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SHODH DARPAN

A Quarterly International Research Journal

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From the Patron's pen.....

It was a long cherished desire of Christ College, Jagdalpur to have a Standard Research Publication, thereby our staff members and others who are pursuing innovation and research can share their knowledge for the betterment of many who are thirsting for knowledge. It is being fulfilled by the strenuous effort of Dr. Ashim Ranjan Sarkar and team members. I do congratulate all of them and wish and pray that Shodh Darpan may inspire research scholars to share their findings to inspire many.

-Rev. Dr. Paul T.J.

EDITORIAL

In the present age each area has cut throat competition, a group or intellectuals felt the need to have some platform, where young and budding professionals & academicians could express their views and discuss the problems among their peers. This Journal is conceive with this noble intention in view. This Journal has been introduced to give an opportunity for expressing refined and innovative ideas in these fields. It is our humble endeavor to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

-Dr. Ashim Ranjan Sarkar

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-Editor

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CONTENT

'MkW ujsUnz dksgyh' ds Lokeh foosdkuUn ds thou ij vk/kkfjr miU;kl esa vkn'kZ dk fp=.k

MkW0 Jherh tLlh tkWu
क्राइस्ट महाविद्यालय जगदलपुर, ftyk cLrj (N.x)

सारांश

(Lokeh th ds fudV jgdj ykxksa esa ekuofufer oxZ vkSj lEiznk; ls ij n[kus yxrs FksA vkSj viuh /kkfed fo'okl ds cko tn Lokeh th ds lkFk rknkRE; dk vuHko djrs FksA /keZ lEesyu esa rks Lokeh dk ckyrs g, ludj vefjdk turk vokd jg xbZ FkhA Lokeh us viuh vktLoh Hkk"k.k ls lcdk viuh ekgik'k esa ck/k fy;k FkkA vkpk; jkepUnz 'kDy u Hkh viuh iLrd esa Lokeh th ds f'kdkxks /keZ&lEesyu ds Hkk"k.kksa dk jkpd fooj.k iLrr fd;k gSA/keZlEesyu ds ckn Lokeh th *विदेश में कई शहरों में भ्रमण करते हुए वहाँ की जनता को भारतीय संस्कृति का नित–नया ज्ञान प्रदान करते हैं। वह अमेरिकी* *turk dks HkfDr ds lc/k esa crkrs gSA blds Jhpj.kksa esa ;fn rRo Lo; dk lefiZr dj nsxs] rks rRo r)r gks tk;xsaA b'oj lsa izeZ djksA fnu&jkr mldk fpru djksA b'oj dks vfir djds [kkvksA mldks vfir djds fi;ksA ;g lc vf/kd mi;kxh gSA)*

ujsUnz dksgyh ,d miU;kldkj] dgkuhdkj] ukVddkj rFkk O;X;dkj gSA blds lkFk gh o viu ledkyhu lkfgR;dkjksa ls fHkUu gSa rFkk lkfgR; dh lef) rFkk lekt dh ixfr esa mudk iR;{k ;kxnku gS D;kfd o vk/kfud gksrs g, Hkh if'pe dk v/kkudj.k ugha djrsA ujsUnz dksgyh ds miU;klksa dk leh{kkRed v/;;u djus ij ge mud miU;klksa esa vkn'kZ ds fp=.k ds lkFk dgha& dgha vkn'kZ o ;FkkFkZ dk lEe"k Hkh fn[kkbZ nsrk gS D;kfd miU;kl lkfgR; u rks i.kr% ;FkkFkZoknh gks ldrk gS vkSj u og ,d ek= vkn'kZoknh gksdj gh viuh mikn;rk vf/kd le; rd LFkk;h j[k ldrk gSA miU;kl lkfgR; dk vkfoHkZko ;|fi ekuo thou ds ;FkkFkZ fp=.k ds fy; gvk gS ijUrq fQj Hkh og i.kr% ;FkkFkZoknh ugha gks ldk gSA miU;kl lkfgR; esa] lkfgR; o lkfgR;dkj ds chp ;g vkn'kZ o ;FkkFkZ dk lEe"k fujUrj pyrk jgrk *है। यथार्थवाद यदि आँखें खोल देता है तो आदर्शवाद हमें उठाकर किसी मनोरम स्थान में पहुँचा देता है। नरेन्द्र कोहली द्वारा रचित क्रान्तिकारी विचारक स्वामी विवेकानन्द के जीवन पर आधारित उपन्यास* ***"rksM+ks dkjk rksM+ks"*** *,oa "u Hkrks u Hkfo"';fr" esa vkn'kZ dk fp=.k cM+h lqUnjrk ls fd;k x;k gS blfy, ujsUnz dksgyh ds miU;kl lkfgR; dk Hkh mPp dksfV dk lkfgR; dgk tk ldrk gSA ftlds vUnj lnk ;FkkFkZ o vkn'kZ nksuksa dk lekos'k gks tk;sA*

"rksM+ks dkjk rksM+ks" Lokeh foosdkuUn ds thou ij vk|r miU;kl gSA ;g rks lofofnr gS fd Lokeh foosdkuUn gekjh orZeku ih<+h ds fy, vkn'kZ gSA mudk pfj= esa vkn'kZ dh i/kkurk gksuk fuf'pr gh gSA Lokeh th dk tUe gh ,sls ifjokj esa gvk Fkk] ftldk lekt esa lEekutud LFkku FkkA mudh firk ;|fi pkgrs Fks fd ujsUnz viuh ckck dh rjg lU;klh u cu] fdrq og viuh ?kj vkus okys lU;kfl;ksa dk vknj djus ugha djrs FksA fo'oukFk ds firk Hkh lU;klh gks x, FksA og viuh ?kj ij fdlh lU;klh dks lRdkj djrs oLrr% viuh firk dk gh lRdkj djrs FksA mudh ?kj ij lU;kfl;ksa dk frjLdkj ugha gks ldrk FkkA og viuh firk dh Hkkouk dk vieku ugha dj ldrs FksA ujsUnz dk tUe gh ,d vkn'kZ ifjokj esa gvk FkkA cpiu ls gh ujsUnz esa Hkh HkfDr ds y{k.k idV gksus yxs FksA

