

v& c| kfQYI & budk d|nzd cMk rFkk 2&3 ikfy; ka ea cWk gkrk gA

c & bvkf| ukfQYI & budk d|nzd nks Li V fi .Mka ea cWk gkrk gA nksuka Hkx rUrq l s tMs gkrs gA ; s ,ythz i frj {k.k dk dk; Z djrh gA

l & U; WkfQYI & budk d|nzd 2&5 ikfy; ka ea cWk gkrk gA ; s l = }jk tMs gkrs gA ; s jksk.k.kvka dk Hk{k.k djrs gA

2& df.kdkj fgr ¼ **Agranulocytes**½ && budk d|nzd cMk o ?kkMs dh uky ds vdkj dk gkrk gA ; s nks i dkj dk dh gksh gA

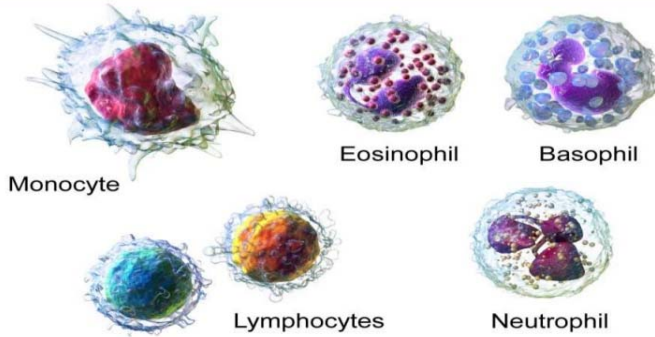
v& fyEQkd kbVt ¼ **Lymphocytes**½ c&ekukd kbVt ¼ **Monocytes**½

v& fyEQkd kbVt ¼ **Lymphocytes**½ && ; s NkVs vdkj ds or #f/kj.k.k gA budk dk; Z i frj {kh dk fuekZ.k djds kjhj dh l g {kk djuk gA

c&ekukd kbVt ¼ **Monocytes**½ && ; s cMs vdkj dh dkf'kdk, a g| tks Hk{kdk.k.fcd; k }jk kjhj dh l g {kk djrh gA

White Blood Cells

- Dr. Chintan



White Blood Cells

3& lyV/yVt ¼ **Thrombocytes**½ && budh l ; k 2 yk[k l s 5 yk[k i fr ?ku feeh gksh gA ; s mHk; kRry] r' rjhuek gkrs gA buea d|nzd i k; k tkrk gA ; s #f/kj dk FkDdk cuus ea l gk; d gA

#f/kj ds dk; Z & #f/kj ds dk; Z fuEu gA

1& vkDI htU rFkk dkcU MkbvkdI kbM dk l ogu

2& [kk] i nkFkkZ dk l ogu

3& mRI thz i nkFkkZ dk l ogu

4& rki dk fu; U=.k

5& j l k; u dk l rgyu

6& ty rFkk pH dk l rgyu

8& #f/kj dk FkDdk tekuk

Ekkuo #f/kj oxl rFkk i xdkj &&bl dk i rk dkyz ySMLVhuj oKkfud us yxk; kA blgkaus crk; k fd #f/kj df.kdkvka dh dks'kdk dyk rFkk lykTek ea fo'ks k i xdkj dh i ks/huI gkrh gA bu i ks/huI dk l Ecu/k FkDdk tekus ea gA yky #f/kj df.kdkvka dh dks'kdk dyk ea tks i ks/hu gkrh gS ml s ifrtu ; k , .VhtUl dgrs gA lykTek ea mi fLFkr i ks/hu dks ifrj {kh ; k , .VhckWht dgrs gA

lkfrtu nks i xdkj ds gkrs gS & , rFkk ch %ArFkkb% ifrj {kh Hkh nks i xdkj ds gkrs gS & , rFkk ch %rFkkb%

, & lkfrtu , & ifrj {kh dh mi fLFkr ea rFkk ch & lkfrtu ch & ifrj {kh dh mi fLFkr ea fpi fpi s gks tkrs gA vr% yky #f/kj df.kdk, a vki l ea fpi dus yxrh gA ftl s FkDdk teuk ; k vfHk'ys k.k %I umpi ng% dgrs gA

dDI 0	#f/kj oxl	ifrtu	ifrj {kh
1-	A	A	B
2-	B	B	a
3-	AB	AB nkuks	dkbz ugha
4-	0	dkbz ugha	A rFkk bnkuks

#f/kj oxl AB l o xkgh rFkk #f/kj oxl 0 l ohkrk dgykrk gA

#f/kj Ldnu dh fdz; k fof/k && #f/kj dk teuk , d tfVy fdz; k fof/k gA #f/kj df.kdkvka ea i kFkkfEcu uked , Utkbe] Qkbfcaukstu uked i ks/hu] , .Vhi kFkkfEcu rFkk fgi fju rFkk dSYI ; e vk; u ik, tkrs gA ; s inkFkZ #f/kj ds teus ea Hkxk ySrs gA budh fuEu rhu voLFkk, a gA

igyh voLFkk && #f/kj dh lys/yS/ l gok ds l Ei dl ea vkus ij lys/yS/ QDVj &3 eDr djrh gA ; g jDr ds i kFkkfEcky fLVu dks dSYI ; e vk; uka dh mi fLFkr ea FkkfEcky fLVu ea cny nrh gA

