

I U ] YQ^^eQ\ HU`\_bd

@e^U - \*î , \* , ,

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9\Qcc ? \$7L?FN%

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# JQRU \_ V 9 \_ ^dU^dc

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 lXQbUX\_\TUb <UU ;hQ ] `U !!! -  
 lSXUTeU \_v ?^fUcd ] U^dc !!! .  
 l dQdU ] U^d \_v 7ccUdc Q^T B'QR\WdlUc !!! 3  
 l dQdU ] U^d \_v E `UbQdl\_^c !!! +\*  
 l dQdU ] U^d \_v 9XQ^WUc Y^ DUd 7ccUdc !!! ++  
 D\_dUc d \_<V^Q^SIQ\ l dQdU ] U^dc !!! +,  
 <V^Q^SIQ\ >W\W\W\Xdc !!! +2  
 7``b\_fQ\ \_v CQ^QWU ] U^d 7WbUU ] U^d !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!! ,\*  
 B\aelT\id i Hlc[ CQ^QWU ] U^d Fb\_WbQ ] !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!! ,.

# <e^T 9XQbQSdUb/cdYSc

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9_ ] ]_^ I d_S[c	31(3 !
I X_bd'JU b ] ?^fUcd ] U^dc	,(/ !
E dXUb 7ccUdc Q^T B\QR\ d\Uc	\$*(. % !

I \ ] ; \ cS>[Rb`a \ S`	\T [Sa O``Sa`
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; ael'di HUQ\ ; cdQdU ?^fUcd ] U^d Jbecic \$H ; ?Jc%	2(, !
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?^cebQ^SU	0(0 !
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# I XQbUX \_\TUb <UU ;hQ ] ` \U

<e^T cXQbUX \_\TUbc ] Qi Y^Seb dg \_di `Uc \_V S\_cdc4 \$+% dbQ^cQSD\ ^ S\_cdc& Y^SteT^W cQ\Uc SXQbWUc  
 \$\\_QTc% \_^ `ehSXQcU `Qi ] U^dc Q^T bUTU ] `d\\_^)UhSXQ^WU VUUc5 Q^T \$,% \_^W \_Y^W S\_cdc& Y^SteT^W  
 ] Q^QWU ] U^d VUUc5 T\cb\Red\\_^ Q^T cUbfISU \$+, R'+% VUUc5 Q^T \_dXUb Ve^T Uh `U^cUc( JXc UhQ ] ` \U Yc  
 Y^dU^TUT d\_XU\ ` i\_e e^TUbcQ^T i\_eb \_^W \_Y^W S\_cdc \$/^\ T\_\Qbc% \_V Y^fUcd\^W Y^ i\_eb Ve^T Q^T d\_  
 S\_] `QbU dXUcU S\_cdc g\dx dXU \_^W \_Y^W S\_cdc \_V Y^fUcd\^W Y^ \_dXUb ] edeQ\ Ve^Tc(

JXU UhQ ] ` \U Yc RQcUT \_^ Q^ Y^fUcd ] U^d \_V +&\*\*\* ] QTU Qd dXU RUW\^Y^W \_V dXU `Uby\_T Q^T XU\T V\_b  
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6QabOY :e]S[ `S`

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 O\_e ] Qi ecU dXU Y^V\_b ] Qd\\_^& d\_WUdXUb g\dx dXU Q ] \_e^d i\_e Y^fUcdUT& d\_ Ucd\ ] QdU dXU Uh `U^cUc dXQd  
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 fQ\Uc Ri +&\*\*\* \$Y\_b UhQ ] ` \U& Q^ 2iO\*\* QSS\_e^d fQ\Uc T\TUTUT Ri +&\*\*\* 6 2(O%& dXU^ ] e\dl ` \i dXU  
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 Y^fUcd\^W Y^ i\_eb Ve^T Q^T \_dXUb Ve^Tc( J \_T\_c\_& S\_] `QbU dX\c / ! Xi ` \_dXUd\SQ\ UhQ ] ` \U g\dx dXU  
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	7SU\ [ \ ] [U 6QQ \ b [a KO\ bS *(*) (++)	: [R\ ] [U 6QQ \ b [a KO\ bS / (, ) (++)	: e]S[ `S` EO\ R 9b \ [U ES \ \ R <sup>PS</sup> *(*) (++) & / (, ) (++)	6 [ [bO\ gSR : e]S[ `S GO\ \ <sup>PS</sup>
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8 \ Z ZS_Q\lOY HS_c\lQS` O[R Hb ] ] \lS` i )'.		
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; \ \ R O[R HaO] YS` G SaO W  [U i *'1		
A_ ^ ^ [Vz [U 7X_IT : U XQ] j U DL	. 3&*31	++&023&/ .3
; \ \ R E_ \ RbQa` i -'.		
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=SOYaV 80_S : ^b  ] ZS[a 0[R Hb ] ] WS` i .1		
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: ; DJ I FB0 I ?HED7& ?^S(	++ /&- /3	.&+ , +&111
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A_ ^ ^ [Vz [U FX V` c DL& DO I XQbUc	+ , .&, 1*	,&01 /&/ - -
P  ] ] Ub 8 _ ] Ud >_  T ^Wc& ?^S(	+22&. 0,	+3&133&2+2 -0&111&+ / ,
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7 ] Ub c_ eb SU8UbWU^ 9_b` (	/ -&*0*	1&/ *0&3, 3
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J_dQ\ Y^fUcd ] U^d cUSEbld\Uc& Qd fQleU \$S_cd _v 0*1&30/&-23%	0-0&2/ +&*0*
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HUSU\fQRU _v_b Y^fUcd ] U^dc c_\T	22/&12,
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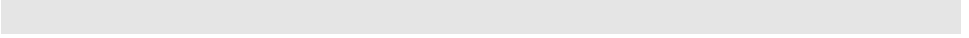
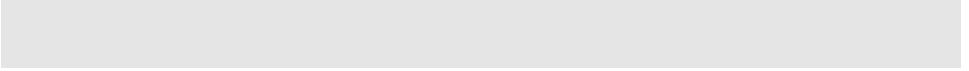
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?v dXU Ve^T T^dUb ] Y^Uc dXQd dXU ] Qb [Ud `b^iSU v\_b Q^ Y^fUcd ] U^d Yc ^ \_d bUQT^I QfQlQRU \_b dXU fQleQdl\_ ^ ] Udx\_Tc ] U^d^ \_AUT QR\_fU T\_ \_^ \_d bUWUSd Q^ Y^fUcd ] U^d Yc YQlb fQleU k ceSX Y^fUcd ] U^d Yc fQleUT Qc T^dUb ] Y^TU Y^ W \_T YQdX Ri dXU 8\_QbT \_v : YbUSd\_b c \_b Ydc T^UWQdU k Y^ QSS\_bTQ^SU gIdX ` \_VSIUc Q^T `b\_SUTebUc QT` \_dUT Ri dXU 8\_QbT \_v : YbUSd\_b c( ?^ Ydc T^UWQdU ] Y^Qdl\_ ^ \_v YQlb fQleU k dXU Ve^T ] Qi bUf^Ug cUf^Ug YQSD\_b c Y^S^eT^W k Red ^ \_d W ] YdUT d\_ k ] Qb [Ud Y^Y\_b ] Qdl\_ ^ bUWQbT^W dXU c` US^W Y^fUcd ] U^d \_b S\_ ] `QbQRU Y^fUcd ] U^dc Q^T S\_bbuQdl\_ ^ gIdX dXU b Y^fUcd ] U^d d^i `Ucd VedeibUc Y^T^SUC \_b WU^UbQl ] Qb [Ud Y^T^SQd\_b c( 9^bSe ] cIdQ^SUC dXQd ] Qi SQecU dXU Ve^T d\_ ecU dXUc `b\_SUTebUc d\_ fQleU Q^ Y^fUcd ] U^d Y^S^eT^W k Red QbU \_d W ] YdUT d\_ 4 Q^ Y^fUcd ] U^d XQc RUU^ TUS^QbU Y^ TUIQeld\_b Yc T^c^UccUT^S dbQT^W Y^ Q cUSEbbid^i XQc RUU^ cec` U^TUT Tebb^W dXU dbQT^W TQ^i \_b Q cUSEbbid^i Yc ^ \_d QSD^fU^i dbQT^W \_^ Ydc `b^iS^` Ql UHSXQ^WU^S `b^iSUc bUSU^fUT Vb\_ ] Q bUWeiQb `b^iS^W c\_ ehsU QbU TUU ] UT e^h^U^YQRIUS\_b dXU b Yc Q v\_b U^W^ ] Qb [Ud X\_VTQ^i Q^T ^ \_dbQT^W \_SSebbuT(



