

**&\$%(' I b]jYfg]hm'cZ' JYf a cbh' 7c a V]bYX' FYgYUfW\ 'UbX' 9 I hYbg]cb' 5bb i U'  
FYdcfh'cZ' 5WWc a d`]g\ a Ybhg'UbX' FYg i `hg**

GEFIAW)çç!•icÁ[ÁX^! { [ ]cÖ [ { äi}^äáÜ•^æ!&@kæ}á!Öçç!•ä [ÁCE} }~æ!Ü^ [ !cÁ[-ÁCE&& [ { ]i•@ { ^}c•kæ}á!Ü•~|ç•

[&&~!|•áÁ [ ]Á [ç!ÁF€€€Áæ&!•ÉÁWX TÁÖçç!•]•á [ ]Á•Á- [ &~•^áÁ [ ]^Á }@æ }&á } \*Ác@^Á~ [ !c•Á [-Á-æ! { •Ác [ Á { ä } ä : ^  
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æáá!•••Áæ\*!i&~|ç~!æ!Áà~•}•^•Á••••cæá }æá!áç~ÉÁUçç!Ác@^Á }æ•cÁ^•æ!Ác@^Á!Á , ^!Á [ ç!Á!Á ]€€Áá [ &~ { ^}c^áÁ ]!æ&cá&^•  
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@á\*^!Áç!Á!Á• [ ]^á }c^Á&!Ááç^áÁc@^Á ]! \*!æ { Á , áç@Áá }&!^æá } \*Á•\á!|Á!Áç!ÁÉÁ& [ ]-áá }&^!Áç!ÁÁæ } á!á^á&á }  
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c@^Ááæcæ!áçæ!áçá!Ác [ Á•@ [ , Ác@^ÁÁçç!• }cáæ } áÁc^!Á•Á [-Áá } ]æ&c^Ác@æcá!Á [ &&~!á } \*Áæ& [ ••ÁX^! { [ ]cÉÁV^  
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&áá! { æ\!•Á!Á• [ ]^áçc@Á!Á [ ç! , @^! { á } \*Áá^ { æ } áÉÁÜ•^•æ!&Ác^•á!Á•Áæ!Áæ } \*^Á•Á-! [ { Á-!~áçc [ Áá ]ç!Ác [  
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]æç^Ác@^Á , æ^Á-!ÁX^! { [ ]cÁc [ Á!^æáÁc@^Á }æcá [ ]Áá }Á&áá! { æ\á } \*Áæ } á!á }|^!Á•^Áæ!&ÉÁ

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\*^ }Áç!ááæ•á-Á- [ !Áæáæ }cæcá [ ]Ác [ Á• ]^&á-á&á!á { æc^•ÉÁÁW }á!•cæ } áá } \*Ác@^Á^\*^ [ { á&É!Áç!Á!Á• [ ] ]•^Ác [  
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V@^ÁÖæ!~ÁÖ^ }c^!Á- [ !ÁÖçç!Á^ }&^Á , æ•Á!æ }&@^áá }ÁG€€JÁ , áç@Ác@^Ááá^æÁc@æcá { ~&@Á [-Áæ } ]|^á!Á!Á•æ!&@Á& [ ~!á  
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&æ ]æç!ÉÁÖ^ }ç!æ!Ác [ Á [-!Á { á••á [ ]Áá }Áæáááçá [ ]Ác [ Áæ\*!i&~|ç~!Áæ!Á^ ]~!á&Á•^!ç!á&^Á&áç!á^ } \*æ\*^ { ^ }cáæ } áÁ~!c@^!á } \*  
^& [ ] [ { á&ááçç!Á [ ] { ^ }cÉÁæ•Á , ^!|Áæ•Á@~ { æ }Á@^Áç!ÉÁÖ~ [ !c•Á& [ ]ç! } ^Ác [ Á^ç [ ]ç^Ác [ Áæáá!•••Áá•••^Á [-  
á { ]! [ !çæ }&^Ác [ ÁX^! { [ ]c^Á-æ! { •Áæ } á!Ác@^Áæ\*!i&~|ç~!æ!Á& [ ] [ { ^ÉÁÜ•^•æ!&@Á ]! [ b^Ác^Áá }&~!ááá^ }ç!~á } \*  
~ } á•Á• ]! [ !c^Áç!áç!á } \*ÉÁ } ^ , Áæ } á!Á^ç }æ } áá } \*Á!Á•^æ!&@Áæ } á!Á [ ~c!Áæ&@Á~ [ !c•Áá }Ác@^Á•^Áæ!Áæ•ÉÁÖ [ !Á^çæ { ]|^ÉÁÉP  
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á!çç!Á!Áæ•Áç!æáçá [ ]æ!ÁÉPÁ&~!áÉÁc [ Ác^ }Ác^æ&@á } \*Á [ c@^!•Á [ ]~ } \*^!Ác^•á^ }c^Áæá [ ~ç!Á^ }Ác@^Á!Áæ!Áæ•Áæ•  
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á!~\*Áæ } á!Áæ!& [ @ [ |Áæá~•^Á^Á , [ !\á } \*Á , áç@Á^ [ ~cÉÁ ]æ!Á^c^Áæ } á!Á&@ [ [ ]•Á•á { ~!çæ } ^ [ ]•^Áæ } á!Ác@^Á!~!áæ } Áæ } á  
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æ& [ ••Á& [ { ~ }áç!Á^Áá }ÁX^! { [ ]cÉÁV@á•Á ]! \*!Áæ { Áæ! [ Á^ } \*æ\*^áÁ , áç@Á [ ç!ÁG€€Á& [ { ~ }áç^Ááæ•^áá&@ [ [ ]Ác [  
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GEFIÁW}áç^!•âc^Á[ÁX^!{ [ ]cáÔ [ { äi}^äáÜ^•^æ!&@kæ}á!ôçc^}•â [ ACE} }~æ!áÜ^ [ !cá[-ÁCE&& [ { ]!•@ { ^}c•kæ}á!Ü^•~|c•

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[-Ác@^Á& [ { { ~}áçá•^Áæ}á!•cæ^~^@ [ |á^!•Áá}Á& [ ]b~ }&cá [ ]Á , áç@Ác@^Á^ç^!^!cá•^Á [-Á-æ&~|c^Áæ}á!•cæ~^Á [-Ác@^ÁCE\*!á&~|c~!æ|  
Ôç]^!á { ^}cÁUcæcá [ }Áæ}á!ÁWX T ÁÔçc^}•á [ }ÉÁV@^Á~ }áæ { ^}cæ!Á•c [ !~Áá•Ác@æcÁ [-ÁæÁ• { æ!|Á|æ}á!•!æ}cÁ~}áç^!•âc^ÉÁ , áç@  
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- [ &~•ÉÁ• [ { ^Ááç^!•âc^Á [-Áá}c^!^•cÁæ}á!Ác@^Á^••^Á [-Ác@^Á}æcá [ ]æ!|Á|æ}á!•!æ}cÁ•^•c^ { Ác [ Á ] : [ çáá^Á [ ~!Á•cæ\^@ [ |á^!•  
 , áç@Ác@^Á!æ} \*^Á [-Á^ç^!^!cá•^Áæ}á!^á~&æcá [ ]Ác@æcáæá!^••^Á• [ { ^Á [-Ác@^Á!Á}^^á•ÉÁV@^Á& [ ]cá}~^ááá { á}~cá [ ]Á [-  
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Ø [ || [ , Ác@á•Áá} \Ác [ Á•^ÁÁæÁ& [ ]^Á [-Á [ ~!ÁCE} }~æ!áÜ^ [ !cÁGEFIÉ  
Á@c}•KGD , , , É~ç { É^á~ð^çc^}•á [ ]ðæá [ ~cDÑÚæ\*^Mæ} }~æ!^ [ !cÉ]@

HchU`5WhiU`5 a c i bh`cZ`dfcZYgg]cbU` : H9g#GMg`Zcf`h\]g`GhUhY

MYUf. &\$%(	9 l h Y b g j c b		FYgYUfW\	
	%, * &	%, - \$	%, * &	%, - \$
Ú æ}	Í HÉ€	€€€	FGÈ I	€€€
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== "AYf]h`FY j]Yk`DfcWYgg

% "H\Y`AYf]h`FY j]Yk`DfcWYgg`h\Uh`kUg`9 a d`cmYX`Zcf`h\]g`mYUf

Òçc^! : æ|ÁW}áç^!•âc^ÁÚæ}^|

Òç^!cÁÜ^•^!ÁÜ^çá^ ,

&" 6f]YZ`9 l d`UbUh]cb

Òçc^!•á [ ]Á\^•Á•cæ~^Á@æç^Á { [ ]c@|^Ác^| ^} @ [ ]^Á { ^cá} \*Á , áç@Ác@^Á- [ ~!Á•cæc^•Ác@æcÁ& [ [ ]^!æc^áÁc [ Áá^ç^! [ ]Áæ} [ ]É|á}^Á|æ} }á} \*Áæ}á!^ [ !cá} \*Á•^•c^ { ÉÁV@^•^Áæ!^Áæ}Á [ ] [ !c~ }áç^!Ác [ Á^cÁ•^Áááæ&\Á [ ]Á ] : [ \*!æ { •Áæ}á  
•cæc^ , áá^Á \* [ æ!|Á|æ}á!á} áçáæcáç^!ÉÁÁÔá•&~••á [ ]•Áá} &|~á^!^\*á [ ]æ!|Á] : [ \*!æ { •ÉÁ [ ] [ !c~ }áçá^•Á- [ !Á { ~|cá•cæc^Á , [ !\É  
•@æ!á} \*Á•cæ~^!^• [ ]!&^•Áæ}á! [ c@^!Á] : [ \*!æ { { á} \*Á•c!æc^\*á^•Áæ}á!á•~^•ÉÁQ} Áæáááçá [ ]ÉÁ•cæ~^ÁæcÁc@^Á-æ&~|c^Áæ}á  
æá { á} áç!æcáç^!Á|æ&&^••Ác@^Á [ ]É|á}^Á•^•c^ { ÁÇQ [ ]!É} ^cDÁc [ Áçá^ , Á ]^^!•Á , [ !\ÉÁÁU : [ \*!æ { Á•cæ~^Á-æ&~|c^Áæ}á  
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XVÉÇÉÓÚÁ] : [ çáá^•Ác@^Á [ ] [ !c~ }áç^!Á- [ !Á•^Áá] : [ b^&cÁ~ }áá} \*Ác@! [ ~\*ÁæÁ& [ { ]^cáçáç^!Á] : [ ] [ •æ!|Á] : [ &^••ÉÁÁU : [ b^&c  
] : [ ] [ •æ!|Áæ!^Á^çæ!~æc^áÁ- [ !Á•&á^ }cá-á&Áæ}á!Ác^&@}á&æ!Á { ^!áçÁc@! [ ~\*ÁæÁ]^^!Á!^çá^ , Á ] : [ &^••ÉÁÁU : [ b^&c•Áæ!^  
á}c^}á!ááÁæ•^Áá~ }áá} \*Ác [ ÁæááÁc@^ÁÚÓÁá}Á^•cæá|á•@á} \*ÁæÁ}^ , Á!^•^Áæ!&@Ááá!&cá [ ]ÉÁ [ !Áæ~ \* { ^}cááá { ^}•á [ ]Á [-  
c@^!Á&~!^!c]~ÉÁ^çc!æ { ~!æ!|~Á~ }á!á!^•^æ!&@Á] : [ \*!æ { É

== "GhU\_Y`c`XYf`=bd`ihY`lfU`a`i`fU`m`Zi`bYX`fYgYUfW\`dfc [ f fU`fi ]bhYbXYc



G€FIÁW}äç^!•öc^Á[-ÁX^! { [ ]c!Ö [ { ää}^äáÜ^•^æ!&@Áæ}á!Öçc^}•ä [ }ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•Áæ}á!Ü^•~|c•

Ü~!ç^~Á[-Ác@^Á^}^!æ|Á]~à|ä&  
T^~cä}•\*Á, äc@Áä}çäc^ä^•^/^&c^Áä}äçä~æ|•Á-! [ { Ác@^Á^}^!æ|Á]~à|ä&  
Ü~!ç^~Á[-Á^•/•&c^Áä}äçä~æ|•Á-! [ { Ác@^Á^}^!æ|Á]~à|ä&

6f]YZ`YId`UbUh]cb"

Öçc^}•ä [ ]Á, [ !\•Á, äc@Á- [ &~•Á\*! [ ~ ]•ÉÁ•cæc^Áæäçä• [ !Á\*! [ ~ ]•ÉÁ [ •cÁ^ç^}cÁæ}á!^~|/•cäç^ÁäæcæÁ& [ ||^&cä [ ]  
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6f]YZ`9Id`UbUh]cb`cZ`k`Uh`mc i`YUfbYX`Zfc a`mc i f`GhU`Y`c`XYfg

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**=J''9IdYbX]hiFY'Gi a aUfm**

%''HchU''5WhiU'':cfa i`U'Xc''Ufg'5''cWUhYX'fidfYdcdi`UhYX'Zfca`7!F99AGL			
<b>9IhYbg]cb</b>		<b>FYgYUfW\</b>	
<b>Ga]h\!@YjYf'V'/'W</b>	<b>%, -\$'9IhYbg]cb</b>	<b>&lt;Uhw\</b>	<b>9jUbg!5''Yb</b>
FïïJJGì	€	Fïïïï€	€

&''HchU'YX'5WhiU'Xc''Ufg'Zfca'D'UbbYX'Dfc [fUag'-bdihg				
	<b>9IhYbg]cb</b>		<b>FYgYUfW\</b>	
	<b>Ga]h\!@YjYf'V'/'W</b>	<b>%, -\$'9IhYbg]cb</b>	<b>&lt;Uhw\</b>	<b>9jUbg!5''Yb</b>
<b>5WhiU'</b> <b>:cfa i`U</b>	FïïïïFï	€	FJHF€€H	€
<b>5WhiU'</b> <b>AUhW\]b[</b>	HFíFJìì	€	GFFíHFí	€
<b>5WhiU''5''</b> <b>Ch\Yf</b>	î€€ïJïï	€	€	€
<b>HchU''5WhiU'</b> <b>9IdYbXYX</b>	FF€HíHíG	€	I€IîHFì	€

''5acibh'cZ'5VcjY'5WhiU'':cfa i`U'8c''Ufg'9IdYbXYX'k\]W\`WcaYg'Zfca'7UffmcjYf'ZibXg'Zfca'dfY]cig				
<b>7UffmcjYf</b>	€	€	€	€

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**J" D`UbbYX`Dfc [fU a`HUV`Y`cZ' 7 cbhYbh**

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%"5WhiU`Uacibh'cZ':H9#GMg`YIdYbXYX'h\]g`Dfc[fUa

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ÁÁÁÁ~ÁÁJYf a cbh`Hc i f]g a `UbX`FYWfYUh]cb"~Ü^•^æ!&@ÉÁ& [ ]~^!^}&^É

ÁÁÁÁ~ÁÁ9IhYbg]cb`AUghYf` ; UfXYbYf"ÁÔ [ ~ !•^ÉÁç!æá}Áç@^Áç!æá}^!

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fYgYUfW\z`W`Ugg#Wc i fgY

ÁÁÁÁÁÁÁÁ

ÁÁÁÁÁÁÁÁ 59G`YZZcfhg"

ÁÁÁÁÁÁÁÁ ..... i` 5b] a U` AUb i fY`HfYUh a Ybh`GmghY a g

ÁÁÁÁÁÁÁÁ ..... i` Ghcf a `UbX` KUghY kUhYf` AUbU [Y a Ybh`GmghY a g

ÁÁÁÁÁÁÁÁ ..... i` DYfh i fVUh]cb`cZ`gc]`YWcgmghY a g`Vm`Ubh`fcdc a cfd\]W]bhYf j Ybh]cbg

ÁÁÁÁÁÁÁÁ ..... i` Gc]`b i hf]Ybh`YZZYWh`cb`ZcfYgh`YWcgmghY a`dfcX i Wh]j]hm`UbX`U`Y`kUhYf`e i U`]hm

ÁÁÁÁÁÁÁÁ ..... i` Gc]`ZYfh]`]hm#W\Y a ]ghf#d\mg]WU`dfcV`Y a g`UggcW]UhYX`k]h\`kUghYX]gdcgU`UbX`V]cfY a cX  
ZUWh]cb

ÁÁÁÁÁÁÁÁ ..... i` 9Wcbc a ]Wg`cZ`cf [ Ub]W`XU]fmz`Wfcd` a UbU [Y a Ybh`UbX`U`hYfbUh] j Y`YbYf [ m

ÁÁÁÁÁÁÁÁ ..... i` <Y]ZYf`b i hf]h]cbz`fYUf]b [ `UbX` a UbU [Y a Ybh

ÁÁÁÁÁÁÁÁ ..... i` 8U]fm`b i hf]h]cbU` ] a a i bc`c [ m

ÁÁÁÁÁÁÁÁ ..... i` G a U``f i a ]bUbh`dfcX i Wh]cb`UbX` a UbU [Y a Ybh`gmghY a g

ÁÁÁÁÁÁÁÁ ..... i` 8Y j Y`cd a Ybh`cZ`ghfUhY [ ]Yg`hc`UXXfYgg`Udd`YX`Ye i ]bY`]gg i Yg

ÁÁÁÁÁÁÁÁ ..... i` 6]cZ i Y`g`Zfc a `WcWcb i hg`UbX`ch\`Yf`YbYf [ m`gc i fWYgÁÁÁÁÁÁÁÁ.....

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ÁÁÁÁÁÁÁÁ ..... i` G i f j Y]`UbWY`UbX`dfY j Ybh]cb`cZ`gdfYUX`cZ`5g]Ub`@cb [ \cfbYX`6YYh`Y

ÁÁÁÁÁÁÁÁ ..... i` AUbU [Y a Ybh`cZ`h\`f]dg`dYgh]b`ZcfYghg`UbX` [ fYYb\`c i gYg

ÁÁÁÁÁÁÁÁ ..... i` -XYbh]Z]WUh]cb#Wcbhfc`cZ`Z i b [ U`dfcdU [ Uh]cb

ÁÁÁÁÁÁÁÁ ..... i` : i b [ U`V]c`c [ ]WU`d`Ubh`dfchYWh]cbz`Wc`YWh]cb`UbX` a UbU [Y a Ybh

ÁÁÁÁÁÁÁÁ ..... i` 9I d`cfY`a ]WfcV]U`dYgh]W]X]Yg`UbX`Z i b [ U`Wc a dcbYbhg`Ug`=DA`ghfUhY [ ]Yg

ÁÁÁÁÁÁÁÁ ..... i` =bbUhY]`a a i b]hmz`8B5!VUgYX`jUWW]bYg`UbX` a Ugh]h]g`dfY j Ybh]cb

ÁÁÁÁÁÁÁÁ ..... i` <cf a cbU`fY [ i`Uh]cb`cZ` [ `i WcgY`gmbh\Yg]g`UbX` a ]`dfcX i Wh]cbÁÁÁÁÁÁÁÁ.....

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ÁÁÁÁ~ÁÁGh i Xm]b [ `U`hYfbUh] j Y`gmghY a g`cZ` a Ud`Y`Wfcd` a UbU [Y a Ybh

ÁÁÁÁ~ÁÁ5b] a U`` a UbU [Y a Ybh`dfcX i Wh]cb

ÁÁÁÁ~ÁÁ : ccX`GmghY a g`hc`Wcbhf]V i hY`hc`]bWfYUg]b [ `UWWYgg`hc`\YU`h\m`ZccX`Zcf`U` JYf a cbhYfg

ÁÁÁÁ~ÁÁFYgc i fWYg`hc`] a dfc j Y`dfcX i Wh]cb` a Yh\`cXg`Zcf`Udd`Y` [ fc`kYfg"

ÁÁÁÁ~ÁÁ9b j]fcb a YbhU`m`Zf]YbX`m`Wfcd`dfcX i Wh]cb`gmghY a g

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&"" 6f]YZ`XYgWf]dh]cb`cZ`h\`Y`hUf [ Yh`U i X]YbWY

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'U''CihWcaY'HmdY.

Ö@æ} \*^Áä} ÁCE&cá [ ] ÁU~c& [ { ^ÁT^æ•~!^

'V''EiUbh]hUh]jY'CihWcaY

MYuf	5WhiU'
G€FI	GH

'W''EiU]hUh]jY'CihWcaY'cf'=a dUWh'GhUhY aYbh

-gg iY'filK\c'WufYg'UbX'K\mł

Yæc^!Á~ ~ æ|äc^ Áä•Áä} Ác@^Á- [ !^~! [ ] cá [-Ác@^ÁX^! { [ ] cáÖ [ç^!} [ !c•Áæ\*^ } áæÉÁÁc|c@ [ ~ \* @Á-æ! { ^!•Áæ!^Áæ&cáç^! ^ [ !\ä} \*Ác [ Áæáá!^••Ác@^á!Á& [ ] c!áä ~ cá [ ] Ác [ Ác@^Á , æc^!Á~ ~ æ|äc^ Á! [ !ä|^ { Ác@^!^Áä•Á { [ !^Ác@æçÁ} ^Áä•Ác [ Áä^ á [ ] ^ÉÁÁP ~ c!á^} cá Tæ}æ\*^ { ^}cáU|æ} }á} \*ÁçP TUDÁæ••ä•c•Á-æ! { ^!•Ác [ Á] |æ} Á•c^ } Ác@æçÁ { ä} á { ä : ^Á } ~ c!á^} c æ} áá• [ ä] | [ !•^•Ác [ Á] : [c^&cÁX^! { [ ] c•Á , æc^!ÉÁÁVWX TÁÖçc^} •ä [ ] Áæ••ä•c•Á-æ! { ^!•Áä} Á& [ { ] |cá} \*Ác@^á! P T U•Ē

K\Uh'\Ug'VYyb'XcbY

Q}ÁG€€îÉÁæÁ& [ !•^Á- [ !Áçc^•c [ &\Á-æ! { ^!•Á , æ•Ááçç^! [ ] ^áÉÁÁV@^Á& [ !•^Á@æ•Áá^ } Ácæ~ \* @cÁ- [ !Ác@^Á] æ•cáJ ^æ!•ÉÁÁV@^Á& [ !•^Á@æ•Áá^ } Á~ ] \*!æááá , äc@ÁæÁ& [ ] |æ} á [ ] Á~ •^!É-!á^ } á|~ Á , ^áÉææ•^áÁæ ] |ä&æcá [ ] Ác [ æ••ä•cÁ-æ! { ^!•Ác [ Á\^ ] Áæ&& ~ !æc^Áæ} áá& [ [ ] ^c^!Á^& [ !á•ÉÁV@á•Áä•Áä { [ ] |cæ} cáç [ Á~^~Á&cáç^! ^Áä { [ ] |^ { ^} c @^á!ÁP T UÁc@^Ááçç^! [ ] Ē

FYgi'hg

Úä} &^ÁG€€JÉÁFì €Á-æ! { ^!•ÉÁ!^ } !^•^} cá} \*ÁF€ÁÁ [-Áæ] |Ááæá! ~ Á-æ! { •Áä} ÁX^! { [ ] cá@æç^Á& [ { ] |c^ááP T U•Ē V@^Á& [ { ] æ} á [ ] Áæ ] |ä&æcá [ ] Áä•Áæçæ|æá|^Á [ ] Áæ } ÁáU@ [ ] ^Á [ !ÁáUæáÁæ] | [ , ä} \*Á- [ !Áä ] ~ c•Á [-Á { æ} ~ !^Áæ} á ^!cá|ä : ^!Áæ} áá~á^!á•Á [ ] Ác@^Á\* [ ÉÁÖæ•^áÁ [ ] ÁæAG€F€Á•~!ç^ Á [-ÁX^! { [ ] cÁ-æ! { ^!•ÉÁc@^Á@æçÁ!^á~^Áä ] @ [ • ] @ [ !~ •Áæááçá [ ] •Á [ ] Ác@^!Á-æ! { •Á~Áî€ÁÁæ•ÁæÁ!^•~|cÁ [-Áä { ] |^ { ^} cá} \*ÁP T UÁáæá! ^c@^!Á-æ! { •Ē V@á•Á [ ] cá [ ] |^! : [c^&c•Ác@^Á^} çá! [ ] { ^} cáá~ cáæ! • [ Á•æç^Á•Áä ] ~ cáá [ |æ!•Á• ] ^} cĒ•c!^ } \*c@^á} •Ác@^ çáæá|äç^ Á [-Ác@^•^Á-æ! { •Ē

('5ggcW]UhYX'?bck`YX[Y'5fYUg

G€FIÁW}áç^!•óç^Á[-ÁX^! { [ ]cÁÔ [ { äá}^äáÜ^•^æ!&@Áæ}á!Ôçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]!á•@ { ^}c•Áæ}á!Ü^•~|c•

?5`7cXY ?bck`YX[Y`5fYU

FHH Ú [ | ] ~ cá [ } ÁÚ!^ç^ } cá [ } Áæ } áÁ T á cá \* æ cá [ }

Î€F Ò& [ ] [ { á&•Á[-ÁCE\*!á&~|c~!æ|ÁÚ! [ á~&cá [ } Áæ } á!Øæ! { Á T æ } æ \* ^ { ^ } c

**CihWcaY`&**

%``CihWcaY`AYUgifyg

} ~ { á^!Á[-Á T æ•c^!ÁÔæ!á^}^!Á}æ!cá&á]æ}c•Á^æ!}á} \* Á&^!cá-á&æcá [ }

&``5ggcW]UhYX`=bgh]h i h]cb`HmdYg

ÁFÎ ÎGÁÔçc^}•á [ }

'U``CihWcaY`HmdY.

