

\$ 1 Ü , ' 8 1 * Ð 1 7 ° 3
, ¥ L V Õ

- $$+ u Q K \quad K \tilde{N} F$$

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$$, \quad 75^2 \& 1^* +, \hat{E} 0$$

' 8 7 \$ 0 7 + i & % ° & + \$,

Câu 1: 7 u P W ± S [i F y i O K F e x D K x P V Õ

$$\begin{array}{ccccccc} \text{\$} & \cdot & f & - & \frac{\text{\$}}{\text{\textcircled{C}}} & & \text{\textcircled{C}} \\ & & & & & & \text{\textcircled{C}} \end{array}$$

Câu 2: 7DP WKÍF QjR GmßL ÿk\ OX{Q G'mkQJ YßL PÑL JLi WUİ FëD
\$ x x %x x & x x ' x x

Câu 3: *Li W U ĩ Qj R W K e D S K m k n Q J x W U m Q K x m Fy K D L Q J K L Ē P S K k Q

\$ m • \ ? %m • f. \$ % 1 & m • - ^ \$ ' m ? - \$ f ' 1

Câu 4: * Ñ Š Œ j W ± S Q J K L Ę P F ë D E @ W S K m 7 k q Q W B u Q W ± S K ç S V D X W ± S
F ë \$ " \$ > f % f & f ' > f

Câu 5 7 u P Q J K L Æ P F ð D W Ð R W K Í X E ± F K D L

\$ x x % x x & x x ' x x

Câu 6 & KR WDP WKíF E xF KDL 7uP W©W Fx yCixWUİ FëD

\$ x \cdot \quad f \quad > \quad \% \quad \% x \cdot > \quad \& x \cdot > \quad ' x \cdot

Câu 7: 7 u P W ± S S Q F K D E P © W S K m k Q J ! W U u Q K

$$\frac{\$}{S} \cdot f \cdot \% \cdot \% S \cdot f \cdot \& S \cdot f > \% \cdot 'f S \cdot f \cdot \% \cdot$$

Câu 8 : 7 u P W ± S \$ J F e L E E © W S K m k x Q J W U u Q ! K

\$ S \ ^? \quad \% S \ \quad \& S \quad \text{f} S \ \backslash \ ^?

Câu 9: 7 u P NK · QJ ỹĩQK ỹ~QJ WURQJ FiF NK · QJ ỹĩQK VDX"

\$ f x x x Oj WDP WKÍF ~~WDP~~ ~~WKÍF~~ ~~WDP~~ ~~WKÍF~~ Oj WDP WKÍF E±F KDL

& f x x x Oj WDP WKíF 'E±F KDLx Oj WDP WKíF E±F KDL

Câu 10 :& K R x ax bx c a z Y j' b ac & K R E L Ã W G K L F e D { Q F • Q J G @ X
Y ß L P Ñ L \$ ' % ' & ' ! ' ' t

Câu 11: + Ë E©W SKm^o_oQJ WUuQK Fy VÕ QJKLËP QJX\rQ Oj
\$ % & 9{ VÕ '

Câu 12: '©X FëD WDP W^o_oíF E±Fx KD^o_olmçF [iF ÿİQK QKm VDX
\$ f x YβLx Yf x ! Y&L KR»F
% f x YβL x Yf x ! Y&L KR»F
& f x ! YβLx Yf x Y&L KR»F
' f x ! YβL x Yf x Y&L KR»F

Câu 13: 6Õ QJKLËP QJX\rQ FëDxE©W SKm^o_oQJ WUuQK
\$ % &

Câu 14: *ÑB Oj W±S QJKLËP FëD^X_XE©WtSKm^o_oQJ WUuQK W±S QjR VDX ÿk
\$ % & ‡ '

Câu 15: Ç E©W SKm^o_oQJ WUuQK QJKLËP W^o_oQ PmQ ÿLÅX NLËQ QjR VDX
\$ m d— %m !— & m d— ' m !—

Câu 16: &y EDR QKLrX JLi WUİ^o_oQJX\rQ F^o_oW^o_oQ PmVÕFy W±S [iA ÿİQK Q
\$ % & '

Câu 17: 7±S QJKLËP FëD E^o_oWxSKm^o_oQJ WUuQK
\$ S > %Sf f % & S > ' S f > % f

Câu 18: &KR Kjp^o_oWÕx x m 9βL JLi WUİ^o_oQjR W^o_oQ W^o_oQ P\ VÕ
\$ m t %m ! & m ! ' m

Câu 19: 9βL JLi WUİ^o_oQjR F^o_oQJxWUuQK x m Fy KDL QJKLËP ÓD Pr
x x xx " \$ m % m & m ! ' m !

Câu 20: &KR SKm^o_oQJ WUuQK x m 9βL JLi WUİ^o_oQjR Fy QJKLËP
W^o_oQ x " \$ m t %m — & — m ' — m d d

Câu 21: 7uP W©W F\$ FiF JLi W^o_oQjR F^o_oQJxWUuQK QJKLËP
\$ m t— %m • \ & m !— ' m —

Câu 22: 7uP FiF JLi WUİ^o_oQjR F^o_oQJxWUuQK x m Fy PÝW QJKLËP jO
PÝW QJKLËP"Q^o_oQ^o_o %m ! & m • ‡ ' ^o_oz

Câu 23: %©W SKm^o_oQJ xWUuQK x m YβL P^o_oQ^o_o t
\$ m > f %m • f& m • f ' m •

Câu 24: 7 ± S Q J K L Ě P F ě D E @ x W S k m k Q x J W U u o g K

t

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\$ x
x
x d —
x

% a x t
x
x d

& x t
x
x d —
x

' x • —
x

®

Câu 25: + Ë E © W S K m k Q J W F y u Q K L Æ P m N K % m & m z ' m

Câu 26: ; i F ÿ ĩ Q Ky Ç SK m k Q J W x U u Q n k x m a F y E D Q J K L Ę P SK k Q E L Ę
\$ — m Y ĩ n z — % m — & — m Y ĩ n z — ' — m Y ĩ n z —

Câu 277 uP W©W F§ FiF Jlm WÇİSKēdK QJK WPU MÇK Fy KDL QJK LVRÓD Pİ
x x d \$.K{QJ Fy Jlm WÇİ FēD & m d ' m d K Rm F

