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| 7KHUXJ)UHH 6FKRROV DQDQ&GRPPXQLWLHV \$FW
WKH (GXFDWLRQ 'HSDUWPHQW *HQHUVQDPLQLVWUDWLRQ
5HJXODWLRQV SROLF\ UHTXLUHV 6468 WR DGRSW DQG
LPSOHPHQWWSRJRSJUHDYHQW WKH XQODZIXO SRV
VHVVLRQ XVH RU GLVWULEXWLRQ RI LOOLFLW GUXJV DQG D
FRKRO E\ DOO VWXGHQWV DQG HPSOR\HHV RQ VFKRRO
SUHPLVHV RU DV SDUW RI DQ\ REFLWV DIWLYI
WŁH(V* \$5 3DUW 6XERDUW \$

| 7KH \$QQXDO 1RWLILFDWLRQ LQFOXGHV UHTXLUHG UHSRUW
LQJ RI

- x 7KH KHDOWK ULVNV DVVRFLDWHG ZLWK WKH XVH RI
DOFRKRO DQG GUXJV
- x 6WDQGDUGV RI FRQGXFW UHJDUGLQJ WKH XVH DQG
SURKLELWLRQ RI DOFRKRO DQG GUXJV IRU VWX
GHQWV DQG HPSOR\HHV
- x 'LVFLSOLQDU\ VDQFWLRQV DQG SHQDOWLHV IRU WKH
YLRODWLRQV RI LOOLFLW EHKDYLRU FRQFHUQLQJ DO
FRKRO DQG GUXJV DW WKH VFKRRO VWDWH DQG
IHGHUDO OHYHO
- x & DPSXV UHVRXUFHV WR DVVLVW FXUUHQW VWXGHQWV
DQG HPSOR\HHV

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&RPPHUFLDO 6)	+RZMW\$GPLQL	,PPHGLDWH (IIHFVW
%LSKHWDPLQH EHQQLHV EODF FURVVHV KHDU WXUQDURXQG GULYHUV XSSHUV	'6ZBGORQHG NVERDOWLRLW WV /\$ VSHHG WUXFN	VQHRHOUWLQGV RI H[KLODUDWLRQ QHQHHFWJHGPHQWDO DOHUWQHVW UHGXFHG DSSHWLWH LUULWDEL SDQLF DQG LQFUHDVHG KHDUW ERG\ WHPSHUDWXUH PHWDERO
+HDOWK 5L	NNDUDQRQLD LQVRPQLD	YLROHQW EHKDYLRU SV\FKRVLV FDUGLDF RU FDUGLRYDVFXODU FRP

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&RPPHUFLDO 6)	+RZMW\$GPLQL	,PPHGLDWH (IIHFVW
'HVR[\\Q PHWK FKDON FU\VWDO JR IDVW VSHHG	L6ZHD OFQURDQHG OVFRNHHG JORDUV	VQHRHOUWLQGV RI H[KLODUDWLRQ QHQHHFWJHGPHQWDO DOHUWQHVW UHGXFHG DSSHWLWH LUULWDEL SDQLF DQG LQFUHDVHG KHDUW ERG\ WHPSHUDWXUH PHWDERO
+HDOWK 5L	NNDUDQRQLD SUREOHPV VWURNH	YLROHQW EHKDYLRU SV\FKRVLV ZHLJKW ORVV LQVRPQLD FDUGLDF VHL]XUHV DGGLFWLRQ

+ ~ ^ , ‡

&RPPHUFLDO 6)	+RZMW\$GPLQL	,PPHGLDWH (IIHFVW
'LDFHW\OPRUSKL,QQHM HVFRNDHFOV KRUvh EURZQ VRUDVQ RGURSHG + MXQN VNDJ VNQZN ZKLWH QDXVHD KRUvh & KLQD ZKLWH FKHHVH ZLWK 27& FROG PHGLFÅ7Q°HE D•AQ VDLQK & VWDQ,P LIQSH €-PHGLD rK 8D•À 8-PHGLD2YKK 88"‡"° ,r ,r2 "‡"	VPRXNSKORrK18D GURZVLQHV FRRUGLQDWLRQ GL]LQHV KHDYLQHV LQ WKH ERG\ VORZH	LPSDLU