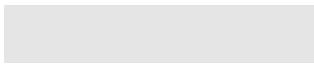
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HSQb`WlIS` AS[RW ] U i IUSEbIdUc QbU U^d d\_ aeQWVUT W^Q^SlQ\ Y^cdIedI\_ ^c Q^T Rb\_ [Ubc( I dQdU I dbUud 8Q^ [ " Jbecd 9\_ (cUbfUc Qc cUSEbIdUc U^T^W QWU^d d\_ dXU Ve^T `ebceQ^d d\_ Q IUSEbIdUc BU^T^W 7WbUU ] U^d( JXU U^T^W \_v cUSEbIdUc Uh`\_cUc dXU Ve^T d\_ bIc[ c ceSX Qc4 dXU R\_bb\_gUbc ] Q i VQ\ d\_ bUdeb^ dXU \\_Q^UT cUSEbIdUc& dXU R\_bb\_gUbc ] Q i ^\_d RU QRU d\_ `b\_ fITU QTTdI\_ ^Q\ S\_ \QdUUbQ& dXU Ve^T ] Q i Uh`UbU^ASU TUIQic Y^ bUS\_fUbi \_v dXU \\_Q^UT cUSEbIdUc\_b TUIQic Y^ QSSUcc d\_ S\_ \QdUUbQ& \_b dXU Ve^T ] Q i Uh`UbU^ASU \\_ccUc bUQdUT d\_ dXU Y^fUcd ] U^d S\_ \QdUUbQ( J\_ ] Y^Y ] YjU SUbQI^ bIc[ c& \\_Q^ S\_ e^dUb` QbIdUc `WUTWU S\_ \QdUUbQ\ Y^ dXU V\_b ] \_v SQcX Q^T ) \_b cUSEbIdUc( JXU U^T^W QWU^d XQc QWbUUT d\_ Y^TU ] ^W i dXU Ve^T Y^ dXU SQcU \_v TUIQeld\_ v Q^ i cUSEbIdUc R\_bb\_gUT( 9QcX S\_ \QdUUbQ\ bUSUfUT Yc Y^fUcdUT Y^ dXU I dQdU I dbUud DQfIWQd\_b IUSEbIdUc BU^T^W =\_ fUb^ ] U^d C\_ ^U i CQb[ Uid F\_bId\_V\_ & Q ] \_^U i ] Qb[ Uid ] edeQ\ Ve^T bUWcdUbiUT e^TUb dXU +3. \* 7Sd( JXU \\_Q^c ] Q i Qlc\_RU cUSEbUT Ri K( (1 (W\_fUb^ ) U^d cUSEbIdUc Y^ Q^ Q ] \_e^d Qd WQcd UaeQ\ d\_ dXU ] Qb[ Uid fQleU \_v dXU cUSEbIdUc \\_Q^UT& `lec QSSbeUT Y^dUbuUcd Q^T TfITU^Tc& TuidUb ] Y^UT \_^ Q TQ\i RQcIc Q^T QTecIUT QSS\_bT^W\i( 8 i U^T^W cUSEbIdUc& dXU Ve^T cUU[ c d\_ Y^SbUQcU Ydc ^Ud Y^fUcd ] U^d Y^S\_ ] U dXb\_eWx dXU bUSU`d \_v Y^dUbuUcd Q^T WUUC( I eSX Y^S\_ ] U Yc bUMUSdUT cU` QbQdU\i gIdXI^ dXU I dQdU ] U^d \_v E`UbQdI\_ ^c( JXU fQleU \_v \\_Q^UT cUSEbIdUc Q^T bUQdUT S\_ \QdUUbQ\\_edIdQ^T^W Qd`\_ UbV\_ T U^T& W Q^ i& QbU cX\_g^ \_^ Q Wb\_cc RQcIc gIdXI^ dXU I SXUTEU \_v ?^fUcd ] U^dc Q^T I dQdU ] U^d \_v 7ccUdc Q^T BQR\YdUc(