Ô@æ} \* ^!á}ÁCE&cá [ } ÁÚ~c& [ { ^Á T ^æ•~!^

'V``EiUbh]hUh]jY`CihWcaY

MYUf 5WhiU`

G€FI FF€

'W``EiU`hUh]jY`CihWcaY`cf`=a dUWh`GhUhY a Ybh

-gg i Y`flK\c`WUfYg`UbX`K\mL

K\Uh`\Ug`VYYb`XcbY

FYg i`hg

("5ggcW]UhYX`?bck`YX[Y`5fYUg

?5`7cXY ?bck`YX[Y`5fYU

FHH Ú [ | ] ~ cá [ } ÁÚ!^ç^ } cá [ } Áæ } áÁ T á cá \* æ cá [ }

G€Í Ú|æ}cÁ T æ}æ \* ^ { ^ } cÁÚ^•c^ { •

GFÎ Q}c^!æc^áÁÚ^•cÁ T æ}æ \* ^ { ^ } cÁÚ^•c^ { •

**CihWcaY`'**

%``CihWcaY`AYUgifyg

} ~ { á^!Á[-Á-æ! { ^!•Á, @ [ Áá { ] ] ^ { ^ } cÁ á^•cÁ-á^|áÁ { æ } æ \* ^ { ^ } cÁ ] !æ&cá&^•ç•DÁ&! [ ] Ð] æ•c~!^ÉÁ]! [ á~&cÉ æ}áÐ [ !Á• [ á! ] ]! [ á~&cáçác~Á, @á|^Á]! [ c^&cá } \* Á, æc^!ÉÁæá!Áæ}áÐ [ !Á• [ á]

&``5ggcW]UhYX`=bgh]h i h]cb`HmdYg



GEFIÁW}âç^!•âc^Á[-ÁX^! { [ ]cÁÔ [ { ââ}^âáÜ^•^æ!&@hæ}â!Ôçc^•â [ }ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]!â•@ { ^}c•hæ}â!Ü^•~|c•

Î€F            Ò& [ ] [ { â&•Á[-ÁCE\*!â&~|c~!æ|áÜ! [ â~&cá [ }Áæ}â!Ôæ! { ÁTæ}æ\*^ { ^}c  
Î€G            Ó~•â}^••ÁTæ}æ\*^ { ^}cÉÁÔâ}æ} &^ÉÁæ}â!Væçæcá [ }

**CihWcaY\_(**

%''CihWcaY'AYUgifyg

▷~ { à^!Á[-Áâ}ââçcâ~æ!•Á , @ [ Áâ { ]|^ { ^}cÁQÚTÁ]!æ&câ&^ç•DÁâ}&!^æ•â} \*Ác@^Á]! [ c^&cá [ }Á[-Á , æc^!ÉÁæâ!Áæ}âD [ !  
• [ â]

&''5ggcW]UhYX'=bgh]h i h]cb'HmdYg

ÁFÎ ÎGÁÔçc^}•â [ }

'U''CihWcaY'HmdY.

Ô@æ} \*^Áâ}ÁS} [ ,|^â\*^ÁU~c& [ { ^ÁT^æ•~|^

'V''EiUbh]hUh]jY'CihWcaY

MYUf            5WhiU`  
GEFI            HFÍ

'W''EiU]hUh]jY'CihWcaY'cf'=a dUWh'GhUhY a Ybh

-gg i Y'fIK\c'WUfYg'UbX' K\mŁ

K\Uh'\Ug'VYYb'XcbY

FYg i`hg

("5ggcW]UhYX'?bc k`YX[Y'5fYUg

?5'7cXY    ?bc k`YX[Y'5fYU  
FHH            Ú [ | ]~cá [ }ÁÚ!^ç^}cá [ }Áæ}â!Táçcâ\*æcá [ }  
G€Í            Ú|æ}cÁTæ}æ\*^ { ^}cÁÚ^•c^ { •  
GFÍ            Q}c^\*!æc^â!ÁÚ^•cÁTæ}æ\*^ { ^}cÁÚ^•c^ { •

**CihWcaY\_)**

%''CihWcaY'AYUgifyg

▷~ { à^!Á[-Áâ}ââçcâ~æ!•Áæ}â!â~•â}^••Á [ , ]^!•Á , @ [ Áâ { ]|^ { ^}cÁ!^& [ { { ^}â^âÁ]!æ&câ&^ç•Dc@æc  
æ&& [ { ]!â•@Á [ , ]^!Áçæ!~^•Áæ}â!â\* [ æ|Ác [ Áâ { ]! [ ç^D]! [ c^&cáâ~•â}^••Á•~•cæâ}æââ|âc^

&''5ggcW]UhYX'=bgh]h i h]cb'HmdYg

G€FIÁW}áç^!•c^Á[-ÁX^! { [ ]cÁÔ [ { ää}^ááÜ^•^æ!&@áæ}ááÔçc^}•á [ }ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]|á•@ { ^}c•áæ}ááÜ^•~|c•

ÁFÌ ÎGÁÔçc^}•á [ }

ÁFÌ ÎGÁÜ^•^æ!&@

'U'''C i hWc a Y'HmdY.

Ô@æ} \*^Áâ}ÁCE&cá [ ]ÁU~c& [ { ^Á T^æ•~!^

'V'''E i Ubh]hUh]jY'C i hWc a Y

MYuf                    5Wh i U`

G€FI                    ì ï J

'W'''E i U`]hUh]jY'C i hWc a Y'cf' = a dUWh`GhUhY a Ybh

=gg i Y`flK\c`WUfYg`UbX`K\mŁ

G€FIÁW}áç^!•óç^Á[-ÁX^! { [ ]c!Ô [ { ää}^äáÜ^•^æ!&@Áæ}á!Ôçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !c![-ÁCE&& [ { ]!•@ { ^}c•Áæ}á!Ü^•~|c•

I€G	Ò} *ä} ^!ä} *ÁÜ^•c^ { •Áæ} á!Ö~~ä [ { ^}c
Î€F	Ò& [ ] [ { ä&•Á[-ÁCE*!ä&~ c~!æ ÁÜ! [ á~&cá [ }Áæ} á!Öæ! { ÁTæ}æ*^ { ^}c
Î€G	Ó~•ä} ^••ÁTæ}æ*^ { ^}cÉ!Ø!æ} &^É!æ} á!Væçæcá [ }
Î€I	Tæ!\^cá} *Áæ} á!Ö!c!á~cá [ }ÁÜ!æ&cá&^•
Î€Í	Þæç~!æ ÁÜ^• [ ~!&^Áæ} á!Ö}ç! [ ] { ^}cæ ÁÖ& [ ] [ { ä&•
ÎGH	Pæ:æ!á•Ác[ÁP~ { æ}ÁP^æ c@Áæ} á!Üæ~^c^

**CihWcaY' \***

%''CihWcaY'AYUgifyg

V@^Á}~ { à^!Á[-Áä} ä!ç!ä~æ|•Á, @ [ Á& [ { ]|^c^ÁæÁ] |æ}Áä} &|~ ä!ä} \*Á]!^ç^}cæcáç^Á { ^æ•~!^•Ác[Á•^&~!^Áæ} ä { æ| @^æ|c@ÉÁ- [ [ á!•æ~^c^Áæ} á!}~ ä!ä&Á@^æ|c@Á]! [ c^&cá} \*Ác@^Á- [ [ á!&@æ!Áæ} á! { æ!\^cá}c^\*!áç^

&''5ggcW]UhYX' =bgh]h i h]cb'HmdYg

ÁFÎ ÎGÁÔçc^}•á [ }  
ÁFÎ ÎGÁÜ^•^æ!&@

'U''CihWcaY'HmdY.

Ô@æ} \*^Áä}ÁCE&cá [ }ÁÜ~c& [ { ^ÁT^æ•~!^

'V''EiUbh]hUh]jY'CihWcaY

MYUf	5WhiU'
G€FI	F€

'W''EiU]hUh]jY'CihWcaY'cf' = a dUWh'GhUhY a Ybh

=gg i Y'fiK\c'WufYg'UbX' K\mł

K\Uh'\Ug'VYYb'XcbY

FYg i`hg

("5ggcW]UhYX'?bc k`YX[Y'5fYUg

?5'7cXY	?bc k`YX[Y'5fYU
ÎGH	Pæ:æ!á•Ác[ÁP~ { æ}ÁP^æ c@Áæ} á!Üæ~^c^



G€FIÁW}áç^!•íc^Á[-ÁX^! { [ ]}cÁÔ [ { áá}^ááÜ^•^æ!&@háæ}á!Ôçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !:cÁ[-ÁCE&& [ { ]}|á•@ { ^}c•háæ}á!Ü^•~|c•

G€FIÁW}áç^!•bc^Á[-ÁX^! { [ ]}cáÔ [ { áá}^ááÜ^•^æ!&@Áæ}ááÔçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]}|á•@ { ^}c•Áæ}ááÜ^•~|c•

**(" 5ggcW]UhYX' ?bc k`YX[Y' 5fYUg**

<b>? 5' 7cXY</b>	<b>?bc k`YX[Y' 5fYU</b>
FHH	Ú[  ~ cá [ }ÁÚ!^ç^} cá [ }Áæ} áÁ T á cá * æ cá [ }
G€Í	Ú æ}cÁ Tæ}æ*^ { ^}cÁÜ^•c^ { •
GFÎ	Q}c^*!æc^áÁÜ^•cÁ Tæ}æ*^ { ^}cÁÜ^•c^ { •
Î€I	Tæ! \ ^ cá } * Áæ} áÁÔá•c!áà~ cá [ }ÁÚ!æ&cá&^•

**CihWcaY**

**%"" C i h W c a Y' A Y U g i f Y g**

}~ { à^!Á[-Áá}ááçáá~æ|•Á, @ [ Á& [ { ]|^c^ÁæÁà~•á}^••Á] |æ}ÉÁ•cæ!cÁæÁà~•á}^••Áç, áç@á}ÁFÌÁ { [ ]}c@•Á[-] |æ} }á} \*DÁàæ•^áÁ [ }Á] ^!• [ ]æ|Áçæ|~ ^•ÉÁ\* [æ|Áæ}áÁà~•á}^••Áçáæáá|áç^

**&"" 5ggcW]UhYX'=bgh]h i h]cb`HmdYg**

ÁFÌ ÎGÁÔçc^}•á [ }

**'U"" C i h W c a Y' H m d Y.**

Ô@æ} \*^Áá}ÁCE&cá [ }ÁU~c& [ { ^Á T ^æ•~!^

**'V"" E i U b h]h U h]j Y' C i h W c a Y**

<b>MYUf</b>	<b>5Wh i U'</b>
G€FI	IG

**'W"" E i U']h U h]j Y' C i h W c a Y' c f' = a d U W h' G h U h Y a Y b h**

**=gg i Y'fl K \ c'WufYg'UbX' K \ ml**  
Ô^\*á} }á} \*Á•æ! { ^!•ÁçLÁF€Á^ ^æ!•Áá}Áà

{ ^ æ áæ

G€FIÁW}áç^!•óç^!Á[ÁX^! { [ ]c!Ö [ { ää}^ááÜ^•^æ!&@áæ}á!Öçc^}•á [ÁCE} }~æ!áÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•^áæ}á!Ü^•~|c•

@~ }á!^áÁ^!&^}cÁ[-Á!^•] [ ]á^}c•^áæ!áá@æcÁ! [ !b^&c!á} &!^æ•^áá@^á!Á } [ , |^á^\*^!áæ}á!á^&á•á [ ]É { æ\á } \*  
æàá|áç^LÁJÍÁ!^ [ !c^áááç!á} &!^æ•^áá•\á|Á|Áç^|Áæ}á!áJÍÁÁ•æ!ááç!á} &!^æ•^áá@^á!Á& [ ]-áá^ } &^ÉÁU } ^  
]æ!cá&á]æ}cÁ^ç|]æ!á^áÉÁÁPæç!} \*Áç@á•Á] ]æ} }á } \*^áæ}á!áæ}æ|~•á• [ Á^æ!|Áá}Á [ ~!Á-æ! { á } \*^áæ!^!Á , á|  
•á\* }á-á&æ}c|^Á@^|]Á~•Áç [ Á&!^æç^!áæ!•~•cæ!}æ!á!á~•á}^••Á { [ á^|ÉN

(" 5ggcW]UhYX' ?bc k`YX[Y' 5fYUg

? 5`7cXY ?bc k`YX[Y' 5fYU

Í€F Ò& [ ] [ { á&•Á[-ÁCE\*!á&~|c~!æ!áÜ! [ á~&cá [ ]Áæ}á!áØæ! { ÁTæ}æ\*^ { ^}c

Í€G Ó~•á}^••ÁTæ}æ\*^ { ^}cÉÁÖá}æ} &^ÉÁæ}á!áVæçæcá [ ]

**CihWcaY`-`**

%"" C i h W c a Y` A Y U g i f Y g

}~ { á^!Á[-Á]æ!cá&á]æ}c•Á , @ [ Á { æ\^!áæ}á!á}c^}cá [ ]æ!ÉÁá}- [ ! { ^áá^&á•á [ ]Á!^\*æ!áá} \*^•æ!cá} \*^áæ!á~•á}^••  
àæ•^áá [ ]Á-^æ•ááá|áç^ÉÁ^!• [ ]æ!Á\* [ æ!•Áæ}á!áçæ!~^•

&"" 5ggcW]UhYX'=bgh]h i h]cb`HmdYg

ÁF!ÍG!Öçc^}•á [ ]

'U"" C i h W c a Y` H m d Y.

Ö@æ} \*^!á}ÁCE&cá [ ]ÁU~c& [ { ^ÁT^æ•~!^

'V"" E i U b h]h U h]j Y` C i h W c a Y

MYUf 5WhiU`

G€FI F€

'W"" E i U`]h U h]j Y` C i h W c a Y` c f` = a d U W h` G h U h Y a Y b h

=gg i Y`fl K \ c`WUfYg`UbX` K \ ml

K \ Uh` \ Ug`VYYb`XcbY

FYg i`hg

(" 5ggcW]UhYX' ?bc k`YX[Y' 5fYUg

? 5`7cXY ?bc k`YX[Y' 5fYU

Í€F Ò& [ ] [ { á&•Á[-ÁCE\*!á&~|c~!æ!áÜ! [ á~&cá [ ]Áæ}á!áØæ! { ÁTæ}æ\*^ { ^}c

G€FIÁW}áç^!•íc^Á[-ÁX^! { [ ]clÔ [ { ää}^äáÜ^•^æ!&@há}á!Ôçc^}•â [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•há}á!Ü^•~|c•

**CihWcaY`\_%\$**

%""CihWcaY`AYUgifyg

▷~ { à^!Á]æ••ä} \*Ác@^ÁWÜÖCEÁÖCEÚ•Áæ~ äácÁc [ Á\*æä]Á [ !Á { æä}cæä}ÁæÁ { æ! \^cÁ- [ !Ác@^á!Á [ &æ||^Á\*! [ , }Á&! [ ]ç•D

&""5ggcW]UhYX`=bgh]h i h]cb`HmdYg

ÁFÌ ÎGÁÔçc^}•â [ }

'U""CihWcaY`HmdY.

Ô@æ} \*^Áä}ÁCE&cá [ }ÁU~c& [ { ^ÁT^æ•~!^

'V""EiUbh]hUh]jY`CihWcaY

MYuf            5WhiU`  
G€FI            FJ

'W""EiU`]hUh]jY`CihWcaY`cf`=a dUWh`GhUhY a Ybh

=gg i Y`flK \c`WufYg`UbX`K \mł

K \Uh` \Ug`VYYb`XcbY

FYgi`hg

("5ggcW]UhYX`?bc k`YX[Y`5fYUg

?5`7cXY    ?bc k`YX[Y`5fYU  
Î€I            Tæ! \^cá} \*Áæ}á!Öä•c!â~cá [ }ÁÚ!æ&cá&^•

**CihWcaY`\_%%**

%""CihWcaY`AYUgifyg

V@^Á}~ { à^!Á[-Á\*! [ , ^!•Á\*! [ , ä} \*Á [ !\*æ}â&Á&! [ ]•Áä} &!^æ•^Á!^ç^} ~^•Áä { ]! [çä} \*Áà~•ä}^••Á•~•cæä}æà|ác^

&""5ggcW]UhYX`=bgh]h i h]cb`HmdYg

ÁFÌ ÎGÁÔçc^}•â [ }  
ÁFÌ ÎGÁÜ^•^æ!&@

'U""CihWcaY`HmdY.

Ô@æ} \*^Áä}ÁCE&cá [ }ÁU~c& [ { ^ÁT^æ•~!^

G€FIÁW}áç^!•íc^Á[-ÁX^! { [ ]}cÁÔ [ { ää}^ááÜ^•^æ!&@háæ}á!Öçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !:cÁ[-ÁCE&& [ { ]}|á•@ { ^}c•háæ}á!Ü^•~|c•

'V''E i Ubh]hUh]jY`C i hWcaY

MYUf

5WhiU`

G€FIÁW}äç^!•öc^Á[-ÁX^! { [ ]c!Ô [ { ää}^äáÜ^•^æ!&@hæ}á!Ôçc^}•ä [ }ÁCE} }~æ!áÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•hæ}á!Ü^•~|c•

**CihWcaY`\_%)**

%""CihWcaY`AYUgifyg

P~ { à^!Á [-Áä}äâçäâ~æ|•Á , @ [ Áä { ]|^ { ^}c!^& [ { { ^}á^á^\*æ!á^}á } \*Á ]!æ&cä&^ç•DÁ ]! [ c^&cä } \*Á , æc^!É!æä!É  
æ}äð [ !Á• [ ä ]  
P [ cÁÜ^ ] [ !cä } \*Á [ }Ác@ä•ÁU~c& [ { ^ÁT^æ•~!^

**CihWcaY`\_%\***

%""CihWcaY`AYUgifyg

P~ { à^!Á [-Á&@æ|^} \*^•Ác@æcÁ@^æ|c@Á&æ!^Á ]! [ ç!ä^!•Á-æ&^Áæ•Ác@^Á•^^\Ác [ Á { ^^cÁc@^Á}^^á•Á [-ÁX^! { [ ]c!•  
{ ä\*!æ}cÁäæä!^Á , [ !\^!•É

&""5ggcWjUhYX'=bgh]h i h]cb`HmdYg

ÁF! ÎGÁÜ^•^æ!&@

'U""CihWcaY`HmdY.

Ô@æ} \*^Áä}ÁS} [ , |^á\*^ÁU~c& [ { ^ÁT^æ•~!^

'V""EiUbh]hUh]jY`CihWcaY

MYUf            5WhiU`  
G€FI            H

'W""EiU`hUh]jY`CihWcaY`cf'=a dUWh`GhUhYaYbh

=ggiY`flK\c`WUfYg`UbX`K\mL  
Q}Ác@^Á]æ•cÁc^}Á^~æ!•ÁPä•]æ}ä&Á , [ !\^!•Á@æç^Áæ!|äç^Áä

G€FIÁW)äç^!•öc^Á[-ÁX^! { [ ]clÖ [ { ää}^äáÜ^•^æ!&@kæ)á!Öçc^••ä [ ACE) } ~æ|Ü^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•kæ)á!Ü^•~|c•

("5ggcW]UhYX' ?bc k`YX[Y'5fYUg

?5'7cXY ?bc k`YX[Y'5fYU

Î€F Ö& [ ] [ { ä&•Á[-ÁCE\*!ä&~|c~!æ|ÁÜ! [ ä~&cá [ ]Áæ}á!Øæ! { ÁTæ}æ\*^ { ^}c

**CihWcaY`%+`**

%``CihWcaY`AYUgifyg

P~ { à^!Á[-Á\*^}^cá&Á-æ&c [ !•Ác@æcÁ { æ^Áä}á^] ^}á^}c|^Á!Áb [ ä}c|^Á& [ ]c!ä~c^Ác [ Áä}•^&cá&äá!^•ä•cæ} &^Á [-  
à^c|^Á [ ] ~|æcá [ ]•É

&``5ggcW]UhYX'=bgh]h i h]cb`HmdYg

ÁFî ÎGÁÜ^•^æ!&@

'U``CihWcaY`HmdY.