एक बार नरेन्द्र अपनी माँ भुवनेश्वरी ls iNrk gS fd] D;k reus Hkxoku dk lpep dHkh idkjk gSA rks Hkqou'ojh mlls crkrh gS fd mlus Hkxoku dks LoFk dh ?kM+h esa idkjk Fkk] vkSj Hkxoku us rEgsa ekxk Fkk i=A bruk NksVk lk ujsUnz mUgs बताता है कि तुमने भूल की थी माँ! तुम्हें तो उनके n'kuk dh ;kpuk djuh pkfg, FkhA i= rks lcdks gksrs g(fdrq Hkxoku ds n'ku fdlus fd, gSA Hkqou'ojh mlls cpiu ls gh >BS o iki ls nj jgus dh f'k{kk nrh gSA lalkj esa >BS] iki rFkk ykxksa ds Hk"B vkpj.k dk n[kdj ufrdrk dHkh ugha NksMuh pkfg,A thou dk dHkh vifo= ugha djuk pkfg,A ujsUnz ds ekrk&firk dk pfj= Hkh vkn'koknh pfj= gSA cpiu ls gh mUgs tkrh; ,drk dh f'k{kk feyh थी। ज्ञान भी एक है, जैसे सत्य एक है। ऊपर के वर्ग foHkktu rks vKkfu;ksa ds fy, g] ;k e[kksa ds fy,A

,d ckj ujsUnz u viuh firk ds dejs esa dbZ lkjs gDds n[k rks] mlus ukdj ls iNk fd bru gDds D;ksa j[ks gSA D;ksa ,d gDds ls dke ugha py ldrkA ukdj mls crkrk gS fd iR;sd tkfr ds eofDdyksa ds fy, vyx&vyx gDdk gSA vxj tkfr pyh xbZ rks 'kk"k dN ugha cprk gSA lcdN xMcM gks tkrk gSA ujsUnz ijh{k.k djds n[kuk pkgrk gSA ukdj ds tkus ds ckn og ,d&,d dj iR;sd gDds ls d'k yrk gS vkSj viuh vxks dks VVkyrk gS fd dgha mlesa dN gks rks ugha x;kA tks i;kx og Nidj dj jgk Fkk] og mlds firk u n[k लिया था। अब उनका क्रोध प्रकट होगा। किंतु पिता ukjkt ugha gkrs gS vkSj mls crkrs gS fd lc tkfr leku gSA fgn gks ;k elyeku lc ,d gh b'oj dh lrku gSA fo'oukFk u ujsUnz dks vkn'k f'k{kk nh FkhA tks vkthou mlds fy, ,d ij.kk cu xbZ FkhA

ujsUnz ds ,d fe= ds ?kj esa og n[krk gS fd mlds fe= ds firk ,d lk/kq dk QVdkj jgs gSA mlds fe= crkrk gS fd mlds firkth fHk{kk&ofRr dks ikRlkfgr djus ds fodV

fojk/kh gA fdr ujUn lk/kvk d ifr mudh mi{kk dk cnk'r ugh dj ikrkA lc ykx viu&viu LokFk vkj Hkkfrd l[kk d ihN iM g] blfy, o viuh&viuh vkthfodk dek jg gA lU;klh u rk lcl igy viuk LokFk NkMk g] Hkkfrd l[kk dh dkeuk NkMh g] viu&ijk, dk Hkn NkMk g] viuk vgdkj NkMk g] b'oj ij fuHkj jguk lh[kk g& blhfy, lU;klh viuh vkthfodk d fy, lekt ij vkj mll c<dj] b'oj ij fuHkj jgrk gA re ykxk u fHk{kk dh ,d eBBh d fy, Qyh mldh gFkyh n[kh g(fdr mld }kjk thou d l[kk dk R;kx ugh n[kkA ujUn d eg l ,lh ckr ludj lc vk'p;pfdr gk tkr gA ml rk cpiu l gh lU;kl u vkdf"kr fd;k FkkA og d{kk d gj yMd l iNrk Fkk fd D;k mld iotk e l fdlh u dHkh lU;kl /kkj.k fd;k FkkA ;fn dkb yMdk ;g dgrk Fkk fd mld o'k e dHkh dkb lU;klh gk x;k Fkk rk ml og yMdk vR;Ur fi; yxu yxrk FkkA lU;kl d ifr bl lEekgu dk dkj.k rk ujUn Hkh ugh tkurk Fkk(fdr mldh vkRek dk ftruk l[k vkj lrk"k lU;kl dh ckr lkpdj feyrk Fkk mruk vkj fdlh ckr l ugh feyrk FkkA vkjHk l gh ujUn d pfj= e vkn'k dh i/kkurk FkhA

cpiu l nljk dh lgk;rk rFkk ijkidkj dk Hkko ujUn d eu e FkkkA ,d ckj viu ,d dk; e ujUn rFkk mld fe=k u ,d xkj lfud dh lgk;rk ekxhA ujUn rFkk mld fe= 0;k;ke'kkyk e >yk [kMk dj jg FkA lfud Hkh mudh lgk;rk dju yxkA rHkh lryu Mxexku d dkj.k >yk fxj iMkA mld lkj fe= ml NkMdj Hkkx x, fdr ujUn d fy, bl idkj Hkkx tku dk dkb dkj.k ugh Fkk vkj u dkb vkfpR;A ; rk ,d n?kVuk Fkh tk fdlh vkj yMd d lkFk Hkh gk ldrh FkhA vprkoLFkk e ml ?kk;y lfud dk fpfdRlk u feyu d dkj.k eR; Hkh gk ldrh FkhA ,l e rk fdlh 'k= dh Hkh lgk;rk djuh pkfg,] ;g rk e=h&Hkko l mudh vkj c<k FkkAujUn u mldh ikFkfed fpfdRlk djd ml MkDVj dk fn[kkdj ekuoh; vkn'k dk ifjp; fn;k FkkA viu firk dh eR; d ckn ujUn d ?kj dh vkfFkd fLFkfr fnu&ifrfnu][kjkc gkrh tk jgh FkhA dHkh&dHkh ,lk gkrk Fkk fd ?kj e u vukt gkrk Fkk u :lk;A FkkMk&cgr tk vukt gkrk Fkk] वो उसकी माँ व भाई भरपेट भोजन कर लें, इतना ही cgr FkkA ,lh fLFkfr e ujUn ckgj fue=.k dk cgkuk cukdj ?kj l fudy tkrk Fkk] ftll mld ifjtu HkjiV Hkktu dj ldA vkj [kn Hk [kk&l;klk xyh&xyh ?kerk jgrk FkkA