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gQ'fU b\*(+\* ! \_v dXU ve^Tic ] Q^QWU ] U^d VUU Vb\_ ] @Q^eQbi +& , \* , , dXb\_eWx @eli -+& , \* , , & Qd gXISX d' ] U dXU  
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Q^T Ydc Y^fUcd ] U^d QT'fc\_b bUWeIQb'i dXb\_eWx\_`ed dXU i UQb& Q^T ] UUI Qd UQcd aeQb'Ub'i g'ldX ] Q^QWU ] U^d \_V dXU  
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>[aS\_Tb[R I\_O[ `OQall [ ` i JXU ve^T ] Qi U^dUb Y^d\_ cUSeb'di dbQ^cQSD' \_` ^c g'ldX dXUb 7 ] Ub'ISQ^ 9U^debi  
?^fUcd ] U^dc ve^T Q^T dXUb S'U^d QSS\_e^dc \_V dXU Y^fUcd ] U^d QT'fc\_b& Y^ QSS\_bTQ^ASU g'ldX dXU +3 . \* 7Sd belUc  
Q^T `b\_SUTebUc QT\_` dUT R'i dXU 8\_QbT \_V : VbUSd\_bc( JXU belUc Q^T `b\_SUTebUc bUae'bU& Q ] \_` ^W\_dXUb dX'AWc&  
dXQd dXUcU dbQ^cQSD' \_` ^c RU UWUS'UT Qd dXU Y^TU^U^TU^d SebbU^d ] Qb[Ud `b'US \_V dXU cUSeb'di ( : ebi^W dXU `Ub'\_T &  
dXU Y^d'Ub'le^T `ebSXQcUc gUbU 2/ \*&+ , Q^T dXUbU gUbU ^\_ Y^d'Ub'le^T cQ'Uc(

-' >[cS`aZS[a I\_O[ `OQall [ `

FebSXQcUc Q^T cQ'Uc \_V Y^fUcd ] U^d cUSeb'd'Uc& UhSleT'AW cX\_b'd'Ub ] Y^fUcd ] U^dc& V\_b dXU `Ub'\_T U^TUT @e^U  
-\*& , \* , , gUbU , 2, &\*11&\* , / Q^T -\*+&3, 3&\*02& bUc `USd'fU'i(

.' 80 ] WAOY HVO\_S I\_O[ `OQall [ `

JbQ^cQSD' \_` ^c Y^ cXQbUc \_V dXU ve^T gUbU Qc V\_\\\_gc4

	Hle Z \ [aV` S[RSR ?b(S , )% +)++	NSO_S[RSR 9SQSZ P'S_ , *% +)+*
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8Y0` ` >(HVO_S` 6baV \ WgSR	<u>+, *&amp;***&amp;***</u>	<u>+, *&amp;***&amp;***</u>
I _T	1-0& , , .	+& , /2&0+0
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HUTUU ] UT	\$23+&- - , %	\$+&131&- * - %
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	, *&23 . &3+ /	\$+*&10* &- + - %
8Y0` ` >>(HVO_S` 6baV \ WgSR	<u>, /&amp;***&amp;***</u>	<u>, /&amp;***&amp;***</u>
I _T	+&2- /&-1 .	, &10/ &. , /
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; \\_SIU[ 8b\_S[Qf Gll`X i JXU Ve^T Ic ceRZUsd d\_v\_bUW^A SebbU^A Si UhsXQ^AWU bQdU bIc[ Y^ dXU ^\_b ] Ql S\_ebUc \_V  
`ebIceI^AW Ydc Y^fUcd ] U^d \_RZUSdI^fUc( JXU fQleU \_V\_v\_bUW^A Y^fUcd ] U^dc XUIt Ri Q Ve^T ] Qi Ru cUW^A WSQ^dI  
QWUSdUT Ri SXQ^AWUc Y^ v\_bUW^A SebbU^A Si UhsXQ^AWU bQdUc( JXU T\_\lQb fQleU \_V Q v\_bUW^A cUSebbIdI WU^U bQlI  
TUSbUQcUc gXU^ dXU fQleU \_V dXU T\_\lQb bIcUc QWQI^cd dXU v\_bUW^A SebbU^A Si Y^ gXISX dXU cUSebbIdI Yc TU^\_ ] Y^QdUT  
Q^T dU^Tc d\_ Y^SbUQcUc gXU^ dXU fQleU \_V dXU T\_\lQb TUSI^Uc QWQI^cd ceSX V\_bUW^A SebbU^A Si (7 Ve^T ] Qi U^dUb  
Y^d \_v\_bgQbT V\_bUW^A SebbU^A Si UhsXQ^AWU S\_ ^dbQSc d\_bUTeSU Q Ve^T Ic Uh` \_cebU d\_v\_bUW^A SebbU^A Si UhsXQ^AWU  
bQdU VeSiteQdI ^c( JXU ^Ud K(I( T\_\lQb fQleU \_V\_v\_bUW^A SebbU^A Si e^TUbIi Y^AW Ql S\_ ^dbQSc d\_bUTeSU ] Yd ] U^dc XUIt Ri  
Q Ve^T Q^T dXU bUceIdI^AW e^bUQVjUT Q` `bUSIQdI\_ ^\_b TU` bUSIQdI\_ ^ QbU TUbU ] Y^UT TQIi( HUQVjUT WQI^ \_b\_lcc Yc  
bUS\_bTUT e` ^\_c dUdU ] U^d \_v\_dXU S\_ ^dbQSc( DUd bUQVjUT Q^T e^bUQVjUT WQI^ \_b\_lccUc \_SSebbi^AW TebI^AW dXU  
X\_\lT^AW `Ubb\_T \_V\_v\_bgQbT V\_bUW^A SebbU^A Si UhsXQ^AWU S\_ ^dbQSc d\_bUTeSU Q S\_ ] `^U^d \_v ^Ud bUQVjUT WQI^ \_b\_lcc% \_^  
\_v\_bgQbT V\_bUW^A SebbU^A Si UhsXQ^AWU S\_ ^dbQSc d\_bUTeSU Q S\_ ] `^U^d \_v ^Ud bUQVjUT WQI^ \_b\_lcc% \_^  
\$TU` bUSIQdI\_ ^% \_^ \_v\_bgQbT V\_bUW^A SebbU^A Si UhsXQ^AWU S\_ ^dbQSc d\_bUTeSU dUd bUQVjUT WQI^ \_b\_lcc% \_^  
e^bUQVjUT bQRU SXQ^AWU Y^ dXU v\_bUW^A SebbU^A Si UhsXQ^AWU bQdU e^TUbIi Y^AW dXU v\_bgQbT S\_ ^dbQSc( 7TTIdY ^QlIi &  
\\_ccUcI e` d\_XU lQb fQleU ] Qi QbIcU W dXU S\_ ^dbU` QbUc T\_ ^\_d `Ubb\_b ] e^TUb dXU S\_ ^dbQSc dUb ] c( JXU Ve^T Ic  
QfUbQWU K(I( T\_\lQb Uh` \_cebU d\_v\_bUW^A SebbU^A Si bIc[ TUbI^fQdI^U Y^c dbe ] U^dc XUIt TebI^AW dXU `Ubb\_T gQc  
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JXU fQleU \_V\_v\_bUW^A SebbU^A Si bIc[ TUbI^fQdI^U Y^c dbe ] U^dc Qc \_v @e^U - \* & , , & Yc TlCsl\_cUT \_^ dXU I dQdU ] U^d \_V  
7ccUc Q^T BQRVdUc Qc Q^ QccUd \_v +/+d01- Y^ e^bUQVjUT Q` `bUSIQdI\_ ^\_ ^\_v\_bgQbT V\_bUW^A SebbU^A Si  
UhsXQ^AWU S\_ ^dbQSc Q^T Q WQRVdI \_v .-&\*\*\* Y^ e^bUQVjUT TU` bUSIQdI\_ ^\_ ^\_v\_bgQbT V\_bUW^A SebbU^A Si UhsXQ^AWU  
S\_ ^dbQSc( < \_b dXU cIh ] \_^dXc U^TUT @e^U - \* & , , & dXU UWUSd \_V\_v\_bUW^A SebbU^A Si bIc[ TUbI^fQdI^U Y^c dbe ] U^dc  
\_ ^ dXU I dQdU ] U^d \_v E` \_UbbQdI\_ ^c gQc -&/02&1. . Y^ ^Ud bUQVjUT WQI^ \_b\_lcc% \_^ \_v\_bgQbT V\_bUW^A SebbU^A Si  
UhsXQ^AWU S\_ ^dbQSc d\_bUTeSU Q S\_ ] `^U^d \_v ^Ud bUQVjUT WQI^ \_b\_lcc% \_^ \$TU` bUSIQdI\_ ^% \_^  
\_v\_bgQbT V\_bUW^A SebbU^A Si UhsXQ^AWU S\_ ^dbQSc(