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2••~‡OE~ \$Ž••↑` , •0 , ‡ , +Ž†	3Ž‡, OE•†~‡3Ž‡, OE•†~‡•	Oz‘, +Ž†
0DQXIDFWXUH RU GHO VXEVDQFHV GUXJV	L6YHQW HRQ FFHR QW U \HDUV	RHQDWGIVQRH RI DQG D ILQH RI !
'HOLYHU\ DQG 3RVVHV	V6LHQW RI Q F B UQ R W D Q W R H [F H H Q U V G D \ V D Q G D I L Q H D B V D Q G D I L Q H R !	RU OHV
'ULYLQJ ZKLOH LQWR [WR [LFDWLRLQ IURP DOFRKROV	L6F B QMIG Q E Q FRO X RHKORUOV GDUQXGI VD	GAKHQXWQWR RI R L Q H E BRW KR U 7' & RI D I L Q H - RI
3XEOLF LQWR [LFDWLRLQ	L Q H RI	\$ I L Q H R I !
3XUFKDvh RI DOFRKRO E \ D PLQRU	E \ D PLQRU	\$ I L Q H R I
&RQVXPSSWLRLQ RI DOFR	R)K R Q H R \ D PLQRU	U\$ I L Q H R I
3RVVHVVLRLQ RI DOFR	K R Q H R \ D PLQRU	\$ I L Q H R I

3(1\$/7,(6 81'(5)('5\$/ /\$:)

2••~‡OE~ \$Ž••^` , •0 , ‡ , +Ž† Oz‘, +Ž†
3Ž‡, OE•†~‡3Ž‡, OE•†~‡•

0DQXIDFWXUH GLVWUL E P S N U L R V Q R P H Q L W / S V H Q W P Q J R M W R V Q P H Q W Z
GUXJV LQFOXGLQJ PDUH MXHDHG D \HDU B Q W R U H Q L H D V H QRW H
PXP I L Q H RI IRU SDUROH DQG D I L
IRU DQ L Q G L Y L
DO WR RWKH
WKDQ L Q G L Y L G X D O

3RVVHVVLRLQ RI GUXJV ,IPSEJQ X & Q Q J H Q W U P S U L Q R R V Q R O H H Q W I R U Q F
QD WKDQ \HDU D Q P Q R U D H I W Q K H D Q I \HDUV R
QRW PRUH WKD W Q K D Q \HDUV D Q G D
QRW OHVV WKDQ
FRVWV RI L Q Y H V W L J D V
SURVHFVWLRQ

2SHUDWLRLQ RI D & R P P R, Q S & D L U / U R L Q H F U H & Q G P T S U L Q R R V Q R O H H Q W I R U X S
WKH L Q I O X H Q F H RI DOF W K B Q R U H Q U X J V H D U V D Q G D I L Q H Q R
H[FHHG