Lokeh th fon'k igp tkr g rk वहाँ भी उनका आकर्षक व्यक्तित्व उनके अनगिनत f'k"; cuk yrk gA [kkldj fon'kh efgyk, rk स्वामी के ऊपर जान छिड़कने लगी थीं। कुछ तो उन्हें viu i= dk lk l;kj nrh FkhA og Hkkjr dh ukfj;k d ckj e vf/kd l vf/kd tkuuk pkgrh FkhA Lokeh mudk crkr g fd Hkkjr e ukjhRo dk vkn'k g& i.k Lok/khurkA vkj mldk xr0; g& lrhRoA iRuh Hkkjrh; ifjokj dh /kjh gA mldh fLFkjrk vkj n<rk mld lrhRo ij gh fuHkj djrh gA Lokeh u fon'k e Hkh viu n'k dh fL=;k dk lEeku iLrr किया था। स्वामी स्त्री में केवल माँ को देखते थे। mud fudV jgdj ykx ekuofufer oxk vkj link;k l ij n[ku yxr Fk vkj viu /kkfed fo'oklk d ckotn Lokeh d lkFk rknkRE; dk vu- Hko djr FkA /kelln e rk Lokeh dk ckyr g, ludj vefjdk turk vokd jg xb FkhA Lokeh u viu vktLoh Hkk"k.k l lcdk viu ekgik'k e ck/k fy;k FkkA ml le; lkjk ifjo'k lkfRod gk x;k FkkA dN rk fof'k"V Fkk ghA iHkko rk 'kCnk dk gh Fkk(fdr mu 'kCnk e fo|r Hkjh FkhA vkpk; jkepUn 'kDy u Hkh viuh iLrd e Lokeh th d f'kdkxk /ke&lln d Hkk"k.kk dk jkpd fooj.k iLrr fd;k gA/kelln d ckn Lokeh fon'k e db शहरों में भ्रमण करते हुए वहाँ की जनता को भारतीय lLdfr dk fur&u;k Kku inku djr gA og vefjdk turk dk HkfDr d lc/k e crkr gA blk d Jhpj.kk e ;fn re Lo; dk lefir dj nkx] re r)r gk tkvkxA b'oj l ie djkA fnu&jkr mldk fpru djkA b'oj dk vfir djd [kkvkA mldk vfir djd fi;kA ;g lcl vf/kd mi;kxh gA Lokeh fonf'k;k d le{k fur u;k Kku iLrr dj jg Fk] mud fy, ;g Kku mUg griHk dju okyk FkkA vkj Lokeh dk 0;fDrRo mud fy, fnuk- fnu vkd"kd vkj vkn'k dk ijd curk tk jgk FkkA Lokeh viu pfj= e vkn'k dk mtkxj djr हुए अपने लक्ष्य की ओर क्रमशः बढ़ते जा रहे थे।

"u Hkrk u Hkfo";fr" uked bl miU;kl e Hkh Lokeh foodkuUn d de o y{; fufgr gA Lokeh th lU;klh Fk] loR;kxh FkA mUg dkb ekg ugh FkkA og rk viuh Hkkjrekrk l ie djr Fk] vkj mld n[k nj djuk pkgr FkA mud लिए प्रत्येक स्त्री माँ समान थी। नारी जाति उनके fy, doy ekr tkfr FkhA og ukjh dk vkj fdlh nf"V l ugh n[k ldr FkA Bkdj ijegl no dk lxfg.kh jkx gk tkrk g rc mud ikl tku oky yMd rFkk ujUn lHkh mudh lok djr g rFkk mudk bykt djokr gA ujUn u rk i.k lokde xg.k fd;k FkkA mudh fpfdRlk djoku d fy,

,d Hkh ilk ugh n ldrk FkA rk ml lok rk djuh gh FkhA Bkdj d bu f'k";k u mudh vikj lok djd lokHkko dk vkn'k iLrr fd;k gA

,d ckj MkDVj ujUn dh vuifLFkfr e Bkdj d vU; f'k";k dk crk tkr g fd Bkdj dk jkx Nr dk jkx gA mudh lok dju okyk dk Hkh ;g jkx gk ldrk FkkA blfy, lcdk lko/kku jguk pkfg,A ujUn dk tc ;g ckr irk pyrh g rk og rMIk mBrk gA ml yxrk g fd vxj mld nkLrk dk bl ckr dk ;dhu gk x;k rk ;g mfpr ugh gA Bkdj dk tUe rk nljk d d"V gju dk gvk gA ok fdlh dk d"V ugh n ldrA og rk nljk d d"V Lo; >y ldr gA

ujUn mlh le; Bkdj d dej dh vkj py iMkA lkj fe= mldh ;g nLIkglh enk tkur FkA o lc mld ihN dej e igp x,A dej e Bkdj dk mfPN"V nfy;k dk l;kyk j[kk FkkA ftl Bkdj u [kku dh dkf'k'k dh Fkh fdr [kklh vk tku d dkj.k og fdruk [kk ik, vkj fdruk l;ky e jg x;k dkb ugh tkurkA ujUn u lcd lkeu ok l;kyk mBkdj ih fy;kA vkj ml viu fe=k l dgk fd vc gee Bkdj d jkx dh NvkNr dh dkb ppk ugh djxkA mlu ,d vkn'k f'k"; rFkk HkfDr dh ijkdk"Bk dk ifjp; nr g, viu fe=k dk Hkh lok dk vFk le>k;k FkkA vc rk lkj f'k"; feydj le; jgr] mudh lok vkj /;ku&Hktu djd] tgk rd gk ldrk Fkk] vk/;kfRed mUufr dj yuk pkgr FkA Bkdj d 'kjhj R;kxu d ckn ujUn rFkk mud fe=k u lU;kl rk y gh fy;k FkkA lkj x:Hkkb;k dk ,d eB e ,df=r djd ujUn lk/kuk d fy, fudy tkrk gA og Hke.k djr g, viuh lk/kuk i.k djuk pkgrk FkkA tkfr] o.k dk vc mld fy, dkb egRo ugh FkkA og rk lU;klh FkkA ekx e pyr g, ,d ckj Hkxh d gkFk dh fpye ihdj ujUn u tkfr dk vkn'k lkeu j[kk FkkA vc mld लिए प्रत्येक जीव में ईश्वर ही था, अतः वह ईश्वर की mi{kk ugh dj ldrk FkkA

स्वामी भ्रमण करते हुए जब मडगाँव d jyo LV'ku igp Fk rk mud Lokxr d fy, सैकड़ों लोग आए हुए थे। स्वामी जी का वहाँ भव्य Lokxr gvk FkkA mudk ,d llfTtr cX?kh e cBkdj 'kkHkk;k=k d :Ik e lck; uk;d d ?kj तक लाया गया था। वहाँ उनके ठहराये जाने की व्यवस्था थी। परंतु जब स्वामी ने अपने मडगाँव पहुंज tku dh lpuk viu fe=k dk i= l nh Fkh rk mle bldk dkb o.ku ugh FkkA Lokeh dh txg dkb vkj gkrk rk viuh vkRei'klk djr g, Qyk uk lekrkA fdr ;g rk Lokeh dh egkurk dk iek.ki= FkkA Lokeh rk Hkkjrekrk d n[k dk nj djuk pkgr FkA dHkh&dHkh og viu n'k dh nn'kk dk Lej.k djd ?kVk vkl cgk;k djr FkA Jh f'koitu lgk; u viuh jpukoyh e bl ilx dk mYy[k Hkh fd;k gA viuh ekr&Hkfe d fy, mud d.k&d.k e ie FkkA viuh ekrHkfe d d"Vk dk de dju d fy, gh o fon'k tku dk ldYi djr gA Hkkjr d djkMk ykxk d uke ij] mud ifrfuf/k cudj o vejhdk tkuk pkgr FkA viu efLr"d की शक्ति से वे वहाँ संपत्ति अर्जित करेगें। भारत ykVdj o viu n'kokfl;k d mRFkku dk i;Ru djxA vc mudk thou viu n'k dh lok dk le-fir FkkA mud thou dk y{; Fkk& lokA mudk असीम प्रेम कोई भेदभाव नहीं करता– कोई ऊँच–नीच ugh g] 'k) vkj v'k)] /kuh vkj fu/ku] i.;kRek vkj ikih& fdlh e dkb Hkn ugh djr FkA Lokeh th dk pfj= i.k vkn'k pfj= gA ftldk dkgyh th u d'kyrk l fpf=r fd;k gA