1' Gll`X ; QQa\`

JXU fQleU \_V dXU Ve^T Ic cXQbUc gll`W\_e` Q^T T\_g^&c\_ ] UdI ] Uc bQ` YlIi \_b e^` bUTISQRiI & RQcUT \_^ dXU  
`Ubb\_b ] Q^SU \_v dXU cUSebbIdI^Uc \_g^UT Ri dXU Ve^T Q^T dXU bIQSd\_bC WU^U bQlI QWUSd^AW dXU cUSebbIdI^Uc ] Qb[Ud(  
CQb[Ud bIc[ c^ Y^SleT^AW ` \_YdISQI bUWeI^QdI\_bI US\_ ^\_ ] IS Q^T c\_ SIQI TUfU\_ ` ] U^dc SQ^ QWUSd dXU fQleU \_V dXU  
Ve^T Ic Y^fUcd ] U^dc( DQIebQI TlCQcIUbIc^ `eRIS XUQdX U ] UbWU^A S^Uc^ gQb^ dUbb\_bIc ] Q^T dXU bUcUcUQRU  
UfU^dc ] Qi WQT d\_ Y^SbUQcUT ] Qb[Ud f\_lQdI^i Q^T ] Qi XQfU QTfUcU \_^ ^WdUb ] UWUSic \_^ g\_bIT US\_ ^\_ ] Uc  
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JXU bU QbU SUbI^QI^ bIc[ c Y^f\_lfUT Y^ Y^fUcdI^AW Y^ v\_bUW^A cUSebbIdI^Uc( JXUcU bIc[ c Y^SleTU dX\_cU bUceIdI^AW Vb\_ ]  
` \_YdISQI UfU^dc \$ceSX Qc SIfI e^bUcI^ ^QdI\_ ^QI UUSdI\_ ^c Q^T Y ] ` \_cIdI\_ ^\_ \_v UhsXQ^AWU S\_ ^db\_lC% c\_ SIQI Q^T  
US\_ ^\_ ] IS UfU^dc \$ceSX Qc lQR\_b cIdI ] Uc Q^T bIcI^AW Y^fUcdI\_ ^% Q^T ^QIebQI TlCQcIUbIc( I USebbIdI^Uc \_V\_v\_bUW^A YcUcUc  
] Qi RU Ucc YaeIT Q^T ] \_bU f\_lQdI^U( Y^fUcdI^AW Q cI^AW WISQ^d ` \_bIdI\_ ^\_ \_v QccUcI^ ^\_ ^U S\_e^dbI \_b\_bUW^A ] Qi  
QSSU^deQdU dXUcU bIc[ c(

2' ; SRS\_OY IOe >[ T\ \_ZOall\ ]

JXU R\_` [RQcIc SXQbQScdUb \_V TlCdbI^RedI\_ ^c\_ ] QTU TebI^AW dXU i UQb Vb\_ ] ^Ud Y^fUcd ] U^d Y^S\_ ] U\_b ^Ud bUQVjUT  
WQI^ \_b ] Qi TlWUb Vb\_ ] dXU b eIdI ] QdU SXQbQScdUbI^jQdI\_ ^\_v\_b VUTUbQI Y^S\_ ] U dQh `eb` \_cUc( JXUcU TlWUbU^SUc bUWUSd  
dXU TlWUbI^AW SXQbQScdUb \_V SUbI^QI^ Y^S\_ ] U YdU ] c Q^T ^Ud bUQVjUT WQI^ \_b\_lccUc \_v\_b W^AQ^SIQI cI^QdU ] U^d Q^T  
dQh `eb` \_cUcI Q^T ] Qi bUceIdI^AW bUSIQcI^WISQdI\_ ^\_ Q ] ^AW SUbI^QI^ SQ` YdQI QSS\_e^dc \_^ dXU W^AQ^SIQI cI^QdU ] U^dc(

