

ck) I kfgR; eaof.kr ykd thou dh okLrfod vo/kkj.kk,i%,d vuqkhyu

jkgv dkr dękj*

ykd thou ds okLrfod vo/kkj.kk,vka ea ck) /keZ dk egROIwKZ ; ksnku gA , d k ughagSfd ; svonku l oFkk ck) I kfgR; eagh ifjyf{kr gkrh gS vfi r q ; s vo/kkj .kk, a l d dfr ds pj.ko) rk dk , d l kacki kak ve; ; u gđ ifjUr q ykd thou ds ft l i {k dks ck) /kelobyfEc; ka us ubZ ifjHkk'kk l s ifjHkk'kr fd; ka og fu% Ung , d ubZ ; k=k i Fk dk l 'tu d jr h g bZ ut j vkrh gA l d dfr ds bu ogUkj vk; kela dks dbZ dkj dka ds : i ea j s k d r dj ve; ; u fd; k tkrk gA vxj ge n s [karkck) I kfgR; }kjk egkrEk cđ ds l e; dsol=ka v s j ifj/kku ds l Ecll/k eal epr tkudkj h ikr dh tk l dr h gA egki fjfuokZ k l = ds vuq kj tc cđ o s kkyh uxjh x; } rksogk ds ukxfj dka us j a k f c j a s o l = igu dj mudk Lokr fd; ka os , d sol= igusgg Fk s tks muds 'kjhj ds j a k l sey [kkr s FkA l k oys j a k ds yk s k a us x g j s u h y s j a k ds o l = v s j v k h k k . k i g u s g g F k s v s j x s j o . k z d s y k s k a u s g Y d s j a k d s d i M l a v s j v k h k k . k d k s / k k j . k f d ; k g p k F k A f l f j d k y & d f . . k t k r d e a , d ; p r h d k o . k u g S f t l d k u k e ' d k y d f > . k ' F k A ' t c o g , d J B ' l s f e y u s d s f y ; s x b j r k s m l u s u h y s j a k d s o l = / k k j . k k f d ; s F k s v s j u h y e f . k ; k a l s g h v i u k U l a k j f d ; k F k A l o l k / k k j . k i # ' k a d s i f j / k k u e a i k ; % n k s o l = g p k d j r s F k s m U k j h ; ' n j e k z v s j v l r j o k l d ' a / k k o l = ; k / k r h i z l E i l l u o x z d s J B ' l n ' k y l x f l j i j m ' . k h . k 1 / 4 x M h z H h c k / k d j r s F k A f l = ; k a v / k k o l = d s : i e a l k M h i g u r h F k a v s j d f v d s m i j d p p l 1 / 2 p k y h i a m U k j h ; d k s o s p k n j d s l e k u v k s k d j r h F k A b l ; q d s i f j / k k u d k v u e k u m u e f r z k a l s h k h f d ; k t k l d r k g b z t k s i k v f y i e j l k p h v s j H k j g r v k f n e a m i y c / k g b z g A n h n k j x a t d h ; f { k . k h e f r z e a ; f { k . k h d h l k M h , M h r d i g p h g b z g b v s j m l d s v k x s , d c v k g p k n i e k y V d j g k g A ; g e f r z e k s z d k y d h g b z i j c k s d h f l = ; k a d k i f j / k k u H h i k ; % , d k g h g k r k g l o k j b l d Y i u k d k s v l a r u g h a d g k t k l d r k g A 2

ck) ; q ea o l = k a d s f u e k z k d s f y ; s d i k l j j s k e j A u v s j l u d k i z k s f d ; k t k r k F k A c k s I k f g R ; e a v u d l F k y k a i j r U r p k ; k a 1 / 4 t g y k g k z

