh\Y`Wci fgY`U'ghi XYbhik ]```fYWY]j Y`Ub`l bgUh]gZJWcfmi: U]``fl : Ł`[ fUXY`Ug`U`fYgi `hcZ i bgUh]gZJWcfmidYfZcfa UbWY`]b`Ub`YggYbh]U``Wca dcbYbhcZh\Y`Wci fgY"

H\]g^]bZcfa Uh]cb^]g^U^gc^Uj U]^\$

**‰**fm

**‰** ‰

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

D`U[]Uf]ga `]g`i g]b[ 'h\Y`k cfXg`cf`]XYUg`cZch\Yfg`UbX`dfYgYbh]b[ 'h\Ya `Ug`mci f`ck b"'\lefi\Wb'hU\_Y`a Ubm Zcfa gžZfca `XY`]VYfUhY`W\YUh]b[ 'hc`UVW]XYbhU`mWcdm]b[ 'Zfca `U`gci f\W' k ]h\ci hUW\_bck `YX[ Ya Ybh'

IBGK [fcidgdu[]Uf]ga ]bhch\YZc``ck]b[ WUhY[cf]Yg.

7 cdm]b[.'i g]b['h\Y'gUa Y'cf'j Yfmg]a]`Uf'k cfXg'hc'h\Y'cf][]bU`hYl h'cf']XYU'k]h\ci h'UW\_bck `YX[]b['h\Y gci fW'cf'i g]b['ei chUh]cb'a Uf\_g"'H\]g'U`gc'Udd`]Yg'hc']a U[Ygž'Ufh'UbX'XYg][b'dfcYWhgž'Ug'k Y``'Ug dfYgYbhUh]cbg'k\YfY'gca YcbY'dfYgYbhg'Ubch\Yf'g']XYUg'cf'k cfXg'k]h\ci h'WfYX]h'

⇒ Uddfcdf]UhY 'dUfUd\fUg]b[...7\Ub[]b[ 'U'ZYk 'k cfXg'UbX'd\fUgYg'k \]'Y 'a cghmfYhJ]b]b[ 'h\Y'cf][]bU` ghfi Wh fY 'UbX#cf'dfc[fYgg]cb'cZ]XYUg'cZh\Y'cf][]bU'žUbX']bZcfa Uh]cb'k ]h\ci hUW\_bck `YX[Ya Ybh'H\]g'U`gc Udd`]Yg']b'dfYgYbhUh]cbg'k \YfY'gca YcbY'dUfUd\fUgYg'Ubch\Yf'g']XYUg'cf'k cfXg'k ]h\ci hWfYX]hUbX'hc d]YW]b[ 'hc[Yh\Yf'ei chYg'UbX'dUfUd\fUgYg']bhc'U'bYk 'k \c`Yžk]h\ci hUddfcdf]UhY'fYZYfYbW]b[ "

 $7c^{i}$  g]cb. 'k cf\_]b[ 'k ]th. 'cth. Yfg'Vi h'dUgg]b[ 'c\Zth. Y'k cf\_'Ug'U'dYfgcb'g']bX]j ]Xi U''k cf\_"'7c''i g]cb'U'gc

 $i\ bXYfgfUbX`mci\ f`f][\ \ \ bX`fYgdcbg]V]`]fJYg`Ug`U`gfi\ XYbfiUfi]\ BGK$ 

## FYgci fW/g

### DfYgWf]VYX F Ygci fWYg

#### FYei ]fYX fYUX]b[g

FYei]fYX:Zcf'd`UmfYUX]b[g']b'WUgg"FYWYbh'd`Umg'UjU]`UV'Y'Zcf'difWXUgY']b'h\Y'<u>LBGK '6cc g\cd</u>"'

- ? UhY '; fYbj ] "Y ' '5 bXfYk '6 cj Y "ž FZWE WUdNf D [hWdfGmXbYm '7 i ffYbWmDfYggž &\$% Ł 'di V ]q\Yf
- 7 fU][ 'G]'j Ym'/ '? UhY'A i 'j Ubmž'<SebWd<a` We'fGmXbYm'7 i ffYbWmDfYggž'&\$%+ž'fYj "'YX"Ł'-'<u>di V']g\Yf</u>

•

7F=7CG'Dfcj]XYf'7cXY.'\$\$\$-,;