Ö@æ} \*^Áä}ÁS} [ ,|^á\*^ÁÜ~c& [ { ^ÁT^æ•~|^

'V``EiUbh]hUh]jY`CihWcaY

MYUf 5WhiU`

G€FI G

'W``EiU`hUh]jY`CihWcaY`cf'=a dUWh`GhUhY a Ybh

=gg i Y`fi K \c`WufYg`UbX`K \mł

Ü [ cæc [ ÁÖ! [ , ^!•Á , ä||Áà^Ác@^Á~|cá { æc^Áä^}^~ä&æ!á^•Á [-Ác@ä•Á!^•^æ!&@ÉÁÁQcÁ , ä||Á@^|]Á\*! [ , ^!•Á~}á^!•cæ}á  
@ [ , Áà^c|^Á•Á& [ ]cá} ~^Ác [ Á!^•ä•cÁä}•^&cá&äá^•Á• [ Á!æ] ää|^É

K \Uh` \Ug`VYYb`XcbY

Ü^•^æ!&@^!Ác^•c^á^\*^}^cá&Áçæ!áæcá [ ]Áä~^Ác [ Áá^ { [ \*!æ] @ä&•ÉÁ\*^}^cá&Áäç^!•äc^Áä~^Ác [ Á^ç [ |~cá [ ]É  
á^ { [ \*!æ] @ä&•Á@ä•c [ !^Ác [ Áá^c^! { ä}^Áä-Áá^c|^Á [ ] ~|æcá [ ]•Áæ!^Áäá^}cá&æ|Áà^Áá^•&^}cÉ

FYg i`hg

Ö^}^cá&Áäç^!•äc^Áá [ ^•Á} [ cÁäá~!Áá^c , ^^}Á!^\*á [ ]•ÉÁ\*^}^cá&Áäç^!•äc^Áá [ ^•Á} [ cÁäá~!Ááæ { [ ]\*  
 [ ] ~|æcá [ ]•Á , äc@ä}Á!^\*á [ ]•ÉÁÁV@ä•Áá}- [ ! { æcá [ ]Áá•Á^••^}cáæ|Ác [ Á!^•^æ!&@^!•Áæ•ÁácÁá^\*á}•Ác [ Á~}á^!•cæ}á  
@ [ , Ác@^Áá^c|^Á•Á& [ ]cá} ~^Ác [ Á^ç [ |ç^Á!^•ä•cæ} &^Ác [ Áæ||Á { æb [ !Áä}•^&cá&äá^•É

("5ggcW]UhYX' ?bc k`YX[Y'5fYUg

?5'7cXY ?bc k`YX[Y'5fYU

GFF Q}•^&c•ÉÁTäc^•ÉÁæ}á!Üc@^!ÁCE!c@! [ ] [ ä•ÁCE~^&cá} \*ÁÜ|æ}c•

GEFIÁW}áç^!•óç^![-ÁX^! { [ ]cáÖ [ { ää}^äáÜ^•^æ!&@Á!^•~|c•Á , @ä&@Áä} &!^æ•^Ác@^Á~ } á^!•cæ} ää} \*Á[-ÁæÁ]|æ}c•Á!^• [ ]•^Ác[Ác@^Á!  
^}çá! [ ] { ^}cÉ

**CihWcaY'\_%\_**

%'''CihWcaY'AYUgifyg

Þ~ { à^!Á[-Á!^•^æ!&@Á!^•~|c•Á , @ä&@Áä} &!^æ•^Ác@^Á~ } á^!•cæ} ää} \*Á[-ÁæÁ]|æ}c•Á!^• [ ]•^Ác[Ác@^Á!  
^}çá! [ ] { ^}cÉ

&'''5ggcW]UhYX'=bgh]h i h]cb`HmdYg

ÁFî ÎGÁÜ^•^æ!&@

'U'''CihWcaY'HmdY.

Ö@æ} \*^Áä}ÁS [ , |^ä \*^ÁU~c& [ { ^ÁT^æ•~!^

'V'''EiUbh]hUh]jY'CihWcaY

MYUf	5WhiU'
GEFI	F

'W'''EiU]hUh]jY'CihWcaY'cf'=a dUWh`GhUhY a Ybh

-gg i Y'fl K\c'WUfYg'UbX' K\mł

U|æ}c•Áæ!^Á! [ [ c^áÁc [ Á [ ]^Á• ] [ cÁc@^Á!Á^ } cá!^Á|ä-^ÉÁÁQ}Á [ !á^!Ác [ Á•~!çáç^ÉÁ]|æ}c•Á { ~cÁ•^ }•^Á^ç^ }Ác@^  
• { æ||^•cÁ^ }çá! [ ] { ^}cæ|Á&@æ} \*^Áæ} äÁ!^• [ ] { äÁ!æ} äá|^ÉÁ&@æ} \*ä} \*Ác@^Á!Á]@^•á [ [ \*^Áæ} äÁ { [ äá-^á } \*  
~!c@^!Áá^ç^! [ ] { ^}cÉÁÁV } ä^!•cæ} ää} \*Ác@^Á!æ} äáÁ { [ |^&~|æ!Á&@æ} \*^•Ác@æcÁ~ } ä^!|ä^Á]|æ}c•Á!^• [ ]•^•  
c[Ác@^Á^}çá! [ ] { ^}cÁ&æ} Á@^!|Á [ ] cá { á : ^Á& [ ] äáçá [ ]•Á [ !Ác!^æc { ^}c•Ác@æcÁ { æçá { á : ^Á]|æ}cÁ^á^|ä^Á~ } ä^!  
•c!^•••~|Á& [ ] äáçá [ ]•ÉÁÁcE|-æ|-æÁæ} äÁ [ ^á^æ }•Áæ!^Áä { [ ]!cæ}cÁ- [ [ áÁ&! [ ]•Á- [ !Áæ} ä { æ|•Áæ} äÁ@~ { æ}•  
á^&æ~•^Ác@^Á^•c [ !Á^! ]! [ c^á }Áä}Ác@^Á!Á^•^á^•Áæ} äÁ}áç! [ \*^ }Áä}Ác@^Á!Á! [ [ c•ÉÁV } ä^!•cæ} ää} \*Ác@^  
á^ç^! [ ] { ^}cÁ [-Ác@^•^Á&! [ ]•Á&æ} Á@^!|Á , áç@Á&! [ ]Á! : [ á~&cá [ ]É

K\Uh'\Ug'VYyb`XcbY

V@^Á] : [ b^&cÁ] [ [ \^ááæcÁc@^Á^~^&cÁ [-Áä~^!^ }cÁ•æ|cÁc!^æc { ^}c•Á [ }Á]|æ}cÁ! [ [ c•ÉÁÁU|æ}c•Á , ^!^Á\*! [ , }Áæ} ä  
ä} [ &~|æc^áá }Á\*! [ , c@Á] [ ~&@^•Á , @ä&@Áä] [ , ^áÁc@^Á•&á^ }cÁ•cÁc [ Áæ&^••Áæ} äÁçá~æ|ä : ^Á! [ [ c  
á^ç^! [ ] { ^}cÉ

FYg i`hg

Öçäá^}&^Á•@ [ , •Ác@æçÁæÁ]|æ}c•Á! [ [ c•Á^ç&@æ} \*^Á { [ |^&~|æ!Á•ä\* }æ|Á , áç@Á• [ ä|Áàæ&c^!áæÁc [ Ác!ä\*~^!  
|^\*~ { ^Ác [ Á-! [ }Á] [ ä~|^•ÉÁ , @ä&@Ác@^Ááæ&c^!áæÁc@^ }Áä}~^&c•ÉÁÁU|æ}cÁ! [ [ c•Áæ!^Á•^ }•áçáç^Ác [ Á•æ|cÁ•c!^••É  
Q}&!^æ•^áÁc^ { ^!^æ~!^ÉÁä~^Ác [ Á&@æ} \*^•Áä}Á [ ç^!æ||Á&|ä { æc^ÉÁ&æ} Á|^æáÁc [ Á]^!á [ äá&Á•c!^••ÉÁ , @ä&@  
!^•~|c•Áä}Áæ&&~ { ~|æçá [ }Á [-Á•æ|c•Áä}Ác@^Á• [ ä|Áæ•Á , æc^!Á^çæ} [ !æc^•É

(''5ggcW]UhYX'?bc k`YX[Y'5fYUg

?5'7cXY	?bc k`YX[Y'5fYU
GEÍ	Óæ•ä&ÁU æ}cÁÓä [ [ ] *^





G€FIÁW}äç^!•ic^Á[-ÁX^! { [ ]}clÔ [ { ää}^ááÜ^•^æ!&@háæ}á!Öçc^}•ä [ }ÁCE) } ~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]}|ä•@ { ^}c•háæ}á!Ü^•~|c•

**Jfl<L"D`UbbYX'Dfc [fU a `fl9 IhYfbU` : UWhcft**

**9 IhYfbU`ZUWhcft k \jW\`UZZYWhYX`c ihWc a Yg**

Natural Disasters (drought, weather extremes, etc.)

Economy

Appropriations changes

Public Policy changes

Government Regulations

Competing Public priorities

Competing Programmatic Challenges

Populations changes (immigration, new cultural groupings, etc.)

**6fjYZ`9 Id`UbUh]cb**

**Jfl<L"D`UbbYX'Dfc [fU a `fl9 jU` i Uh]cb`Gh i X]Ygt**

**9 jU` i Uh]cb`FYgi`hg**

Participants from past year's NMP courses were surveyed as to changes implemented as a result of taking the course. Sixty percent of the farms increased yields while decreasing phosphorus fertilizer by 50% and nitrogen fertilizer by 25%. 100% of respondents felt they had a positive impac 46o26ing get they had a59

GEFIÁW)äç^!•äc^Á[ÁX^! { [ ]c}Ö [ { ää}^äáÜ^•^æ!&@Áæ}ä!Öçc^}•ä [ }ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•Áæ}ä!Ü^•~|c•

**Jfi5L''D'UbbYX'Dfc [fUa 'fiG i a a Ufml**

**Dfc [fUa 'i&**

%''BUaY'cZ'h\Y'D'UbbYX'Dfc [fUa

Ö [ { { ~ }äc^ÁÖ^ç^! [ [ ] { ^}c}Áæ}ä!c@^ÁÜ^!• [ ]æ|Áæ}ä!Q]c^|/^&c~æ|ÁÖ^ç^! [ [ ] { ^}c}Á [-ÁY [ ~c@Áæ}ä!ÁCEä~|c•

Ü^ [ !cä} \*Á [ ]Ác@ä•ÁÜ! [ \*!æ {

**Jfi6L''Dfc [fUa 'bck'YX[Y'5fyUfígl**

FÉÁÜ! [ \*!æ { ÁS} [ , |^ä \*^ÁCE!^æ•Áæ}ä!Ü^!&^}cæ \*^

?5 7cXY	?bck'YX[Y'5fyU	!%, *& 9lhYbg]cb	!%, -\$ 9lhYbg]cb	!%, *& FYgYUfW\	!%, -\$ FYgYUfW\
FGI	W!àæ}AØ [ !^•c! ^	FFÄ		€Ä	
í€í	Ö [ { { ~ }äc^ÁÜ^• [ ~!&^AU æ} }ä} *Áæ}ä Ö^ç^! [ [ ] { ^}c	FíÄ		€Ä	
ì€G	P~ { æ}ÁÖ^ç^! [ [ ] { ^}c}Áæ}äAØæ { ä ~AY^ E Ó^ä} *	FíÄ		€Ä	
ì€í	Ö [ { { ~ }äc^ÁQ]•cäc~cä [ ]•Áæ}äAU [ &äæ  Ü^!cä&^•	íÄ		€Ä	
ì€í	Y [ ~c@ÁÖ^ç^! [ [ ] { ^}c	ííÄ		€Ä	
	HchU'	F€€Ä		€Ä	

**Jfi7L''D'UbbYX'Dfc [fUa 'fi-bd i hgl**

%''5WhiU''Uaaci bh'cZ': H9#GMg'YIdYbYX'h\]g'Dfc [fUa

MYUf. '&\$% (	9lhYbg]cb		FYgYUfW\	
	%, *&	%, -\$	%, *&	%, -\$
D'Ub	GG€€	€€€	€€€	€€€
5WhiU''DUJX	í€í	€€€	€€€	€€€
5WhiU''Jc'ibhYYf	FG€í	€€€	€€€	€€€

&''5WhiU''Xc''Ufg'YIdYbYX]b'h\]g'Dfc [fUa 'fi]bW' iXYg'7UffmcjYf' : ibXg'Zfca'dfY]jc ig'mYUfígl

9lhYbg]cb		FYgYUfW\	
Ga]h\!@YjYf''V'/'W	%, -\$'9lhYbg]cb	<UhW\	9jUbg!5''Yb
		%, *&'AUhW\]b [	%, -\$'AUhW\]b [
			%, -\$'5''Ch\Yf

GEFI AW)äç!•äc^Á[ÁX^! { [ ] cãÖ [ { ää] ^äáÜ^•^æ!&@kæ) ä!Öçc^•ä [ ACE) } ~æ|áÜ^ [ !cá[-ÁCE&& { [ ] ä•@ { ^ } c•kæ) ä!Ü^•~|c•

### Jf18L"D`UbbYX`Dfc [ fUa `f15Wh] j]hmL

%"" 6fjYZ`XYGwfjdh]cb`cZ`h\Y`5Wh] j]hm

AAAA

AAAAAAAA~IÉPÁU[•äcç^ÁY[~c@ÁÖ^ç^| [ ] { ^ } cÁU! [ \*!æ { KÁP^ ] Á^ [ ~c@Áæ&~ä!^ÁŠä-ÁÜ\ä|]•Áä } Ác@^Á- [ ] [ , ä ] \*Áæ!^æ•K  
Ö^&ä•ä [ ] \*ÁTæ\ä } \*LÁÖ!äcä&æ|ÁV@ä } \ä } \*LÁU! [ à| ^ { ÈÜ [ |çä ] \*LÁÖ [ { { } } ä&æcä [ ] LÁÖ [ æ|ÈÜ^ccä ] \*LÁæ } äÁU\ä|]•Á- [ !  
Öç^! ^äæ^ÁŠçä } \*Ác [ Á•~&^&^Áæ•Áæä~|c•ÉÁÖ^|çç^! ^ÁT^c@ [ ä•KÁIÉIÁ•^~^ } cäæ|Á|æ! } ä } \*Á@ [ ~!•Á~•ä ] \*Á^ç^ ^!ä^ } cäæ|  
|æ! } ä } \*Ác^&@ } ä~^•Á- [ !Áä ] ÉÁ•&@ [ [ !ÉÁæ-c^!•&@ [ [ !ÉÁ [ !Á [ ~cÉ [-É•&@ [ [ !Á•^ccä ] \*•

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~U^!æcä [ ] ÁTä|äcæ! ^ÁŠä•ÁçUTSDÁÁÁ^çä•c•Ác [ Á^á~&æc^ÁX^! { [ ] cÁ [ { { } } äc^Á•Á [ ] Ác@^Á~ } ä~^Á^ç^ ^!ä^ } &^Áæ } ä  
&@æ| ^ } ^•Á- [ -Á [ ä|äcæ! ^!ä-^Áæ } äÁc•Áä [ ] æ&cÄ [ ] Á-æ { ä|ä^ÉÁ , @ä|Á } ! [ çää ] \*Á [ ] •äcç^Á [ ] [ !c~ } äc^Á•Á- [ !  
^ [ ~c@ÉÁÁÜ^æä ÉÁU^cÉÁÖ [ ÁÁU ] ^!æcä [ ] KÁTä|äcæ! ^ÁŠä•ÁX^! { [ ] cÁÁUTSÉXVÁæä { •Ác [ Á^•cæä|ä•@Á& [ { { } } äc^  
] æ!c^!•@ä ] •Ác@æcä , ä|Á& [ ] ^&cÄæ } äÁ^ä~&æc^Á^ [ ] ^Áä^KÁÖ!^æcä } \*Á& [ { { } } äc^Á•Á~ ] [ !cÉÁä^|çç^!ä } \*Á [ ] [ !c~ } äc^Á•  
c [ Á^ [ ~c@Áæ } äÁ-æ { ä|ä^ÉÁ•~ ] [ !cä ] \*Á { ä|äcæ! ^Á\ä^ÉÁ& [ ||æä [ !æcä ] \*Á , äc@Á& [ { { } } äc^Á ] æ!c^!•ÉÁ^ä~&æcä } \*Ác@^Á~ } ä|ä&É  
ä } &|~ä } \*Ác@^Á^ä~&æcä [ ] Á& [ { { } } äc^ÉÁæ } äÁä } & [ ! ] [ !æcä ] \*Á { ä|äcæ! ^Á-æ { ä|ä^Áä } c [ Á^çä•cä ] \*Á& [ { { } } äc^Á!•Á• [ !&^•É

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AAAAAAAA~UÉÖÈVÉÁE&cäçäcä^•KÁIÉPÁÜÖVÁ , ä|Áä^•ä } Ác [ Á•@ [ , Á@ [ , Á•&ä^ } &^Áæ } äÁ^ } \*á^ ^!ä } \*Áä••~^•Áæ-^&cÁ [ ~c@•cÁ|çç^  
æ } äÁ ] ^!æ! ^Áæ!~c^! ^Á^ } ^!æcä [ ] Á [-Á•&ä^ } cä•c•Áæ } äÁ^ } ^!æ! •ÉAV@^ÁIÉPÁÜÖVÁ ] ! [ \*!æ { Á , ä|Á ] ^!•^ } cÁIÉPÁ , äc@Áæ  
} ^ , Á [ ] [ !c~ } äc^Á& [ ] ^&cÄc [ Ác@^ÁŠÖWc•ÁÜÖVÁ! ^•Áæ!&@Á& [ { { } } äc^Áæ } äÁä } c^!æc^Á , äc@Á&~!^ } cÁ^ [ ~c@  
 , [ !~ [ !&^Á^çç^! [ ] { ^ } cÁä ] äcäæcç^•É

Á^Tæ! ^cÁCE) æ| ^•äÉÁB^ä•ÁCE•••• { ^ } cÄæ } äÁÜc!æc^\*äÁÜ|æ } ä } \*KÁV@ä•Á ] ! [ \*!æ { Á ] ! [ çää^•Ác@^Á& [ { { } } äc^Á , äc@  
æ } æ|cä&æ|Ác^&@ } ä~^•Ác@æcÄ&æ } Áä^Á ] ~cÄc [ Á , [ !Áä { { ^Áäæc^!^Áä } ^& [ ] [ { ä&Á^ççæ|ä : æcä [ ] Á^~ [ !c•ÉAV@^Á ] ! [ &^••  
! ^~ä! ^Áä } ] cÁ-! [ { Ä | &æ|Á! ^•ä^ } c•Á• [ Ác@æcÁ! ^& [ { { } } äæcä [ ] •Á! ^! ^&cÄ [ c@Á { æ! ^cÄ& [ ] äcä [ ] •Áæ•Á , ^|Áæ•Ác@^  
] ! ^! ^ } &^•Á [-Ác@^Á& [ { { } } äc^ÉÁÁÁÁÖ^|çç^! ^ÁT^c@ [ ä•KÁÖ! [ ~ ] Á { ^cä } \*•Áæ } äÁä&~••ä [ ] \*Á! [ ~ ] •Áä } Á& [ { { } } äc^É

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AAAAAAAA~Ö [ { { } } äc^ÁŠ^æä^!•@ä ] KÁCE••••ä } \*ÉÁæä! ^••ä } \*Áæ } äÁ^ç } ää } \*Á& [ { { } } äc^Á&æ } æ&äc^Ác@! [ ~ \*@  
|æä^!•@ä ] Áæ } äÁ } ä|ä&Á [ !ä&^Á^ä~&æcä [ ] Á^~ [ !c•Áä } &|~ä } \*Áä~ä|ää } \*ÉÉæ } äÁ^ä~&æcä [ ] Á { ^ { ä! ^•Áæ } äÁ&|ä^ } c^! ^Á [-ÉÉ  
& [ æ|çä [ ] •Áæ } äÁ& [ ||æä [ !æcç^•É

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AAAAAAAA~Ö [ ] ä } \*Á , äc@ÁÜ^ ] æ!æcä [ ] Áæ } ä!Öç [ !&^çÖUÜÖDKÁUæ! ^ } cÁ^ä~&æcä [ ] Á- [ !Á ] æ! ^ } c•Á [-Á { ä } [ !Á&@ä|ä! ^ } Á , @ [  
@æç^Á-ä|ä^Á- [ !Á^ ] æ!æcä [ ] ÉÁäç [ !&^ÉÁä•• [ |çä ] \*Á [-ÁæÁ&çä|Á ] ä [ ] ÉÁ ] æ! ^ } cæ^ÉÁ&@æ } \*^•Áä ] Á!ä~c@•Áæ } ä  
! ^• [ ] •ää|äcä^Á& [ ] &! } ä } \*Ác@^Á!Á&@ä|ä! ^ } ÉAV@ä•Áä•ÁæÁ& [ ~!cÁ { æ } äæc^ÁÁ ] ! [ \*!æ { É

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AAAAAAAA~Tä\*!æ } cÁÖä~&æcä [ ] ÁÜ^!~äc { ^ } cÁU! [ \*!æ { ÄCTÖÜDKÁV [ Á^ ] •~! ^Ác@æcÄ&@ä|ä! ^ } Á [-Á { ä\*!æ } cÁ-æ! { Á , [ !~!•É  
æ } äÁ~æ|ä~ä } \*Á^ [ ~c@Á~ } ä! ^Áæ\* ^ÁGGÉÁæ! ^Áæ , æ! ^Á [-Ác@^Á^ä~&æcä [ ] æ|Á•~ ] [ !cÁ^!çä&^•Áæçæ|ä|ä^Ác [  
c@^ [ ÉÁÖ^|çç^! ^ÁT^c@ [ ä•KÁU~c! ^æ&@Ác [ Á•&@ [ [ !ÉÁæ\*!ä&~|c~!æ|Á^ { ] [ ^!•ÉÁæ } äÁ [ &äæ|Á^!çä&^Áæ\*^ ] &ä^•  
c@! [ ~\*@ [ ~cÄc@^Á•cæc^É

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AAAAAAAA~X^! { [ ] cÁCE\*!cÉä|äc^ÁU! [ !b^&cKÁV [ Á { æ^! ^! ^& [ { { } } äæcä [ ] •Ác@æcÄ&æ } Áä^Á~^Áä^Á-æ! { ^!•Á , äc@Áää•æä|äcä^•  
c [ Á { æä } cæä ] Á^ [ ] [ ^ { ^ } cÉÁc@! [ ~\*@Áä^çç^! [ ] { ^ } cÁ [-Áæ&& [ { { } } äæcä [ ] •ÉÁÁÁÖ^|çç^! ^ÁT^c@ [ ä•KÁU! [ &^••Áä ] ç [ |çç^  
! ^&! ^äc { ^ } cÁ [-Á^|ä~ä| ^Áä ] ääçää~æ|Ác@! [ ~\*@Á! ^! ^!æ|ÉÁQ } cæ^ÁÁä ] - [ ! { æcä [ ] Áä•Á! ^& [ !ä^Áä [ ] Á-æ! { •Á ] ! [ çää^Áä~Ác@^  
Pæcä [ ] æ|ÁCE\*!cÉä|äc^ÁU! [ !b^&cÉÁÜäc^!çä~äc^Áæ! ^Ác@^Á ] !ä { æ! ^Á { ^æ } •Á [-Á& [ ] cæ&cÉ

AAAAAAAA

AAAAAAAA~Væ^ÁÖ@æ! ^ÁçVÖBÜÖDKÁP^! ] ä } \*Á& [ { { } } äc^Áæä~|cÁ { ^ { ä! ^•Ác [ Á^æä ] Ác@^Á•\ä|]•Áä } ^&^•æ! ^Ác [ Á^Á& [ ] -äá^ } c  
^ } [ ~\*@Ác [ Ácæ^Á^ ] æ!cÄä ] Ác [ , ] \*Á [ çç^! ] { ^ } cÁä^Á^|cä { æc^! ^Á& [ ] ^cä } \*Á [-Ác [ , ] Á^ [ çç^! ] { ^ } cÁ|æä^!•@ä ]  
 [ !•äcä [ ] •ÉÁÁÁÁÁÁÁÖ^|çç^! ^ÁT^c@ [ ä•KÁT^cä ] \*•ÉÁä•\*ÉÉæ } äÁ^ä~&æcä



G€FIÁW}áç^!•æ^Á[ÁX^! { [ ]clÔ [ { áá}^ááÜ^•^æ!&@há}ááÖçc^}•á [ÁCE} }~æ|ÁÜ^] [!cÁ[-ÁCE&& { [ ]!•@ { ^}c•há}ááÜ^•~|c•

ÁÁÁÁ~ÁÁÜ~à|á&KÁ T á|áçæ!^Á^ [ ~c@  
ÁÁÁÁ~ÁÁÜ~à|á&KÁP [ ] }! [-áçÁU! \*æ}á : æcá [ ] •  
ÁÁÁÁ~ÁÁÜ~à|á&KÁÜæ!^}c•  
ÁÁÁÁ~ÁÁÜ~à|á&KÁÜ { æ|ÁÖ~•á}^••ÁU , }^!•BÖ}c!^}!^}^~!•  
ÁÁÁÁ~ÁÁÜ~à|á&KÁX [ | ~ }c^!^!•  
ÁÁÁÁ~ÁÁÜ~à|á&KÁXVÁÜUWSÁV!^~ÁÜc^ , æ!á•  
ÁÁÁÁ~ÁÁÜ~à|á&KÁY [ ~c@  
ÁÁÁÁ~ÁÁÜ~@ [ [ |ÁÖ!æá^KÁSĚFG