*'k s k k k z ; v h l h t s v j , Q & u v i k n H k n b n , o a i j k r u o f o h k x i v u k f o ' o f o | k y ; j i v u k

rUrHk.M 1/2 di Ms c p u s d s m i d j . k z v s j r U r f o u V B k u e - 1 / 2 c p k b z d s l F k k u z d k m Y y s k v k ; k g A l h u s f i j k a s d k 0 ; o l k ; H k h b l d k y e a H k y h & H k a r f o d f l r g l s p p k F k A p r y o x x e a r t u o k ; 3 ' n j t h z } k j k d i M l a d h f l y k b z d k o . k u f o | e k u g A r U r p k ; k a } k j k c p u s g g v s j r p u o k ; k a } k j k f l ; s g g t k s o l = c k s d k y e a i z k s e a y k ; s t k r s F k s o s m r d " V d k s V d s H h g k r s F k A e g k i f j f u o k z k l = d h V h d k d s v u d k j c d d s ' k o d k s o k j . k l h e a c u s g g , d s o l = l s < a d k x ; k F k j t k s e g h u g k r s g g H h b l i z d k j x B d j c p k x ; k F k f d r y H h m l e a i o s k u g h a d j l d r k F k A b l h l = e a o k j . k l h d s o l = d s f o " k ; e a ; g H h d g k x ; k g S f d o g l c v s j l s u h y h > y d e k j r k F k v s j l k F k g h o g y k y l i h y k r F k k ' o r H h f n [k u s y x r k F k A f ' k f o t u i n e a c u s A u h ' k y d k e w ; f ' k f o t k r d d s v u d k j , d y k [k d k ' k k z . k F k A b l i z d k j d s c f < ; k o d h e r h o l = r k s / k u h J S B h v s j j k t d o y d s 0 ; f D r g h i z p r d j l d r s g l a k a i j l o l k / k j . k y k s k a d s f y ; s H h r c d i k l v s j l u d s c u s o l = k a d h d k b z d e h u g h a F k A t i r s i g u u s d k H h b l ; q e a p y u F k A i g y s c k s f h k (k a / k a d k s t i r s i g u u s d h v u e f r u g h a F k h i j c d u s m u d s u a k s i s k a d h n p z k k n s [k d j m l g a t i r s i g u u s d h v u e f r n s n h A i j d o y , d s t i r s g h i z k s e a y k l d r s F k s t k s j a k f c j a k h u g k o d j l k n s g l a t i r s c u k u s d s f y ; s f l g l e x v k f n d s p e M s i z p r f d ; s t k r s F k s v s j m l g a f o f o / k j a k a e a j a k t k r k F k A e g l o x x e a v u d i z d k j d s t i r k a d k o . k u g b f t u e a i h / d) d 1 / 2 k / u s r d v k u s o k y s i k f y x B e 1 / 2 d o y i j < d u s o k y s [k y c) d 1 / 2 p l i y z v s j n y i f . k d 1 / 2 t u e a : b z H k j h g b z g l e z m Y y s [k h ; g A 4

o f n d d k y d s l e k u c k s ; q e a H h v k h k k . k i g u u s d k c g r f j o k t F k A c k s I k f g R ; e a e f n z d k 1 / 2 a x B h i z o f Y o d k 1 / 2 d i y i z x b s d 1 / 2 g k j 1 / 2 i k 3 e ; 1 / 2 d . k Q n y 1 / 2 v k o f U k d k 1 / 2 a x . k z g r F k j . k 1 / 2 p M h z v s j e s k y k v k f n v u d o f / k v k h k k . k a d k m Y y s k g A 5 c k s ; q d s l = h & i # " k u d o y f o f o / k i z d k j d s v k h k k . k a l s v i u s ' k j h j k a d k s v y a r f d ; k d j r s F k s v f i r q v u d i z d k j d s v k y s u k a l s v i u s ' k j h j k a d s l k o n ; z e a o f) H h f d ; k d j r s F k A f o f o / k l q f l u / k ; k a d k H h o s i z k s d j r s F k A

ck) I kfgR; ka ea ; g o . k u f d ; k x ; k g S f d f l = ; k a d s f l j d s v k h k k . k a e a p M e f . k l o z S B F k A d g k x ; k g S f d j k f u ; k a d s J S B x q k a d h r y u k p M e f . k l s d h t k r h F k A ; g v k h k k . k f o ' k s k v o l j a i j g h / k k j . k f d ; k t k r k F k A b l I k f g R ; l s l = h j i # " k n s u k a d k s d . k Q n y i g u u s d k l k { ; f e y k g A d i n d . k Q n y d k u k a l s f p i d s j g r s F k A f l = ; k a d s u k u k f o f / k d . k Q n y d k u k a l s f p i d s j g r s F k A f l = ; k a d s u k u k f o f / k d . k Q n y n ' k u h ; g A c k s I k f g R ; k a l s e f . k t f M r d . k Q n y k a d k o . k u f e y r k g A d . k Q n y > e d s d s l n ' k H h g k r s F k A

