

6 â *' 7 9 -1+ 3+ Ò & Ä 7+, .+|2 6 È7 &+ "7 /l æ1* & È & 0 Ð1 /ª1
75l à1* 7+37 Ò1* °8 1 0 + Ð &

Å WKL J×P WUDQJ

Thời gian làm bài: 90 phút;
(Không k^hể gian giao ý)

+ Ñ WrQ WKt VLQK
6 Õ EiR GDQK

0 m ý Å WKL

&kX 7±S QJKLEP FëD E@WxSKmkQj WUuQK

\$ S f % f % S > @
& S > ' S f > % f

&kX &KR KuQSKABCDySLDR WX\ÃQ FëDSKBDLYJSCWOSKy·qáQJ WK·QJ
\$ SB % AC & SC ' SA

&kX 7uP KË x⁷ ÕWURQJ NKDL WULÇQ QKf WKfF E HZ WURQJ FëDQJX\rQ G
WK Ó D4C³ m Q2C² A_n³.
\$ % 14784 & '

&kX 7URQJ P»WySRKKQJMLÇP +ÓL FiF ýLÇP VDX ýk\ ýLÇP TQjR SKpSQ
TXD\ WURF TX°D\
\$ % √;0 & (2;0) ' 0;2√

&kX 7uP VÕ QJKLEP FëDRSKmWQJÓWURQK @
\$ % & '

&kX &KR KuABCDABSCD »AB a AD b AA c *ML Oj WUXQJ ýBÇP FëD ýR
FKÑQ NK·QJ ýİQK ý~QJ WURQJ FiF NK·QJ ýİQK VDX
JJJG G G JJJG G G JJJG G G JJJG G G
\$ AM a -b -c % AM a -b c & AM -a -b -c ' AM a b c

&kX $\frac{1}{x_1} \frac{1}{x_2}$
\$ ± $\frac{3}{10}$ % ± $\frac{10}{3}$ & $\frac{10}{3}$ ' —

&kX &KR Wí GLËQ \$%&' WURQJ ýy JyF JLóQKDEñLmáQJ WIKÇQJESW
F¥QK \$& ý»W 0»W SK·QJ 3 ýL TXD ýLÇP 0 Yj VRQJ ýVWQJ
FëD ýLÇP 0 ýÇ GLËQ WtFK WKLÄW GW E Q IF PD WUSKK QWí GLËQ W\$ %&i' Wk
\$ % & '

&kX 7tQK WÙQJ FiF QJKLEP FëDRSKmkkQPSVLOxVLOx VLQ
\$ S % S & — S ' — S

ABCD.A'B'C'D'

AD',DB AM DN x 0 x a√ MN//A'C

x $\frac{a\sqrt{}}{}$ x $\frac{a\sqrt{}}{}$ x $\frac{a\sqrt{}}{}$ x $\frac{a}{}$

&kX .K·QJ ýİQK QjR ý~QJ

Å WKL

\$ W D Q xœ^S k S

% V L x Q x œ k S

& F R V xœ^S k S

' V L x Q xœ^S k S

&kX 6 Õ K ¥ Q J W K Í N W U R Q J D K D I E W U Q Q Q K İ W K Í F

\$ Q & D^N E % & D^N E^N & Q & D^N E^N E ' & D^N E^N E^N

&kX &K R W ± S K ç S \$ J × P S K « Q W ñ 7 u P F V Õ W i F S W k S F R Q F y S K «
\$ % & \$ '

&kX &K R G m \ V Õ L V Õ K ¥ Q J W K Í K D L F è D G m \ O j "

\$ % & '

&kX 7 ± S [i F y ĩ Q K F y è D K i P V Õ O j
c R W

\$ D R — k ? S k Z̄[®] • % D R ^{1/2}/_{3/4} — k ? S k Z̄[®] • ^{1/2}/_{3/4} ç

& D R — k ? — k S k Z̄[®] S S ' D R — k ? • — k S k Z̄[®] ^{1/2}/_{3/4} S • ç

&kX má Q J W K · Q J Q j R T X D \$ Y j V R Q J \ V R Q J Y ß L y má Q J W K · Q J
\$ [± \ % [± \ ± & [\ ± ' [\ ±

&kX * L i W U ĩ O B Q Q K © W Y j J L i y W U ĩ Q K © Q Q © W F W D O K j P V Õ
\$ Y j % Y j & Y j ' Y j