''' <ck`kUg`YLhYbg]cb`i gYX3

Ò} @æ} &á} \*ÁÜ~!æ|ÁÖæ] æ&ác^ÁÖ [ ÚÁ] æ!cá&á] æcá [ }ÁÁ

Jf19ł"D`UbbYX`Dfc [fUa`fC i h d i h g ł

%'''GhUbXUfX`c i h d i h` a YUg i fYg

&\$%(	8]fYWh`7cbhUWhg 5Xi`hg	=bX]fYWh`7cbhUWhg 5Xi`hg	8]fYWh`7cbhUWhg Mcih\	=bX]fYWh`7cbhUWhg Mcih\
5WhiU`	F€ÍFG	ÎJ€€€	JHĪ Í	Fì€€

&'''Bi a VYf`cZ`DUhYbh`5dd`]WUh]cbg`Gi Va ]hhYX`flGhUbXUfX`FYgYUfW\`C i h d i h ł  
DUhYbh`5dd`]WUh]cbg`Gi Va ]hhYX

ÿ^æ!K G€FI  
ŒE&c~æ|K €

DUhYbhg``]ghYX

'''DiV`]WUh]cbg`flGhUbXUfX` ; YbYfU``C i h d i h`AYUg i fYł

Bi a VYf`cZ`DYyf`FYj]YkYX`DiV`]WUh]cbg

&\$%(	9IhYbg]cb	FYgYUfW\	HchU`
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Jf1:ł"GhUhY`8YZ]bYX`C i h d i h g

C i h d i h`HUf [ Yh

C i h d i h`\_%

C i h d i h`AYUg i fY

IĚPÁCE-c^!•&@ [ [ |  
P [ cÁ!^ ] [ !cá} \*Á [ }Ác@á•ÁU~c ] ~cÁ- [ !Ác@á•ÁCE} } ~æ|ÁÜ^] [ !c

GEFIÁW}äç^!•öc^Á[-ÁX^! { [ ]}clÔ [ { ää}^äáÜ^•^æ!&@kæ}á!Öçc^}•ä [ }ÁCE} } ~æ|ÁÜ^ [ !cÁ[-ÁCE&& { [ ]}i•@ { ^}c•kæ}á!Ü^•~|c•

**C i h d i h`\_ &**

**C i h d i h`A Y U g i f Y**

IËPÁÔ|~à

MYUf  
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**C i h d i h`\_ ' .**

**C i h d i h`A Y U g i f Y**

IËPÁÖæ^ÁÔæ { [ ]

MYUf  
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**C i h d i h`\_ (**

**C i h d i h`A Y U g i f Y**

IËPÁUç^!}á\* @cÁ&æ { [ ]

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**C i h d i h`\_ )**

**C i h d i h`A Y U g i f Y**

IËPÁÜ&@[ [ ]|Á^}!ä&@ { ^}c  
P [ cÁ!^ [ !cä } \*Á [ ] Ác@ä•ÁU~c ] ~cÁ- [ !Ác@ä•ÁCE} } ~æ|ÁÜ^ [ !c

**C i h d i h`\_ \* .**

**C i h d i h`A Y U g i f Y**

IËPÁÜ@[ !cËc^! { ð• ] ^&äæ|Áä}c^!^•c

MYUf  
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FHI

**C i h d i h`\_ +**

**C i h d i h`A Y U g i f Y**

Ô|æ••ð& [ ~!•^  
P [ cÁ!^ [ !cä } \*Á [ ] Ác@ä•ÁU~c ] ~cÁ- [ !Ác@ä•ÁCE} } ~æ|ÁÜ^ [ !c

**C i h d i h`\_ -**

**C i h d i h`A Y U g i f Y**

Ô [ ]-^!^}&^





GEFIÁW)äç^!•ic^Á[-ÁX^! { [ ]clÖ [ { ää}^äáÜ^•^æ!&@hæ}á!Öçc^••ä [ }ÁCE} } ~æ|ÁÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•hæ}á!Ü^•~|c•

**C i h d i h`\_%)**

**C i h d i h`AYUg i fY**

Ú ~ à|ä&æcä [ }ÁÉÁ}^ , •|^cc^!

MYUf  
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5Wh i U`  
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**C i h d i h`\_%\***

**C i h d i h`AYUg i fY**

Ú ~ à|ä&æcä [ }ÁÉÁ}^ , •|ä}c|hæ!cä&|^

MYUf  
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**C i h d i h`\_%+**

**C i h d i h`AYUg i fY**

Üæäâ [ ÁÜ] [c•D] ! [ \*!æ { ÁÇ^â ~ &æcä [ }æ|  
Þ [cÁ!^] [ !cä} \*Á [ }Ác@â•ÁU~c] ~cÁ- [ !Ác@â•ÁCE} } ~æ|ÁÜ^ [ !c

**C i h d i h`\_%.**

**C i h d i h`AYUg i fY**

VXÁ•^\* { ^}cØCEVØ

MYUf  
GEFI

5Wh i U`  
FF

**C i h d i h`\_%-**

**C i h d i h`AYUg i fY**

V!æä}Ác@^ÁV!æä}^!Á•^••ä [ }•  
Þ [cÁ!^] [ !cä} \*Á [ }Ác@â•ÁU~c] ~cÁ- [ !Ác@â•ÁCE} } ~æ|ÁÜ^ [ !c

**C i h d i h`\_&\$**

**C i h d i h`AYUg i fY**

Y^àÁÚæ\*^  
Þ [cÁ!^] [ !cä} \*Á [ }Ác@â•ÁU~c] ~cÁ- [ !Ác@â•ÁCE} } ~æ|ÁÜ^ [ !c

**C i h d i h`\_&%**

**C i h d i h`AYUg i fY**

Y [ !\•@ [ ]ÁÉÁ•^!ä^•

MYUf

5Wh i U`

G€FIÁW}äç^!•öc^Á[-ÁX^! { [ ]cÁÔ [ { ää}^äáÜ^•^æ!&@kæ}á!Öçc^}•ä [ }ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]|ä•@ { ^}c•kæ}á!Ü^•~|c•

G€FI

G

**Cihdiñ\_&&**

**Cihdiñ'AYUgiY**

Y [ !\•@ [ ] ÁÉÁ•ä } \*|^Á•^••ä [ }

MYUf

5WhiU`

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FÎÎ

**Cihdiñ\_&'**



G€FIÁW}äç^!•öc^Á[-ÁX^! { [ ]cÁÔ [ { ää}^äáÜ^•^æ!&@Áæ}á!Öçc^}•ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•Áæ}á!Ü^•~|c•

**CihWcaY'\_%**

%''CihWcaY'AYUgifyg

ä}&!^æ•^Áä}Á } { à^!Á [-Á-æ! { ^!Á , äc@Áä•æà|äcá^•Á { ää}cæä}ä } \*Á^ { ] [ ^ { ^ }c

Þ [cÁÜ^] [ !cä } \*Á [ }Ác@ä•ÁÜ~c& [ { ^ÁT^æ•~!^

**CihWcaY'&**

%''CihWcaY'AYUgifyg

Þ~ { à^!Á [-ÁTä\*!æ}cÁÖä~&æcä [ }Á^|ä\*äà|Á•c~ä^}c•Á^}! [||^ä

&''5ggcW]UhYX'=bgh]h]h]cb'HmdYg

ÁFî ÎGÁÖçc^}•ä [ }

'U''CihWcaY'HmdY.

Ô@æ} \*^Áä}ÁCE&cä [ }ÁÜ~c& [ { ^ÁT^æ•~!^

'V''EiUbh]hUh]jY'CihWcaY

MYUf            5WhiU'

G€FI            FîG

'W''EiU]hUh]jY'CihWcaY'cf'=a dUWh'GhUhYaYbh

=ggiY'fiK\c'WufYg'UbX'K\mł

K\Uh'\Ug'VYYb'XcbY

FYgi`hg

("5ggcW]UhYX'?bc k`YX[Y'5fYUg

?5'7cXY    ?bc k`YX[Y'5fYU

ì€í            Ô [ { { ~ }äc^ÁQ}•cäc~cä [ }•Áæ} äÁÜ [ &äæ|ÁÜ^!çä&^•

ì€í            Ÿ [ ~c@ÁÖ^ç^| [ ] { ^ }c

GEFIÁW}áç!•íc^Á[-ÁX^! { [ ]clÖ [ { äi}^äáÜ^•^æ!&@hæ}á!Öçc^••ä [ ACE} } ~æ|áÜ^ [ !cÁ[-ÁCE&& { [ ]i•@ { ^}c•hæ}á!Ü^•~|c•

**CihWcaY'.**

%'''CihWcaY'AYUgifyg

Q}&!^æ•^Ác@^Á} ~ { à^!Á[-Á]! [ \*!æ { Á}æ!cá&â}æ}c•Á•^!çâ} \*Áæ•Á|^æâ!•Á [ ]ÁÖ [ { { äcc^•

&'''5ggcW]UhYX'=bgh|h|h]cb'HmdYg

ÁFÎIGÁÖçc^}•â [ }

'U'''CihWcaY'HmdY.

Ô@æ} \*^Áâ} ACE&cá [ ]ÁU ~ c& [ { ^ÁT^æ•~!^

'V'''EiUbh]hU]jY'CihWcaY

MYuf                      5WhiU'  
GEFI                              ì

'W'''EiU]hU]jY'CihWcaY'cf'=aDUWh'GhUHy aYbh

**-gg iY'filK\c'WufYg'UbX'K\mł**

Þ [ ]É}! [-äc•Áæ!^Á&!äcá&æ|Ác [ Á { ^^cÁ& [ { { ~}äc^Á}^^á•Áâ~cÁ&æ}Áâ^Áç~|}^!æà|^Áâ~^Ác [ Á-^á!æ|Áæ}á!•cæc^ ~}äâ} \*ÉÁÖ [ [ ä!|^æâ!•@â]Áæ}á! [ &æ|Á& [ { { ~}äc^Á•~ } ] [ !cÁ&æ}Á@^|] Á!iä^Á [ ~cÁc@^•^Á&@æ|!^} \*^•É Öæ|^á [ ]äæÉÁÖ••^çÉÁæ}á!U!|^æ}•Á& [ ~}cá•Á& [ { [ ]!ä•^ÁX^! { [ ]cN•Á [ [ !^•cÁæ!^æÁ [-Ác@^Á•cæc^Á , @^!^ à^c , ^^]ÁFHEÍ ÁÁæ}á!FÍÉÍ ÁÁ [-Á] ^ [ ]|^Á!äç^Áâ^| [ , , Á] [ ç!c^Á|^ç^!ÉÁ& [ { ]æ!^áÁc [ ÁæÁ•cæc^É , äâ^Áæç!æ\*^ [-ÁFFÉÍ ÁÉÇWEÜÉÁÖ^}•~•ÁÓ~!^æ~DÁV@^ÁÞ [ !c@^æ•cÁSâ} \*á [ { ÁÖ [ { { ~}äc^ÁCE&cá [ ]ACE\*^} &^ÁçÞÖSÔCEÁá•æh [ ]É}! [-äcÁ [ !\*æ}ä:æcá [ ]Á•^!çâ} \*Ác@^•^Ác@!|^Á& [ ~}cá•É

**K\Uh'\Ug'VYYb'XcbY**

WX T ÁÖçc^}•â [ ]Á , [ !|^áÁ , äc@ÁÞÖSÔCEç•Á|^æâ!•@â]Ác^æ { Ác [ Áá^ç^! [ ] Áæ}á!â { [ ]|^ { ^}cÁæÁ { ~|cáÉ^æ! ]|æ}Á!æâ•â} \*Áæ , æ!^}•••Á [-Ác@^Á^~^&c•Á [-Á] [ ç!c^Áæ}á!Ác@^!Á! [ !|Áá]Ác@^Á& [ { { ~}äc^ÉAV@^Á•^& [ ]á!^æ! [-Áá { ]|^ { ^}cæcá [ ]ÉÁá^}Á&~c•Áá}Á-^á!æ|Áæ}á!•cæc^Á-~}äâ} \*Ác@!^æc^}^áÁ&!äcá&æ|Áææ•â&Á•^!çâ&^•É S^ç!æ\*â} \*Á!|^æcá [ ]•@â]•Á- [ ! { ^áÁá}Ác@^Á]!^çâ [ ~]Á•^æ!ÉÁÞÖSÔCEÁâ^\*æ}Áæ}Áæ\*\*!•••äç^Á-~}á!æâ•â} \* &æ [ ]æâ} \*Áæ}á!ææ}Áæâç [ &æ&^Á! [ ]|^Á , äc@Áâ [ c@^Á-^á!æ|Áæ}á!•cæc^Á|^æâ!•Ác [ Á@â\* @|ä\* @cÁc@^Áá [ ]æ&cÁc@æc ~}äâ} \*Á&~c•Á , ^!^Á@æçâ} \*Áá}Ác@^ÁÞ [ !c@^æ•cÁSâ} \*á [ { É

**FYg i'hg**

CEÁ\ä|!^á!|^æâ!•@â]Ác^æ { Á@æ•Á&!^æc^á!æá•c! [ ] \*^!Á [ !\*æ}ä:æcá [ ]ÉÁ!^•~|cá} \*Áá}Á!••Á}c^!~}cá [ ]Á [- &!äcá&æ|Á•^!çâ&^•Á- [ !Á-æ { ä|ä^•ÉAV@^Á-~c~!^Áá•Á [ !|^Á]! [ { ä•ä} \*ÉÁQ}ÁGEFIÁc@^Á} ~ { à!Á [-Á-æ { ä|ä^•Á , @ [ !^&^äç^á!~|^!æ•••cæ} &^!á!^&!^æ•á!Á^Á!ÉÍ ÁÁâ~cÁæ [ [ •cÁÍ€€€Á-æ { ä|ä^•ÉÁæÁç!Í ÁÁá} &!^æ•^É !^&^äç^á!^ { ^!\*^} &^Á- [ [ ä!Áæ] [ [ •cÁG€€€Á-æ { ä|ä^•ÁçGJÉÍ ÁÁá} &!^æ•^DÁ\* [ cÁ^ { ^!\*^} &^!Á!}cÁæ•••cæ} &^L æ}á!æ] [ [ •cÁÍ!€€€Á-æ { ä|ä^•Á\* [ cÁ!ä^•ÁçæÁG€€€Í ÁÁá} &!^æ•^DÁ- [ [ ÁG€€FHEÁQ}Áæâäçcá [ ]ÉÁá~^Ác [ Áæ}Áá} &!^æ•^á ~}á!•cæ}á!} \*Á [-Ác@^Á^~^&c•Á [-Á] [ ç!c^ÁÉÁ& [ { { ~}äc^Á|^æâ!•ÉÁâ~•ä}••••Áæ}á! & [ { { ~}äc^Á { ^ { à!•æ!Á•~} ] [ !cá} \*Áæ}Á [ !\*æ}ä:æcá [ ]Áá^á&æc^áÁc [ Á { ^cá} \*Ác@^Á}^^á•Á [-Á] [ { ^Á [-Ác@^Á { [ •cÁç~|}^!æà|^ { ^ { à!•Á [-Ác@^Á& [ { { ~}äc^É

(''5ggcW]UhYX'?bc k'YX[Y'5fYUg

G€FIÁW}áç^!•âc^Á[-ÁX^! { [ ]c!Ô [ { ää}^äáÜ^•^æ!&@Áæ}á!Öçc^}•ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•Áæ}á!Ü^•~|c•

?5`7cXY ?bck`YX[Y`5fYU  
î€ì Ô [ { { ~}âc^ÁÜ^• [ ~!&^ÁÜ|æ} }â} \*Áæ} á!Ö^ç^|[ ] { ^}c  
ì€í Ô [ { { ~}âc^ÁÜ} •câc~câ [ ] •Áæ} á!Ü [ &âæ|ÁÜ^!çâ&^•

**CihWcaY`\_(**

%""CihWcaY`AYUgifyg

Þ~ { à^!Á [-Áä} äâçcâ~æ|•Áç^ [ ~c@Áæ} á!ç [ | ~ }c^!•DÁä} &!^æ•â} \*Á \ } [ , |^ä \*^Áæ} á! [ !Á•\ä||•Áä} Á& [ ]c^}cÁæ} ä  
&æ!^!•Áçæ& [ ••Á•~ äb^&cÁæ!^æ•Á!æ} \*â} \*A-! [ { Áæ} ä { æ|Á•&á^} &^Ác [ Á^} çâ! [ ] { ^}cæ|Á•&á^} &^Ác [ Ác^&@ ] [ | [ \* ^D

&""5ggcW]UhYX`=bgh]h i h]cb`HmdYg

ÁFì îG!Öçc^}•â [ }

'U""CihWcaY`HmdY.

Ô@æ} \*^Áä} ÁS [ , |^ä \*^ÁÜ~c& [ { ^!T^æ•~!^

'V""EiUbh]hUh]jY`CihWcaY

MYUf 5WhiU`  
G€FI HÍGï

'W""EiU`]hUh]jY`CihWcaY`cf`=adUWh`GhUhYaYbh

=ggiY`fiK\c`WUfYg`UbX`K\mł

K\Uh`Ug`VYYb`XcbY

FYgi`hg

("5ggcW]UhYX`?bck`YX[Y`5fYUg

?5`7cXY ?bck`YX[Y`5fYU  
ì€ì Ÿ [ ~c@ÁÖ^ç^|[ ] { ^}c

**CihWcaY`\_)**

%""CihWcaY`AYUgifyg

Þ~ { à^!Á [-Áä} äâçcâ~æ|•Á , @ [ Á~•^Á|^æá!•@ä] Áæ} á!á^&â•â [ ] Á { æ\ä} \*Á•\ä||•Áä} Á^ç^&~câ} \*Ác@^!Á! [ |^Áæ} á  
!^• [ ] •â!|áçá^•Á^~&cáç^!^Áá^ç^|[ ] ä} \*Áæ} á! [ !Á! { ]|^ { ^}câ} \*Á [ |&^

&""5ggcW]UhYX`=bgh]h i h]cb`HmdYg



G€FIÁW)äç^!•öc^Á[-ÁX^! { [ ]clÔ [ { ää}^äáÜ^•^æ!&@háæ}á!Öçc^}•ä [ ]ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•háæ}á!Ü^•~|c•

**CihWcaY`\_\***

%""CihWcaY`AYUgifyg

Q}&!^æ•^Ác@^Á}~ { à^!Á[-Á]æ!^}c•Á~ }á^!•cæ}áä \*Á-æ { ä|^Ác!æ}•äcä [ ]Ác@! [ ~ \*@Á]æ!^}cæ\*^ÉÁäç [ !&^Á [ !  
•^]æ!æcä [ ]Á, @ [ Á~ }á^!•cæ}á!c@^Áhá { ]æ&cÁ [-Ác@^•^Á&@æ} \*^•Á [ ]Ác@^!Á&@ä|á!^}É

&""5ggcW]UhYX`=bgh]h i h]cb`HmdYg

ÁFÌ ÎGÁÖçc^}•ä [ ]

'U""CihWcaY`HmdY.

Ô@æ} \*^há}ÁS} [ , |^ä \*^ÁU~c& [ { ^ÁT^æ•~!^

'V""EiUbh]hUh]jY`CihWcaY

MYuf            5WhiU`  
G€FI            FÌ ÍF

'W""EiU`]hUh]jY`CihWcaY`cf`=a dUWh`GhUhY a Ybh

=ggiY`fiK\c`WUfYg`UbX`K\mŁ

K\Uh`\Ug`VYYb`XcbY

FYgi`hg

("5ggcW]UhYX`?bc k`YX[Y`5fYUg

?5`7cXY    ?bc k`YX[Y`5fYU  
Ì€G            P~ { æ}ÁÖ^ç^| [ ] { ^}c!há}á!Øæ { ä|^ÁY^||ÉÓ^ä} \*

**CihWcaY`\_+**

%""CihWcaY`AYUgifyg

P~ { à^!Á[-Á-æ! { ^!•Á, äc@Áäá•æàä|äcá^•Á { ää}cæä}ä} \*Á^ { ]|^ { ^}c

&""5ggcW]UhYX`=bgh]h i h]cb`HmdYg

ÁFÌ ÎGÁÖçc^}•ä [ ]



G€FIÁW}áç^!•ac^Á[-ÁX^! { [ ]clÔ [ { ää}^äáÜ^•^æ!&@hæ}á!Öçc^}•ä [ }ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•hæ}á!Ü^•~|c•

'U'''CihWcaY'HmdY.

Ô@æ} \*^hâ}ÁCE&cä [ }ÁÜ~c& [ { ^ÁT^æ•~!^

'V'''EiUbh]hUh]jY'CihWcaY

MYUf            5WhiU`

G€FI            F€H

'W'''EiU]hUh]jY'CihWcaY'cf'=a dUWh`GhUhY a Ybh

=ggiY'fiK\c'WufYg'UbX'K\mł

K\Uh'\Ug'VYyb'XcbY

FYgi`hg

("5ggcW]UhYX'?bck`YX[Y'5fYUg

?5'7cXY    ?bck`YX[Y'5fYU

!€G            P~ { æ}ÁÖ^ç^ [ [ ] { ^}cÁæ}á!Øæ { ä|^ÁY^||ÉÓ^ä}\*

!€Í            Ô [ { { ~}ac^ÁQ}•cac~cä [ ]•Áæ}á!Ü [ &äæ|ÁÜ^!çä&^•

**CihWcaY`**

%'''CihWcaY'AYugifYg

ä}&!^æ•^hâ}Á}~ { à^!Á[-Á^ [ ~c@Á!^æ&@^hâ, äc@Á [ !•äcäç^Á^ [ ~c@Áä^ç^ [ [ ] { ^}cÁ]! [ \*!æ { { ä} \*Áä^ { [ ]•c!æc^ { æ•c^!^Á- [ !Ácæ! \*^c^hâ|ä-^Á•\ä||•ÉÁä} &|~ ää} \*KÁÖ^&ä [ }Á { æ\ä} \*LÁ, ä•^Á~•^Á[-Á!^• [ ~!&^•L& [ { { ~} ä&æcä [ ]L æ&&^}cä} \*Áä~^!^} &^•L|Á^æä^!•@ä]LÁ~•^~|D { æ!\^cæä|Á^•\ä||•LÁ@^æ|c@~Á|ä-^c^|Á&@ [ ä&^•Læ} äD [ !Á•^|-É !^• [ ]•ä!ä!ac^

&'''5ggcW]UhYX'=bgh]h i h]cb`HmdYg

ÁFî ÎGÁÖçc^}•ä [ }

'U'''CihWcaY'HmdY.