Câu 28 : * L § L E © W S K $\sqrt{m \times Q \times W}$ U u Q x K F l y Q J K L Æ P O j
\$ x d % x d & x d ' x d d

Câu 29: *Li WUİ OßQ QK(α)W f(α D 1K)P 3αÖ Yß≤ ≤ Oj
\$ $\sqrt{2}$ % $\sqrt{3}$ &

Câu 30 : & K R K j P x Õ x m x m 7 u P W © W F § F i F J m i w Ç U ĩ ! F ë D W K D P
x • \$ m ! % m — & m t ' m t —

& + | j 1 * & 8 1 * * i & / | æ 1 È & , & Ð 1 * 7 + ì & / | æ 1 * * , È &

Câu 1: *y F Fy V Õ^R y ð L UD UD S L D Q Oj —^S % —^S & —^S

Câu 2: % LĂW PÝW VŌ^SW FēD Jy F WUǃ WÙQ JŌ^SW FēD Jy F

$$\begin{array}{ccccccc} \$ & \text{Ou} & \text{Ov} & \frac{S}{\%} & k\$ & & \text{Ou} & \text{Ov} & \frac{S}{\%} & k\$ & & \text{Ou} & \text{Ov} & \frac{S}{\%} & k\$ & & \text{Ou} & \text{Ov} & \frac{S}{\%} & k\$ \end{array}$$

Câu 3: * y F F y V O ÿ Ü R V D Q J \$ ŷ Ý R O j R % & I R

Câu 4: 0 Ý W ÿ m á Q J W U z Q F y F E i Q u N t Q K G j L F W D U F Q Q J m á Q J W U z Q

$$\frac{\$FP}{\$P} = \frac{\%P}{\frac{\$FP}{\$P}} = \frac{\%P}{SFP}$$

Câu 5: 7 u P P Ě Q K Q W U R Q J F i F P Ě Q K y Å V D X

\$ 6 Õ ÿ R F ë D P Ý W F X Q J O m ç Q J J L i F O X { Q O j P Ý W V Õ N K { Q J k P

% 6 Õ ŷ R F ë D P Ý W F X Q J O m ç Q J S L i F O X { Q N K { Q J Y m ç W T X i

& 6 Õ ŷ R F ẽ D P Ý W ~~EXQO~~ Om P Ý W J V Õ F W K S F @ W K X Ý F ŷ R ¥ O

6 Õ ÿR FëD PÝW FXQJ OmçQJ JLiF Oj PÝW VÕ WKõF

Câu 6: &KR ÿm áQJ WUzQ FFr 7EiP WñDjR ëD FXQJ Fy FyF GjL Oj

\$ 0,5 3 % 2 & 1 '
 Câu 7: ; pW JyF OmçQJOMJLIF WURMJOjyÿLÇP NK{QJ QµP WOrQYiF.WU
 M WKXÝF JyF SKVQJWFRQJÇG©X
 \$ (I) và (II) (I) và (III) (I) và (IV) (II) và (III)

Câu 8: &K Oj JyF W• LÅX NK·QJ ÿiQK QjR VDX ÿk\ ÿ~QJ"
 \$ VLQ %RDI W DQ F'RW

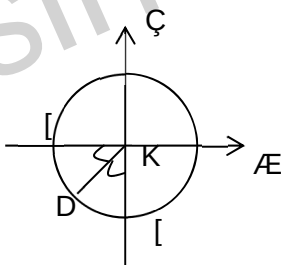
Câu 9: &KÑQ YALÇPOjP ÿLÇP ÿ«X FëD FXQJ OmçQJ JLiFwYlRQPyMñQD FX
 OmçQJ JLiF—^SFy VÕ ÿR

\$ M Oj ÿLÇP FKtQK JLóD FëD FmQJ \$KÇQ FmQKJLóD FëD FXQJ SK
 &M Oj ÿLÇP FKtQK JLóD FëD FmQJ DßKQPWmQKíJLóD FëD FXQJ S

Câu 10: &KR EÕQ FXQJ WURQ PÝW ymáQJ ^SAV^SzQ ^SÿiQK ^SKmßQJF FXQJ
 ÿLÇP FXÕL WU^SDQYjEQKjG E%Yj D YjG D&E J E'J G

Câu 11: *Li WU^SiÇ FXQJ kD WKÓD PñQ D O\$ kS % & k

Câu 12: &XQJFy P~W Äy «Yj Þj W MxñKQjVÕDÿRj FëD



\$ —^S k S —^S % k S —^S k & —^S k S '

Câu 13: 1ÅX JyF OmçQJJOjDzF Fy^SWKu KOLYñLD

\$ 7U•QJ QKDX % 9X{QJ JyFJyF E+Q& 7¥R YÕLL QKDX PÝW

Câu 14: 0ÝW EiQK [H RQJ 6Õ ÿR JyF Pj EiQK [H ÿm TXDQjñQjF NKL GL
 \$ R R R R %

Câu 15: 7URQJJLk\ EiQK [H FëD [H J³Q PzQJX7DQKñýF GjL TXmQJ ÿmáQ
 WURQJ SzQ-W ELÅW UµQJ EiQ NtQK EPQK [H J³Q Pi\ EµQJ
 \$ FP % FP & PP ' FP

Câu 16: &KR KDL JyF OmçQJQuJLiF mY^RVñZ Yj VñOv n^R n Z^R
 7D Fy KOLYñLD
 \$ 7¥R YBL QñDX JyP% 7U•QJ QKDX & ÕL QKDX '

Câu 17: 0ÝW ÿ×QJ K× WUHR WmáQJPyjñEPJ\$K-GYLGjURQJ SK~W PÊL
 OrQ FXQJ WUzQ\$Fy ÿÝFñjL Oj %FP & FP FP '

Câu 18: &KR^S a s .ĂW TX§ ÿ~QJ Oj

\$ VhQ FRV %VhQ FRV &VhQ FRV ' VhQ FRV Câu 19: 7URQJ FiF ÿ·QJ WKÍF VDX ÿ·QJ WKÍF QjR ÿ~QJ "