7c \_v `Ubb\_T U^T dXU S\_ ] ` ^U^dc \_v Y^fUcd ] U^dc v\_b VUTUbQI Y^S\_ ] U dQh `eb` \_cUc gUbU Qc V\_\\_gcI

<UTUbQI dQh S\_cd \_v Y^fUcd ] U^dc 0+1&1, /&-1\*

# </^Q^S/QI >WXVWXdc

; \\_0 HVO\_S DBa`aO[R][U IV \bUV\ba aVS NSO\_` : [RSR 9SQSZPS\_ , \* #SeQS] aO` [ \aSR\$

ES\_&HVO\_S 90aO

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>[Q\ ZS ; \_\ Z >[cS`a ZS[a D]S\_Oall\ [ `3

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GOall\ a\ 6cS\_OUS CSa 6``Sa` \T3

CSa 6``Sa KO\bs%	CSa >[cS`a ZS[a >[Q\ ZS #A\ ``\$ <sup>#3</sup>	CSa GSO\lgSR O[R J \_SO\lgSR <O\ [ #A\ ``\$	I \aOY ; _\ Z >[cS`a ZS[a D]S_Oall\ [ `	CSa >[cS`a ZS[a >[Q\ ZS	CSa GSO\lgSR <O\ [ `	I \aOY 9W`a_WPball\ [ `	CSa 6``Sa KO\bs%	I \aOY GSab_ [ ##3	D]S_Oall[U :e]S[ `S` #PST\ S Se]S[ `S` dOlcS_ \$	CSa >[cS`a ZS[a >[Q\ ZS #A\ ``\$	CSa >[cS`a ZS[a >[Q\ ZS #A\ ``\$	CSa >[cS`a ZS[a >[Q\ ZS #A\ ``\$	E\ aT\ \V\ \ Ib_ [ \cS_` GOaS`	CSa 6``Sa` % : [R \ T ES \ \R #\ [ ` aV\ b`O[R] \$		
8\O``` >	, *, \$-`	, /(*-`	*(,*`	\$(13%`	\$(+/3%`	\$(-*%`	\$(,- %`	\$(-/ -%`	+3(3+`	\$1(3- % !`	*(1/ ! \$.%`	*(2/ ! \$.%`	+(1+ ! \$.%`	+(0+ ! \$.%`	. + !`	+0-!00-`
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, *+3`	+2(-+`	*(-/`	.(0,`	.(31`	\$(.+ %`	\$(,+3%`	\$(,0*%`	, *(02`	, 3(+ / !`	*(2/ !`	+(** !`	+(00 !`	+(/ + !`	. + !`	+1-!+*/`	
, *+2`	, ,(1/`	*(,3`	\$(-* . %`	\$(,1/ %`	\$(+ - %`	\$(+ -2%`	\$(+03%`	+2(-+`	\$(, 2. % !`	*(2. !`	+(** !`	+(-- !`	+(+ / !`	1, !`	, . &, - .`	
, *+1`	, +(,+`	*(-1`	, (*-`	, (. *`	\$( - . %`	\$( - . %`	\$(11%`	, ,(1/`	++(03 !`	*(20 !`	+(*+ !`	+(02 !`	+(/ - !`	. / !`	. /1!+*.`	

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, *+2`	, ,(10`	*(, .`	\$( - * - %`	\$(, 13%`	\$(, 1%`	\$(+ -2%`	\$(+0/ %`	+2(-,`	\$(, 30% !`	*(33 !`	+(+ / !`	+(+0 !`	+(** !`	1, !`	, . &, +3`
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\$+% 9\_] `eiUT ec'^W QfUbQWU cXQbUc \_edcdQ^T'^W dXb\_eWX\_ed dXU `Ub\T(

\$.% J\_dQ\ bUteb^c QbU SQ\Se\Qd\UT RQcUT \_^ dXU ^Ud QccUd fQ\eU \_\ dXU \Qcd Recl^Ucc TQi ( J\_dQ\ bUteb^c \\_b

7` `b\_fQ\ \_V CQ^QWU ] U^d 7WbUU ] U^d

7d Q ] UUd/^W XUUT \_^ @e^U ,3& , \* , , & dXU <e^Tpc 8\_QbT \_V :YbUSd\_bc \$dXU 8\_QbT % e^Q^Y ] \_ecl i  
Q` `b\_fUT dXU bU^UgQ\ \_V dXU ] Q^QWU ] U^d QWbUU ] U^d `ebceQ^d\_d\_ gXISX 7 ] UbISQ^ 9U^deb i  
?^fUcd ] U^d CQ^QWU ] U^d& ?^S( \$dXU n7Tf\c\_bo% QSic Qc dXU Y^fUcd ] U^d QTf\c\_b\_V\_b dXU <e^T( K^TUb  
IUSd\\_^ + /SS% \_V dXU ?^fUcd ] U^d 9\_] `Q^i 7Sd \_V +3. \* \$dXU n?^fUcd ] U^d 9\_] `Q^i 7Sdo%& S\_^dbQSic  
V\_b Y^fUcd ] U^d QTf\c\_bi cUbf\ISuc QbU bUae\bUT d\_ RU bUf\UgUT& UfQ\eqdUT& Q^T Q` `b\_fUT Ri Q