Ô@æ} \*^hâ}ÁCE&cä [ }ÁÜ~c& [ { ^ÁT^æ•~!^

'V'''EiUbh]hUh]jY'CihWcaY

MYUf            5WhiU`

G€FI            JHİ

'W'''EiU]hUh]jY'CihWcaY'cf'=a dUWh`GhUhY a Ybh



G€FIÁW}áç^!•bc^Á[-ÁX^! { [ ]}cÍÔ [ { ää}^ááÜ^•^æ!&@háæ}á!Ôçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !:cÁ[-ÁCE&& [ { ]}|á•@ { ^}c•háæ}á!Ü^•~|c•

G€FI

JG

'W''E i U`]hUh]jY`C i hWc a Y`cf`= a dUWh`GhUhY a Ybh

=gg i Y`flK`c`WUfYg`UbX`K`mł

K`Uh`Ug`VYYb`XcbY

FYg i`hg

("5ggcW]UhYX`?bc k`YX[Y`5fYUg

?5`7cXY ?bc k`YX[Y`5fYU

ì€î



G€FIÁW}áç^!•óç^Á[-ÁX^! { [ ]}cÁÖ [ { ää}^ááÜ^•^æ!&@Áæ}á!Öçc^}•á [ }ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]}|á•@ { ^}c•Áæ}á!Ü^•~|c•

'W''E i U]hUh]jY'C i hWc a Y'cf'= a dUWh'GhUhY a Ybh

=gg i Y'flK \c'WufYg'UbX' K \mł

K \Uh' \Ug'VYYb`XcbY

FYg i`hg

(''5ggcW]UhYX' ?bck`YX[Y'5fYUg

?5'7cXY ?bck`YX[Y'5fYU

ì€G P~ { æ}ÁÖ^ç^|[ [ { ^}cÁæ}á!ÁØæ { á|^ÁY^||ÉÓ^á}\*

ì€í Ô [ { { ~}ác^ÁQ}•cáç~cá [ ]•Áæ}á!ÁÜ [ &áæ|ÁÜ^!çá&^•

ì€î ÿ [ ~c@ÁÖ^ç^|[ [ { ^}c

**CihWcaY'\_%'**

%''CihWcaY'AYUgifyg

Þ~ { à^!Á[-Á]æ!cá&á]æ}c•Á, @ [Á!^] [ !cÁá { ]! [ç^ { ^}c•Áá}Á&@á|á!^}c•Á•^|-É!^\*~|æcá [ ]Áæ}á!Áæccæ&@ { ^}c  
!^|æc^á!á^@æçá [ !•

Þ [cÁÜ^] [ !cá} \*Á [ ]Ác@á•ÁU~c& [ { ^ÁT^æ•~!^

**CihWcaY'\_%(**

%''CihWcaY'AYUgifyg

}~ { à^!Á[-Á]áäçáä~æ|•Á, @ [Áæ••^••Áç~|]^!æàá|çá^•Áæ}á!Áá { ]|^ { ^}cÁæÁ] !æ&cá&^Ác [Á•^&~!^Áæ}á { æ|Á@^æ|c@É  
-[ [ á!•æ-^c^ÉÁæ}á!á [ !Á]~à|á&A@^æ|c@Á]! [c^&cá} \*Ác@^Á- [ [ á!&@æá]Áæ}á!Á { æ! \^cÁá}c^\*!ác^

Þ [cÁÜ^] [ !cá} \*Á [ ]Ác@á•ÁU~c& [ { ^ÁT^æ•~!^

G€FIÁW}äç^!•äc^Á[-ÁX^! { [ ]clÔ [ { ää}^äáÜ^•^æ!&@áæ}á!Öçc^}•ä [ }ÁCE} } ~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•áæ}á!Ü^•~|c•

'V''E i Ubh]hUh]jY'C i hWc a Y

MYUf 5Wh i U'

G€FI ìG

'W''E i U']hUh]jY'C i hWc a Y'cf' = a dUWh' GhUhY a Ybh

=gg i Y'flK\c'WUfYg'UbX' K \mł

K \Uh' \Ug'VYYb'XcbY

FYg i`hg

("5ggcW]UhYX' ?bc k`YX[Y'5fYUg

?5`7cXY ?bc k`YX[Y'5fYU

FGI W!àæ}ÁØ[!^•cl^

Î€ì Ô[ { { ~}äc^ÁÜ^• [ ~!&^ÁÜ|æ} }ä} \*Áæ} ä!Ö^ç^|[ [ ] { ^}c

ì€î Ÿ[ ~c@!Ö^ç^|[ [ ] { ^}c

Jfl<ł"D`UbbYX'Dfc [fU a`fl9 I hYfbU`` : UW hcfgł

9 I hYfbU``ZUWhcfg' k \]W\`UZZYWh ~ `h







G€FIÁW}äç^!•äc^Á[-ÁX^! { [ ]c!Ö [ { ää}^äáÜ^•^æ!&@Áæ}á!Öç^}•ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•Áæ}á!Ü^•~|c•

9lhYbg]cb		FYgYUfW\	
Ga]h\!@YjYf''V'/'W	%, - \$'9lhYbg]cb	<UhW\	9jubg!5''Yb
I IJH€	€	HFJ!GF	€
%, * &'AUhW\]b [	%, - \$'AUhW\]b [	%, * &'AUhW\]b [	%, - \$'AUhW\]b [
ï í í í H	€	HFï€íí	€
%, * &'5''Ch\Yf	%, - \$'5''Ch\Yf	%, * &'5''Ch\Yf	%, - \$'5''Ch\Yf
F I I € F F	€	€	€

Jfl8L''D'UbbYX'Dfc [ fUa 'fl5Wh] j]hmk

%''6f]YZ'XYgWf]dh]cb'cZ'h\Y'5Wh]j]hm

Q}çæ•äç^ÁÜ^•c•ÁÉÁT [ }äc [ !ä } \*Á [-Ác@^ÁCE•iæ}ÁŠ [ ] \*ÁP [ ! ] ^ááÓ^c|ÁBÁP^ { [ ! & \ Á Y [ [ [ ] ^ÁCEá^! \*ááLÁä } c^! & ^ } cä [ } Áæ } á  
 ] ! ^ ç ^ } cä [ } Áä-Á [ [ ••ä|ÁÉÁ { äcä \* äcä [ } Ác@! [ ~ \* @Á , [ ! \ Á , äc@Áä [ æ&cäç^Á-~ } \*ááæ } áÁ } äc~!æ|Á^ } ^ { ^Á• ] ^ & á^•LÁ , [ ! \ Á , äc@  
 c@^ÁWUÁ- [ ! ^•cÁ•^!çä&ÁÉÁWÜÉCEÜÜÉÁæ } áÁc@^Á { æ } | ^ Á ä } á ~ •c! ^ ÉÁ

Ø [ ! ^•cÁÖá~&æcä [ ] KÁ Y [ ! \ Á , äc@Á]æ } á [ , } ^!•Áæ } áÁ } ^çcÁ^ } ^!æcä [ ] •Ác [ Áä^æ|Á , äc@Á- [ ! ^•cÁ-!æ\* { ^ } cæcä [ ] Áæ } á  
 { æ } æ \* ^ { ^ } cÁæ } áÁ ~ •æ \* ^ É

Tæ ] | ^ Á Ü ! [ ä ~ & cä [ ] ÁÉÁ! ^•^æ!&@Áæ } áÁ^çc^ } •á [ ] Á~ [ ! c•ÁæcÁc@^ÁÜ! [ & c [ ! Á Tæ ] | ^ Á Ö ^ } c^!Áæ!Ááä! ^ & c^áæcÁ^çc^ } áä } \*  
 c@^Á•~æ!ä } \*Á•^æ• [ ] ÉÁ { æçä { ä : ä } \*Á~á^|áÉÁæ } áÁ { ä } ä { ä : ä } \*Áä•^æ•^Ác [ Ác! ^•É

T [ ] äc [ !ä } \*Á [-Ác@^ÁÖæ•c^! } ÁØ [ ! ^•c•ÁÉÁÜ ] ^ & á^•Á&@æ } \* ^ Áæ } áÁá^ { æ!&æcä [ ] Á | ^ ç ^ | • Áæ! Áá^á } \*Á [ ä•^!ç^áÉ  
 á [ & ~ { ^ } c^ááæ } áÁ { [ á^|Áá- [ ! Á ] [ ! c@^! } Á- [ ! ^•c•Ác@! [ ~ \* @Á! ^ { [ c^Á•^ } •á } \*Áæ } áÁ [ ] Éc@^É \* ! [ ~ } áÁ [ ä•^!çæcä [ ] •É

G€FIÁW)äç^!•öc^Á[-ÁX^! { [ ]clÖ [ { ää}^äáÜ^•^æ!&@hæ}á!Öçc^}•ä [ ^CE} } ~æjÁÜ^] [ !cÁ [-ÁCE&& { [ ]j•@ { ^}c•hæ}á!Ü^•~|c•

ÁÁÁÁÁÁÁÁ

ÁÁÁÁ~ÁÁCE\*!ä&~|c~!^KÁØæ! { ^!•  
ÁÁÁÁ~ÁÁCE\*!ä&~|c~!^KÁÜ! [ ä~&^ÁÖ! [ , ^!•  
ÁÁÁÁ~ÁÁCE\*!ä&~|c~!^KÁÜ^!çä&^ÁÜ! [ çä^!•  
ÁÁÁÁ~ÁÁCE\*!ä&~|c~!^KÖ [ ç^! } { ^}cÁCE\*^} &^ÁÜ^!• [ ] } ^!  
ÁÁÁÁ~ÁÁÖçc^}•ä [ ] KÁØæ&~|c~!Ücæ~  
ÁÁÁÁ~ÁÁÜ`à|ä&KÁÖ~•ä}^••ÁDÁÖ [ { { ^!&äæ|Ác!æ}•} [ !cæcä [ ] Áä} ä~•c!^  
ÁÁÁÁ~ÁÁCE\*!ä&~|c~!^KÁTæ] | ^ÁÜ! [ ä~&^!•

'"'<c k`kUg`YLhYbg]cb`i gYX3

ÁÁÁÁÁÁÁÁ^Yc^}•ä [ ] Á , æ•Á} [ cÁ~•^äÁä}Ác@ä•Á] ! [ \*!æ {

Jf!9L"D`UbbYX`Dfc [ fU a `fC i h d i h g t

%"'GhUbXufX`c i h d i h` a YUg i f Yg

&\$%(	8]fYWh`7cbhUWhg 5Xi`hg	=bX]fYWh`7cbhUWhg 5Xi`hg	8]fYWh`7cbhUWhg Mcih\	=bX]fYWh`7cbhUWhg Mcih\
5WhiU`	H€€€	Fï€€	€	€

&''B i a VYf`cZ`DUhYbh`5dd`]WUh]cbg`G i V a ]hhYX`f!GhUbXufX`FYgYUfW\`C i h d i h t  
DUhYbh`5dd`]WUh]cbg`G i V a ]hhYX

Y^æ!K G€FI  
CE&c~æ|K €

DUhYbhg``]ghYX

'"'DiV`]WUh]cbg`f!GhUbXufX` ; YbYfU`C i h d i h`AYUg i f Yt

B i a VYf`cZ`DYyf`FYj]YkYX`DiV`]WUh]cbg

&\$%(	9IhYbg]cb	FYgYUfW\	HchU`
5WhiU`	€	î	î

Jf! : t"GhUhY`8YZ]bYX`C i h d i h g

C i h d i h`HUf [ Yh

C i h d i h`\_%

C i h d i h`AYUg i f Y

þ~ { à^!Á [-Á!^•^æ!&@Á] ! [ b^&c•Á- [ &~•ä} \*Á [ ] Á&|ä { æc^Á&@æ} \*^Á { æ}æ\*^ { ^}cÁ] !æ&cä&^•Á [ ] ÁX^! { [ ] c  
-æ! { •Ác@æcæiäÁ} Á&|ä { æc^Á&@æ} \*^Áæäæ] cæcä [ ] É

G€FI ÁW}áç^!•íc^Á[-ÁX^! { [ ]}c!Ô [ { áá}^ááÜ^•^æ!&@háæ}á!Ôçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !:cÁ[-ÁCE&& [ { ]}|á•@ { ^}c•háæ}á!Ü^•~|c•

GEFIÁW}áç^!•âc^Á[-ÁX^! { [ ]}cÁÔ [ { ää}^äáÜ^•^æ!&@háæ}á!Ôçc^}•â [ }ÁCE} }~æ|ÁÜ^ [ !:cÁ[-ÁCE&& [ { ]}|â•@ { ^}c•háæ}á!Ü^•~|c•

MYUf  
GEFI

5WhiU`  
Í

**Cihdi h`**

**Cihdi h`AYUg ifY**

Ù~!ç^•Á& [ ]ã~&c^â

MYUf  
GEFI

5WhiU`  
G



GEFIÁW}áç^!•óç^Á[-ÁX^! { [ ]cÁÔ [ { ää}^äáÜ^•^æ!&@háæ}á!Ôçc^}•á [ }ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•háæ}á!Ü^•~|c•

**CihWcaY'\_%**

%'''CihWcaY'AYUgifyg

Þ~ { à^!Á[-Áäá^}cä-ä^áÁ [ !Á { äcä\*æc^áá }çæ•äç^Á• ]^&á^•Ác@!^æcÁc [ Ác^Á^ }çá! [ ] { ^}c

Þ [cÁÜ^] [ !cä } \*Á [ ] Ác@ä•ÁU~c& [ { ^ÁT^æ•~!^

**CihWcaY'\_%**

%'''CihWcaY'AYUgifyg

Þ~ { à^!Á!^•^æ!&@Á!^•~|c•Á ]~à|ä•^á!^\*æ!äá } \*Ác^Á^•^!^!æcá [ }Á [-Á\*!^!^]@ [ ~•^Á\*æ•Á^ { ä••á [ ] •Á-! [ { -æ! { Áæ } ä { æ|•Áæ } äÁc@! [ ~\*@Á• [ ä!Á ] ! [ &^•••^

Þ [cÁÜ^] [ !cä } \*Á [ ] Ác@ä•ÁU~c& [ { ^ÁT^æ•~!^

**CihWcaY'\_'**

%'''CihWcaY'AYUgifyg

Þ~ { à^!Á^}c^! ; !ä•^Á• , @ [ Áä { ]|^ { ^}cÁ!^& [ { { ^} ä^áÁ^ }çá! [ ] { ^}cæ|Á^@æçä [ !•Ác [ Á { ^^cÁ [ !Á^ç&^á^ c^! { •Ác [ Ácæç^Áç^@ä&|^•Á&^!cä-ä^áÁc@! [ ~\*@Ác@^Á^Üæcä } \*Á ] ! [ \*!æ {

&'''5ggcW]UhYX'='bgh]h i h]cb'HmdYg

ÁF!ÎGÁÔçc^}•á [ }

'U'''CihWcaY'HmdY.

Ô@æ } \*^há } ÁCE&cá [ } ÁU~c& [ { ^ÁT^æ•~!^

'V'''EiUbh]hUh]jY'CihWcaY

MYuf            5WhiU'  
GEFI            GÍ

'W'''EiU]hUh]jY'CihWcaY'cf'='aduWh'GhUHy aYbh

-gg i Y'fl K\c'WUfYg'UbX'K\mł

T [ !^Ác@æ } ÁG Í Á ]^!&^ } cÁ [-Á&æ!à [ ] Áäá [ çäá^ÁçÔUGDÁ^ { ä••á [ ] •Áä } Ác@^ÁW } äc^á!Üæc^•Á&æ } Áä^Áæcc!ä~c^áÁc [ c!æ } • ] [ !cæcá [ ] Áæ&cäçäcá^•ÉÁ , äc@Á!HÁ ]^!&^ } cÁ [-Ác@^•^Á^ { ä••á [ ] •Á& [ { ä } \*Á-! [ { Á ]æ•••^ } \*^! c!æ } • ] [ !cæcá [ ] ÉÁQ } ÁCE~\*~•cÁ [-ÁGEFGÉÁWX T ÁÔçc^} •á [ ] Á|æ~ } &@^áÁc@^ÁÔ^!cä-ä&æcá [ ] Á- [ !ÁÜ~•cæä } æä|^ V!æ } • ] [ !cæcá [ ] ÁçÔÜVDAÚ! ; \*!æ { Á ] ! [ [ cä } \*Ác@^Á~•^Á [-Ác!æ } • ] [ !cæcá [ ] Á [ ] cä [ ] •Ác@æcÁÜ^á~&^ \*!^!^]@ [ ~•^Á\*æ•há } äÁ [ c@^!Á@æ! { ~|Á^ { ä••á [ ] •ÉÁQ } &!^æ•^Á^ } ^! \*^Á^~ä&á^ } &^ÉÁæ } äÁWcälä : ^Áæ|c^! } æcäç^ ~^!•há } äÁ } ^ , Ác^&@ } [ ] [ \*ä^•É

K\Uh'\Ug'VYyb'XcbY

GEFIÁW)áç^!•âc^Á[-ÁX^! { [ ]}c!Ö [ { äi}^âáÜ^•^æ!&@hæ}á!Öçc^•â [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]}i•@ { ^}c•hæ}á!Ü^•~|c•

V^•^ÁÖÜVÁ@æ•Áá^ç^ [ ] ^á^æ } á!i^ } •ÁæÁç^@â|/Áàæ•^á^Á^!câ-â&æcá [ }Áæ } á!|æà^|jâ } \*Á ]! [ \*!æ { Á&æ||^á^Ác@^  
Ñ^Üæcá } \*ÑÁæ•Á , ^||Áæ•Áá!ç^!Á&^!câ-â&æcá [ }Á ]! [ \*!æ { •Ác [ Á@^| ] Áá!ç^!•Á!^á~&^Áæ } á!^|â { ä } æc^  
~ } ^&^••æ!^Áá!jâ } \*Áæ } á!æá [ ] cÁ~ ^|Á^--â&â^ } cÁá!ç^! } \*Á ]! æ&cá&^•ÉÁÁÖ~!;!^ } c|^Ác@^ÁÖÜVÁá•Á ]! â { æ!j|^  
 [ !\â } \*Á , âc@Á ]! áçæc^!^Á [ , ] ^á^à~ •hæ } á! { [ c [ !Á& [ æ&@Á [ ] ^!æc [ !•Á | &æc^á!hâ } Á | Á•cæc^•hæ } á!HÁÖæ } æáææ }  
 ]! [ çá } &^ÉÁY^Á@æç^!@æá!hâ } Á^ç&^••Á [-ÁGEG€€Áá!ç^!•ÉÁ•@ [ ] Á { ^&@æ } á&•ÉÁæ } á!æá { ä } â•c!æçá^!cæ--Á\* [  
c@! [ ~\*@Á [ ~!ÁÑÖ& [ ÉÖ!áç^!ÑÁæ } á!ÑÖá|ÁÁØ!^ÁÑÁ&^!câ-â&æcá [ }Á ]! [ \*!æ { É

**FYg i`hg**

CE)^&á [ çæ|Á^ç^á^ } &^Á-! [ { Á& [ { ]æ } â^•Á!^ [ !cÁ•æçá } \*Á [-ÁGÈ ì ÁÁ [ ] Á~ ^|Áæ } á! , ^æ!Áæ } á!Ác^æ!Á [ ]  
^~^á ] { ^ } cÉÁY^Áæ!^Á&~!;!^ } c|^Á& [ ||^&cá } \*ÁáæææÁc [ Á~^æ } câ~Ác@^•^Á!^•~|c•ÉÁV [ Ááæc^ÁGÍÁ& [ { ]æ } á^•Á@æç^  
& [ { ]|^c^á^Á&^!câ-â&æcá [ }Áæ } á!Ác!æá } á } \*Á , âc@Áæ } [ c@^!ÁG€Á& [ ] •Ác [ Á& [ { ]|^cá [ ] ÉÁV@^!^Áæ!^ÁÍG€Áç^@â&|^•É  
!G€Á [-Á , @â&@Áæ!^Áá~ •^•Á [ !Á [ [ c [ !É& [ æ&@^•ÉÁ , @â&@Áæ!^ÁÜæcá } \*Á&^!câ-â^áá , âc@ÁNH€€€Ác [ Á^Á&^!câ-â^áá  
 } ^çcÁ^~æ!ÉÁUc@^!Á!^•~|c•Áá } &|^á^Á& [ { ]æ } á!^•Á\*!^æc^!Á~ •^Á [-Á ]! [ É^ } çá! [ ] { ^ } çæ!Áà^@æçá [ !•Á~&@Áæ•  
á [ ]|^ { ^ } çá } \*Á!^&~&|â } \*Á ]! [ \*!æ { •ÉÁU!^•áá^ } cÁæ } á!ÖÖUÁ [-ÁÖ [ æ&@ÁWUcÉÁÖ [ æ&@ÁÖæ } æáæÉÁæ } á  
T^\*æá~•ÉÁá } ÁæÁP [ ç^ { à^!ÁF ÍÉÁG€FHÁCE!cá&|^Á [-ÁÖ~•Áæ } á!ÁT [ c [ !& [ æ&@ÁP^ , •ÁUcæc^áKÁCP^Á•æáá@á•  
& [ { ]æ } ^Á@æ•Á•æç^á^Ác@~ } á!^á•Á [-Ác@ [ ~•æ } á!Á [-Áá [ ]|æ!•Á ] ^!Á~^æ!cÁâ } &^Ááçá^\*æ } Á ]æ!cá&á ]æcá } \*Áá } Ác@^  
 ]! [ \*!æ { c•Á ]á [ cÁ ]@æ•^Á- [ ~!Á^~æ!•Áæ\* [ ÉÁÖ-- [ !c•Áæ!^Á& [ ] çá } á } \*Ác [ Á^ç } æ } á!Ác [ Á [ c@^!Á& [ { ]æ } á^•É

( " 5ggcW]UhYX`?bc k`YX[Y`5fYUg

?5`7cXY ?bc k`YX[Y`5fYU

FHH Ú [ | ~ çá [ ] ÁÜ!^ç^ } çá [ } Áæ } á!ÁT áçá\*æcá [ }

Î€G Ó~•â } ^••ÁTæ } æ\*^ { ^ } cÉÁÖá } æ } &^ÉÁæ } á!ÁVæçæcá [ }

**CihWcaY`\_ (**

%"" C i hWca Y`AYUg i fYg

P~ { à^!Á [-Á^& [ [ \*!æ&|hæ } á!^ç [ | ~ çá [ ] } æ!^Á-æ&c [ !•Áá^ } câ-â^á^Ác@æçá } -|^ } &^Áá } çæ•áç^!Á\*!æ••Áá } ÁX^! { [ ] } cÈ

&"" 5ggcW]UhYX`=bgh]h i h]cb`HmdYg

ÁF! ÎGÁÜ^•^æ!&@

'U"" C i hWca Y`HmdY.

Ô@æ } \*^Áá } ÁS [ , |^á\*^ÁU~c& [ { ^!T^æ~!^

'V"" E i Ubh]hUh]jY`C i hWca Y

MYuf 5Wh i U`

GEFI F

'W"" E i U`hUh]jY`C i hWca Y`cf`=a dUWh`GhUhY a Ybh

=gg i Y`fl K`c`WUfYg`UbX`K`mł

Q } çæ•áç^!Á\*!æ••Á ] ^&â^•Á&æ } Áá^&!^æ•^Á } æçá^Á• ] ^&â^•Ááç^!•âc^Áæ } á!Áæ|c^!Á& [ •^•c^ { Á ]! [ &^••Á•É

G€FIÁW}áç^!•öc^Á[-ÁX^! { [ ]c!Ö [ { äi}^äáÜ^•^æ!&@kæ}á!Öçc^}•á [ÁCE} }~æ!áÜ^ [ !cÁ[-ÁCE&& { [ ]i•@ { ^}c•kæ}á!Ü^•~|c•

**K\Uh\Ug'VYYb'XcbY**

Ü^•^æ!&@^!Á&æ!i!ä^äÁ [ ~c^•á^!á!æ}á!^!^!@ [ ~•^Á^ç ]^!i { ^}c•Á [ }Áà [ c@Á }æcáç^Á!æ}á!Á }çæ•áç^Á• ]^!&á^•Á! }  
à [ c@Á }æcáç^Á!æ} \*^Á! }ÁÖ~! [ ]^!Á!æ}á!Á! }çæ•áç^Á!æ} \*^Á! }Á! [ !c@ÁCE { ^!i&æÁ•@ [ , ä } \*Ác@æcÁ• [ { ^Á! }çæ•áç^Á  
 [ ] ]~|æcá [ ] •Á!^Áç^!^!Á!æ \*^!^••áç^É

**FYgi`hg**

Ö [ ]cá }~^!á! }c! [ á~&cá [ }Á [-Á!á--^!^}c!çæ!iæ}c•Á- [ !Á@ [ !cá&~|c~!æ!Á [ !Á!æ \*! [ ] [ { á&Á ]!æ}cÁ• ]^!&á^•Á&æ }  
á }&!^æ•^Ác@^Á! }çæ•áç^Á [ c^ }cáæ!Á [-Ác@^•^Á• ]^!&á^•Á!æ}á!Á! }&!^æ•^Ác@^Á! }æ••Áæ!á!ç^Ác [ Á• ]!^æ!á! }c [ Á ]^!  
æ!^æ•ÉÁÁÖ!æ } \*^•Á! }Á\^Ác!æ!á! }Á!^ÁÖÉ!á& [ ]c^ }c! [-Á!^æç^Á!&æ}Á!^•~|cÁ! }Á! }&!^æ•^!á!æ \*^!^••áç^! }^••Á [-  
!^!á!&æ}æ!^! }æ••Á { æ!á } \*ÁcÁ { [ !^!á!^!^Ác [ Ácæ\^Á [ ç^!Á , ^c!æ }á•É

( " 5ggcW]UhYX`?bck`YX[Y`5fYUg

?5`7cXY ?bck`YX[Y`5fYU

F€G Ü [ ä!ÉÁÜ!æ }cÉÁ Yæc^!ÉÁ!~c!á^ }c!Ü^!æcá [ ]•@ä ]•

**CihWcaY`\_)**

%""CihWcaY`AYUgifyg

!~ { à^!Á [-Á&|ä { æc^Á&@æ } \*^Á { æ }æ \*^ { ^}c! }!æ&cá&^Á [ ]ÁX^! { [ ]c!-æ! { •Ác@æc!æ!á! }Á&|ä { æc^Á&@æ } \*^  
æ!á! }æcá [ ]É

&""5ggcW]UhYX`=bgh]h]h]cb`HmdYg

ÁF! ÎGÁÜ^•^æ!&@

'U""CihWcaY`HmdY.