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& R F D L Q H 6 F K H G X O H P , , P L [W X U L U M W 2 I I H R Q W H N J P L [W X U H] L U V W 2 I I H R Q W H O H	O H V V W K D Q \ U V D Q G	Q R W P R U H W K D Q \ U V	W K D Q \ U V D Q	P R U H W K D Q O L I H
& R F D L Q H % D V H - J P P L [W X U H , , G H D W K R U V H \ P R X \ P [W X U H R U V H U L R X V L Q M	L Q M X U \ Q R W O H V V W K D Q O H V V W K D Q R U	P R U H W K D Q O L I H) L Q H	P R U H W K D Q P	L I D Q L Q G L Y L G X D O
) H Q W D Q \ O 6 F K H G X O P H P L [W X U H , , Y H G X D O P L O J P L R P Q [W X U H P H O O L R Q L I Q R W	Q R W D Q L Q G L Y L G X D O	P L O J P L R P Q [W X U H P H O O L R Q L I Q R W Y L G X D O	W K D Q O L I H) L Q H	P R U H W K D Q L I D Q L Q G L Y L G X D O
+ H U R L Q 6 F K H G X O H J P P L [W X U H , , N J P L [W X U H 6 H F R Q G 2 I I H R Q W H O H V V W K D Q \ U V	6 H F R Q G 2 I I H R Q W H O H V V W K D Q \ U V D Q G	N J P L [W X U H G H D W K R U V H U L R X V L Q M X O L I H L P S U L V R Q P H Q W R I Q R W P R U H W K	Q R W P R U H W K D Q \ U V D Q G	G H D W K R U V H U L R X V L Q M X O L I H L P S U L V R Q P H Q W R I Q R W P R U H W K
/ 6' 6 F K H G X O H , , - J P P L [W X U H , , R U L Q H R I Q R W P R U H P L [W X U H R P L O O L R Q L I D Q L Q G L Y L G X D O	Q R W P R U H W K D Q O L I H L P S U L V R Q P H Q W R I Q R W P R U H W K	R U L Q H R I Q R W P R U H P L [W X U H R P L O O L R Q L I D Q L Q G L Y L G X D O	Q R W P R U H W K D Q \ U V D Q G	G H D W K R U V H U L R X V L Q M X O L I H L P S U L V R Q P H Q W R I Q R W P R U H W K
0 H W K D P S K H W 6 F K H G X O H , , D P L Q R P S X U H , , R U L Q H R I Q R W P R U H P L [W X U H R P L O O L R Q L I D Q L Q G L Y L G X D O	Q R W P R U H W K D Q O L I H L P S U L V R Q P H Q W R I Q R W P R U H W K	R U L Q H R I Q R W P R U H P L [W X U H R P L O O L R Q L I D Q L Q G L Y L G X D O	Q R W P R U H W K D Q \ U V D Q G	G H D W K R U V H U L R X V L Q M X O L I H L P S U L V R Q P H Q W R I Q R W P R U H W K
3 & 3 6 F K H G X O H , , - J P S X U H , , R U L Q H R I Q R W P R U H P L [W X U H R P L O O L R Q L I D Q L Q G L Y L G X D O	Q R W P R U H W K D Q O L I H L P S U L V R Q P H Q W R I Q R W P R U H W K	R U L Q H R I Q R W P R U H P L [W X U H R P L O O L R Q L I D Q L Q G L Y L G X D O	Q R W P R U H W K D Q \ U V D Q G	G H D W K R U V H U L R X V L Q M X O L I H L P S U L V R Q P H Q W R I Q R W P R U H W K
				R U L Q H R I Q R W P R U H P L [W X U H R P L O O L R Q L I D Q L Q G L Y L G X D O