\$ FRV a ± aFRV%LQ a ± aVLQQL a QL VL a Q R

Câu 20: &KÑQ ÿ·QJVDW~~WKÍF~~QJ FiF ÿ·QJ WKÍF VDX

\$ VLQ^S x[§] xFR₁[§] %VLQ^S x[§] xFR₁[§] &WDQ^S x[§] xFR₁[§] ' WDQ^S x[§] xFR₁[§]

Câu 21: 7URQJ FiF JVLQW~~FiF~~W~~QJ~~ QK±Q JLi WUİ QjR"

\$ -% &√

Câu 22: 7URQJ FiF F{QJ WKÍF VDX F{QJ WKÍF QjR VDL"

\$ VLQ FRV D %DQ^S k k][§] Dz S ·₁
& F RWD k k] DzWDQ DFRW^{kS} Dk][§] Dz ·₁

Câu 23: &KR E~~VLQ~~ 7tQ~~FRV~~ \$RDW P/RD— F&RD— F'RD√

Câu 24: kQ JLSQ ELÇX WKÍF^S V₁ L[§]Q^S S₁ WD FyQ SF F

\$ A VhQ%^A FRV&A VhQ aFRV A'

Câu 25: kQ JLSQ EAÇX~~WKÍF~~ x WDQx WĐWFĐQ

\$ A VLxQ A%FRW &A ± VLxQ 'A ± FRV

Câu 26: &K~~VLQ~~— Y^S D S *Li WUİ~~FĐĐ~~ F\$V %- &r— ' —

Câu 27: &K~~FRVĐQ~~ *Li WUİ^{VLQĐQ} ^{DFRV} _{VLQĐQ} _{FRV} \$ -% & ' —

Câu 28: &iF F»S ÿ·QJ WKÍF QjR VDX ÿk\ ÿ×QJ WKáL [S\ UD"

\$ VLQ YFRV VLQ— %YFRV √

& VLQ— YFRV — VLQ√ YFRV

Câu 29: &K~~FRV~~— YβL D^S 7tQ~~VLQ~~ \$VLQ— %VLQ— &VLQ— ' VLQ +

Câu 30: kQ JLSQ EAÇX^{FRV} ^{WKÍF} _{VhQ} WD Fy_{xFRV}

\$ A FRV xVLQ%^A FRV xVLQA&VhQ aFRV 'A VhQ aFRV

Câu 31: 7tQ~~ELFRV~~

\$ Đ k]S · % kD k] S &—^S·kD k] · ' SD k & } S

Câu 32: % L $\tilde{A}W\mathcal{D}Q$ Yj D^D *Li $\overline{FR\mathcal{D}i}$ $\mathcal{D}^P\text{LE}QJ$

$$\mathcal{S} \frac{\sqrt{\quad}}{\quad} \pm \sqrt{\%} \& \frac{\sqrt{\quad}}{\quad} \cdot \sqrt{\quad}$$

Câu 33: *Li WU\$ $\overline{FR\mathcal{D}V}^S$ $\overline{FRV}^S$ $\frac{S}{\quad}\overline{FRV}$ $\overline{FR\mathcal{D}V}^S$ \$ $\overline{FRV}^S$ % & '

Câu 34: % L Ç X DW $\overline{KíF\mathcal{X}}$ $\overline{FRW}$ x $\overline{FRV}$ $\pm \overline{FR\mathcal{D}V}^S$ {QJ $\overline{V\mathcal{L}Q}^S$ $\overline{W\mathcal{K}E\mathcal{X}i}^S$ $\overline{QJ}$

$$\mathcal{S} \frac{\pm}{\quad} \frac{\%}{\quad} \& \frac{\quad}{\quad}$$

Câu 35: % L $\tilde{A}WQ$ $\overline{D\mathcal{F}R}^{\sqrt{\quad}}$ 7 $\overline{D\mathcal{R}QJ}$ FiF N $\tilde{A}W$ TX\$ $\overline{D\mathcal{L}D}^S$ X N $\tilde{A}W$ TX\$ QjR

$$\mathcal{S} \overline{V\mathcal{L}Q}^D \overline{D\mathcal{F}R\mathcal{V}}^D \pm \overline{V\mathcal{L}Q}^D \overline{D\mathcal{F}R}^{\sqrt{\quad}} \overline{D\mathcal{V}\mathcal{L}Q}^r \overline{D\mathcal{F}R\mathcal{V}}^D \overline{D\mathcal{W}D}^Q \overline{D\mathcal{F}R\mathcal{W}}^D$$

Câu 36: 7tQK JLi WU $\tilde{i}$ $\overline{F\mathcal{A}D\mathcal{V}E}^Q$ Ç X $\overline{FR\mathcal{K}íF\mathcal{X}}$ $\overline{V\mathcal{L}Q}$ $\overline{FRV}$

$$\mathcal{S} A \pm A \% A \& A \pm$$

Câu 37: % L Ç X $\overline{A\mathcal{W}KíF}$ $\frac{\mathcal{W}}{W\mathcal{D}Q} \frac{D}{xV\mathcal{L}Q} \frac{Q}{\overline{FRV}}$ NK{QJ $\overline{SKé}$ $\overline{W\mathcal{K}X}^{\sqrt{\quad}}$ $\overline{FR\mathcal{D}V}^S$ QjR

$$\mathcal{S} \frac{\pm}{\quad} \frac{\%}{\quad} \& \frac{\quad}{\quad}$$

Câu 38: % L Ç X $\overline{O\mathcal{W}KíF\mathcal{L}Q}$ $\overline{FRV}$ x $\overline{V\mathcal{L}Q}$ $\overline{FRV}$ $\pm \overline{FR\mathcal{D}V}^S$ Li $\overline{FR\mathcal{D}V}^S$ NK{QJ $\tilde{y}\tilde{U}\mathcal{L}$ Yj

$$\mathcal{S} \frac{\pm}{\quad} \frac{\%}{\quad} \& \frac{\pm}{\quad}$$

Câu 39: 7URQJ FiF $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ $\overline{V\mathcal{D}X}$ $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ QjR

$$\mathcal{S} \overline{FR\mathcal{W}}^{\frac{FR\mathcal{W}}{FRW}} \overline{W\mathcal{D}Q}^{\frac{W\mathcal{D}Q}{\mathcal{W}DQ}} \frac{W\mathcal{D}Q}{\mathcal{W}DQ} \overline{FR\mathcal{W}}^{\frac{FR\mathcal{W}}{FRW}} \overline{FRV}$$