Ö!æ } \*^Á! }Á!S [ , |^!á^!ÁÜ~c& [ { ^!T^æ•~!^

'V""EiUbh]hUh]jY`CihWcaY

MYUf 5WhiU`

G€FI I

'W""EiU`]hUh]jY`CihWcaY`cf`=a dUWh`GhUhY aYbh

=ggiY`fiK\c`WufYg`UbX`K\mL

Ö!ä { æc^Á&@æ } \*^Á!^!ç ]^!&c^!á!ç [ Á! { }æ&c!-æ! { á } \*Ác@! [ ~ \*@Á ]!^!á! }áçæcá [ ]Á! }&!^æ•^•ÉÁ&@æ } \*^Á! }Á! [ ]  
•~!æ!á!ç^Áç^ÉÁ!æ } ]|^•D!æ }á!á^!&!^æ•^•Á! }Á { ä! \Á ]! [ á~&cáç^Á&æ }æ&áç^

**K\Uh\Ug'VYYb'XcbY**

V@^!^!^!æ!&@^!Á!æ!á!æ } [ ]|^!á!^!^!@ [ ~•^Á!^!ç ]^!-æ! { •ÉÁ ]@ [ c [ É!á [ &~ { ^}c^!á!á [ : ^}Á!á!-^!^!c  
-æ! { •ÉÁ&!^æc^!á!ç^Á!^!ç^Á [-Á ]@ [ c [ Á•á { ~|æcá [ ] •Á! ] •c!æcá } \*^Áç!á!ç! } \*Á& [ ] á!cá [ ] •



G€FIÁW}äç^!•öc^Á[-ÁX^! { [ ]}clÖ [ { ää}^äáÜ^•^æ!&@Áæ}ááÖçc^••ä [ }ÁCE} } ~æ|ÁÜ^ [ !cÁ[-ÁCE&& { [ ]}!•@ { ^}c•Áæ}ááÜ^•~|c•

**FYgi`hg**

Ü^•^æ!&@^!Á@æ•Áä}c^!-æ&^áÁ}! [ b^&cÁ , äc@ÁæÁ!^|æc^áÁ}! [ b^&cÁc [ Á&!^æc^ÁæÁ|ä•cÁ [-Á&|ä { æc^Á&@æ} \*^Áä^•c  
] !æ&cä&^•ÉÁÁV@^Á!^•^æ!&@^!Á@æ•Á { æá^Á& [ ] } ^&cä [ ] •Á , äc@Á•^ç^!æ|Á-æ! { •Áæ} áÁ , ä|Á•æ { ] |^Á\*!^Á} @ [ ~ •^  
\*æ•^•Á- [ !Ác@^Á} ^çcÁc , [ Á^•æ!•ÉÁÁÜ^•^æ!&@^!Á@æ•Áäá••^ { ä}æc^áÁ!^•~|c•ÁæcÁæÁ} ~ { à^!Á [-Á , [ !\•@ [ ] }•

**("5ggcW]UhYX' ?bc k`YX [Y' 5fYUg**

<b>?5'7cXY</b>	<b>?bc k`YX [Y' 5fYU</b>
F€I	Ú! [ c^&cÁÜ [ ä Á-! [ { ÁPæ! { ~  ÁÖ--^&c•Á [-ÁPæc~ !æ ÁÖ  ^ { ^ } c•
FFG	Yæc^!•@^áÁÚ! [ c^&cä [ ] Áæ} áÁTæ}æ*^ { ^ } c
FGÍ	CE*! [- [ !^•c! ^
FHG	Y^æc@^!Áæ} áÁÖ ä { æc^

**Jfl<ł" D`UbbYX'Dfc [fU a`fl9 IhYfbU` : UWhcfgł**

- 9 IhYfbU`ZUWhcfg' k \]W\`UZZYWhYX' c i hWc a Yg**
- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations

**6f]YZ' 9 I d`UbUh]cb**

**Jfl<ł" D`UbbYX'Dfc [fU a`fl9 jU` i Uh]cb`Gh i X]Ygł**

**9 jU` i Uh]cb`FYgi`hg**

{No Data Entered}

**?Ym`hY a g`cZ' 9 jU` i Uh]cb**

{No Data Entered}

G€F I ÁW}áç^!•óç^Á[ÁX^! { [ ]}clÖ [ { áá}^ááÜ^•^æ!&@áæ}ááÖçç^•á [ }ÁCE} }~æ|ÁÜ^ [ [!cÁ[-ÁCE&& { [ ]}!•@ { ^}c•áæ}ááÜ^•~|c•

**Jfi5L''D`UbbYX`Dfc [fUa`fiG i a aUfml**

**Dfc [fUa` (**

%''BUaY`cZ`h\Y`D`UbbYX`Dfc [fUa

Ü~•cæá}æà|ÁÖ}^!•^

Ü^ [!cá}•Á [ }Ác@á•ÁÜ! [!•!æ {

**Jfi6L''Dfc [fUa`?bck`YX[Y`5fyUfgl**

FÉÁÜ! [!•!æ { ÁS} [ , |^á•^ÁCE!^æ•Áæ}ááÜ^!&^}cæ\*^

?5 7cXY	?bck`YX[Y`5fyU	!%, *& 9lhYbg]cb	!%, -\$ 9lhYbg]cb	!%, *& FYgYUfW\	!%, -\$ FYgYUfW\
G€F	U æ}cÁÖ^ [ [ ^ÉÁÖ^}^cá&•ÉÁæ}ááÖ^}^cá&T^&@æ}á• { •	€Ä		!€Ä	
I€G	Ö}•á}^^!á}•ÁÜ^•c^ { •Áæ}ááÖ~`á [ ^}c	G€Ä		€Ä	
î€F	O& [ ] [ { á&•Á[-ÁCE*!á&~ c~!æ ÁÜ! [ á~&cá [ }Áæ}á Øæ! { ÁTæ}æ*^ { ^}c	!€Ä		H€Ä	
î€I	Pæc~!æ ÁÜ^• [ ^!&^Áæ}ááÖ}çá! [ ] { ^}cæ  Ö& [ ] [ { á&•	€Ä		H€Ä	
	HchU'	F€€Ä		F€€Ä	

**Jfi7L''D`UbbYX`Dfc [fUa`fi-bd i hgl**

%''5WhiU`Ua c i bh`cZ` : H9#GMg`Y IdYbXYX`h\]g`Dfc [fUa

MYUf.`&\$%(	9lhYbg]cb		FYgYUfW\	
	%, *&	%, -\$	%, *&	%, -\$
D`Ub	€€I	€€€	€€I	€€€
5WhiU`DU]X	€€€	€€€	€€H	€€€
5WhiU`Jc`i bhYYf	€€€	€€€	€€€	€€€

&''5WhiU`Xc`Ufg`Y IdYbXYX`b`h\]g`Dfc [fUa`fi]bW` i XYg`7Uffmc jYf` : i bXg`Zfc a`dfY]j]c i g`mYUfgl

9lhYbg]cb		FYgYUfW\	
Ga]h\!@YjYf`'V`/'`W	%, -\$`9lhYbg]cb	<Uhw\	9jUbg!5`Yb
FíiH€	€	!€GFF	€
%, *&`AUhW\]b [	%, -\$`AUhW\]b [	%, *&`AUhW\]b [	%, -\$`AUhW\]b [
GîiG€	€	îi€J€	€
%, *&`5`Ch\Yf	%, -\$`5`Ch\Yf	%, *&`5`Ch\Yf	%, -\$`5`Ch\Yf
!€iI€	€	€	€

G€FIÁW)äç^!•äc^Á[ÁX^! { [ ]c!Ô [ { ää}^äáÜ^•^æ!&@ÁÚ! [b^&c•Áæ} äÁ!^}^, æà|Á^}^! \* ^ Á, [! \ • @ [ ] • Á [ ] Á] |æ} cÁçæ! ä^c^ÉÁ] |æ} cä} \*

**Jf18L"D'UbbYX'Dfc [fUa'fl5Wh]j]hmŁ**

%""6f]YZ'XYgWf]dh]cb'cZ'h\Y'5Wh]j]hm

ÁÁÁÁÁÁÁÁ

U}Á-æ! { ÁÒ}^! \* ^ ÁÔ! [ ] ÁÜ^•^æ!&@ÁÚ! [b^&c•Áæ} äÁ!^}^, æà|Á^}^! \* ^ Á, [! \ • @ [ ] • Á [ ] Á] |æ} cÁçæ! ä^c^ÉÁ] |æ} cä} \* äæc^•ÉÁ] ^•cÁ& [ ] c! [ÉÁ@æ!ç^•cä} \* Áæ} äÁ]! [ &^••ä} \* Á[-Á[ä]•^ÁäÉ

X^! { [ ] c!á•ÁæÁ|^æäá} \* Á•cæc^Áá} Á& [ ] ç^!cä} \* Á& [ , Á { æ} ~! ^Áá} c [ Á^|^&c!ä&äc^ÉÁÁV@ä•Á!^•^æ!&@Áá•Ác [ Á•^Áá-ÁáçÁá• ^& [ ] [ { ä&æ||^Á-^æ•äà|^Á- [! Á-æ! { ^!•É

**&""6f]YZ'XYgWf]dh]cb'cZ'h\Y'hUf [Yh'U i X]YbWY**

ÁÁÁÁÁÁÁÁ

ÁÁÁÁÁÁÁÁ

CE\*!ä&~|c~!^ÁÔ! [ ] ÁÚ! [ ä~&!•  
CE\*!ä&~|c~!^ÁÔæ! { ^!•  
Ü&ä^}cä-ä&ÁÔ [ { { ~ } äc^  
W} ä^! \*!æä~æc^Á•c~ ä^}c•

**'""<ck'kUg'YLhYbg]cb'igYX3**

ÁÁÁÁÁÁÁÁÉÉ

**Jf19L"D'UbbYX'Dfc [fUa'flC i hd i hgŁ**

%""GhUbXUfX'c i hd i h' a YUg i fYg

&\$%(	8]fYWh'7cbhUWhg 5Xi'hg	=bX]fYWh'7cbhUWhg 5Xi'hg	8]fYWh'7cbhUWhg Mcih\	=bX]fYWh'7cbhUWhg Mcih\
5WhiU'	ï€	€	€	€

**&""B i a VYf'cZ'DUHybh'5dd']WUh]cbg'G i V a ]hhYX'flGhUbXUfX'FYgUfW\`C i hd i hŁ  
DUHybh'5dd']WUh]cbg'G i V a ]hhYX**

ÿ^æ!K

G€FI

CE&c~æ!K

€

**DUHybhg``]ghYX**

G€FIÁW}áç^!•ic^Á[-ÁX^! { [ ]clÖ [ { ää}^ááÜ^•^æ!&@Áæ}á!Öçc^}•ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•kæ}á!Ü^•~|c•

**C i h d i h ' H U f [ Y h**

**C i h d i h ' %**

**C i h d i h ' A Y U g i f Y**

Ü^•^æ!&@ÁÜ! [b^&c•

**MYUf**

**5WhiU`**

G€FI

Gì

**C i h d i h ' &**

**C i h d i h ' A Y U g i f Y**

Y [ ! \ • @ [ ] ÁÉÁ • ä } \* | ^ Á • ^ • • ä [ }

**MYUf**

**5WhiU`**

G€FI

H

**C i h d i h ' '**

**C i h d i h ' A Y U g i f Y**

Üæää [

**MYUf**

**5WhiU`**

G€FI

F

G€F I ÁW}áç^!•öc^Á[-ÁX^! { [ ]c!Ö [ { ää}^äáÜ^•^æ!&@Áæ}á!Öçc^••ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•Áæ}á!Ü^•~|c•

Jfl ; Ł" GhUhY' 8YZ]bYX' C i hWc a Yg

**J" GhUhY' 8YZ]bYX' C i hWc a Yg' HUV' Y' cz' 7 cbhYbh**

C" Bc"	C I H 7 C A 9 B 5 A 9
F	Þ~ { à^!Á[-Áä}áâçäã~æ •A, @[Áä { ] ^ { ^}cÁ!^& [ { { ^}á^ää]!æ&cä&^Ç•DÁà^*ä} }ã} *Á^}^!^*Á& [ [ ]! ! [ ä~&cä [ ]Á [ !Áä} &!^æ•ä} *Á^á^ áÁæ} áð [ iÁ~ ~æ äc^Á[-Á^çä•cä} *Á& [ [ ]•Á& [ ]c!iää~cä} *Ác [ ÁæÁ•~•cæä}æà ^É & [ •cÁ^~^&cäÇ^Á^}^!^*Á• [ ~!&^
G	Þ~ { à^!Á[-Á-æ! { ^!•Á, @[Áä { ] ^ { ^}cÁæÁ^, Á]!æ&cä&^Ác [ Áà^*ä} Á]! [ ä~&cä [ ]Á [ !Ác [ Áä { ]! [ Ç^Á&~! ^}c [ ä ^ÁáÁ]! [ ä~&cä [ ]Á^á^ áÁæ} áÁ~ ~æ äc^
H	Þ~ { à^!Á[-Á!^•^æ!&@Á-ä} ää} *•Á- [ !Á*^}^•Áä { [ [ !cæ}cÁä}Ác@^Á•c!~&c~!^Á[-Ác@^Á]  æ}cÁ&^ Á, æ  Áä~!ä} * *! [ , c@Ác@æcÁ, ä  Áæä!Áä}Ác@^Á~•æ*^Á[-Á~•ä} *Á&^ Á, æ  •Áæ•ÁæÁ• [ ~!&^Á[-Áä![-~ ^]•É

G€FIÁW}äç^!•öc^Á[-ÁX^! { [ ]cáÖ [ { ää}^äáÜ^•^æ!&@kæ}á!Öçc^}•ä [ }ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•kæ}á!Ü^•~|c•

**CihWcaY'\_%**

%''CihWcaY'AYUgifyg

Þ~ { à^!Á[-Áä}äâçä~æ|•Á , @ [ Áä { ]|^ { ^}cá!^& [ { { ^}ä^á!}!æ&cá&^ç•DÁá^\*ä }ä } \* Á^}^! \* ^Á& [ ]Á [ ]! [ ä~ &cá [ ]  
[ !Áä }&!^æ•ä } \* Á^á^!áÁæ } äð [ !Á~ ~æ|äc^Á[-Á^çä•cä } \* Á& [ ] \* Á& [ ] c!áä~ cá } \* Ác [ ÁæÁ•~ •cæä }æà|^ÉÁ& [ •cÁ^~^&cáç^  
^}^! \* ^Á• [ ~!&^

&''5ggcW]UhYX'=bgh]h i h]cb'HmdYg

ÁFî ÎGÁÖçc^}•ä [ ]  
ÁFî ÎGÁÜ^•^æ!&@

'U''CihWcaY'HmdY.

Ô@æ} \* ^Áä}ÁS} [ , |^á \* ^ÁU~c& [ { ^ÁT^æ•~!^

'V''EiUbh]hUh]jY'CihWcaY

MYUf            5WhiU'  
G€FI            FG

'W''EiU]hUh]jY'CihWcaY'cf'=a dUWh'GhUhY a Ybh

=ggiY'fiK\c'WufYg'UbX'K\mL

Uä|•^^äÉc^ }^Á•~ }- [ , ^!Áä•Áæ!|æçç^!^Á}^ , Á& [ ] Á- [ !Ác@^!•cæc^Á[-ÁX^! { [ ]cÉÁ , äc@Ác@^Á [ ]c^}cäæ|Ác [ Áæäâ  
çæ}~^Ác [ Á-æ! { •ÉÁVW}- [ !c~ }æc^!^ÉÁä!äÁæ } äÁä }•^&cÁ] ^•c•Á@æç^!|ä { äc^!äÁc@^Á [ ç^!æ|!Á^!áÁ [ ]c^}cäæ|Á , äc@  
•^^äÁæ } äÁ [ ä!Á^!á|ä•Ác!æäâcä [ ]æ|!^Á [ , ^!Ác@æ}Á }æcä [ ]æ|Áæç^!æ \* ^•ÉÁÁÖ!ä•Á@æç^!á^!ä { æc^!á~ }Ác [ Á ]€ÁÁ [-  
•~ }- [ , ^!Á-á^!ä•ÉÁ { ä \* !æcä } \* Ác@! [ ~ \* @Áæ } äÁ~ ä& \!^Áá^!^æ•ä } \* Á^!á|ä•ÉÁÁQ }•^&cÁ] ^•c•Á|ä\^Ác@^!ÁÖæ } ä^!á  
Ü~ }- [ , ^!ÁT [ c@Á@æç^!Á ]! [ ç^! }Áá^çæ•cæcä } \* Ác [ Á•^^á^!á|ä•Áæ } äÁ~ ~æ|äc^!Á^!á~ } \* Á [ ]Ác@^!Á { ^æ|Áä }•äá^  
•^^á•É

K\Uh'\Ug'VYYb'XcbY

V [ Áæäâ!^••Áä•~^•Á [-Á] ^•cÁ ]!^!áæcä [ ]ÉÁVWX T ÁÖçc^}•ä [ ]Áä }äcäæc^!á [ ]É-æ! { Á!^•^æ!&@Ác!äæ|•Á^çæ|~æcä } \*  
•~ }- [ , ^!Á ]|æ}cä } \* Ááæc^!Á!æ } \* ä } \* Á-! [ { Á { äáÉ T æ^Ác [ Á]æc^!ÁR~ } ^ÉÁŠæc^!Á ]|æ}cä } \* Ááæc^!Á!^•~|c^!áÁä }  
@ä \* @^!Á•^^áÁæ } äÁ [ ä!Á^!á|ä•Áæ } äÉÁ [-c^}ÉÁ \* !^æc^!Ác^•cÁ , ^!á \* @c•ÉÁä } ä!ä&æcä } \* Áá^c^!Á•^^á~ ~æ|äc^!ÉÁVWX T

G€FIÁW}áç^!•íc^Á[-ÁX^! { [ ]}cÁÔ [ { áá}^ááÜ^•^æ!&@háæ}á!Ôçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !:cÁ[-ÁCE&& [ { ]}|á•@ { ^}c•háæ}á!Ü^•~|c•

G€F I ÁW} äç^! •ic^Á [-ÁX^! { [ ]} c!Ö [ { ää} ^ááÜ^•^æ!&@áæ} á!Öçc^} •ä [ ] ÁCE} } ~æ|ÁÜ^ [ [ :c! [-ÁCE&& [ { ]} i•@ { ^} c•áæ} á!Ü^•~|c•

**(" 5ggcW]UhYX' ?bc k`YX[Y' 5fYUg**

**? 5`7cXY ?bc k`YX[Y' 5fYU**

G€F Ú|æ} c!Ö^} [ { ^É!Ö^} ^cä&•É!æ} á!Ö^} ^cä&Á T^&@æ} ä { •

**Jfl<Ł" D`UbbYX'Dfc [fU a`fl9 IhYfbU` : UWhcfgŁ**

**9 IhYfbU`ZUWhcfg` k \]W\`UZZYWhYX`c ihWc a Yg**

Natural Disasters (drought, weather extremes, etc.)

Economy

Government Regulations

**6f]YZ`9 Id`UbUh]cb**

**Jfl<Ł" D`UbbYX'Dfc [fU a`fl9 jU` i Uh]cb`Gh i X]YgŁ**

**9 jU` i Uh]cb`FYg i`hg**

Oilseed producers were surveyed at the annual oilseed producer meeting and online to identify if information generated and delivered by the UVM oilseed program has improved yield and quality of the crop. Results included:

33% indicated that UVM Extension work helped improve their oilseed yields

75% indicated that our work help improve weed control, insects, and disease

100% indicated that our work helped them reduce harvest losses through fine-tuned harvest and drying practices.