milkgkj &

thou d ;FkkFk l?k"k e t>rk gvk eu"; ,d vkn'k ykd dh dYiuk l l[k 'kkfr dk vuHko djrk gvk viu ;FkkFk thou dk xfr'khy j[krk gA ujUn dkgyh d miU;kl lkfgR; e Hkh वस्तुतः मानव के सम्पूर्ण जीवन अर्थात् बाह्य एवं vH;rj e pyu oky l?k"k dk ifrfuf/kRo gAfu"d"kr% ge dg ldr g fd ujUn dkgyh u ledkyhu fgUnh y[ku dk xgjkb d lkFk iHkkfor fd;k g ;g Hkh irk pyrk g fd ujUn dkgyh d lkfgR; e viu ;x thou dh ;FkkFk o vkn'k dh vfHkO;tuk g] tk mud miU;kl lkfgR; dk ;FkkFk thou d fudV yk [kMk dj ldrh gA ;g ckr mud miU;klk d leh{kkRed v/;;u l i.kr% lR; fl) gkrh gA

lanHkZ xzFk &

^rkMk dkjk rkMk* &1 fuek.k % Mk ujUn dkgyh i"B l[;k 78

^rkMk dkjk rkMk* &1 fuek.k % Mk ujUn dkgyh i"B l[;k 146

^rkMk dkjk rkMk* &2 % lk/kuk Mk ujUn dkgyh i"B l[;k 129

u Hkrk u Hkfo";fr % Mk ujUn dkgyh i"B l [;k 141

5 u Hkrk u Hkfo";fr % Mk ujUn dkgyh i"B l[;k 477

Green Computing – An Analytical Study

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ABSTRACT

Today everyone is looking for virtual world because virtualization has the popular option to switch "green computing". Through this virtualization one can transfer money in a few seconds; best medical advice from doctors who are not even in our town & country; several videos and learning materials are available to learn; goods can be compared and purchased from home; without moving anywhere meeting with officers, ministers, family members and friends can be conducted; movies and TV programmes can be seen. Not only virtual world is providing us a lot of facilities and saves money it also protects our environment.

In this research paper, we describe the process; we took to go green in one of the computer lab on our campus. We identify the financial and other benefits of going green.

INTRODUCTION

"**Green Computing is the practice of designing, manufacturing, using, and disposing of computers & its devices effectively with minimal or no impact on the environment**". Today everyone is looking for the ways to do their computing operations in environmentally responsible manner.

There are many aspects associated with Green Computing. The purpose of this paper is to identify the risks and benefits to utilize Green Computing.

LITERATURE REVIEW

This review has the following purposes:

To identify the ways of green computing-

- Cloud Computing
- Energy Efficiency
- Efficient Algorithms
- Computer Waste Management
- Intended Belief and Actual Behavior Describe related challenges and benefits; Provide possible methods for extracting its power

Cloud Computing : It is a computing technique where Software and Data stored and on-demand delivered in real time via Internet rather than stored in locally on server or Hard drive[1][5].

Energy Efficiency: In this approach we replace old desktop machines with tiny, optimized computing device called thin client. A thin client is a computer which relies on another computer to perform the processing operations that a normal computer does alone [2][3][4]

Efficient Algorithms: The efficiency of algorithms has an impact on the amount of computer resources required for any given computing function and there are many efficiency trade-offs in writing programs. Algorithm changes, such as switching from a slow (e.g. linear) search algorithm to a fast (e.g. hashed or indexed) search algorithm can reduce resource usage for a given task from substantial to close to zero[6] [7][8].

Computer Waste Management: Computer components contain harmful ingredients like lead, cadmium beryllium or flame retardants etc. and needs to be handled with great care and under safe environment. Old and obsolete computers exposure to the toxic e-waste, they are dismantled and the parts which can be recycled are separated from the parts which can be discarded and can either be incinerated or used as landfill.

Intended Belief and Actual Behavior: The Earth may no longer be a sustainable living environment for any creature if we do not reduce the rate and amount of toxic waste, such as carbon, nitrogen, and sulfur dioxide, which we release as emissions into our air, water, and land.

There is not any visible literature dedicated to the study of IT users' belief and behavior about green computing, in particular the usage of IT resources. So, it is a simple research question: are IT users passionately interested in green computing?

CHALLENGES

Users face problems with any new technology. With the right support system these problems can be addressed and resolved. The entire virtualization system is depending upon the servers. The server based computing is fully depended on network transmissions. If the network goes down for any reason, the terminals will not function. This could be addressed by making sure that the network hardware is up to date and running smoothly. When utilizing virtualization, network load will increase, so it's a good idea to make sure ahead of time that the current layout can support the new technology. **[**7]

RESEARCH METHODOLOGY

In this research paper we focused on the financial benefits of adopting green technology in the lab, other benefits found from using the technology and disadvantages in using the technology.

The first thing we did was setup the new lab in Christ College, Jagdalpur. The lab that we had replaced Twenty two workstations. We replaced each of these workstations with VAMA thin clients, all are connecting to a HP Server. When converting the lab from desktop computers to thin client devices, we were able to leave all existing hardware in place. This included monitors, network cables and hardware, keyboards, mice, and a printer. This allowed us to properly isolate and credit any changes in performance and power usage to their proper source.

The server was installed in an existing table and loaded with the Windows Server 2008 software. Then thin clients were connected to the server via the network. After the initial configuration was completed, it was possible to log into each thin client using an account created on the Windows Server 2008 appliance.

Financial Savings from Power Consumption

We estimated the energy savings by desktop virtualization by monitoring the power usage of the computing devices as shown in table-1. To find the consumption of wattage, we installed a watt-hour meter. Measurements were taken as well as idle state and 95 percent load state.