;OQa\` 8\[\`llRS\_SR

JXU : YbUSd\_bc S\_`cFTUbuT Qll`v dXU Y^V\_b ] QdY\_`^ `b\_ fITUT Ri dXU 7Tf'c\_b& dXU Y^TU`U^TU^d TQdQ  
`b\_ fITUbc& Q^T Y^TU`U^TU^d S\_e^cU Y^ S\_^^USdY\_`^ gYdX dXU Q` ``b\_ fQ( JXU i TUdUb ] Y^UT dXQd dXU  
Y^V\_b ] QdY\_`^ gQc ceWfS^U^d V\_b dXU ] d\_ UfQleQdU dXU ] Q^QWU ] U^d QWbUU ] U^d V\_b dXU <e^T( ?^  
S\_^^USdY\_`^ gYdX dXU bU fIUg& dXU : YbUSd\_bc TIT ^\_d YTU^dW i Q^ i cI^WU VQSd\_b Qc RU^AW Qll`Y ] ``bdQ^d\_b  
S\_`^db W^AW& Q^T UQSX : YbUSd\_b ] Q i XQfU QdbbRedUT T^WUbuU^d UfUlc` V\_Y ] ``bdQ^ASU d\_ T^WUbuU^d VQSd\_bc( ?^  
TUSIT^AW d\_ bU^Ug dXU ] Q^QWU ] U^d QWbUU ] U^d& dXU 8\_QbT RQcUT YdC TUSIcI\_`^ \_^ Q `e ] RUB\_V  
YQSd\_bc& Y^SleT^AW gYdX\_ed V ] YdQdY\_`^ dXU V\_`\_gY^AW4

COab\_S% : eaS[a O[R FbOYlaf \T HS\_cIIQS` i <S[S\_OYf' K^ATUbu dXU ] Q^QWU ] U^d QWbUU ] U^d& dXU  
7Tf'c\_b Yc bUC\_`^ cRIU V\_b `b\_ fIT^AW\_b QbbQ^AW^AW\_b Qll`cUbfISUC ^USUccQbi V\_b dXU ``UbQdY\_`^ \_v dXU  
<e^T( JXU 8\_QbT ^\_dUT dXQd dXU 7Tf'c\_b `b\_ fITUC\_b QbbQ^AWUC Qd YdC\_g^ Uh`U^cU Q gITU fQbUdi` V  
cUbfISUC gXISX Y^SleTU& gYdX\_ed V ] YdQdY\_`^ dXU V\_`\_gY^AW4

- k S\_`^cdbesdY^AW Q^T TUcI^W^AW dXU <e^T
- k ``bdV\_`\_v\_bUCUQbSX Q^T cUSEbIdi cUUSdY\_`^
- k Y^YdIQ SQ`YdQVjQdY\_`^ )e^T^AW
- k cUSEbIdIUC dbQT^AW
- k <e^T QT ] Y^YcdQdY\_`^
- k Secd\_Ti`\_v <e^T QccUlc
- k TQll`i fQleQdY\_`^ \_v dXU <e^Tjc` ``bdV\_`\_v
- k WaelTIdi ] \_`^Yd\_bI^AW Q^T ] Q^QWU ] U^d
- k bIc[ ] Q^QWU ] U^d& Y^SleT^AW SiRUb cUSEbIdi
- k cXQbUX\_`ITUb cUbfIS^AW Q^T dbQ^cUbu QWU^Si& Y^SleT^AW cXQbUX\_`ITUb S\_`^Vb ] QdY\_`^ c&
- k bUS\_bT[UU`Y^W& Q^T S\_] ] e^ISQdY\_`^c
- k UWUQl cUbfISUC \$UhsU`d dXU Y^TU`U^TU^d : YbUSd\_bcp S\_e^cUW%
- k bUWeIQd\_bi Q^T ``bdV\_`\_v S\_] ``VQ^SU
- k W^Q^SIQl bU` ``bdI^AW
- k ] Qb[Udi^AW Q^T T^cbbRedY\_`^ \$UhsU`d Q ] \_e^Yc` QIT Ri dXU <e^T e^TUbu HeLU +, R'+ `IQ^c%

JXU 8\_QbT ^\_dUT dXQd ] Q^i`\_v dXUcU cUbfISUC XQfU Uh`Q^TUT`\_fUb dY ] U Y^ dUb ] c`\_v R\_dX aeQ^dIdi  
Q^T S\_] ``UhdI i Y^ bUC\_`^ ^cU d\_`\_cXQbUX\_`ITUb TU ] Q^Tc& S\_] ``UdIdY\_`^ Y^ dXU Y^TecdIbi & SXQ^W^AW  
T^cbbRedY\_`^ SXQ^AWUc& Q^T dXU SXQ^W^AW bUWeIQd\_bi U^fIb\_`^ ] U^d(