**?Ym`hY a g`cZ`9 jU` i Uh]cb**



G€FIÁW)äç^!•äc^Á[-ÁX^! { [ ]clÖ [ { ää}^äáÜ^•^æ!&@Áæ}á!Öçc^••ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•Áæ}á!Ü^•~|c•

**Jfl5L''D`UbbYX`Dfc [fUa`flG i a a Ufml**

**Dfc [fUa` ]**

%''BUaY`cZ`h\Y`D`UbbYX`Dfc [fUa

Ô@!á@ [ [ áÁUà^•äc^

Ü^ [ !cä} \*Á [ }Ác@ä•ÁÜ! [ \*!æ {

**Jfl6L''Dfc [fUa`?bck`YX[Y`5fYUflgl**

FÉÁÜ! [ \*!æ { ÁS} [ , |^á \*^ÁCE!^æ•Áæ} á!Ü^!&^} cæ\*^

?5 7cXY	?bck`YX[Y`5fYU	!%, *& 9lhYbg]cb	!%, -\$ 9lhYbg]cb	!%, *& FYgYUfW\	!%, -\$ FYgYUfW\
Í€I	Íæ!\^cä} *Áæ} á!Öä•c!iä~cä [ }ÁÜ!æ&cä&^•	I Ä		€ Ä	
Í€I	Ô [ ]•~ { ^!Ö& [ ] [ { ä&•	I Ä		Í Ä	
Í€J	Ò& [ ] [ { ä&AV@^ [ !^Áæ} á!T^c@ [ á•	€ Ä		Í Ä	
Í€H	P~clácä [ }ÁÖä~&cä [ }Áæ} á!Ö^@æçä [ !	GF Ä		ÍG Ä	
Í€I	P~clácä [ }Áæ} á!P~ } *^!Áä } Ác@^ÁÜ [ ] ~ æcä [ }	í Ä		Í Ä	
ÍGI	P^æ c@^ÁŠä-^c^!^	FJ Ä		H€ Ä	
ì€I	Ö [ { { ~}äc^AQ}•c {	ì€I		€ Ä	





GEFIÁW}äç^!•öc^Á[ÁX^! { [ ]c!Ô [ { ää}^äáÜ^•^æ!&@kæ}á!Öçc^}•ä [ÁCE} } ~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•kæ}á!Ü^•~|c•

**Cihdi h`\_&**

**Cihdi h`AYUgi fY**

Ô [ ]•~ { ^!ÁÜ~ à|ä&æcä [ ]  
P [cÁ!^] [ !cä } \*Á [ ]Ác@ä•ÁU~c] ~cÁ- [ !Ác@ä•ÁCE} } ~æ|ÁÜ^ [ !c

**Cihdi h`\_'**

**Cihdi h`AYUgi fY**

Ô ~ !|ä&~|~ {  
P [cÁ!^] [ !cä } \*Á [ ]Ác@ä•ÁU~c] ~cÁ- [ !Ác@ä•ÁCE} } ~æ|ÁÜ^ [ !c

**Cihdi h`\_(**

**Cihdi h`AYUgi fY**

Øæ&cÁÜ@^^c•  
P [cÁ!^] [ !cä } \*Á [ ]Ác@ä•ÁU~c] ~cÁ- [ !Ác@ä•ÁCE} } ~æ|ÁÜ^ [ !c

**Cihdi h`\_)**

**Cihdi h`AYUgi fY**

Ú ~ à|ä&æcä [ ]ÁËÁP^, ]!ä}c

MYUf  
GEFI

5WhiU`  
Fì

**Cihdi h`\_\***

**Cihdi h`AYUgi fY**

V!æä}Ác@^Ác!æä}^!Á!; [ \*!æ {  
P [cÁ!^] [ !cä } \*Á [ ]Ác@ä•ÁU~c] ~cÁ- [ !Ác@ä•ÁCE} } ~æ|ÁÜ^ [ !c

**Cihdi h`\_+**

**Cihdi h`AYUgi fY**

Y [ !\•@[ ]ÁÜ^!ä^•  
P [cÁ!^] [ !cä } \*Á [ ]Ác@ä•ÁU~c] ~cÁ- [ !Ác@ä•ÁCE} } ~æ|ÁÜ^ [ !c

**Cihdi h`\_+**

**Cihdi h`AYUgi fY**

Y [ !\•@[ ]ÁËÁ•ä } \*|Á^•^••ä [ ]

MYUf  
GEFI

5WhiU`  
Hí

G€FIÁW}äç^!•öc^Á[-ÁX^! { [ ]clÔ [ { ää}^äáÜ^•^æ!&@kæ}á!Öçc^}•ä [ }ÁCE} } ~æ|ÁÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•kæ}á!Ü^•~|c•

**C i h d i h`\_ -**

**C i h d i h`AYUg i fY**

Y^à ]æ\*^ÁÇ } ^, Áæ}áÁ~ ]áæc^âD  
Þ [cÁ!^ [ !cä } \*Á [ }Ác@â•ÁU~c ] ~cÁ- [ !Ác@â•ÁCE} } ~æ|ÁÜ^ [ !c

**C i h d i h`\_%\$**

**C i h d i h`AYUg i fY**

Ú!^•^}cæcä [ }  
Þ [cÁ!^ [ !cä } \*Á [ }Ác@â•ÁU~c ] ~cÁ- [ !Ác@â•ÁCE} } ~æ|ÁÜ^ [ !c

**C i h d i h`\_%%**

**C i h d i h`AYUg i fY**

Ô|æ••ð& [ ~!•^Á•^••ä [ }

MYUf 5Wh i U`  
G€FI I Í

**C i h d i h`\_%&**

**C i h d i h`AYUg i fY**

Öçæ|~æcä [ }

MYUf 5Wh i U`  
G€FI Ì

**C i h d i h`\_%'**

**C i h d i h`AYUg i fY**

Ü^•^æ!&@Á ] ! [ b^&c•

MYUf 5Wh i U`  
G€FI Í

**C i h d i h`\_%{**

**C i h d i h`AYUg i fY**

Üæää [

MYUf 5Wh i U`  
G€FI Ï

**C i h d i h`\_%}**

**C i h d i h`AYUg i fY**

V^|^çä•ä [ }

G€FIÁW}áç^!•c^Á[-ÁX^! { [ ]c!Ö [ { ää}^ááÜ^•^æ!&@Áæ}á!Öçc^}•á [ }ÁCE} }æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•kæ}á!Ü^•~|c•

**MYUf**  
G€FI

**5Wh i U`**  
F

**C i h d i h` %\*`**

**C i h d i h` A Y U g i f Y**

Ü^•^æ!&@ÁÜ [ •c^!

**MYUf**  
G€FI

**5Wh i U`**  
F

GEFIÁW}âç^!•âc^Á[-ÁX^! { [ ]c!Ô [ { ââ}^âáÜ^•^æ!&@hæ}â!Ôçc^•â [ }ÁCE} }~æ!áÜ^ [ !cÁ[-ÁCE&& [ { ]!â•@ { ^}c•hæ}â!Ü^•~|c•

Jfl ; Ł" GhUhY' 8YZ]bYX' C i hWc a Yg

**J" GhUhY' 8YZ]bYX' C i hWc a Yg 'HUV'Y' cz' 7 cbhYbh**

C" Bc"	C I H 7 C A 9 ' B 5 A 9
F	P~ { à^!Ác@^hâ}ââçââ~æ!•Á, @[Áâ}&[!][!æc^Á[ ]^Á [ !Á { [ !^Á@^æ c@~ ^Á^æcâ} *Á ]!æ&câ&^•hæ}âð [ ! ]@~•â&æ!Áæ&câçâc^Ác [ Á ]!^ç^}cð { æ}æ *^hââ•^æ•^hæ}âð [ !Á [ à^•âc^
G	P~ { à^!Á[-hâ}ââçââ~æ!•Á, @[Á~•^Á- [ [ âÁ ] æ} }â} *Áæ}âÁ, â•^Á•@ [ ] ]â} *Áâ^@æçâ [ !•hâ { ]! [ ç^hââ^câæ} â c@^Á•~ ] ] ^Á[-Á- [ [ â
H	V@^Á}~ { à^!Á[-hâ}ââçââ~æ!•Á, @[Á•^!^&câæ}âÁ ]!^æ!^hâçæ!â^c^Á[-Á ]! [ â~&^Ác [ Á@^ ] ]!^ç^}cð { æ}æ *^hââ•^æ•^hæ}âð [ !Á [ à^•âc^

GEFIÁW)äç^!•äc^Á[ÁX^! { [ ]clÖ [ { ää}^äáÜ^•^æ!&áÖçc^}•ä [ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•kæ}áÜ^•~|c•

**CihWcaY'\_%**

%''CihWcaY'AYUgifyg

Þ~ { à^!Á[-Áä} ääççä~æ|•Á, @ [Áä}& [ ! ] [ !æcÁ [ ] ^Á [ !Á { [ !^Á@^æ|c@-~|Á^æcä } \*Á ] !æ&cä&^•Áæ } äD [ !Á ] @^•ä&æ|  
æ&cäççäc^Á [ Á ] !^ç^ } cD { æ } æ\*^Áäâ•^æ•^Áæ } äD [ !Á [ à^•äc^  
Þ [ cÁÜ^ ] [ !cä } \*Á [ ] Ác@ä•ÁU~c& [ { ^ÁT^æ•~!^

**CihWcaY'\_&**

%''CihWcaY'AYUgifyg

Þ~ { à^!Á[-Áä} ääççä~æ|•Á, @ [ Á^•^Á- [ [ äá ] |æ } } ä } \*Áæ } äÁ, ä•^Á•@ [ ] ] ä } \*Áà^@æçä [ !•Áä { [ ] [ ç^Áäâ^çkæ } äÁc@^  
•~ ] ] |^Á[-Á- [ [ ä

&''5ggcWjUhYX'=bgh]h i h]cb`HmdYg

ÁFî ÎGÁÖçc^}•ä [ ]  
ÁFî ÎGÁÜ^•^æ!&@

'U''CihWcaY'HmdY.

Ö@æ } \*^Áä } ACE&cä [ ] ÁU~c& [ { ^ÁT^æ•~!^

'V''EiUbh]hUh]jY'CihWcaY

MYUf            5WhiU'  
GEFI            HÎ

'W''EiU]hUh]jY'CihWcaY'cf'=a dUWh`GhUhY a Ybh

-gg i Y'flK\c'WufYg'UbX`K\mł

U [ [ !Á^æcä } \*Á@æäâc•Áä~!ä } \*Á&@ä|ä@ [ [ äÉÁc@æcÁ-!^~^ } c|^Á!^•~|cÁä } Á [ ç^! , ^ä\*~cÁæ } äÁ [ à^•äc^ÉÁæ!^ÁæÁ•^!ä [ ~•  
& [ ] &^! } Áæ& [ ! ••Ác@^ÁWÉÜÉÁÖ^ç^ [ [ ] ä } \*Á@^æ|c@^Á^æcä } \*Á@æäâc•Á^æ!|~Áä } Á|ä-^Á ] [ çäâ^Ác@^Áà^Á^çk&@æ } &^Á [-  
] !^ç^ } cä } \*Á [ ] \* [ ä } \*Áæ } äÁ~c~!^Á@^æ|c@Á ] [ ! ] ^ { •ÉÁÖ@ä|ä&æ!^Á&^ } c^!•Á ] [ çäâ^Áæ } Á^ç&^| | ^ } c  
[ ] [ !c~ } äc^Á- [ !Á^æ!|~Áäâ^çcæ!~Áä } c^!ç^ } cä [ ] ÉÁÖ^æ~•^Á&@ä|ä&æ!^Á ] [ çäâ^!•Áæ!^Ác@^Á^æc^ \ ^ } ^!•Ác [ Ác@^  
} ~c!äcä [ ] Á ] [ çäâ^Áä , äc@ä } Ác@^•^Á&^ } c^!•ÉÁc@^~Áæ!^Áæ } Áæ ] [ ! ] !æc^Áæc!^c^! [ ~ ] Á- [ !Á!^|çæ } c^!ä~&æcä [ ]  
æ } äÁ { ^ } c [ !ä } \*É

K\Uh`\Ug`VYyb`XcbY

Ö!^! } ÁT [ ~ ] cæä } ÁP^æ|c@^ÁSä•ÁÖ@æ| | ^ } \*^ÁçÖTPSÔDÁ , æ•ÁæÁ\*!æ } cÉ~ } ä^äÁ ] [ b^&cÁ , äc@ÁæÁ& [ { [ ] ] ^ } c  
ä^•\*~^!äc [ Á^ç } æ } äÁ^ } äÁ^ } @æ } &^Ác!æä } ä } \*Á ] [ ! ] \*!æ { •Á- [ !Á&@ä|ä&æ!^Á&^ } c^!•Á^ } [ ! ] |^!äÁä } Ác@^Á-^!ä^!æ| | ^  
~ } ä^!äÖ@ä|ä&æ } äÁcÉ~|cÁÖæ!^ÁÖ [ [ äÁU! [ ! ] \*!æ { ÁçÖcÉÖÜDÉÁV@ä•Á , æ•Áä [ ] ^!ä~Á~cä|ä:ä } \*Ác@!^!ä^!æ| | ^ } c [ !É  
- [ &~•^!ä•c!æc^\*ä^ÉÁä } &|~ää } \*KÁc!æä } ä } \*Áæ } äÁc^&@ } ä&æ|Áæ••ä•cæ } &^Ác [ Á^ } æä|Á^ ] !^ } æ!æcä [ ] Áæ } ä  
äâ•c!äâ~cä [ ] Á [-Á ] , ~c!äcä [ ~•Áæ } äÁæ ] ] ^æ|ä } \*Á { ^æ } Ác [ Á&@ä|ä!^ } ÉÁ ] [ çäâä } \*Á~ } Áæ } äÁä } c^!æ&cäç^Á } ~c!äcä [ ]  
^!ä~&æcä [ ] ÉÁæ } äÁä~ä|ää } \*Á& [ { { ~ } äc^Á~ ] [ ! ] cÁ- [ !Á&!^æcä } \*Á@^æ|c@^Á- [ [ äÁ^ ] çä! [ ] { ^ } c•É

FYgi`hg





G€FIÁW)äç^!•öc^Á[-ÁX^! { [ ]cÖ [ { ää}^äáÜ^•^æ!&@hæ}á!Öçc^•ä [ ACE} } ~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•hæ}á!Ü^•~|c•

WÜÖEÁPæcá [ ]æ|ÁÜ&@ [ [ |ÁŠ ~ }&@ÁÜ! [ \*!æ { Áä { [ ]|^ { ^}c^á!^\* ~|æcá [ ]Á!^~!á! } \*Á&@á!á!^}Ác [ Á•^|/c^hæÁ-!~äc  
[ !ÁÇ^\*^cæà|Á^, äc@Ác@^!Á!~ }&@Á { ^æ|ÉÁCE•••••ä } \*Á, @^c@^!Ác@^•^Á^~ [ !c•Á!^•~|cÁh}Á&@á!á!^}c•hæ} &!^æ•^á  
& [ ]•~ { ]cá [ ]Á [-Á!~!äc [ !ÁÇ^\*^cæà|Á^}cæ\^Á [ !Á•ä { ]|^|Á^æáÁc [ Áh} &!^æ•^á, æ•c^Á•ÁÇäcæ|Ác [ Á^Çæ|~æc^Ác@^  
á { ]æ&cÉ

**K \Uh \Ug VYyb XcbY**

Ü^•^æ!&@Ác^æ { Ác^•c^áÁc@^Á-^æ•iäá|äc^ÉÁ!^|ææàá|äc^ÉÁæ } á!Çæ|äáäc^Á [-Á { ^c@ [ á•Áæ•••••ä } \*Á&@á!á!^}c•Á-!~äc  
æ}á!Ç^\*^cæà|Á^& [ ]•~ { ]cá [ ]É

**FYg i'hg**

QcÁ, æ•Áá^c^! { á }^áÁc@æcÁáá\*äcæ|Áh { æ\*á } \*ÁÇÖQDÁ, æ•Á!^|ææà|Ác [ Áæ•••••Á&@á!á!^}c•Á-!~äcÁæ } á!Ç^\*^cæà|Á^  
& [ ]•~ { ]cá [ ]Á á~!á } \*Á•&@ [ [ |Á!~ } &@Áæ } á!ÖQÁæ } á!ÁUÁÇ [ à^!çæcá [ ]DÁ, ^!^ÁÇæ|äáÁ- [ !Áæ•••••ä } \*Á { ^æ }  
& [ ]•~ { ]cá [ ]Á à~c|Á^•••Á!^&á^Á- [ !Á^•cá { æcá } \*Áh} á!çáá~æ|Á& [ ]•~ { ]cá [ ]É

(" 5ggcW]UhYX' ?bc k`YX[Y' 5fYUg

?5'7cXY    ?bc k`YX[Y' 5fYU  
Í€H            B~c|äcá [ ]ÁÖá~&æcá [ ]Áæ } á!Ö^@æçá [ !

**CihWcaY' )**

%"" C i h W c a Y' A Y U g i f Y g

B~ { à^!Á [-Áh} á!çáá~æ|Á, @ [ Ácæ\^Á•c^ ] •Ác [ Á { ^cÁáæá!^Á } ^á•Á- [ !Á@^æ|c@ÉÁ^á~&æcá [ ]ÉÁ• [ &äæ|Áæ } á!^!• [ ]æ|  
, ^||à^á } \*

&"" 5ggcW]UhYX'=bgh]h i h]cb`HmdYg

ÁF! ÍGÁÖçc^ } •ä [ ]

'U"" C i h W c a Y' H m d Y.

Ö@æ } \*^Áh} ÁCE&cá [ ]ÁU~c& [ { ^ÁT^æ•~!^

'V"" E i U b h]h U h]j Y' C i h W c a Y

MYuf            5Wh i U'  
G€FI            G€I

'W"" E i U ]h U h]j Y' C i h W c a Y' c f' = a d U W h`G h U h a Y b h

**-gg i Y'fi K \c`WufYg`UbX`K \mL**

X^! { [ ]cÁ•Á^ç ]^!á^ } &ä } \*ÁæÁ\*! [ , ä } \*Áh { { á\*!æ } cÁæ } á!^~\*^Á^ [ ] ~|æcá [ ]Á, @ [ Á [-c^} Á@æ•ÁæÁ•c! [ ] \*  
@á•c [ !^Á [-Á\*! [ , ä } \*Ác@^!Á [ , ] Á- [ [ áÉÁX^! { [ ]c•ÁÇ^!^Áá~^!^ } cÁ&|ä { æc^ÉÁ& [ •cÁ [-Á]æ } áÉÁc@á•Á [ ] ~|æcá [ ] •  
æàá|äc^Ác [ Á& [ { { ~ } ä&æc^Á [ ~c•áá^Á [-Ác@^!Á& [ { { ~ } äc^ÉÁ \ [ , ] |^á \*^Á [-Á] [ &æ|Á&! [ ] •Áæ } á! [ c@^!Áh••~^Áæ!^  
&@æ|Á^ } \*^ÉÁV@^•^Á&@æ|Á^ } \*^Á&æ } Ác@!^æc^ } Ác@^!Á- [ [ áÁæ&&^••ÉÁ•^&~!äc^Áæ } á! [ Ç^!æ|Á, ^||á^á } \*É  
Öçc^ } •ä [ ] Á ] ! ! \*!æ { •Á&æ } Áá!áá \*^Á• [ { ^Á [-Ác@^•^Ááæ!á!^!•É

G€FIÁW}äç^!•öc^Á[-ÁX^! { [ ]}c!Ö [ { ää}^äáÜ^•^æ!&@Áæ}á!Öçc^••ä [ }ÁCE} } ~æ|ÁÜ^ [ !:cÁ[-ÁCE&& { [ ]}!•@ { ^}c•Áæ}á!Ü^•~|c•

**K\Uh`Ug`VYYb`XcbY**

V@^ÁB^ ACE { ^!ä&æ}ÁØæ! { ^!Á}! [\*!æ { Áä^\*æ}Áä}ÁG€FHÁ , äc@Á]! [\*!æ { { ä} \*Á& [ ]cä} ~ä} \*Áä}ÁG€FIÁc [ Á@^! ]  
!^•^cc|^ä!^~ \*^^•Á { ^^cÁc@^ä!Á- [ [ äÁ]! [ ä ~ &cä [ ]Áæ} äÁ]! [ &^••ä} \*Á} ^^ä•ÉÁCEÁ• ~!ç^~Á , æ•Á& [ ]ä ~ &c^áÁc [ ]  
äá^}cä~^Á~c~!^Á}^^ä•Á- [ !Á|æ} äÁæ} äÁc^&@} ä&æ|Áæ••ä•cæ} &^ÉÁQ}c^! ]!^c^!Áæ} äÁ&~|c~!æ|Á|äæä• [ ]Á•^!çä&^•  
^!^Á]! [ çä^áÁc [ Áä { ]! [ ç^Á& [ { { ~} ä&æcä [ ]Áæ} äÁæ&&^••Ác [ Á• ~ ] ] [ !:cÉÁV@! [ ~ \*@Á , [ !\•@ [ ]•Áæ} ä  
äá•&~••ä [ ]Á\*! [ ~ ]Á { ^^cä} \*Áä^cÁ { æ!\^cä} \*Á•c!æc^\*ä^Áæ} äÁ} ä&@^Á { æ!\^cÁ [ ] ] [ !c~ } äcä^•Á , ^!^  
äá^}cä~ä^áÉ

**FYg`i`hg**

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- Economy
- Appropriations changes
- Government Regulations
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

**6f]YZ' 9 Id`UbUh]cb**

Staffing changes in Extension and grant funding have shifted programming from nutrition education for those with diabetes and some youth programming to working with underserved latino migrant farmers and a growing immigrant and resettled refugee population. Migrant farmers often have challenges with access to health care and food including, importantly, access to familiar foods. The immigrant and resettled refugee farming communities face challenges of food insecurity and access as well with additional need for support for issues that enable them to grow their own food, often an important part of their culture. Some desire to explore options enabling them to begin food enterprises..

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**Evaluation Study #1**

Poor eating habits during childhood, that frequently result in overweight and obesity, are a serious concern across the U.S. Developing healthy eating habits early in life provides the best chance of preventing ongoing and future health problems. Given the number of young children currently being cared for outside of the home, childcare centers provide an excellent opportunity for early dietary intervention. Because childcare providers are the gatekeepers to the nutrition provided within these centers, they are an appropriate target

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group for relevant education and mentoring.

Green Mountain Healthy Kids Challenge (GMHKC) was a grant-funded project with a component designed to expand and enhance training programs for childcare centers that were enrolled in the federally funded Child and Adult Care Food Program (CACFP). This was done by utilizing three behavior-focused strategies, including: training and technical assistance to enable preparation and distribution of nutritious and appealing meals to children, providing fun and interactive nutrition education, and building community support for creating healthy food environments.

A representative of each childcare center that was enrolled in the project was asked to complete a 14-page rubric self-assessment at the beginning (April 2012) and end (April 2013) of their project participation. Pre and post rubrics were compared to identify any statistically significant changes in the responses over time. The broad categories of change were focused on 1) nutrition standards, 2) the eating environment, 3) nutrition education, 4) physical activity, and 5) communication, promotion and monitoring. Pre-post comparisons were done using a statistical approach (Wilcoxon sign ranked test) to identify significant changes over the year. The vast majority of responses were found to have improved in the positive direction, addressing topics such as menu planning, staff modeling of healthy behaviors, food service personnel qualifications and training, physical environments that promote safe play, and promotion of healthy food choices.

#### Evaluation study #2

Healthy eating and physical activity patterns that are established at an early age are essential for students to achieve their full academic potential. Vermont Nutrition and Fitness Policy guidelines provide schools with the most recent information on best practices. However, many schools participating in the National School Lunch Program need on-going training, technical assistance, mentoring and financial support to effectively convert nutrition and physical activity resources and activities into best practices that improve student food choices and physical activity.

Team Nutrition Training Grant funds were used to provide training and technical assistance to



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Natural Disasters (drought, weather extremes, etc.)

Economy

Appropriations changes

Public Policy changes

Government Regulations

Competing Public priorities

Other (Food safety requirements of food)

**6f]YZ`9 Id`UbUh]cb**

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ÁFÌ ÎGÁÔçc^}•á [ }

'U'''C i hWc a Y'HmdY.