&kX &K R W A B C J L A F * M I L E Q U A C O j

\$ √ % √ & — ' —

&kX + È S K m k Q J W U u Q K V D X y x y E D R x Q K L r X Q J K L È P
y x y x

\$ % & '

&kX * L i W U ĩ Q K Ó Q K © W F è D E y ç x S W K y i y ! Y x y O j
y © x © ' 1 ' 1

\$ % — ' —

&kX 7 u P W © W F S F i F J y ç S u ĩ W Q j W F è D K

F y E Õ Q Q J K L È P S K k Q E L È W O ± S W K j Q K P Ý W F © S V Õ F Ý Q J
\$ % & '

&kX + D L K u Q K E u Q K K j Q K \$ % & ' Y j \$ % () Q µ P È W U R Õ W K T X I S Q j W S D X Q Y J
\$ \$ ' % () % \$ % ' () & & (& \$ %) ' \$) ' % (&

&kX + j P y Õ m x m x y × Q J E L ã Q W U d N K R S Q J F K Í N K L P W K X Ý F W
\$ < d % d f d & d f d ' d >

&kX 0 Ý W N K X U ĩ Q J F y W U ó P W ç Q K Õ J Ū ç J L ã W W Õ F y Ý V L Q K W U m ã Q J
P Û L Q P + Ó L V D X J y ç F Á N F y X E D i P Q K L r X P p W N K Õ L J
\$ % & '

&kX 7 t Q K W Û Q J F i F Q J K L È F x F è D √ S K m k Q J W U u Q K

\$ % & '
 &kX V L^xQ -^x VmL Qx FRV S S¹
 \$ m % m & m ' m
 &kX &KR Kjp fax x x Fy^p yx WKİ yL TXD yLÇP \$ % NK
 \$ % & '
 &kX &KW DQ[√] Yj S -^S D WKu BRV WUjİ
 \$ cos D [√] %cos D [√] & cos D - ' cos D -
 &kX &KR KjPf(x) Ö³ x² 2x² x¹ , khi x z1 yÇ I [O LrQ WéF W¥L [WKu P EµQ
 \$ % & '
 &kX \$ % LÃQ yR¥Q WK·QJ WKjQK yRG QQWjR·QJ Wyk·yJ EjdQJ Q SX
 % % LÃQ WDP JLiF WKjQK WDP JLiF EµQJ Qy ELÃQ WLD WKjQK WLD
 & % LÃQ ymáQJ WUzQ WKjQK ymáQJ WUzQ EµQJ Qy
 ' % LÃQ ED yLÇP WK·QJ KjQJ WKjQK ED WİÇP E WKE·QJ yKQJ JyYj ESR W
 &kX &KR FiF KJR WÖ^x y ^x x y x x .t KLE X D E F O«Q
 KjP VÖ KjP VÖ FK¹Q KjP VÖ Oç KjPKM Ö y NK{QJ EµQJ ± NK{QJ Oç .
 \$ % & '
 &kX &KR WİABOD E QNL * Yj (O«Q OmçW Oj WUÑQJ WkP QYBPG JLiF \$ % ' yYjQ \$ % &
 \$ máQJ WK·QJ *(Yj &' FKpR QK D máQJ WK·QJ *(VRQJ VRQJ YBL ym
 & máQJ WK·QJ *(F³W ymáQJ WK·QJ *(F³W ymáQJ WK·QJ
 &kX &KR JLB O Lr^xQ -^x a YB a · Z Y^a Oj SKkQ VÖ WÖL JLSQ &KÑQ NÃ
 NÃW TXS ODPX FèD
 \$ % & '
 &kX &y KDL FKLÃF KÝS +ÝS WKÍ QK©W +ÝS WKÍ QK©W FKLÃF KDL KDL EµQJ EµQJ
 /©\ QJ⁻X QKLrQ Wİ PÛL KÝS PÝW Yİ DQ K ELOj; iF VX©W yÇ ymçF KDL EL
 \$ - % - & - ' -
 &kX &KR NKDLxWULÇQ x a ax ax ax a x
 a ù QJa a
 \$ % & '
 &kX &KR Ku QKABCK FyS FiF SA SQ K y{L PÝW YX{SA SBy SCY ÑIL Oj WUXQJ yL
 FèD .KL yy JyF JLÓD KIL Yip á QJ W'K·QJ
 \$ % & '
 &kX 7uP W©W F\$ FiF Jmi yç U\$ FèD Q W W DQ Pu Q F R VFy QJKLEP
 \$ m d % m & m t KRm Fd ' m d d
 &kX 7 Û QJ Fy JLi WUİ EµQJ
 \$ % & '
 Å WKL