egkoX⁶ I s Kkr gkrk gSfd I Ei wKz Hkkjr ea fL=; ka cMk 'kKd I se fkyk
 1/2 dVl # 1/2 /kij .k djrh FkA fL=; ka ?k/uka rd yVdusokys dVl # ka dks n'kz k gA
 ck) I kfgR; I s bl ; q; ds [kku&iku ds I æU/k ea Hkh vPNk ifjp;
 feyrk gA i wKz Hkkjr eam l e; HkÜk 1/2 Hkkstu dk izkku vax Fkk ftl s
 nky I Cth rFk eka ds I kFk [kk; k tkrk FkA I qÜk tkrd ds vuq kj I kfj i tk
 usfEcknoh dks Hkkstu ds fy; svkef=r dj tks Hkkstu i Lr r fd; k] ml ea Hkkjr
 dks yky eNyh rFk ?h ds I kFk ijkd k x; k FkA [khj bl ; q; ea vR; r
 ykdfiz; FkA c) us bl smRd "V Hkkstu ekuk gS vS fHk{kq/ka ds i kr% dkyhu
 Hkkstu ds fy; s I epr crk; k gA ftu vU; Hkkst; inkFkæ dk ck) I kfgR; ea
 mYy f k gS muea l Ük vii 1/2 wKz fi VB [kTtd 1/2 kktk] frydV] fi e [kknuh;
 1/2 hBk 1/2 vkfn izkku gA? eka Hk{k.k dk Hkh bl ; q; ea pyu FkA ck) fHk{kq Hkh
 xgLFkka }kj inÜk eka Hkkstu dks Lohdkj dj yrs FkS vS ml dk Hk{k.k djus
 eamUga dkbz I ækp ugha gkrk FkA egki fjuokz k I # ds vuq kj tc c) ikok
 uxjh ea FkS rks ml gkaus ptn dekj i q=k ds ?kj ea 'kudj & eknb 1/2 wj dk eka 1/2
 [kk; k Fk] ftl s [kkdj os chekj i M+x; s Fks vS ml h ds dkj .k mudh eR; q gBz
 FkA tkrd dFk vka ds vuq kj ; KkavS Jk) ds vol j ij ckä.k yxs eka
 Hkkstu fd; k djrs FkA /keZ #ka vS Lefrxh FkA ea Hkh bu vol j ka ij eka Hk{k.k
 dk fo/kku gA ; | fi egkRek c) vfga k ds ifriknd FkS ij ml gkaus Hkh eka
 Hkkstu dk fu"ksk ugha fd; ka mudh I Ei fÜk ea fHk{kq/ka ds eka kgkj ugha djuk
 pkfg; } ij ; fn xgLFk fHk{k ea eka Hkkstu inku dj} rks ml gka Lohdkj dj ysk
 pkfg, A tS yxs i wkr; k vfga kor ds I eFkd FkS vr% bl /keZ ds vuq k; h
 efu vS xgLFk nka gh eka dh fojkskh FkA

eft>e fudk; ea xkskkrd] esk?kkrd] vt?kkrd] 'kplj?kkrd]
 exyq/kd vS 'kklud 1/2 gfy; k/2 dk mYy f k vk; k gS ftl I s bl ; q; ea
 fofo/k i 'kq/ka vS i f{k; ka dks ekjus okys yxska dh I Ük i æf.kr gkrh gA ; s
 yxs eka dk 0; ki kj djrs Fks vS eka dk iz; kst u I s i f.k; ka dks ekj k Hkh djrs
 FkA ck) dky eadfri; in'ka ea o fdlgha oxks ea xkela Hkh [kk; k tkus yxk
 FkA egkHkkjr ea ennsk ds fo"n; ea fy [k gSfd ogka dh ukfj; ka/kku vS xM+
 dh 'kjk ihdj xks eka ds I; kt ds I kFk [kk; k djrh FkA Hkkjr cgr cMk
 ns k gS vS i kphu I e; ea; gla cgr & I s tuinka dh I Ük FkA ; fn dfri;
 tuinka ea xkela ds Hk{k.k dh Hkh i Fk i kphu I e; ea gks jgh gS rks bl s
 vk'p; Ztud ugha I e>k tk I drkA⁸