Ô@æ} \*^Áá}ÁCE&cá [ }ÁÜ~c& [ { ^Á T^æ•~!^

'V'''E i Ubh]hUh]jY'C i hWc a Y

MYUf            5Wh i U`  
G€FI            €

'W'''E i U]hUh]jY'C i hWc a Y'cf': a dUWh'GhUhY a Ybh

=gg i Y'flK \c'WUfYg'UbX' K \mł  
,P [ÁÔæçæÁÔ}c^!^áª

K \Uh' \Ug'VYYb'XcbY  
,P [ÁÔæçæÁÔ}c^!^áª

FYg i`hg  
,P [ÁÔæçæÁÔ}c^!^áª

(''5ggcW]UhYX'?bc k`YX[Y'5fYUg

?5'7cXY    ?bc k`YX[Y'5fYU  
FFG            Y æc^!•@^ááÜ! [ c^&cá [ }Áæ}áá Tæ}æ\*^ { ^}c  
FHH            Ú [||~cá [ }ÁÜ!^ç^}cá [ }Áæ}áá T ácá\*æcá [ }

%'''C i hWc a Y'AYUg i fYg

P~ { á^!ÁŠÒCEÚÁ^ [ ~c@Á , æc^!•@^ááÜ! { •Áæ } } ~æ||^Áæ••á•cÁF€Á|æ\^•@ [ !^Á]á



G€FIÁW)äç^!•öc^Á[-ÁX^! { [ ]c!Ô [ { äá}^ááÜ^•^æ!&@áæ}á!Ôçc^}•ä [ }ÁCE} }~æj!Ü^ [ !c![-ÁCE&& { [ ]!•@ { ^}c•áæ}á!Ü^•~|c•

,P [ÁÖæçæ!Ö}c^!^áª

**K\Uh`Ug`VYYb`XcbY**

,P [ÁÖæçæ!Ö}c^!^áª

**FYgi`hg**

,P [ÁÖæçæ!Ö}c^!^áª

**("5ggcW]UhYX`?bc k`YX[Y`5fYUg**

**?5`7cXY ?bc k`YX[Y`5fYU**

FFG Y æc^!•@^áÁÚ! [ c^&cá [ ]Áæ}á!Tæ}æ\*^ { ^}c

FHH Ú [ ||~cá [ ]ÁÚ!^ç^}cá [ ]Áæ}á!Táçá\*æçá [ ]

**CihWcaY`\_+**

**%""CihWcaY`AYugifYg**

P ~ { à^!Áàæ•á}Á•çæ\^@ [ |á^!•Áæ}á! { æ}æ\*^!•Á~•^Áá}çæ•äç^!Á• { ^|c!æ}á! [ c@^!ÁCEQÜÁ!^•^æ!&@Á!^•~|c•Ác [ { æ}æ\*^!Á• [ !c•Á-á•@^!á^•É

**&""5ggcW]UhYX`=bgh]h i h]cb`HmdYg**

ÁF! ÎG!Ôçc^}•ä [ }

**'U""CihWcaY`HmdY.**

Ô@æ}•^Áá}ÁCE&cá [ ]ÁÚ~c& [ { ^ÁT^æ•~!^

**'V""EiUbh]hUh]jY`CihWcaY**

**MYUf 5WhiU`**

G€FI €

**'W""EiU`]hUh]jY`CihWcaY`cf`=a dUWh`GhUhY a Ybh**

**=ggiY`fiK\c`WufYg`UbX`K\mł**

,P [ÁÖæçæ!Ö}c^!^áª

**K\Uh`Ug`VYYb`XcbY**

,P [ÁÖæçæ!Ö}c^!^áª

**FYgi`hg**

,P [ÁÖæçæ!Ö}c^!^áª



G€FIÁW}áç^!•óç^Á[-ÁX^! { [ ]c!Ô [ { äá}^ááÜ^•^æ!&@áæ}á!Ôçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& { [ ]!•@ { ^}c•áæ}á!Ü^•~|c•

**(" 5ggcW]UhYX' ?bc k`YX[Y' 5fYUg**

**?5'7cXY ?bc k`YX[Y' 5fYU**  
FFG Y æc^!•@^áÁÚ! [ c^&cá [ ] Áæ} á!Tæ} æ\*^ { ^}c  
FHH Ú [ || ~ cá [ ] ÁÚ! ^ç^ } cá [ ] Áæ} á!T ácá\* æcá [ ]

**CihWcaY'↵**

**%'' CihWcaY'AYUgifyg**

Šæ\^ÁÔ@æ { ]|æá}Áàæ••Ác [ ~ ! }æ { ^}cÁ [ ! \*æ} á : ^!•Áæá [ ] cÁæ ~ æcá&Áá } çæ•áç^Á• ] ^&á^•ÁçCEQÜDÁ• ] !^æá  
]!^ç^} cá [ ] ÁÓTÚBPCEÔÔÚÁc [ ~ ! }æ { ^}cÁ [ ! c [ & [ ! ]•

**&'' 5ggcW]UhYX'=bgh]h i h]cb'HmdYg**

ÁF Î ÎGÁÔçc^}•á [ }

**'U'' CihWcaY'HmdY.**

Ô@æ} \*^Áá} ACE&cá [ ] ÁU ~ c& [ { ^ÁT^æ•~!^

**'V'' E i Ubh]hUh]jY' CihWcaY**

MYuf 5Wh i U'  
G€FI €

**'W'' E i U']hUh]jY' CihWcaY'cf'= a dUWh' GhUhY a Ybh**

=gg i Y'fl K \c'WufYg'UbX' K \mł  
,P [ ÁÔæcæÁÔ } c^!^áª

K \Uh' \Ug'VYYb'XcbY  
,P [ ÁÔæcæÁÔ } c^!^áª

FYg i`hg  
,P [ ÁÔæcæÁÔ } c^!^áª

**(" 5ggcW]UhYX' ?bc k`YX[Y' 5fYUg**

**?5'7cXY ?bc k`YX[Y' 5fYU**  
FFG Y æc^!•@^áÁÚ! [ c^&cá [ ] Áæ} á!Tæ} æ\*^ { ^}c  
FHH Ú [ || ~ cá [ ] ÁÚ! ^ç^ } cá [ ] Áæ} á!T ácá\* æcá [ ]

G€FIÁW}áç^!•óç^![-ÁX^!{ [ ]clÔ [ { ää}^äáÜ^•^æ!&@áæ}á!Ôçç^}•â [ }ÁCE} }~æ|áÜ^ [ !cá[-ÁCE&& [ { ]!•@ { ^}c•áæ}á!Ü^•~|c•

**CihWcaY`\_-**

%""CihWcaY`AYUgifyg

Þ~ { à^!Á { æ!â}æ•Áà^& [ { ^Á}æ!cá [-ÁÔ|^æ}ÁTæ!â}æ•Áæ}áD [ !ÁÔ|^æ}ÁÓ [ æcá } \*Á ] ! [ \*!æ { •Á^æ&@Á^æ!È

&""5ggcW]UhYX'=bgh]h i h]cb`HmdYg

ÁFÌ ÎGÁÔçç^}•â [ }

'U""CihWcaY`HmdY.

Ô@æ} \*^Áâ}ÁCE&cá [ }ÁU~c& [ { ^ÁT^æ•~!^

'V""EiUbh]hUh]jY`CihWcaY

MYUf                      5WhiU`  
G€FI                              €

'W""EiU`]hUh]jY`CihWcaY`cf'=a dUWh`GhUhY a Ybh

=ggiY`flK\c`WufYg`UbX`K\mł  
,P [ ÁÔæçç^]c^!^â

K\Uh`\Ug`VYYb`XcbY  
,P [ ÁÔæçç^]c^!^â

FYgi`hg  
,P [ ÁÔæçç^]c^!^â

("5ggcW]UhYX`?bc k`YX[Y`5fYUg

?5`7cXY      ?bc k`YX[Y`5fYU  
FFG              Y æç^!•@^áÁÚ! [ c^&cá [ }Áæ}á!Tæ}æ\*^ { ^}c  
FHH              Ú [ ||~cá [ }ÁÚ!^ç^}cá [ }Áæ}á!Tâcá\*æç [ }

**CihWcaY`\_%\$**

%""CihWcaY`AYUgifyg

Þ~ { à^!Á { æ!â}æ•Á!•Áb [ â}Ác@^á!Á { æ!â}æÑ•ÁÔ|^æ}ÁÓ [ æcá } \*Á ] ! [ \*!æ { Á^æ&@Á^æ!

&""5ggcW]UhYX'=bgh]h i h]cb`HmdYg

G€FIÁW}áç^!•âc^Á[-ÁX^! { [ ]}clÔ [ { ää}^äáÜ^•^æ!&@háæ}á!Ôçc^}•â [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]}|â•@ { ^}c•háæ}á!Ü^•~|c•  
ÁFÌ ÎGÁÔçc^}•â [ }

'U'''C i hWc a Y'HmdY.

Ô@æ} \*^Áâ}ÁCE&cá [ }ÁÜ~c& [ { ^ÁT^æ•~!^

'V'''E i Ubh]hUh]jY'C i hWc a Y

MYUf            5Wh i U`

G€FI            €

'W'''E i U]hUh]jY'C i hWc a Y'cf' = a dUWh`GhUhY a Ybh

=gg i Y'flK \c`WufYg`UbX`K \mł  
,P [ÁÔæçæÁÔ}c^!^â

K \Uh` \Ug`VYYb`XcbY  
,P [ÁÔæçæÁÔ}c^!^â

FYg i`hg  
,P [ÁÔæçæÁÔ}c^!^â

(''5ggcW]UhYX`?bc k`YX[Y'5fYUg

?5`7cXY    ?bc k`YX[Y'5fYU  
FFG            Y æc^!•@^áÁÚ! [ c^&cá [ }Áæ}á!Tæ}æ\*^ { ^}c  
FHH            Ú [||~cá [ }ÁÚ!^ç^}cá [ }Áæ}á!T ácá\*æcá [ }

C i hWc a Y`\_%%

%'''C i hWc a Y`AYUg i fYg

Ó|æ&\áæ••Á& [ }•^!çæcá [ }Á]|æ}Áá^ç^ [ ]^áÁ~ [ !ÁÔac`ðV [ , }Á [-ÁÚ]æcc•à~! \*@ÉÁP`ÿ

&'''5ggcW]UhYX`=bgh]h i h]cb`HmdYg

ÁFÌ ÎGÁÔçc^}•â [ }

'U'''C i hWc a Y'HmdY.

Ô@æ} \*^Áâ}ÁCE&cá [ }ÁÜ~c& [ { ^ÁT^æ•~!^

G€FIÁW}áç^!•óç^Á[-ÁX^! { [ ]c!Ô [ { áá}^ááÜ^•^æ!&@háæ}á!Ôçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]|á•@ { ^}c•háæ}á!Ü^•~|c•

'V''E i Ubh]hUh]jY'C i hWc a Y

MYUf 5Wh i U'

G€FI €

'W''E i U']hUh]jY'C i hWc a Y'cf'= a dUWh'GhUhY a Ybh

=ggiY'fIK\c'WufYg'UbX'K\mł  
,P[ÁÔæçæÁÔ}c^!^áª

K\Uh'\Ug'VYYb'XcbY  
,P[ÁÔæçæÁÔ}c^!^áª

FYgi`hg  
,P[ÁÔæçæÁÔ}c^!^áª

("5ggcW]UhYX'?bc k`YX[Y'5fYUg

?5`7cXY ?bc k`YX[Y'5fYU  
FFG Y æc^!•@^áÁÚ! [ c^&cá [ }Áæ}á!Tæ}æ\*^ { ^}c  
FHH Ú [ ||~cá [ }ÁÚ!^ç^}cá [ }Áæ}á!Táçá\*æçá [ }

**C i hWc a Y`\_%&**

%''C i hWc a Y'AYUg i fYg

P~ { à^!Á[-Áç [ , }Á] |æ}•Áæ} }~æ||^Áá}&|~á^Á [ !áá}æ}&^•ÉÁ [ |á&^•ÉÁ [ !Á [ c@^!Á•~ ] ] [ !cÁ- [ !Á•~ •cæá}æà|^Á& [ æ•cæ|  
á^ç^| [ ] { ^}c

&''5ggcW]UhYX'=-bgh]h i h]cb'HmdYg

ÁFî ÎGáÔçc^}•á [ }

'U''C i hWc a Y'HmdY.

Ô@æ} \*^Áá}ÁCE&cá [ }ÁU~c& [ { ^ÁT^æ•~!^

'V''E i Ubh]hUh]jY'C i hWc a Y

MYUf 5Wh i U'

G€FI €

'W''E i U']hUh]jY'C i hWc a Y'cf'= a dUWh'GhUhY a Ybh

=ggiY'fIK\c'WufYg'UbX'K\mł



G€FIÁW}äç^!•öc^Á[-ÁX^! { [ ] cÁÖ [ { ää}^äáÜ^•^æ!&@Áæ} ä!Öçc^}•ä [ }ÁCE} }~æ|ÁÜ^ [ !:cÁ[-ÁCE&& [ { ] |ä•@ { ^}c•Áæ} ä!Ü^•~|c•

**("5ggcW]UhYX' ?bc k`YX[Y'5fYUg**

**?5'7cXY ?bc k`YX[Y'5fYU**

FFG Y æc^!•@^äÁÜ! [ c^&cä [ ] Áæ} ä!Tæ} æ\*^ { ^}c

FHH Ú [ | | ~ cä [ ] ÁÜ! ^ç^ } cä [ ] Áæ} ä!T äcä\* äcä [ ]

**%''CihWcaY'AYUgifyg**

Þ~ { à^!Á& [ { { ^!&äæ|Á}! [ ] ^!cä^•Áä} Ácæ! \*^c^Áä { ] æä!^äÁ , æc^!•@^ä•Á~•^Á| [ , Áä } ] ~cÁ\*! [ ~ } ä•Á&æ!^Á^æ&@  
^Ü Ö

G€FIÁW}áç^!•ó^Á[-ÁX^! { [ ]clÔ [ { äá}^äáÜ^•^æ!&@áæ}á!Ôçc^}•á [ }ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•áæ}á!Ü^•~|c•

**CihWcaY`\_%)**

%""CihWcaY`AYUgifyg

Ɔ~ { à^!Á\*æ|[ ]•Á[-Á•c[! { Á, æc^!Á!^ç^}c^á-! [ { Á!^æ&@á }\*Á [ &æ|Á, æc^!Áà [ áá^•Á^æ&@Á^æ!

&""5ggcW]UhYX'=bgh]h i h]cb`HmdYg

ÁFÌ ÎGÁÔçc^}•á [ }

'U""CihWcaY`HmdY.

Ô@æ} \*^Áá}ÁCE&cá [ ]ÁU~c& [ { ^ÁT^æ•~!^

'V""EiUbh]hUh]jY`CihWcaY

MYuf            5WhiU`  
G€FI            Í€€€

'W""EiU`hUh]jY`CihWcaY`cf'=a dUWh`GhUhY a Ybh

-gg i Y`flK \c`WufYg`UbX`K \mł  
K \Uh` \Ug`VYYb`XcbY  
FYg i`hg

("5ggcW]UhYX`?bc k`YX[Y`5fYUg

?5`7cXY    ?bc k`YX[Y`5fYU  
FFG            Y æc^!•@^áÁÚ! [ c^&cá [ ]Áæ}á!Tæ}æ\*^ { ^}c  
FHH            Ú [ ||~cá [ ]ÁÚ!^ç^} cá [ ]Áæ}á!Táçc^\*æcá [ }

**CihWcaY`\_%\***

%""CihWcaY`AYUgifyg

Ɔ~ { à^!Á [ &æ|Á [ ~á&áæ|•b|^æá^!•Áæ} }~æ|[ ^Á!^~^•cáá} ]~cÁæ}á!á}~ [ ! { æcá [ ]Á [ ]Á-| [ [ á!^•á|á^} &^Á ]|æ} }á }\*

&""5ggcW]UhYX'=bgh]h i h]cb`HmdYg

ÁFÌ ÎGÁÔçc^}•á [ }

G€FIÁW)äç^!•öc^Á[-ÁX^! { [ ]c!Ô [ { ää}^äáÜ^•^æ!&@Áæ}á!Ôçc^}•ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& { [ ]!ä•@ { ^}c•Áæ}á!Ü^•~|c•

'U'''C i hWc a Y'HmdY.

Ô@æ} \*^Áä}ÁCE&cä [ ]ÁÜ~c& [ { ^ÁT^æ•~!^

'V'''E i Ubh]hUh]jY'C i hWc a Y

MYUf            5Wh i U`

G€FI            G

'W'''E i U`]hUh]jY'C i hWc a Y'cf'= a dUWh`GhUhY a Ybh

=gg i Y`f!K \c`WufYg`UbX` K \mł

K \Uh` \Ug`VYyb`XcbY

FYg i`hg

(" 5ggcW]UhYX`?bc k`YX[Y`5fYUg

?5`7cXY    ?bc k`YX[Y`5fYU

FFG            Yæc^!•@^áÁÚ! [c^&cä [ ]Áæ}á!Tæ}æ\*^ { ^}c

FHH            Ú [||~cä [ ]ÁÚ!^ç^}cä [ ]Áæ}á!T`áçá\*æcä [ ]

**C i hWc a Y`\_%+**

%'''C i hWc a Y`AYugifYg

p~ { à^!Á { ~ }ä&ä]æ|äçá^•Áæ} }~æ||^Á , äc@Á}^ , Á [ !Á~ ] áæc^á!•@ [ !^!ä}^!ä]æ!äæ}Áç^\*^cæcä [ ]Á [ !c^&cä [ ]Á [ !  
!^•c [ !æcä [ ]Á [ !á!æ}æ}&^•

&'''5ggcW]UhYX`=bgh]h i h]cb`HmdYg

ÁF! ÎG!Ôçc^}•ä [ ]

'U'''C i hWc a Y'HmdY.

Ô@æ} \*^Áä}ÁS} [ , |á^\*^ÁÜ~c& [ { ^ÁT^æ•~!^

'V'''E i Ubh]hUh]jY'C i hWc a Y

MYUf            5Wh i U`

G€FI            €

'W'''E i U`]hUh]jY'C i hWc a Y'cf'= a dUWh`GhUhY a Ybh

=gg i Y`f!K \c`WufYg`UbX` K \mł

,p [ ÁÔæçáÔ }c^!^á





G€FIÁW}áç^!•ó^Á[-ÁX^! { [ ]clÔ [ { ää}^ááÜ^•^æ!&@Áæ}á!Öçc^}•á [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]|ä•@ { ^}c•Áæ}á!Ü^•~|c•

**?5`7cXY ?bc k`YX[Y`5fYU**  
FFG Y æc^!•@^ááÜ! [ c^&cá [ }Áæ} á!Tæ}æ\*^ { ^}c  
FHH Ú [ ||~ cá [ }ÁÜ!^ç^} cá [ }Áæ} á!T ácá \*æcá [ }

**CihWcaY`%-**

**%""CihWcaY`AYUgifyg**

Þ~ { à^!Áàâ [ ^} \*â}^^!â} \*Á] |æ} Áæâ [ ]c^áá- [ !Á] |æ} }^á!Ó~ !|ä} \*c [ }Áàâ\^Á]æc@Á!^•c [ !æcá [ }

**&""5ggcW]UhYX`bgh]h i h]cb`HmdYg**

ÁFî ÎGÁÖçc^}•â [ }

**'U""CihWcaY`HmdY.**

Ô@æ} \*^Áâ}ÁCE&cá [ }ÁÜ~c& [ { ^ÁT^æ•~!^

**'V""EiUbh]hUh]jY`CihWcaY**

MYuf 5WhiU`  
G€FI €

**'W""EiU]hUh]jY`CihWcaY`cf`=adUWh`GhUhYaYbh**

-gg i Y`flK\c`WUfYg`UbX`K\mL  
,P [ ÁÖæcæÁÖ}c^!^áª

K\Uh`\Ug`VYYb`XcbY  
,P [ ÁÖæcæÁÖ}c^!^áª

FYg i`hg  
,P [ ÁÖæcæÁÖ}c^!^áª

**("5ggcW]UhYX`?bc k`YX[Y`5fYUg**

**?5`7cXY ?bc k`YX[Y`5fYU**  
FFG Y æc^!•@^ááÜ! [ c^&cá [ }Áæ} á!Tæ}æ\*^ { ^}c  
FHH Ú [ ||~ cá [ }ÁÜ!^ç^} cá [ }Áæ} á!T ácá \*æcá [ }

G€FIÁW}áç^!•óç^Á[-ÁX^! { [ ]clÔ [ { ää}^äáÜ^•^æ!&@há}á!Ôçc^}•á [ }ÁCE} }~æ|áÜ^ [ !cÁ[-ÁCE&& [ { ]!•@ { ^}c•há}á!Ü^•~|c•

**CihWcaY\_&\$**

%''CihWcaY'AYUgifyg

▷~ { à^!Á-á•@Á&~|c~!^Á-æ&á|äcá^•há} }~æ||^Áá}Á▷YÁæ}áÁXVÁæá [ ]cÁ▷ÜCEÔÁ!^& [ { { ^}á^á!ää [ •^&~!äc^ÁÓTÚ ]!æ&cá&^•

&''5ggcW]UhYX'=bgh]h i h]cb'HmdYg

ÁFÎ ÎGÁÔçc^}•á [ }

'U''CihWcaY'HmdY.

Ô@æ} \*^há}ÁCE&cá [ }ÁU~c& [ { ^ÁT^æ•~!^

'V''EiUbh]hUh]jY'CihWcaY

MYuf            5WhiU`  
G€FI            €

'W''EiU]hUh]jY'CihWcaY'cf'=a dUWh`GhUhY a Ybh

-gg i Y`fIK\c`WUfYg`UbX`K\mL  
,▷ [ ÁÖæçæÁÖ }c^!^á

K\Uh`\Ug`VYYb`XcbY  
,▷ [ ÁÖæçæÁÖ }c^!^á

FYg i`hg  
,▷ [ ÁÖæçæÁÖ }c^!^á

("5ggcW]UhYX'?bck`YX[Y'5fYUg

?5`7cXY    ?bck`YX[Y'5fYU  
FFG            Yæc^!•@^áÁÚ! [ c^&cá [ ]Áæ}áÁTæ}æ\*^ { ^}c  
FHH            Ú [ ||~cá [ ]ÁÚ!^ç^}cá [ ]Áæ}áÁT^áç^\*æç [ ]

**CihWcaY\_&%**

%''CihWcaY'AYUgifyg

▷~ { à^!Á@ [ ~•^@ [ !á•há} }~æ||^Á!^á~&^Á& [ ]•~ { ]cá [ ]Á [-Á-á•@Á [ !Á-á•@Á ]! [ á~&c•Á , äc@Á@a\* @Á { ^!&~!i^Á& [ ]c^}c

&''5ggcW]UhYX'=bgh]h i h]cb'HmdYg



G€FIÁW}äç^!•ic^Á[-ÁX^! { [ ]cÁÔ [ { ää}^äáÜ^•^æ!&@kæ}á!Öçc^}•ä [ }ÁCE} }~æ|ÁÜ^ [ !cÁ[-ÁCE&& [ { ]|ä•@ { ^}c•kæ}á!Ü^•~|c•

**Jfl=L"D`UbbYX`Dfc [fUa`fi9 jU` i Uh]cb`Gh i X]Ygl**

**9 jU` i Uh]cb`FYgi`hg**

{No Data Entered}

**?Ym`hY a g`cZ`9 jU` i Uh]cb**

{No Data Entered}

G€FIÁW}áç^!•óç^Á[-ÁX^!{ [ ]çlÔ [ { ää}^äáÜ^•^æ!&@áæ}á!Ôçç^••á [ }ÁCE} } ~ æ|áÜ^ [ !ç[-ÁCE&& [ { ]!•@ { ^}ç•áæ}á!Ü^•~|ç•

**J="BUh]cbU`C i hWc a Yg`UbX`=bX]WUhc fg**

%"B=: 5`GY`YWhYX`C i hWc a Yg`UbX`=bX]WUhc fg

7\]X\ccX`CVYg]hm`fiC i hWc a Y`%z`=bX]WUhc f`%WL	
€	P~ { à^!Á[-Á&@á á!^}Áæ}á!^ [ ~ç@Á, @ [ Á!^ ] [ !ç^á!^æçá } *Á { [ !^Á[-Á@^æ ç@^Á-[ [ á•É
7`]a UhY`7\Ub[Y`fiC i hWc a Y`%z`=bX]WUhc f` (L	
€	P~ { à^!Á[-Á}^, Á&! [ ]Áçæ!á^ç!^•É!æ}á { æ á!^•á•É!æ}á!^*^ [ ç^ ]^•Á, @áç!&!á { æç^áæáæ]ç!çç^ ç!æáç•É
;`cVU``: ccX`GYW i f]hm`UbX`< i b[Yf`fiC i hWc a Y`%z`=bX]WUhc f` ('UŁ	
FH€J	P~ { à^!Á[-Á]æ!ç!á]æ}ç•áæá [ ]çá } *á^•ç! ]!æ&ç!&^•áæ}á!ç^&@} [ [ [ *á^•Á!^•~ ç! } *Áá } á}&!^æ•^á!^á^ áÉ!^á~&^á!á } ] ~ç•É!á } &!^æ•^á!^•~á!^ } &^É!á } &!^æ•^á!^& [ ] [ { á&Á!^ç~! } É æ}á! [ !& [ ] •^!çæç! [ ] Á[-Á!^• [ ~!&^•É
;`cVU``: ccX`GYW i f]hm`UbX`< i b[Yf`fiC i hWc a Y`&z`=bX]WUhc f`%Ł	

P~ { à^!Á[-Á}^, Á [ !Áá { ]! [ ç^á!á } }

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