We started with power monitoring tests which was conducted on the desktop computers. Due to the dependency of server to operate thin clients, we measured power consumption of the server. To simulate a 95 percent load, *Load Runner* Performance Test software was installed and executed on each user to find the energy consumption in real time. After collecting enough data from each device, then we compared the results and analyzed our findings. In Table-1 we show the recorded watts from each device. The kilowatt hours taken in business days, weekends, and holidays. In business days, the computers were under load for about Seven hours, and idle for the remaining seventeen hours. We assume that each year contains 250 working days and 115 holiday days. We used a rate of Rs. 9 per kilowatt hour to calculate the yearly costs.

Table-1 Energy Consumption

Device	Average wattage while idle	Average wattage under load	Kilowatt hours per business day	Kilowatt hours per weekend day & holiday	Kilowatt hours per year	Yearly Cost	Kilowatt hours for 22 machines and 1 server per year	Yearly costs for 22 Machines and 1 Server per year
Desktop	92	113	2.355	2.208	842.817	7585.353	19777.28	177995.6
VAMA Thin Client	5.6	5.9	0.1365	0.1344	49.5831	446.2479	2326.138	20935.24
HP Server	135	165	3.45	3.24	1235.31	11117.79		

OTHER ADVANTAGES

The major advantage is that softwares installed in server, each workstation receives software and updates simultaneously, reduces time spent to upgrade and license cost of softwares.

DISADVANTAGES

There are no issues with Internet, general softwares and programming languages; only drawback with 3D support and rendering.

CONCLUSIONS

Desktop virtualization offers many advantages over standard computing systems. The benefits were not up to energy and cost savings; performance increases as well. Some difficulties can be encountered regarding initializing and setting-up a virtual network, but the benefits and rewards are more than problems. To overcome the issues of initialization and settings, a trained IT staff or specialized team should be appointed. We concluded that significant energy and cost savings can be realized when incorporating green computing methods.

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Exception Handling Mechnism of Diffrent Modern Object-Oriented Languages

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ABSTRACT

Exception handling continues to be a challenging problem in object oriented system development. One reason for this is that today's software systems are getting increasingly more complex. Moreover, exception handling is needed in a wide range of emerging application areas, sometimes requiring domain-specific models for handling exceptions. Moreover, new programming paradigms such as pervasive computing, service oriented computing, grid, ambient and mobile computing, web add new dimensions to the existing challenges in this area. The integration of exception handling mechanisms in a design needs to be based on well-founded principles and formal models to deal with the complexities of such systems and to ensure robust and reliable operation. It needs to be pursued at the very start of a design with a clear understanding of the ensuing implications at all stages, ranging from design specification,implementation, operation, maintenance, and evolution. This workshop was structured around the presentation and discussion of the various research issues in this regard to develop a common understanding of the current and future directions of research in this area.

Introduction

Exception handling which presents a conformable and highly attractive, alternative way of detecting and reacting to run-time errors in non-trivial applications. Unfortunately, the support for Exception handling is very complicated and potentially very costly in performance for the end application, especially for some modern object-oriented programming languages such as C++[1]. An object-oriented programming language incorporating handling of exceptions using this method. The general idea of EXCEPTION HANDLING is that when one part of a program runs into a problem, usually an error, which it cannot (or will not) cope with at the time and place, it raises (or throws or signals[2]) an exception. - The raising of an exception transfers control to another part of the program, the exception handler, which will catch the exception, and react sensibly according to the problem at hand. Typically different kinds of exceptions can be thrown, and different exception handlers can exist, one for each type of exception and usually in multiple scopes. After being notified about the problem the exception handler decides what to do next. Asking the user for new or additional input followed by a retry of the operation originally at fault is one example of action that can be taken by an exception handler. To simply abort the program is another example.

1.1. Exception handling requirements

The requirements for the design and implementation of EXCEPTION HANDLING adapted from this model are discussed and presented, as are the additional requirements due to the object-oriented programming language of which it will be a part.

1.1.1 Exception handling model specification

Roughly, most EXCEPTION HANDLING models can be classified according to the following terms (See [Pilbrow90] and [Koenig90]):

- Are exceptions synchronous and/or asynchronous?
- Is the Termination model or the Resumption model used?
- Are exceptions handled in a single level or multi-level fashion?
- Can exceptions be parameterized and if so, in a fixed or user-defined manner?
- How are an exception and its handler matched?

1.1.2 Exception handling design requirements

Certain self-evident demands must be placed upon the the implementing of EXCEPTION HANDLING in any modern programming language:

- It is easy and safe to use.
- It presents no problems with BIG programs.
- It can be used with and across separately compiled modules.

1.1.3 Exception handling implementation requirements

Furthermore, the following properties are de-

manded or deemed desirable in an implementation of the EXCEPTION HANDLING Mechanism. All demands mentioned have a serious effect upon the implementation of the EXCEPTION HANDLING mechanism.

Run-time overhead is minimal!
Space overhead is small.
It's possible to port.
Support of mixed-language programming.

It is a basic requirement that EXCEPTION HANDLING should be implemented in a way that introduces only minimal run-time overhead! The inevitable run-time cost associated with exceptions can be divided between:

1. The normal program flow.
2. The cleanup and the transference of control from the signaller to the exception handler, which takes places when an exception is actually being raised.

1.1.4 Requirements due to programming language

The programming language in which EXCEPTION HANDLING is incorporated may force additional demands upon the design and implementation of EXCEPTION HANDLING. This thesis considers EXCEPTION HANDLING in object-oriented programming languages, which in some but not all cases introduce new significant problems to be addressed in an implementation.

The Modula-3 programming language is an example of an object-oriented language that apparently does not add to the complexity of the implementation of EXCEPTION HANDLING. The situation is different in the C++ programming language , where the EXCEPTION HANDLING mechanism is required to properly cleanup automatic4 objects when propagating back to the exception handler. The cleanup involves explicitly calling the destructor for each successfully constructed object in each function frame it encounters when propagating an exception.

1.2 Requirements of programming language

The requirements presented here form a specification of the capabilities of the compiler that will be developed for this .

1.2.1 Object model

From the initial specification of the scope of this thesis, the C++ programming language object model and its influence on the EXCEPTION HANDLING mechanism has been targeted. Thus, a scaled down C++ style object model that embodies the notion of constructors and destructors for objects has been chosen for this thesis. More to the point, an object model with the following properties:

Single inheritance.
Polymorphism (virtual methods Data abstraction with private data members and public member methods, with constructors and destructors as special method cases.)

The above properties, except for the constructor/destructor part borrowed from C++, represent the minimal
requirements for a programming language to be object-oriented.