I jki ku Hkh ck) dky ea ipfyr FkA ok#f.k tkrd I s Kkr gkrk gS
 fd bl ; q; ea e/kqkyk, a gkrh FkH ftuea 'kjk i hus okya dh HkhM+ yxh jgrh

FkA e/ikkyk dk Lokeh vius I g; kSx; ka 1/2 Urskf I ; kZ ds I kFk yxska dks
 I jki ku dj; k djrk Fk] vS dñ yxs bu e/kqkyk vka ea I i Ruhd Hkh tk; k
 djrs FkA dfri; , d smRI o Hkh bl ; q; ea euk; s tkrk FkS ftueafd I kefgd
 : i I s I jki ku dk vk; kst u fd; k tkrk FkA , d k , d mRI o I jki ku d [kr
 1/2 jku {k=1/2 dgkrk Fk] ftl ea cgr & I s yxs , d I kFk ; FkSV I jki ku fd; k
 djrs FkA fou; fi Vd⁹ ea fHk{kq/ka ds fy; s I qki ku dks fu"n) Bgjk; k x; k gA
 vki LrEc vS xks e /keZ #ka ea ckä.k ka ds fy; s i k; f'pr dh 0; oLFk dh gA
 tS /keZ kL=ka ea Hkh e | i ku dks cjk dgk x; k gA ij /keZpk; k dh bu
 0; oLFk vka ds gksr gq Hkh I oZ k/kj .k turk ea ck) ; q; ea I jki ku ipfyr
 Fk] bl rF; I s bl dkj ugha fd; k tk I drkA

ck) I kfgR; eamu mRI oka dk vucl Lfkula ij mYy f k feyrk gS ftuds
 }kj turk dk I kefgd : i I seulgatu gkr djrk FkA ogkamRI o eukusdsfy,
 , d= tul e g dsfy, I eTt 1/2 ekt 1/2 'kn dk iz; kx fd; k x; k gA ; g 'kn bl h
 vFz ea jtk v'kcl ds f'kyky [ka ea Hkh vk; k gA i k. fku dh v"Vie; k; h¹⁰ ea bl h
 dks 'I eT; k' dgk x; k gA fl xkyokn tkrd ds vuq kj I eTt ea uR;] xk; u]
 oknu) , hntkyd [sy] jLI s ij pyus vkfn dk in'ku fd; k tkrk Fk] vS
 vuclfo/k vk]; ku Hkh dgs tkrk FkA , d sHh I eTt vk; kstr fd; s tkrk FkS ftuea
 fd eVy; q) ?k/ka vS ukVd] I ahr & i r; ksrk, arFk gkFk; ka ds [sy in f'kz gksr
 FkA ck) I kfgR; I s i pr gkrk gSfd dfri; mRI oka ds vol j ij I k/ks Hk/ks
 gkFk; ka vS xhka dh yVbz ka FkA cätky I tk eagfLr; q) Hk/ka dk ; q) exkS dk
 ; q) efg'k; q) o'kk; q) o'kk; q) efv; q) dñh ekj i IV rFk ykH ds [sy vkfn
 dk mYy f k gkr gS ftuds }kj turk dk cgr eulgatu gkr FkA tkrd dFk vka
 eauVla }kj in f'kz [sy l adk vucl Lfkula ij o.ku gA uV jTt qij uR; fd; k djrs
 Fks vS Hkyla ds Äij Nylax yxk; k djrs FkA , d s I kefgd mRI o Hkh bl dky
 ea gkr djrs FkS ftueafd I ahr vS uR; ds I kFk & I kFk eka vS efnjk dk Hkh
 mledr : i I s I ou gkrk FkA

I nH&I ph %

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