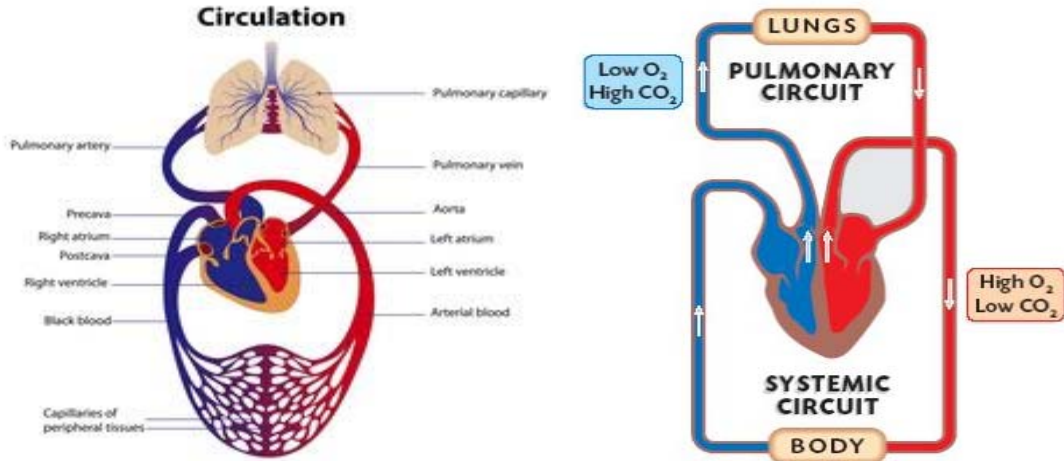
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rhl jh voLFkk && #f/kj ea igys l s mi fLFkr Qkbfcaukstu i ks/hu vc FkkfEcu dh mi fLFkr ea Qkbfcaukstu uked v?kyu'khy rlr; i ks/hu ea cnydj {kfrxLr Hkxk ij tky dk fuekZk dj yrk gA bl h ea #f/kj df.kdk, W QW dj FkDdk cukrh gA

nkgyk i fjl pj.k && nkgyk i fjl pj.k i f{k; ks rFkk Lrfu; ka ea i k; k tkrk gA an; ds nkW s Hkxk dks fl LVfed an; rFkk ck, WHkxk dks i Yekujh an; dgrs gA nkgyk i fjl pj.k ea an; ea nks vfyUn o nks fuy; gkrs gA bl dkj.k an; ea kD rFkk v kD jDr vyx & vyx jgrs gA an; ds nk, WHkxk ea l kjs kjhj l s v kD jDr vkrk gA rFkk ; g jDr i Yekujh /keuh }kjk QQMka ea kD gkus ds fy, pyk tkrk gA

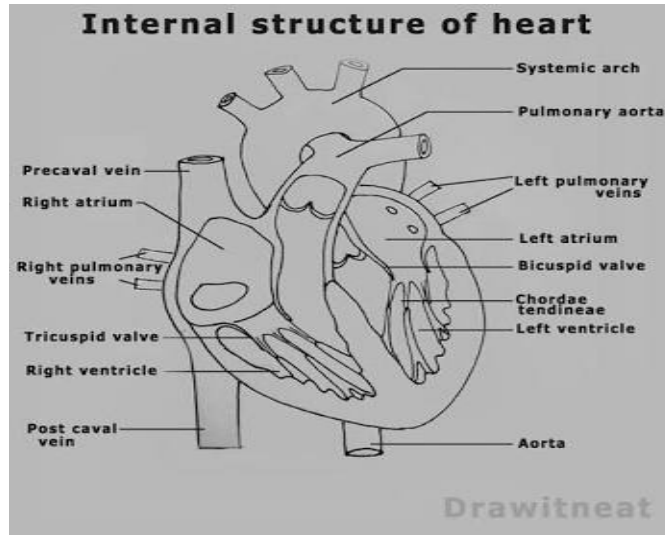
an; ds ck, WHkxk ea i Yekujh f'kj kvka }kjk kD jDr vkrk gS rFkk ; g dSj kFVdks fl LVfed pki }kjk l kjs kjhj ea i okfgr gks tkrk gA

bl i xdkj nkgyk i fjl pj.k ea dgha Hkh kD rFkk v kD #f/kj dk feJ.k ugha gkrkA



nkjgk i fj l pj .k

àñ; dh vklrfjd l jpk &&



ekuo àñ; pkj d{kh; gkrk gA dkjkujh l Ydl }jk àñ; vfyln rFkk fuy; ea cWk jgrk gA àñ; dk pkMk Hkkx vfyln rFkk fupyk kd#ih Hkkx fuy; gA