1.2.2 Language constructs

The following additional basic requirements for the programming language have been decided upon:

Static, strongly typed, imperative.
Syntax similar to Pascal (for simplicity).
Integration of the most common of normal concepts in structured programming languages such as:
Global procedures/functions.
Assignments.
Conditional statements.
Loop statements.
Heap-management (An issue with EXCEPTION HANDLING, also we want our pointers to point to something).
Return statements (An issue with EXCEPTION HANDLING).
Support of the following data types from which new types can be constructed.
Integer
String (Any language should be able to do a “Hello world”).
Pointer (Without pointers, objects are not of great use).
Array (Is an issue with EXCEPTION HANDLING and the destruction of automatics).
Object

1.2.3 Identifiers and scopes

Identifiers can be types, variables, procedures, functions or methods. Variables can be global, local or of object members. Named types are always global. Procedures and functions are

global, methods are in scope of the containing object and its descendants.

1.2.4 Modules

It must by verifiable that the EXCEPTION HANDLING mechanism facilitates separately compiled modules. Consequently a program written in the programming language may consist of several modules.- One main program module and several additional modules, which can be compiled separately. Identifiers can be imported and exported from/to other modules.

1.3. Design of exception handling mechanism

This will present the design and syntax of the EXCEPTION HANDLING support as incorporated in the compiler used for this
thesis. The design and syntax are borrowed from the Modula-3 programming language.

1.3.1 The RAISE statement

Exceptions can be thrown at any point using a RAISE statement with an exception as an optional parameter:

RAISE exception type [.constructor(param 1, param 2, ...)] or
RAISE

Where exception type is an object type descended from a standard object called Exception which is a super type for all user-defined exceptions. The type can be supplemented with an explicit specification of the exceptions type's constructor argumented with actual parameters. If a RAISE statement is issued inside an exception handler and no exception type is specified, the current exception being handled is re-raised and propagated further back the call-chain until a new handler is found.

1.3.2 The exception control constructions

Two kinds of exception control constructions are possible - A try-except and a try-finally statement:

```
TRY
    Guarded statements
    EXCEPT
    | exception_type1(id) => statements
    | exception_type2(id) => statements
    or
    | exception_type1, exception_type2, ... => statements
    END
```

```
TRY
    Guarded statements
    FINALLY
    Final statements
    END
```

In the try-except construction, if an exception is raised in one of the guarded statements, control will be Transferred to the nearest matching exception handler. This construction corresponds to the try-catch statements found in the C++ programming language. If a single exception type with an identifier is specified, that identifier will act as a variable of the typed exception. If no identifier is specified, any number of exception types can be specified for the same action. In the try-finally construction, the finally statements will always be executed eventually. If an exception is raised in one of the guarded statements, execution will continue immediately at the statements in the finally section, otherwise the finally statements will be executed after the last guarded statement. None of the finally statements do, however, handle the exception. After the last statement in the finally section has been executed, the exception is re-raised and must be taken care of by a proper exception handler. Note that the guarantee that the finally statements are always executed includes non-exceptional situations, such as a statement that jumps out of a guarded section of statements (as a guarded return statement etc.).
The try-finally construction is not supported in C++, which is unfortunate as the typical resource acquisition
Example shown below will demonstrate:

```
TRY
Open File (...);
...
IF some_file_error THEN RAISE FileError.Init (...); ENDIF;
...
FINALLY
Close File (...);
END;
```

In the example above, it is guaranteed that the file will always be closed. In case a file error is identified, the try
Block will be immediately terminated, the file closed and an exception propagated to a matching handler (not Present in the example). In case of no file error, the file will likewise be closed, after the execution of the last of the statements

in the try section has finished. Noteworthy, and in all fairness to C++, automatic objects can to some extent be used to manage allocation/ deallocation of resources by using constructors and destructors to perform these actions respectively. In some cases such use of automatic objects to handle resource management is within reason, but in other cases a more or less artificial object encapsulation is cumbersome and the try-finally construction is the only appropriate alternative.

1.3.3 Exceptions are objects

All users specified exceptions must be defined as objects derived from a standard Exception object. The requirement for all exception types to be objects derived from a common superclass provides a powerful, but simple syntax for specifying exceptions. Since exceptions are objects they comply with the rule that any object B descended from A is an A. Therefore any exception handler for A will also handle any derived exceptions, including B (unless a handler for B has been explicitly specified). In this way the required exception grouping feature has been acquired without extending the language. If two distinct exception handlers are wanted, one for A and one for B, the derived object type furthest down the inheritance hierarchy, B, must be specified first. Note that by specifying an exception handler for object type Exception, any exception regardless of type will be handled, as all exception types must be derive directly or indirectly from the object Exception (This is different from Modula-3 where an ELSE clause is used).

1.3.4 The RAISES construction

It is required from the EXCEPTION HANDLING mechanism that the user must be enable to specify the exact range of exceptions Allowed to propagate out of a function. In the Modula-3 and C++ programming languages run -time checks for valid exceptions are activated through explicit declaration of the exceptions that may be propagated for each procedure or function. The implementation language will address the problem in the same way, by extending the function header with an Optional RAISES set of possible exceptions. Extraordinarily, an approach similar to C++ and contrary to Modula-3 has been elected which frees the user from unnecessary typing of exception specifications. With this approach a not present RAISES specification will mean that all exceptions are allowed! Below the syntax for RAISES specification is presented:

RAISES {exception_type1, exception_type2, ...}

Where exception_type1 & exception_type2 are the (super-)type names of two of the exceptions that the Procedure or function in question may propagateout. If an empty raises-set is specified it means that no Exceptions can propagate.

Litreture Review

The failure of return codes and status flags indicates the need for an EXCEPTION HANDLING, which must:

1. Alleviate testing for the occurrence of rare conditions throughout the program, and from explicitly changing the control flow of the program,
2. Provide a mechanism to prevent an incomplete operation from continuing,
3. Be extensible to allow adding, changing and removing exceptions.

The first objective targets readability and programmability by eliminating checking of return codes and flags. The second objective provides a transfer from the exception point that disallows returning, directing control flow away from an operation where local information is corrupted, i.e., the operation is non-resumable. The last objective targets extensibility, easily allowing change in the EXCEPTION HANDLING, and these changes should have minimal effects on existing programs using them. An event is an exception instance, and is raised by executing a language or system operation, which need not be available to programmers, e.g., only the runtime system may raise predefined exceptions. Raising an exception indicates an abnormal condition the programmer cannot or does not want to handle via conventional control flow. What conditions are abnormal is programmer determined. The execution raising the event is the

source execution. The execution that changes control flow due to a raised events the faulting execution; its control flow is routed to a handler. With multiple executions, it is possible to have an exception raised in a source execution different from the faulting execution. Propagating an exception directs the control flow of the