Câu 40: 7URQJ FiF $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ $\overline{V\mathcal{D}X}$ $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ QjR

$$\mathcal{S} \overline{FR\mathcal{W}}^{\frac{FR\mathcal{W}}{FRW}} \overline{FRV}$$

Câu 41: 7URQJ FiF $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ $\overline{V\mathcal{D}X}$ $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ QjR $\tilde{y}\sim QJ$ "

$$\mathcal{S} \overline{FR\mathcal{W}}^{\frac{FR\mathcal{W}}{FRW}} \overline{FRV}$$

Câu 42: 7URQJ FiF $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ $\overline{V\mathcal{D}X}$ $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ QjR $\tilde{y}\sim QJ$ "

$$\mathcal{S} \overline{W\mathcal{D}Q}^b \frac{W\mathcal{D}Q}{aWbDQ} \overline{W\mathcal{D}Q}^b \pm a \overline{W\mathcal{D}Q}^b \overline{W\mathcal{D}Q}^b$$

Câu 43: 7URQJ FiF $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ $\overline{V\mathcal{D}X}$ $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ QjR

$$\mathcal{S} \overline{FR\mathcal{W}}^{\frac{FR\mathcal{W}}{FRW}} \overline{FRV}$$

$$\& \overline{V\mathcal{L}Q}^b \overline{FRV}$$

Câu 44: 7URQJ FiF $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ $\overline{V\mathcal{D}X}$ $\overline{F\{QJ}$ $\overline{W\mathcal{K}íF}$ QjR

Câu 56:&K R B C Oj FiF JyF WQKQ WQ WQ 7UQJB C EμQJ

$$\$ \frac{S}{} \qquad \frac{S}{} \qquad \% \frac{S}{} \qquad \& \qquad \frac{S}{} \qquad .$$

Câu 57:&K R W JLiWQIFy WKÇ QK±Q JLi WUİ QjR—%mß&ÿk\ \$—'

Câu 58:&K R B C Oj ED JyF FëD PÝW WDP JLiF +m\ FKİİF KİDXWKÍF ÿ~C

$$\begin{aligned} \$ \text{ FRA} \quad \text{BRV} \text{ C FRV A} \quad \text{BFRV} \quad \text{FRVA} \text{ FRVBRV} \text{ C FRV A} \quad \text{BFRV} \quad \text{FRV} \\ \& \text{ FRA} \quad \text{BRV} \text{ C FRV A} \quad \text{BFRV} \quad \text{FRVA} \text{ FRVBRV} \text{ C FRV A} \quad \pm \text{BFRV} \quad \text{FRV} \end{aligned}$$

Câu 59:% L Ç X AW KÍF $\frac{\text{FRV} \sqrt{}}{\text{VLQ} \sqrt{}} \frac{D \text{VLQ}}{D \text{VLQ}}$ Fy NǺW $\frac{D}{D} \text{X} \text{S} \text{U} \sim \text{W} \text{J} \text{ÑQ} \text{Oj}$

$$\$ \frac{\text{FRV} \sqrt{}}{\text{FRV} \sqrt{}} \quad q \quad \frac{\text{FRV} \sqrt{}}{\text{FRV} \sqrt{}} \quad q \quad \frac{\text{VLQ} \sqrt{}}{\text{VLQ} \sqrt{}} \quad q \quad \frac{\text{VLQ} \sqrt{}}{\text{VLQ} \sqrt{}} \quad q$$

Câu 60: 1 Æ X V LQ V LQ W K E u

$$\begin{aligned} \$ \text{ W DQ} \quad \text{E W D Q W DQ E} \quad \text{E W D Q W DQ E} \quad \text{E W D Q W DQ E} \quad \text{E W D Q} \\ + \hat{1} + \quad + \text{D} \& \\ 3 + \text{lj} 1 * \quad 7 5 \hat{1} + \quad \text{l} \hat{a} 1 * \quad 7 \text{H} 1 * \quad * \hat{\text{i}} \& \quad 9 \neg \quad . + 2 \text{!} 1 * \quad \& \text{È} \& + \end{aligned}$$

Câu 1: 7 u P F{VLQ JyFmJLQJDK xQ Jy Yj' $\frac{-x}{y} \frac{t}{t} \$ — \% \sqrt{} \& \sqrt{} ' —$

Câu 2: .KRŞQJ FiFKMWİ ÿÿŞQ ÿmáQJ $\frac{-x}{y} \frac{t}{t} \text{QJ O} \$ \sqrt{} \% \sqrt{} \& \sqrt{} ' \sqrt{}$

Câu 3: &y KDL ðLmWUİ ÿmáQJxWK · QJ KçS YßL ÿmáQJ WK · QJ JçF ÙQJ m EμQJ\$ % & '

Câu 4 7 u P WÑD WYQ ÿE QPUOQY W BİFK ÿ Æ X QJ WK xQ Jy Yj x y \$ $\sqrt{} \% — \frac{S}{\text{©}} \text{' } \& \text{' } \sqrt{}$

Câu 5: 7 t Q K FKL Å X FDR W n B C Q B e i Q J W D B C J E X Å W C B \$ % — & — ' —

Câu 6 .KRŞQJ FiFK JLóD KD& ÿmáQJ WjK · QJ y Oj \$ $\sqrt{} \% \sqrt{} \& \sqrt{} ' \sqrt{}$

Câu 7: &KR ÿmáQJ WK · QJ Æ L T X B D K D I Z ÿE Q P Ñ D C ÿ W ÿ L Q F ÿmáQJ WK · QJ V D F FKR GLËQ W A B C E M D Q J J L i F

$$\$ \text{ C} \quad \text{YQ} \quad — \quad \frac{S}{\text{©}} \quad \% \text{ C} \quad \text{' } \& \text{ C} \quad \text{' } \text{ C} \quad — \quad \frac{S}{\text{©}} \quad \text{' }$$