&kX 7i FiF FKó VÖ Fy WKQQQ±SQÿmKçFQEDyR QFKlórXŒŒ{WŒ
 \$ % &
 &kX &KR Gm\ VŒçF [iF ŸüQKuEãL $\frac{u_n}{u_n}$ n
 .KL yLP $\frac{u}{u}$ $\frac{u}{u}$ $\frac{u}{u}$
 \$ — % — & — ' —
 &kX +jP QjR VNK{QJ KjP Oç
 \$ y xx x %y x & y $\frac{-}{x}$ ' y x
 &kX 7URQJ FiF PËQK ŸÅ VDX PËQK ŸÅ QjR Oj PËQK ŸÅ
 \$ OLP YBLOj VÖ QJXlrQ GmkQ1ÃX WKuⁿ OLP
 &1ÃX uLP Yj QLP W $\frac{u}{v_n}$ $\frac{a}{b}$ ' 1ÃX uLP Yj QLP fW $\frac{u}{v_n}$
 &kX &KR SKmkQJ WUuQK Fy FiF KË VÖ D E F NK{QJ kp %LÃV
 FKR Fy EÖQ QJKLËP .KL Ÿy JLi WUİ QKÓQK©W FëD ELÇX WKÍF
 \$ % &
 &kX &y KÑF VLQK Yj WK«\ JLiR ŸmçF [ËBRWQKQKXKFQFKQ[ÃSQVDR
 JLiR NK{QJ ŸíQJ F¥QK QKDX"
 \$ FiFK % FiFK & FiFK ' FiFK
 &kX &KR Kjp MÖ $\frac{2\sqrt{1-x}\sqrt[3]{8-x}}{x}$ % LiñWx $\frac{m}{n}$ YBLOj SKkQ VÖ WÖL JLSQ
 .KL Ÿy Oj
 \$ % &
 &kX 0ÝW QKyp E¥Q KÑF VLQK F•QJ KÑE DQPSj Q6KkW WPKQJ ŸQ KFDy9
 1Kyp E¥Q Gõ NLÃQKFKQKSNR©QNLËP WUQ BFFXÖL FKLSD QVSLQJ-X QKLrQ
 KjQJ GÑF Ÿç FKés KuQK WtQK [iF VçFQWQJçFKQK QKQDLQK Yj 1JÑF
 \$ $\frac{3}{4}$ % $\frac{2}{5}$ & $\frac{1}{3}$ ' $\frac{2}{3}$
 &kX &KR KuQK FKys 6 \$ % & *ÑL 0 1 O«Q&OmçW yLjçW WUXQJ ŸE¥QPKF\$&
 \$, & 7KLÃW GLËQ FëD KuQK QKKSQK WUEãL P»W SK·QJ 01,
 \$ +uQK WKDQJ % +uQK QJË JLiR +uQK WDP JLiF +uQK Wí JLiF
 &kX 7URQJ P»W SK·QJxYBEKREWDEQKŸFQ Fy FiF BEmçF FñLROj WUõF
 WkP WDAJCJLMFOj WUXQJ BCçPuP¥QñDA ŸÉL ãVQKy mE F³WKýQñQBC WK¥IQJ
 D(0;2) ŸmáQJMWKFQSKmkQJ+VU=QKj ŸAQWKXŸF ŸmáQJ2WV=QJ
 \$ % &
 &kX &KR KuQK FKys 6 \$ % & ' Fy Ÿil Oj KuQKQEQQKmkQJQJWWPJXQJ*ŸLQ
 *LDR WX\ÃQ FëD P»W SK·QJ 012 Yj P»QW "SK·QJ \$ % & ' Oj ŸmáQJ WK
 \$ 21 % 2\$
 & 20 ' máQJ WK·QJ TXD 2 Yj VRQJ VRQJ
 &kX 7K«\ ; Fy FXÖQ ViFK J×P FXÖQ ViFKXÖQ ViFKXÖQ V&FK FxÖ
 PÝW NKiF QKDX 7K«\ ; FKÑQ QJ-X QKkraqJ FJKÖQPÝMFKñç QLPQSKZQ
 FXÖQ ViFK FzQ O¥L FëD WK«\ ; Fy Ÿë P{Q
 \$ $\frac{5649}{6435}$ % $\frac{5549}{6435}$ & $\frac{5749}{6435}$, $\frac{5949}{6435}$

[illegible]