>[cS`aZS[a BO[OUSZS[a HS\_cIIQS` JXU ^Qdebu`\_v dXU Y^fUcd ] U^d ] Q^QWU ] U^d cUbfISUC `b\_ fITUT  
d\_`\_v dXU <e^T Yc aeYdU S\_] ``Uhd Q^T Qll`gc <e^T cXQbUX\_`ITUbc QSSUcc d\_`\_b`\_vUccI\_`AQl ] \_`^U i  
] Q^QWU ] U^d& Y^cdQ^d T^fUbcI^ISQdY\_`^ \_v dXU bU Y^fUcd ] U^d& gYdX^ Q^ QccUd SIQcc& dXU ````bdeY^dI d\_`  
UQcI^i T^fUbcI^i Q ] \_`^W QccUd SIQccUc Ri Y^fUcdI^AW Y^`\_b UhsXQ^W^AW Q ] \_`^W fQbY\_ec 7 ] UbiSQ^  
9U^debi ?^fUcd ] U^d& Ve^Tc& Q^T WaelTIdi ( ?^ UfQleQdY^AW Y^fUcd ] U^d `UbV\_b ] Q^ASU& dXU 8\_QbT Uh`USIdc  
dXU 7Tf'c\_b\_d\_ ] Q^QWU dXU <e^T Y^ QSS\_bTQ^ASU gYdX YdC Y^fUcd ] U^d`\_RZUSdI^fUC Q^T `bI^S^I` Ql  
Y^fUcd ] U^d`\_cbbQdUWUc( <ebdXUb& dXU : YbUSd\_bc bUS\_W^YjU dXQd dXU 7Tf'c\_b XQc Q^`\_R^WQdY\_`^ d\_ ] \_`^Yd\_b  
dbQT^AW QSdI^fIdIUC& Q^T Y^`\_QbdlSelQb d\_`\_cUU[ dXU RUcd U^USedI\_`^ \_v <e^T dbQTUc& Q^T d\_`\_UfQleQdU dXU  
ecU`\_v Q^T `Q i ] U^d`\_v\_b bUCUQbSX( ?^ `b\_ fIT^AW dXUcU cUbfISUC& dXU 7Tf'c\_b edI^VjUC dIUQ ] c`\_v  
Y^fUcd ] U^d `b`\_vUccI\_`AQlc \$` ``bdV\_`\_v ] Q^QWUbc& Q^Ql`icd& bUCUQbSX QccI^cdQ^d& Q^T cUSEbIdIUC dbQTUbc%  
gX`\_bUaelbU UhdU^cI^fU Y^V\_b ] QdY\_`^ dUSX^`\_`\_W i& bUCUQbSX& dbQ^I^AW& S\_] ``VQ^SU& Q^T`\_dXUbu cIcdU ] c d\_`  
S\_`^TeSd dXU bU RecI^Ucc( JXU 8\_QbT& T^bUSdI Q^T dXb\_eWX YdC <e^T FUbV\_b ] Q^ASU HUfIUg 9\_] ] YddUU&  
`b\_ fITUC`\_fUbcI^WXd\_`\_v dXU Y^fUcd ] U^d `UbV\_b ] Q^ASU `b`\_vSUcc( ?d bUWeIQbi bUfIUgc Y^fUcd ] U^d  
`UbV\_b ] Q^ASU Y^V\_b ] QdY\_`^ V\_b dXU <e^T& d`\_WUdXUb gYdX S\_] ``QbQdY^AW Y^V\_b ] QdY\_`^ V\_b Q` ``b`\_bI^QdU  
RU^SX ] Qb[c Q^T`\_b`\_vUbu Wb\_e`\_c`\_v cI ] YQbi` ] Q^QWUT Ve^Tc&`\_fUbu T^WUbuU^d dY ] U X`\_bIj\_`^c( JXU  
: YbUSd\_bc Qlc`\_bUfIUg Y^fUcd ] U^d `UbV\_b ] Q^ASU Y^V\_b ] QdY\_`^ T^ebI^AW dXU ] Q^QWU ] U^d QWbUU ] U^d  
bU^UgQV`\_b`\_vSUcc( ?v `UbV\_b ] Q^ASU S\_`^SUB^c Qbu YTU^dW^UT& dXU 8\_QbT T^cSecUc gYdX dXU 7Tf'c\_b dXU  
bUQC\_`^c`\_v\_b ceSX bUceI^c \$U(W& ] Qb[Ud S\_`^TIdY\_`^c& cUSEbIdi cUUSdY\_`^% Q^T Q^i QSdY\_`^c RU^AW dQ[U^`\_d\_`  
Y ] `b`\_fU `UbV\_b ] Q^ASU& Q^T ] Q i S\_`^TeSd c`\_USIQl bUfIUgc e^dI^`\_UbV\_b ] Q^ASU Y ] `b`\_fUc( JXU <e^Tjc  
`UbV\_b ] Q^ASU gQc QR`\_fU YdC RU^SX ] Qb[V\_b dXU dU^`i UQb `UbV\_T Q^T RU`\_g YdC RU^SX ] Qb[V\_b dXU  
\_`^U& dXbUU& Q^T W^fU`i UQb `UbV\_Tc bUfIUgUT Ri dXU 8\_QbT( JXU 8\_QbT`\_v e^T dXU Y^fUcd ] U^d

]Q^QWU]U^d cUbf!SUC `b\_fiTUT Ri dXU 7Tf!c\_b d\_dXU <e^T d\_RU cQd!c!QSi\_bi Q^T S\_^c!cdU^d g!dX  
dXU ]Q^QWU]U^d QWbUU]U^d(



8\_QbT S\_^SleTUT dXQd dXU ] Q^QWU ] U^d VUU `QIT Ri dXU <e^T d\_ dXU 7Tf'c\_b e^TUb dXU ] Q^QWU ] U^d QWbUU ] U^d 'c bUQc\_^QRiU Y^ VWXd \_V dXU cUbf'ISUc `b\_fiTUT d\_ dXU <e^T(

8\Z]O\_#` \ [ a\ ;S` O[R HS\_cIQS` E\_\c\RSR a\ DaVS\_8WIS[a` \T aVS 6Rc\` \\_' JXU 8\_QbT Q'c\_ bUaeUcdUT Q^T bUSU'fUT Y^V\_b ] Qd'\_^ Vb\_ ] dXU 7Tf'c\_b S\_^SUb^V^W dXU ^QdebU \_V dXU cUbf'ISUc& VUUC& S\_cic& Q^T `b\_VdQR\Wdi \_V Ydc QTf'c\_bi cUbf'ISUc d\_QTf'c\_bi SVU^dc \_dXUb dXQ^ dXU <e^T( JXU i \_RcUbfUT dXQd dXUcU fQbi^VW di `Uc \_V SVU^d QSS\_e^dc bUaeUcU TWUbuU^d cUbf'ISUc Q^T Y^f\_\fU TWUbuU^d bUWeQd\_bi Q^T U^dbU `bU^Ueb'Q\ b'c[c dXQ^ dXU ] Q^QWU ] U^d \_V dXU <e^T( JXU 8\_QbT Q^Q'i jUT dXic Y^V\_b ] Qd'\_^ Q^T S\_^SleTUT dXQd dXU VUUC SXQbWUT Q^T cUbf'ISUc `b\_fiTUT d\_ dXU <e^T gUbU bUQc\_^QRiU Ri S\_] `Qb'c\_^

EOf ZS[a` a\ >[aS\_ZSR\O\_]S`' JXU : YbUSd\_bc Q'c\_b UaeUcdUT Q^T bUSU'fUT Q TUCsb'` dY\_^ \_V `Qi ] U^dc ] QTU d\_ Y^dUb ] UTIQb'Uc Ri dXU <e^T Q^T dXU 7Tf'c\_b Q^T cUbf'ISUc `b\_fiTUT Y^ bUc` \_^cU dXUbUd\_ ( JXUcU `Qi ] U^dc Y^SleTU fQb'ec `Qi ] U^dc ] QTU Ri dXU <e^T\_b dXU 7Tf'c\_b d\_ TWUbuU^d di `Uc \_V Y^dUb ] UTIQb'Uc Q^T bUS\_bT[UU`Ubc V\_b T'c'cb'Red'\_^ Q^T cUbf'ISU QSd'f'd'Uc `b\_fiTUT V\_b dXU <e^T( JXU : YbUSd\_bc bUf'UgUT ceSX Y^V\_b ] Qd'\_^ Q^T bUSU'fUT bU`bUcU^dQd'\_^c Vb\_ ] dXU 7Tf'c\_b dXQd Q\ ceSX `Qi ] U^dc Ri dXU <e^T gUbU ] QTU `ebceQ^d d\_ dXU <e^T'ic HeU +, R'+ F\Q^ Q^T dXQd Q\ ceSX `Qi ] U^dc Ri dXU 7Tf'c\_b gUbU ] QTU Vb\_ ] dXU 7Tf'c\_b'c bUc\_ebSUC Q^T bUQc\_^QRiU `b\_V'ic(