Câu 8: 7URQJ P»W SK·QJ Y~~Q~~xy 'A~~B~~C FyU~~đ~~đ FQW ÑDB ÿÝ Yj GL~~E~~Q~~AB~~W~~E~~FKQJ %L

WUÑQ~~G~~F~~V~~D~~B~~C WKXÝF ÿmáQ~~x~~ WK·QJ 7uP WÑDCÿÝ ÿLÇP
\$ C Yj~~c~~ %C Yj~~c~~ & C Yj~~c~~ ' C Yj~~c~~

Câu 9: &KR KDIA ÿLÇ~~P~~ 7uP SKmkQJ WUuQK A~~y~~máQ~~F~~BW~~K~~Ý WJN~~y~~LR \$~~Q~~Q~~D~~ E

\$ x y Yjx y %x y Yjx y
& x y Yjx y ' x y Yjx y

Câu 10: 7URQJ P»W SK·QJ W~~Ñ~~D F~~K~~RY~~K~~QJ~~đ~~đ FQJyWK·Q~~đ~~đ x y 9L~~Ã~~

SKmkQJ WUuQK ÿmáQ~~J~~ W~~K~~·QJ~~d~~Y~~B~~DW~~đ~~đ F~~W~~KjQK WDP JLiF FkQdFy~~đ~~đ F~~đ~~íQ

\$ đ x y đ x y đ x y đ x y
đ x y đ x y đ x y đ x y

3+lj1* 75Î1+ l~~à~~1* 75Ñ1

Câu 1: 7URQJ P»W SK·Q~~D~~xy ßLK~~R~~Ë~~y~~W~~Ã~~QJ~~đ~~đ FyU~~S~~QmkQJ WU~~u~~Q~~K~~ 7kip

Yj EiQ~~N~~tQ~~đ~~Q~~đ~~ O«Q OmçW Oj

\$ I R %I R & I R ' I R

Câu 2: 7URQJ P»~~O~~xySK~~y~~·Q~~đ~~QJ WUzQ QjR V~~D~~X ÿk\ ÿL TXD ÿLÇP

\$ x y x %x y x y & x y x y ' x y x y

Câu 3: 3KmkQJ WUuQK \$j~~R~~m~~G~~Q~~đ~~đ W~~đ~~u~~đ~~Q~~K~~j F~~đ~~D ÿmáQJ WUzQ"

\$ x y x y %x y x y & x y x y ' x y x

Câu 4: &KR ÿmáQ~~C~~J WU~~z~~Q x y &KÍ UD R~~đ~~Q~~đ~~W~~đ~~Q~~đ~~J FiF P~~đ~~EQK ÿ~~Ã~~ VDX

\$ C Fy WkP %C ÿL T~~M~~XD & C ÿL T~~A~~XD ' C Fy EiQRNtQK

Câu 5: &KR ÿmáQ~~C~~J W~~đ~~U~~z~~Q~~K~~P WKXÝF~~đ~~đ ÿmáQ~~J~~^t W~~K~~ÿQJTXD A~~K~~DL Y~~đ~~ÇP 7tQK

EiQ NtQK ÿmáQ~~J~~\$ W~~U~~zQ %R √ & R ' R

Câu 6: 7URQJ P»~~O~~xySK~~F~~Q~~đ~~ ÿmáQ~~J~~ WUzQy 3KmkQJ W~~W~~U~~S~~Q~~đ~~Q~~đ~~ÃQ~~đ~~W~~đ~~LE~~đ~~L

A Oj\$ x y %x y & x y ' x y

Câu 7: &KR ÿmáQ~~C~~J WUzQy Yj ÿmáQJ W~~K~~y·QJ EL~~Ã~~W ÿmá'Q~~B~~³W~~K~~W~~Q~~J

KDL ÿLÇP A~~K~~B~~Q~~ ÉL~~E~~đ~~M~~ ÿR~~đ~~ W~~đ~~KQ~~đ~~J %√ & √ ' √

Câu 8: &KR ÿmáQ~~C~~J WUzQy Yj ÿmáQJ W~~K~~yQ~~m~~ máQJ W~~K~~W~~Q~~ÃS [

Y~~ß~~L ÿmáQ~~C~~J W~~đ~~zQ~~y~~j F~~K~~Í NKL

\$ m KR~~m~~F %m KR~~m~~F & m KR~~m~~F ' m KR~~m~~F

Câu 9: &KR ÿmáQ~~C~~J W~~U~~zQx y Yj ÿmáQ~~J~~ W~~K~~y·QJ 7uP W©W F~~S~~ FiF ÿ

VRQJ VRQJ Y~~ß~~Ld ÿmáQ~~J~~³W~~W~~Y~~K~~m~~Q~~QJ W~~W~~U~~đ~~Q~~K~~\ FXQJ Fy ÿÝ GjL E~~μ~~QJ

\$ x y Y~~đ~~ y %x y & x y ' x y Y~~đ~~ y

Câu 10: &KR ÿmáQ~~C~~J WU~~z~~Q x y Yj ÿLÇP máQJ W~~K~~·Q~~đ~~³W~~đ~~ W~~đ~~L

ÿLÇMP N VDRAF KQJ WUXQJMLÇF S K D k Q J W U u Q K O j
\$ x y % x y & x y ' x y

là 1* (/ , 3

Câu 1: 7 U R Q J F i F S K m k Q J W U u Q K Q J P D Ø j S K m k Q J W U u Q K F O L S
\$ x y 1 % $\frac{x}{y}$ 1 & $\frac{x}{y}$ 1 1 , $\frac{x}{y}$ 1 1
— —

Câu 2: (O L S F y ÿ Ý G j L W U é F j F y F j Q J W U é F F O S K F k Q J W U u Q K F K t Q K W
\$ $\frac{x}{y}$ 1 % $\frac{x}{y}$ 1 & $\frac{x}{y}$ 1 1 , $\frac{x}{y}$ 1 1

Câu 3: má Q J (O L S $\frac{x}{y}$ F y P Ý W W L r X ÿ L Ç P O j
\$ % $\sqrt{\quad}$ & $\sqrt{\quad}$ ' .