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R U N J R U P R U H P D U L M K D Q D H R V [W X U H Q \ U V R W U O P R V W H W M K D Q Q \ U V R U	M K D Q D H R V [W X U H Q \ U V R W U O P R V W H W M K D Q Q \ U V R U	\ U V R W U O P R V W H W M K D Q Q \ U V R U
R U N J W R N J P D U L M X D Q D P D U L M X D Q D V S Q I D Q H D W K R U V H U G R \ W K E R G L \ O M \ L Q R M X U E R G L	M K D Q D H R V [W X U H Q \ U V R W U O P R V W H W M K D Q Q \ U V R U	\ U V R W U O P R V W H W M K D Q Q \ U V R U
R U N J W R N J P D U L M X D Q D P D U L M X D Q D V S Q I D Q H D W K R U V H U G R \ W K E R G L \ O M \ L Q R M X U E R G L	M K D Q D H R V [W X U H Q \ U V R W U O P R V W H W M K D Q Q \ U V R U	\ U V R W U O P R V W H W M K D Q Q \ U V R U
OR U H W K D Q N J V K D V K L V K R L O W R P D U L M X D Q D P L [W X U H V 1 K R L W K P R U H V R K D Q J \ U V R W B R D M W K V R D Q V H U \ W V , ,	M K D Q D H R V [W X U H Q \ U V R W U O P R V W H W M K D Q Q \ U V R U	\ U V R W B R D M W K V R D Q V H U \ W V , ,
K D V K L V K R L O W R P D U L M X D Q D P L [W X U H V 1 K R L W K P R U H V R K D Q J \ U V R W B R D M W K V R D Q V H U \ W V , ,	M K D Q D H R V [W X U H Q \ U V R W U O P R V W H W M K D Q Q \ U V R U	\ U V R W B R D M W K V R D Q V H U \ W V , ,
/ H V V W K D Q N L O R J U D 1 P R W P D R U L M X D Q D Q E X U W 1 R W Q P H R Q R W W R B Q H \ U V) L	M K D Q D H R V [W X U H Q \ U V R W U O P R V W H W M K D Q Q \ U V R U	\ U V R W B R D M W K V R D Q V H U \ W V , ,
G R H V Q R W L Q F O X G H W R K U D Q R U H P D U L M X D Q D Q E X U W 1 R W Q P H R Q R W W R B Q H \ U V) L	M K D Q D H R V [W X U H Q \ U V R W U O P R V W H W M K D Q Q \ U V R U	\ U V R W B R D M W K V R D Q V H U \ W V , ,
S O D Q W V U H J D U G O H V V R K D Q D L D Q K W Q G M W R L G X D O P L O O L R Q	M K D Q D H R V [W X U H Q \ U V R W U O P R V W H W M K D Q Q \ U V R U	\ U V R W B R D M W K V R D Q V H U \ W V , ,
P D U L M X D Q D S O D Q W V M K D Q D L D Q K W Q G M W R L G X D O P L O O L R Q	M K D Q D H R V [W X U H Q \ U V R W U O P R V W H W M K D Q Q \ U V R U	\ U V R W B R D M W K V R D Q V H U \ W V , ,



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6+68 DQG WKH VXUURXQGLQJ FRPPXQLW\ KDV D QXPEHU RI UH
PD\ EH H[SHULHQFLQJ FRQFHUQV UHODWHG WR WKH XV



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7KH 6+68 & RXQVHOLQJ & HQWHU RIIHUV FRQILGHQWV
WR VWXGHQWV ZKR DUH FXUUHQWO\ HQUROOHG 7K
FKRORJL\ WR\ WBRD\ UHVLGHQWV DQG JUDGXDWH WU
LQFOXGLQJ LQGLYLGXDO FRXQVHOLQJ JURXS FRXQV
SUHYHQWLHY HGXFDWLRQ SUHVHQWDWLRQV 6WDII
FULVLV VLWXDWLRQ 7KH & RXQVHOLQJ & HQWHU KDV
FRYHU\ IURP GUXJV DQG DOFRKRO 7KH\ RIIHU SHHU
ZRUN DQG IXQ VREHU DFWLYLWLHV DQG HYHQWV)
SDJH

& RXQVHOLQJ JURXSV WKDW PD\ EH EHQHILFLDO
DEXVH DUH H[S UFRVRPLQH\ VDQH\ QLQGIXOQHVV DQ
RWKHUV ORUH LQIRUPDWLRQ LQFOXGLQJ WKH WLPI
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: HEVLUWWHS ZZZ VKVX HGX GH SW FRXQV

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7KH 36& LV VWDIHG E\ VWXGHQWV LQ WKH FOLQ
KRXVHG ZLWKLQ WKH 'HSDUWPHQW RI 3V\FKRORJ\ D
FOLQLFDO DFWLYLWLHV DUH FORVHO\ VXSHUYLVHG
6+68 7KH 36& VWULYHV WR SURYLGH SV\FKRORJLF
DUH XQGHUVHUYHG LQ WKH + XQWVYLOOH FRPPXQLW
ELOOHG DFFRUGLQJ WR WKHLU LQFRPH DQG RWKHU
YLFHV

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