àñ; rhu i rkz dk cuk gkrk gA

1& , i hdkfMz e

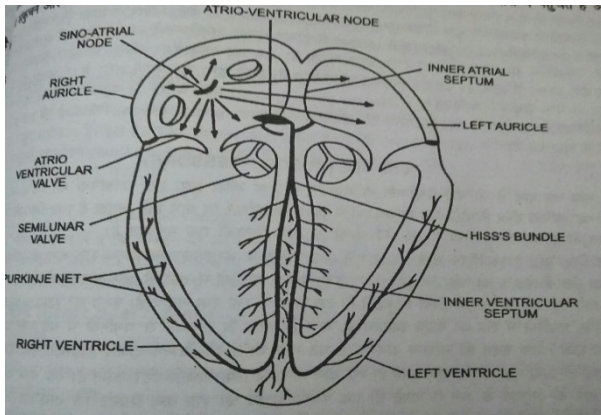
2& ek; kdkfMz e

3& , .MkdkfMz e

vfyln ea , d vlrjkvfyln i V gkrk gS tks bl s nkW s vfyln o ckW s vfyln ea ckW nrk gA bl s nkbz vkj , d v .Mkdkj xi k gkrk gS ft l s Qkl k vkosyl dgrs gA nkW s vfyln ea i 'p egkl jk rFkk vxz egkl jk ds fNnz gkrk gA i 'p egkl jk ds fNnz ij ; lVfd; u di kv gkrk gA vxz egkl jk ds fNnz ds i kl , d fNnz dkjkujh l kbul dk gkrk gA bl ij dkjkujh di kv gkrk gA

vLrjkfuy; i V fuy; dks nk, Wo ckW s fuy; ea ckW/rk gA fuy; dk i s kh Lrj vfyln l s vf/kd ekv/k gkrk gA fuy; ea fLFkr i s kh LrEHkka dks i s hyjh i s kh dgrs gA ckW s fuy; l s d s kfVdks fl LVfed pki fudyrk gA tks l kjs kjhj dks kq #f/kj i gWpkrk gA vfyln fuy; ea vfyln& fuy; fNnka }kjk [kqyrk gA bu fNnka ij vfyln& fuy; di kV gkrk gA ; s di kV #f/kj dks vfyln l s fuy; ea tkus nrs gA fdUrq oki l ughs vkus nrsA nkW s vfyln o fuy; ds chip ds vfyln& fuy; di kV ea rhu oyu gkrk gA vr%bl s f=oyuh dgrs gA ckW s vfyln o fuy; ds chip ds di kV ij nks oyu gkrk gA vr%bl s f}oyu dgrs gA

ekuo àn; dh fdz k fof/k rFkk àn; Li nu && ekuo o vU; Lru/kkfj; ka dk àn; i s khpkfyr ; k ek; kstfud gkrk gA àn; Li nu dk i kjEHk nkW s vfyln ea fLFkr f'kjk vfyln /kq Vh ; k l kbuk, fV^a, y ukM %noatrial Node or SA node% l s gkrk gA àn; Li nu nkW s vfyln l s i kjEHk gkdj ckW s vfyln ea vk s fQj c. My vkW fgl l s gkrk gq i jfdUts ds rUrqka }kjk fuy; dh fhkRr; ka ea QWyrk tkrk gA àn; ds fu; fer xfr l s idpu rFkk vuf'kFkyu djrk gA àn; dk fl dMuk idpu gS rFkk QSyuk f'kFkyu gA euq ; dk àn; , d feuV ea 72 ckj Li nr djrk gA



Ekkuo àn; ds /kMdus ds fy, fofhkuu ukM

fVli .kh &&

, Utkbuk %Angin% & bl jks ea àn; dh fhkRrh dks jDr l gh idkj l s ugha feyrk gS D; ka fd dkj kujh /keuh ea FKDdk cu tkrk gA àn i f'k; ka dks vkDI htu u fey i kus ds dkj. k l hus o dU/s ea rst nnz gkrk gA bl s vkVhij; kLdyhj kfl l dgrs gA

i s edj & dhkh&2 àn; dh l kbuk, fV^a, y ukM %Sinoatrial Node or SA node% vi uk dk; l djuk cln dj nrh gA bl l s àn; xfr vfu; fer o /kheh gks tkrh gA df=e i s edj dks KY; k pfdRI k }kjk àn; ea yxk fn; k tkrk gA ; g àn; xfr dks l keku; cuk; s j [kus ea l gk; d gA

i dpu	vuf'kFkyu
i dpu dh volFkk ea àn; fuy; ka l s jDr dks /keuh ea iEi djrk gA	vuf'kFkyu ea f'kjkvka l s vk; k jDr àn; ds vfyln ea vkrk gA

P rjx	T rjx
byDVkdkfMz; kxke ea P rjx dks vfyln ds mnñhi u ds #i ea iLr fd; k tkrk gS ft l l s nkuka vfylnka dk l dpu gkrk gA	T rjx fuy; dh mRrstuk dks l keku; volFkk ea oki l vkus dh fLFkr dks i nf'kar djrk gs

डा0टी0एन0जोषी प्रवक्ता जीव विज्ञान रा0इ0का0गुरना, पिथौरागढ