faulting execution to a handler, and requires a propagation mechanism to locate the handler. The chosen handler is said to have caught the event when execution transfers there. A handler is a sequence of statements dealing with a set of exceptions. The faulting execution handles an event by executing a handler associated with the raised exception. It is possible that another exception is raised while executing the handler. A handler is said to have handled an event only if the handler returns. Unlike returning from a routine, there may be multiple return mechanisms for a handler. For a synchronous exception, the source and faulting execution are the same, i.e., the exception is raised and handled by the same execution. It is usually difficult to distinguish raising and propagating in the synchronous case, as both happen together. For an asynchronous exception, the source and faulting execution are usually different, e.g., raise E in Ex raises exception E from the current source to the faulting execution Ex. Unlike a synchronous exception, raising an asynchronous exception does not lead to the immediate propagation of the event in the faulting execution. In the Unix example, an asynchronous signal can be blocked, delaying propagation in the faulting execution. Rather, an asynchronous exception is more like a non-blocking direct communication from the source to the faulting execution. The change in control flow in the faulting execution is the result of

delivering the exception event, which initiates the propagation of the event in the faulting execution. While the propagation in the faulting execution can be carried out by the source, faulting or even another execution, for the moment, assume the source raises the event and the faulting execution propagates and handles it.

3. Proposed Methodology during the Tenure of the Research Work

To accomplish the proposed solution the following methodology will be adapted-

Step 1: Survey of existing Exception Handling techniques.

Step 2: Comparative analysis of results of existing techniques.

Step 3: Compare the newly discovered algorithm with the existing algorithm.

5. Conclusion

This paper has presented a number of methods for handling exceptions in modern object-oriented languages. Handling of exceptions which, as have been considered in this paper, is synchronous, termination based, multi -level and general parameterized.- In the tradition of C++ and Modula-3. It has been pointed out that methods for exception handling can be classified according to the approach used for transfer of control and object cleanup. Two alternative standard approaches to exception handling have been discussed which have been called the static table approach and the registration approach. It has been shown that neither of these standard approaches to exception handling meet all the requirements for handling of exceptions specified in this . The problem being the large ever-present runtime overhead for the registration approach and the missing support for mixed-language programming for the static table approach. For minimal runtime overhead combined with mixed-language support this thesis has purposed a new unified method based on a modified static table approach with support of mixed-language programming through registration of calls to external functions which may indirectly raise an exception.

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IN VITRO REGENERATION OF SPILANTHES, AMCELLA.MURR AND ITS PRE-LIMINARY PHYTOCHEMICAL SCREENING

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ABSTRACT

Spilanthes acmella Murr. belongs to the family Asteraceae is a threatened medicinal herb. It is used as antimalarial, antibacterial, antifungal larvicidal, anti-inflammatory and immunomodulating properties. The present project work was undertaken in order to learn the tissue culture technique for medicinally important plant Spilanthes acmella Murr which has several therapeutic uses.

In the present investigation, the nodal segments of Seedling explants were inoculated MS media supplemented with different hormonal concentrations of BAP (0.5, 1.0, 1.5, 2.0mg/l) under aseptic conditions. Best Shoot elongation was observed in two concentration of BAP (0.5 mg/lit & 2mg/lit) after two weeks. The Callus were initiated on MS medium supplemented with 0.5 BAP and different concentration of 2,4-D i.e.MS+ 1.0mg/l 2,4-D, MS+ 1.5mg/l 2,4-D, MS+ 2.0mg/l 2,4-D and MS+2.5mg/l 2,4-D. The callus obtained after 30 days of incubation was 100% in MS+0.5 BAP+ 2.0mg/l 2,4-D.

The preliminary phytochemical analysis of Callus of Spilanthes revealed that these phytocompounds are mainly present in the methanolic extract as compared to ethanolic or aqueous extract (distilled water).

INTRODUCTION

Spilanthes belongs to the family Asteraceae is a threatened medicinal herb *(*Veda Prachayasittikul *et al.,* 2013) a small, erect plant, it grows quickly and sends up gold and red flower heads in the fall. The plant is widely distributed in the tropical and sub- tropical regions including America, north Australia, Africa, Malaya, Borneo, India, Chhattisgarh and Jharkhand. Spilanthol the most active antiseptic alkaloid extracted from this plant, is found effective at extremely low concentrations against blood parasites, and indeed is a poison to most invertebrates while remaining harmless to warm blooded creatures.(Oliver-Bever, 1986; Di Stasi *et al.,* 1994) It is further recommended as a cure for dysentery and rheumatism, and to enhance the immune system. It stimulates wound healing, protects the individual from cold and flu. The leaves are also used to treat bacterial and fungal skin diseases. Medicinal activities are mainly due to the presence of an alkaloid spilanthol (N-isobutyl-2, 6, 8-decatrienamide). Spilanthol also showed anti-ageing activity by inhibiting contractions in subcutaneous muscles, notably those of face and can be used as an anti-wrinkle product.

Objectives:-

- To develop an efficient protocol for the mass multiplication of *Spilanthes.*
- To standardize the protocol for callus induction
- To extract preliminary phytochemcials and Qualitative analysis of phytochemicals

Review of literature:-

Spilanthes acmella Murr. Belonging to family Asteraceae, *Spilanthes acmella (L.) Murr*ay is also known as Toothache Plant and its various synonyms are *Bidens acmella, Bidens ocymifolia*, *Pyrethrum acmella, Spilanthes ocymifolia, Verbesina acmella, Blainvillea acmella* (Sarafl D.K. & V.K. Dixit, 2002*)*. The present study deals with the laboratory investigations to ascertain the larvicidal properties of S. acmella Murr. in three species of mosquito viz. *Anopheles culicifacies Giles,* a vector of malaria, Culex quinquefaciatus, Say, a vector of *filariasis* and *Aedes aegypti Linn*, a vector of dengue. The plant belongs to family *compositeae,* an annual herb upto 30-60 cm. in height that grows throughout India. Villagers use flower heads, which give burning taste, as a remedy for stammering and toothache. Other aerial parts and roots are used for curing of inflammation and diarrhoea.

Gokhle & Bhide (1945) extracted *Spilanthol* from the aerial parts of the plants. Later on Krishnaswami *et al*., (1975), Bohalman *et. al*. (1980), Barges-Del-Castillo et al. (1984), Lemos *et. al*. (1991) and Baruah (1993) reported *â- cryophyllene, â-sitosterol, limonene, myrecene* and other compounds from the plant *S. acmella* and its two other species. The flower tops and aerial parts have been found to be toxic to mosquito larvae and Periplanata. The compound Spilanthol has been identified as having larvicidal activity (Kadir *et. al*., 1989). In the

present study one of the major constituents, Spilanthol, was use to confirm its activity against the eggs, various instar larvae and pupae of the above- mentioned mosquito species.

Material and methods:-

Sterilization Procedure:

Glass culture vials, metal instruments and aluminium foil can all be sterilized by properly wrapped with aluminium foil before sterilization and autoclaving under steam at a pressure of 15psi pressure in and a temperature of 121ºc for 20 min.