Câu 4: 3 K m k Q J W U u Q K F F K H O L S ÿ L Y j X Ø y W L F X ÿ L Ç P
\$ $\frac{x}{y}$ 1 % $\frac{x}{y}$ 1 1 & $\frac{x}{y}$ 1 1 , $\frac{x}{y}$ 1 1

Câu 5: 7 u P S K m k Q J W U u Q K L F S K F y K W U F F F O L S W L r X W U é F F j E Q J
\$ $\frac{x}{y}$ % $\frac{x}{y}$ & $\frac{x}{y}$, $\frac{x}{y}$

Câu 6 & K R H O L S F y S K m k Q J W U u Q K W U Q J N K R S Q J W F K F F F W H Q L Ç P F y
ÿ Ñ Q K D L W L r X ÿ L Ç P % $\sqrt{\quad}$ & $\sqrt{\quad}$ ' .

Câu 7: 7 U R Q J P » O x y S K K Q J F y K D L W L (- X ; 0) L Ç P ; 0 Y j ÿ L T X (0 ; 3) L Ç P L Ç P Q j R
V D X ÿ k \ (A Y K W K F D M F

\$ M — $\frac{\sqrt{\quad} S}{\textcircled{\cdot}}$ % M — $\frac{\sqrt{\quad} S}{\textcircled{\cdot} 1}$ & M — $\frac{\sqrt{\quad} S}{\textcircled{\cdot} 1}$ ' M — $\frac{\sqrt{\quad} S}{\textcircled{\cdot} 1}$.
© © ©

Câu 8: & K (R) $\frac{x}{y} + \frac{y}{x} =$ 0 Ý W ÿ má Q J W K · Q (J) ÿ L Y j T X B Q J L Ç P Q J Y B (E) W U u F K D L Ç
S K k Q M E L F j W 7 t Q K y Ñ G j L $\sqrt{\quad}$ % $\sqrt{\quad}$ & $\sqrt{\quad}$ ' $\sqrt{\quad}$

Câu 9: / ± S S K m k Q J W U u Q K E K t Q K Ñ W F y L F M D H O L S P j M F F Y X { Q M W F L
 $\sqrt{\quad}$ $\sqrt{\quad}$ ©
\$ $\frac{x}{y}$ % $\frac{x}{y}$ & $\frac{x}{y}$, $\frac{x}{y}$

Câu 10: 7 U R Q J P » W S K · Q O x y F L K R E B V F S ÿ Ý Y j K D L A ÿ L Ç P B 7 u P W U r
E ÿ L Ç P V D R F K R A B C F y L G E E Q W t F K O B Q Q K © W
\$ C % C & C ' C

3 + e 3 7 î 1 + 7 , Â 1

Câu 1: 7 U R Q J P » W S K O x y F L K R E B V F S ÿ Ý Y j ÿ L Ç P O j S Q M F T X D S K p S W İ Q
Y p F W k 7 u P W Ñ D v y \$ Y p F W k % V & V ' V

Câu 2:&KR KuQK ~~ABC~~W~~K~~Q KÃW OX±Q Q~~J~~RL VDX ÿk\

\$ ^{T_{JJG}}_{DC} A B % ^{T_{JJG}}_{CD} B A & ^{T_{JJG}}_{DI} I B , ^{T_{JG}}_{IA} I C

Câu 3:7URQJ FiF PĚQK ÿÂ WDX" PĚQK ÿÂ QjR

\$ 3KpS WĪQK WLÃQ ELÃQ ÿmáQJ WKK~~QJ~~FW~~KJ~~Q~~Q~~ ÿmáQJQJWK·QJ VRQJ

% 3KpS ÿÕL [íQJ WUéF ELÃQ PÝW W~~QJ~~ JLiF WKjQK PÝW WDP JLiF

& 3KpS ÿÕL [íQJ W~~QJ~~ ELÃQ~~QJ~~ PÝW~~Wj~~Q~~Q~~ ÿmáQJ~~QJ~~W UZQ F

' 3KpS WĪQK WLÃQ ELÃQ ÿmáQJ WKK~~QJ~~W~~Kj~~Q~~Q~~ ÿPÝW ÿmáQJ WK·QJ

Câu 4:7URQJ P»W S~~Ox~~QJF~~W~~Ã~~B~~Q ÿLÃW B C 3KpS WĪQK W~~B~~Ã~~Q~~ELÃ

'ABC WKj~~Q~~ABC WmkQJ íQJ FiF ÿLÇP G~~z~~Ñ~~F~~ÿ~~B~~C W~~Qj~~Ñ~~Q~~J WkP

\$ Gc %Gc & Gc ' Gc

Câu 5:7URQJ P»W S~~Ox~~QJ~~W~~Ã~~Q~~DS~~K~~ÿmkQJ WUu~~QK~~ ÿmáQJ~~QJ~~W LÇP WKu Qy EL

A WKjQ~~K~~ ÿLÇP % ÿLÇP & ÿLÇP ' ÿLÇP

Câu 6:7URQJ P»W S~~Ox~~QJ~~W~~Ã~~Q~~DS~~K~~ÿmkQJ WUu~~QK~~ ÿmáQJ~~QJ~~W LÇP WKu Qy EL

\$ cx y % cx y & cx y ' cx y

Câu 6:7URQJ P»W SK·Q~~x~~ W~~W~~DP ÿ~~S~~KmkQJ WUu~~QK~~ ÿmáQJ~~QJ~~W LÇP WKu Qy EL

C x y y T~~X~~DP~~Y~~ ÿL [

\$ x y % x y & x y [' x y x

Câu 7:7URQJ P»W S~~Ox~~QJF~~W~~Ã~~Q~~DS~~K~~ÿmkQJ WUu~~QK~~ ÿmáQJ~~QJ~~W LÇP WKu Qy EL

x y Yjx y *LSTV~~Qj~~ SKpS WĪQK W~~L~~Ã~~Q~~W~~W~~K~~R~~Q~~K~~H~~I~~

7uP WÑD ÿ~~Y~~ ÿ~~F~~ED~~Y~~ HFWK~~u~~ & u ' u

Câu 8:7URQJ P»W S~~Ox~~QJF~~W~~Ã~~Q~~DS~~K~~ÿmkQJ WUu~~QK~~ ÿmáQJ~~QJ~~W LÇP WKu Qy EL