8\YQaS\_OY \\_k; OY&Dbal 7S[ST\la` 9S\_licSR Pf aVS 6Rc\` \\_' JXU 8\_QbT S\_^c'ITUbUT dXU ` \_cc'RIU Uh'icdU^ASU \_V S\_\QdUbQ\ RU^U'V'ic dXU 7Tf'c\_b ] Qi bUSU'fU Qc Q bUce'ld \_V Y'ic bU'Qd ] ] ] XU 7 UV e^T YRU Uh'icdU^ASU \_V7Tf'c\_bY Ubu b dX c Ri ] \_Q dX h'Uc ] Uh'icdU^ASU \_ U Tf'c\_b Y C ] ] ] Q^T ] c ] ] SU Yd

B'ae'Yd'i H'c [ CQ^QWU ] U^d Fb\_WbQ ]

E\_ \ef K\all[U E\WQIS`

7 TUcSbl`dV\_^\_v dXU ` \_VSUc dXQd dXU Ve^T#c I^fUcd ] U^d QTfVc\_b ecUc I^ UhUbSicI^W dXU f\_dI^W bWXdC  
Qcc\_SIQdUT gVdX dXU cUSeblVUc `ebSXQcUT Q^T)\_b XUIT Ri dXU Ve^T Vc QfQ\QRIU gVdX\_ed SXQbWU& e`\_^  
bUaeUcd& Ri SQW^W + '2\*\*' - 12'3212( ?d Vc Qlc\_ QfQ\QRIU\_^ 7 ] Ub\SQ^ 9U^debi ?^fUcd ] U^dcp gURcVdU  
Qd Q ] Ub\SQ^SU^debi(S\_) `b\_hi Q^T\_^ dXU IUSEblVUc Q^T ; hSXQ^WU 9\_] ] VccI\_^pc gURcVdU Qd  
cUS(W\_f( ?^V\_b ] QdV\_^ bUWQbT^W X\_g dXU I^fUcd ] U^d QTfVc\_b f\_dUT `b\_hVUc bUQdI^W d\_ ` \_bdV\_V\_  
cUSeblVUc Tebl^W dXU ] \_cd bUSU^d + , ' ] ^dX `UbV\_T U^TUT @e^U - \* Vc QfQ\QRIU\_^  
Q ] Ub\SQ^SU^debi(S\_) `b\_hi( ?d Vc Qlc\_ QfQ\QRIU Qd cUS(W\_f(

Fb0\_aS\_yf E\\_aT\W\ 9W`QY\`b\_S

JXU Ve^T VUc Vdc S\_] `WdU cSXUTeU \_V ` \_bdV\_V\_X\_ \T^Wc gVdX dXU IUSEblVUc Q^T ; hSXQ^WU  
9\_] ] VccI\_^ \$ I ; 9% V\_b dXU Wbcd Q^T dXVbT aeQbdUbc \_V UQSX VVcSQ\ iUQb Qc Q^ UhXVRVd d\_ Vdc bU ` \_bdc\_^  
<\_b ] D'FEHJ( JXUcU ` \_bdV\_V\_X\_ \T^Wc QbU QfQ\QRIU\_^ dXU Ve^T#c gURcVdU Qd  
Y`b\_(Q ] Ub\SQ^SU^debi(S\_) \$V\_b ?^fUcd ] U^d Fb\_VUccV\_^Qlc% Q^T& e`\_^ bUaeUcd& Ri SQW^W  
+ '2\*\*' - 12'3212( JXU Ve^Tpc <\_b ] D'FEHJ bU ` \_bdc QbU QfQ\QRIU\_^ dXU I ; 9pc gURcVdU Qd cUS(W\_f(











9\_^dQsd Kc

Q ] Ub\|SQ^SU^debi(S\_ ]

7ed\_ ] QdUT ?^V\_b ] Qd\\_^ B/^U

+ '2\*\*' - . / '210 /

?^fUcd ] U^d Fb\_ \|Ucc\\_^Q\ | Ub f\|SU HU`bUcU^dQd\|fUc

+ '2\*\*' - . / '0.22

JUUS\_ ] ] e^|SQd\\_^c HUIQ | | Ub f\|SU V\_b dXU : UQV 1++

6 ZS\_ \|QO [ 8S [ab\_f KO\_ \|OPIYS E \\_aT \|V\ \ ` % > [Q'

> [cS`aZS [a 6RC \| \\_3

7 ] Ub\|SQ^ 9U^debi ?^fUcd ] U^d CQ^QWU ] U^d & ?^S(

AQ^cQc 9\|i & C\|cc\_ebi

( ) / % . - / ! , \$ 1 ( % 0 ! ! 1 % + % , 10 ) ! # - , ! ! , 0 ! / % 0 2 " + ) 1 1 % \$ & - / 1 ( % ' % , % / ! \* ) , & - / + ! 1 ) - , - & - 2 / 0 ( ! / % ( - \* \$ % / 0 ( % / % . - / 1 ) 0 , - 1 ! 2 1 ( - / ) 5 % \$ & - / \$ ) 0 1 / " 2 1 ) - , 1 - . / - 0 . % # 1 3 % ) , 3 % 0 1 - / 0 2 , \* % 00 . / % # % \$ % \$ - / ! # # - + . ! , ) % \$ " 4 ! , % & & % # 1 3 % . / - 0 . % # 1 2 0

h+)++ 6 ZS\_ \|QO [ 8S [ab\_f E \ ] \|SaO\_f = \|VR\| [U` % > [Q' 6\|\_ \|UVa`\_ S` S\_cSR` 8A&H6C&2+21, ++ ) 1