WLÃS KDL SKpS WĪQ~~K~~ WLÃQ~~W~~K~~H~~R F~~W~~K~~Y~~ ÿmáQJ~~QJ~~W LÇP WKu Qy EL

SKmkQJ WUuQK Oj

\$ x y %x y x y & y x y ' x y y

Câu 9:7URQJ P»W S~~Ox~~QJF~~W~~Ã~~Q~~DS~~K~~ÿmkQJ WUu~~QK~~ ÿmáQJ~~QJ~~W LÇP WKu Qy EL

x y 7uP TXû W~~t~~FK ÿíQK

\$ /j ÿmáQJ WK·QJ Fyx~~S~~KmkQJ WUu~~QK~~ ÿmáQJ WK·QJ Fyx~~S~~KmkQJ WUuQK

& /j ÿmáQJ WK·QJ Fyx~~S~~KmkQJ WUu~~QK~~ ÿmáQJ WUzQ Fyx~~S~~KmkQJ WUuQK

Câu 10:7URQJ P»W S~~Ox~~QJF~~W~~Ã~~Q~~DS~~K~~ÿmkQJ WUu~~QK~~ ÿmáQJ~~QJ~~W LÇP WKu Qy EL

SKmkQJ YX{~~QJ~~ ÿ~~F~~ELÃQ ÿmáQJ~~QJ~~W LÇP WKu Qy EL

Ô, ;ì1* 75è&

Câu 2: +uQK QjR VDX ÿk\ Oj Fy WUéF ÿÖL [íQJ
\$ 7DP JLiF E©W N'u 7DP JLiF FkQ & 7í JLiF E©W N'u +uQK EuQK Kj

Câu 4: 7 U R Q J P » W S K x Q J F W Ñ D y m á Q J x W y K · Q J ! Q K ð ë D X D S K p S ÿ Õ L [í Q J
S K m k Q J W U u Q K

\$ x y % x y & x y ' x y

$$\hat{O}_i \in \mathbb{R}^{n \times n}$$

\$ +uQK YX{QJ % +uQK WUzQ & +uQK WDP JLiF y'AX+uQK WKRL
Câu 2: 7URQJ P»W SExQJFWÑD y'Y7uP §QAKTFED SKpS y'ÖQ [íQJ WkP

Câu 3: 7 U R Q J P » W S Q x Q J S W ã S y ã Y L I [í E U ã V k P W K J Q K W I K F y W ã N D ÿ Ý O j
\$ | % | & | ' |

Câu 5: 7 U R Q J P » W S Q J F W Ñ D ñ Ắ Q J F W U S Q m k Q J W U ư Q K y
7 u P s Q K ỹ m ắ Q J F W U S Q D S K p S ỹ Õ L í Q J W k P

70 / 801
%jL *L§L FiF KË SKmkOJ WUuOK

$\begin{array}{c} -X \\ \circ \\ \circ \\ \textcircled{R} \\ \circ \\ \ominus \end{array} \quad \begin{array}{c} \text{---} \\ \text{---} \end{array} \quad \begin{array}{c} t \quad X \\ D \\ X \end{array}$

$$\begin{array}{ccc} \text{---} & & \\ \circ & & \text{xd} \\ \text{X} & & \\ \circ & & \\ \textcircled{\text{R}}\text{X} & \text{X} & \text{E} \\ \circ & & \\ \circ & & \text{X} \\ \text{---} & & \text{xd} \end{array}$$

%jL *L§L FiF E©W SKmkQJ WUuQK VDX

$$D \quad x \quad x \quad x \quad \frac{x}{x} \quad x \quad t \quad |x| \quad |x| \quad dx \quad \frac{G^x}{x \quad x} \quad t$$

%jL 7uP JLi WUİ FëD WKDP VÕ ÿÇ ESW VDX QJKLEP ÿ~QJ YßL PÑL
± [D E P P R f [P ±

%jL 7uP JLi WUİ FëD WKDP VÕ ÿÇ ±E\$WdPVDX Y{ QJKLEË± [D± [

%jL &KR SKmkQm WUuQK m YßL JLi QjR FëD P WKu

D 3KmkQJ WUuQK FyQQJMUËQK Ey 3KQmJKLËP WUil G©X

F 3KmkQJ WUuQK Fy KDL QJKLEP smkkQJ ELKv ELËV &y KDL QJKL

%jL 9βL JLi WUİ QjR FëD P W_uK_x_u K_m VDX_! F_pÖJK_m_xL_xEP t !

%jL *L\$L FiF SKmkQJ WUuQK Yj E©W SKmkQJ WUuQK VDX

a $\sqrt{x}$ x x x b $\sqrt{x}$ x x c $\underline{x}$ $\underline{x}$ $\underline{x}$ d $\sqrt{x}$ x x

e $\frac{\frac{x}{x}}{x}$ f $\frac{x}{x} \cdot \frac{x}{x}$ g $\sqrt{\frac{x}{x}}$ t

%jL D &KR FRV [WtQK VLQ[WDQ[FRW[

E & K ~~E~~ W D Q S $\xrightarrow{S_D}$ 7 t Q K C F R ~~M~~ Q F B V

%jL &KR C — ^S ;pW G©X FiF EL QXSWKEF WDSQRFV dLQ © ' 31

%jL 5~W JÑQ FiF ~~ALGXWKIF~~^{XF}_{VXQ}^R_{DB}^V_E $\sqrt{VLxQ}$ xFRW FxRV WDQ

%jL 7tQK JLi WUİ FëD ÊLÇX WKÍF

$$D_A = \frac{F_{RDW}}{F_{RDW} + D_{NDQ}} \approx \frac{D_{NDQ}}{D_{NDQ} + V_{LQj}} \approx \frac{S}{S + V_{LQj}}$$
$$E \quad \& \quad \frac{V \quad DQ}{V \quad DQ} \quad \frac{DF \quad R \quad W \quad DQ}{DF \quad R \quad V \quad DQ} \quad \frac{DF \quad R \quad V}{DF \quad R \quad V}$$
$$\%jL \& KíQJ \text{ PLQK FiF } \ddot{y} \cdot QJ \xrightarrow{x^F} \frac{V \times Q}{x^F} \text{ WKíF } \xrightarrow{x^F} \frac{V \times R}{x^F} \text{ VDX } \xrightarrow{x^F} \frac{R \times V}{x^F} \text{ D } \text{ L } \text{ E } \text{ M } \text{ E } \text{ Q } \text{ V } \pm \text{ V } \text{ L } \text{ Q } \text{ F } \text{ R } \text{ V}$$
$$F \frac{\quad}{FRV} \frac{x}{xVLO} WDO \quad R \quad G[\quad V \quad] \quad V \quad \pm \quad [\quad V \quad] \quad V \quad \frac{FRW}{FRW} \frac{VLO}{xVLO} VLO \quad xFRV$$
$$I = \frac{X}{Y} \cdot \frac{L}{L} \cdot \frac{Q}{Q} \cdot X \cdot W \cdot D \cdot Q$$

$\%jL \quad 7t \quad \overset{S}{\text{FRV}} \quad \overset{S}{D} \quad \overset{S}{Q} \quad \overset{S}{\tilde{A}MD} \quad \overset{S}{D} \quad \overset{S}{Yj} \quad \overset{S}{D} \quad \overset{S}{S}$
 ©

$$\begin{array}{c} \text{\%jL} \quad \&K\acute{I}QJ \quad PLQK \text{---} \frac{xW}{xW} \frac{D}{D} \frac{SO}{O} \frac{\S}{\text{\textcircled{C}}} \\ \text{\%jL} \quad \&K\acute{I}QJ \quad PLQK \text{---} \frac{xW}{xW} \frac{D}{D} \frac{SO}{O} \frac{\S}{\text{\textcircled{C}}} \end{array}$$

%jL 7tOK JLi WUï FëD FiF ELCX WKíF

DA $\overset{S}{VLO}$ $\overset{S}{-FRV}$ $\overset{S}{FRV}$ $\overset{S}{C}$ $\overset{S}{FRV}$ $\overset{S}{VLO}$ $\overset{S}{FRV}$ $\overset{S}{VLO}$ $\overset{S}{FRV}$

[illegible]

%jL &KíQJ PLQK ELÇX WKÍF VDAANK{QJ SKé WKXÝF YjR
DVLQ FRWD FENDQ WEQ FRW E WDFQW DWDQ WDQ^D

+Î1+ +Ð&
%jL&KR ELÃW WUXQJ ŷLÇP ED F¥QK FæD PÝW0W±P J±SF SOKjmk QJ W
FëD ŷmáQJ WK·QJ FKÍD PÛL F¥QK FëD WDP JLiF ŷy
%jL 7URQJ P»W SK·QJ WÑD ŷÝ FKR WDP FëD PÝW F¥QK K Dlj WUX
Oj [\ ± [\ ;iF ŷíQKWÑDlŷF FiF ŷíQK FëD
%jL/±S SKmkQJ WUuQKáWUQWKTQJWGFW D RYQV Bx WUmáQJ K

D G TXD 0 ± Yj YX{QJ[JyF YßLEÿW G TXD JÕF WÑD®ÿÿÝÝtYj VR

%jL;pW Yİ WUt WmkQJ ÿÖL FëD PÛL [F±S\ymáQJYWKQJYDX D G

E ®ÿtYj®G u F G[\ ± ®ÿYjG

%jL&KR ŷLÇP 0 Yj ŷmáQJ WK·QJ G ŷ[máQJ WK·QJ 9G Ĥ W L S T V X U D u Q

```
%jL&KR   ŷLÇP 0           ŁĀW SWUŲQK ŷmáQJYWKİ-ŲKJ ŷŁÇP İXFDÝW NKR
%jL &KR ŷmáQ'J W[K±QJ±       Yj ŷLÇP 0
D 9LĀW SKmkQJ WUŲQK ŷmáQD WKJQVX{ŲJPJYFNĐBŁY KuQK FKLĀX
E      7uP ŷLÇP 0Ł ŷŐL [íQJ YBL 0 TXD
```

%jL &KR ÿmáQ'J FwKSQm kQJ WUQOK WKDP^WV^WÕ

D 7uP ŷLÇP 0'QYujPFwFUKrQLÇP \$ PÝW NKRSQJ EμQJ
E 7uP WÑD ŷÝ JLDR ŷLÇP FFLëDnyánQJWVQJQJ \
F 7uP ŷLÇP 0'WVUFQR \$0 Oj QJ³Q QK©W

%jL &KR SKmkQJ W+UuPQK±[P± \ P Oj WKDP VÕ
D 9ßL JLi WUİ QjROFëSK m kQK uWUuQK ŷmáQJ WUzQ"
E 1ÃX Oj ŷmáQJ WUzQ Km\ WuP WÑW UzyQ WkRHYj Ei

%jL 9LÃW SKmkQJ WÜTØØ ÿñáQÞ \$UzQYjyØ ± ±

%jL 7uWÑD ÿÝ JLDR ÿLÇP 'F^xQJD¹2t^táQjÿmáQJWUzQ &\ ± [±

%jL 9LÃW SKmkQJ WULuQKDÿ\$áQJ WUzQWKXjYFyÿWáQJ WK·QJ G [±

%jL 9LÃW SKmkQJ WULuQKĐyĐáQJ WUzQ ÑtQK 5y EiQ

% j L 9 L Ã W S K m k Q J Ã W U Y R I K j m l Ã Q S x W X U z Q & W ¥ L ÿ L Ç P 0 W K X Ý F ÿ m
ÿ Ý E µ Q J [

%jL &KR ýmáQJ xWUyzQx&y Yj ýmáQJ WK·QJ G [\ ± 9LÃ
' EL'ÃW G 7uP WÑD ýÝ WLÃS ýLÇP

% j L & K R ÿ m á Q J x W ŷ z Q x & y Y j ŷ L Ç P \$

D & KÍQJ PLQK UμQJ \$ QμP QJRjL ŷmáQJ WUzQ Q FèD & NE¿ V
E 9LÃW SW WLÃS WwXWÃQ F èD XÃQ F XÃQ K ·QJ F G B L ŷmáQJ