Sterilization of plant material :

The nodal segments were first washed with ethanol for 2-3 times then washing with 0.1% bavistine for 10-15 min and followed by surface sterilization with 0.1% solution of mercuric chloride for 2-5min .After sterilization treatment, nodal segments were washed thrice with autoclaved distilled water.

Culture of Nodal Segment:

After surface sterilization, these nodal segments were aseptically cultured under laminar flow on liquid MS Media supplemented with cytokinin (BAP).

Shoot Multiplication:

The shoots were excised and cut into 3-6 shoots and cultured on MS medium supplemented with different concentration of MS and MS+ 0.5 BAP, MS+1.0 BAP, MS+1.5 BAP and MS+2.0 BAP mg/lit.

Standardization of Media for callus induction: For callus induction, leaves were excised on MS medium supplemented with 0.5 BAP and different concentration of 2,4-D i.e.MS+ 1.0mg/l 2,4-D, MS+ 1.5mg/l 2,4-D, MS+ 2.0mg/l 2,4-D and MS+2.5mg/l 2,4-D.

Stock solution of Hormones :

Cytokinins: 10mg of BAP and kinetin were dissolved separately in 1ml of 1N HCl and made upto 10ml by distilled water.

Auxin: 10mg of 2,4-D is dissolved separately in 1ml absolute alcohol and volume is made up to10ml by distilled water.

Result: Growth Regulator (BAP) on number of shoots per explants formed. (After 2 Weeks) **(BAP) in MS medium on *in vitro* shoot multiplication of *Spilanthes acmella* (Data recorded after 3 weeks): Result of callus induction**

S. No	Concentration BAP (mg/l)	No. of explants Inoculated	No. of shoots Induced	Response %
CONTROL	0.0	1	1	20%
1.	**0.5**	**1**	**3**	**60%**
2.	1.0	1	2	40%
3.	1.5	1	2	40%
4.	**2.0**	**1**	**3**	**60%**

DISCUSSION

The multiplication rate is main cause of in vitro propagation of material, subsequently also for the successful commercial exploitation of the plant material. The present investigation was carried out to explore the use of in vitro culture

BAP (mg/l)	Initial no. of shoots	Mean shoot number	Mean shoot length (cm)
Control	2-3	1	1.5-2.5
0.5	2-3	**5**	2.0-3.0
1.0	**2-3**	3	**3.5-4.5**
1.5	2-3	3	5.5-6.5
2.0	**2-3**	**6**	**4.5-5.5**

techniques in the economically and medicinally

S. No	Concentration BAP (mg/l)	Concentration 2,4-D (mg/l)	Response %
1.	0.5	1.0	60%
2.	0.5	1.5	40%
3.	**0.5**	**2.0**	**100%**

important plant like *Spilanthes acmella Murr*. The seedling Explants were initiated on MS medium supplemented with different concentration of BAP i.e.MS+ 0.5 BAP, MS+1.0 BAP,

S.NO PYTOCHEMICALSCREENING OF SPILANTHES ACMELLA MURR.

	PHYTO-CHEMICALS	METHANOL	ETHANOL
1. Carbohydrate	+ve	+ve	+ve
2. Tannins	-ve	-ve	-ve
3. Saponins	-ve	-ve	+ve
4. Flavonoids	+ve	-ve	-ve
5. Alkaloids	-ve	-ve	-ve
6. Ouinones	-ve	-ve	-ve
7. Phenol	-ve	-ve	-ve
8. Steroids	+ve	-ve	-ve
9. Phytosteroids	-ve	-ve	-ve
10. Glycosides	-ve	-ve	-ve
11. Cardiacglycosides	-ve	-ve	-ve
12. Terpenoids	-ve	-ve	-ve
13. Acids	-ve	-ve	-ve
14. Protein	+ve	-ve	-ve
15. Phlobatannins	-ve	-ve	-ve
16. Anthraquinone	-ve	-ve	-ve
18. Anthocyanin	-ve	-ve	-ve
19. Betacyanin	+ve	-ve	-ve
20. Coumarins	+ve	-ve	-ve

MS+1.5 BAP and MS+2.0 BAP mg/lit, for shoot initiation from seedling Explants. Best Shoot elongation was observed in two concentration of BAP (0.5 mg/lit & 2mg/lit) after two weeks. The Callus were initiated on MS medium supplemented with 0.5 BAP and different concentration of 2,4-D i.e.MS+ 1.0mg/l 2,4-D, MS+ 1.5mg/l 2,4-D, MS+ 2.0mg/l 2,4-D and MS+2.5mg/l 2,4 -D. The callus obtained after 30 days of incubation was 100% in MS+0.5 BAP+ 2.0mg/l 2,4-D.

An efficient protocol for *in vitro* flowering of *Spilanthes acmella* Murr, a medicinally valuable plant, has been developed. Multiple shoot formation of up to 4 shoots was obtained on Murashige and Skoog (MS) medium supplemented with BAP (1.0 mg/l). Regenerated shoots were subcultured cultured on MS medium containing various concentrations of BAP alone. (Kuldeep yadav *et al.*, 2011*) In vitro flowering* of shoots regeneration from culture nodal explants *of spilanthes Acmella Murr.*

A major constituent of ethanolic extract of flower heads of *Spilanthes acmella Murr.* is having potent ovicidal, larvicidal and pupicidal activity. Maximum 7.5 ppm concentration causes 100% motility of eggs, larvae and pupae of Anopheles, Culex and Aedes mosquito. Spilanthol is more effective even at low doses against eggs and pupae. In pupae, it seems to work on nervous system which was evident by abnormal movement like jerks, spinning and uncoordinated muscular activity suggesting thereby that it disturbs nerve conduction. (D.K. Saraf1 & V.K. Dixit 2002) *Spilanthes acmella Murr*. : Study on Its Extract Spilanthol as Larvicidal Compound Spilanthol.

Photographs:

Fig: (1) Culture after 18 days

(a) Standard (b) 0.5 BAP c) 1.0 BAP (d) 1.5 BAP (e) 2.0 BAP

Fig: (2) Culture after two week: Multiple shooting

Fig: (3) Callus initiated with MS+0.5 BAP+ 2.0mg/ 2, 4-D.

Phytochemical screening:

Test with Methanol:

Fig: (9) (a) Control (b) Steroids (c) Coumarins (d) Betacyanin (e) protein (f) Carbohydrate

CONCLUSION

In the present study an efficient protocol was developed onto the subject of "*In vitro* regeneration of *Spilanthes acmella Murr*. and preliminary phytochemical screening" which was conducted in Devleela Biotech's VIP road Raipur (C.G). (1) To develop an efficient protocol for the mass multiplication of spilanthes. (2) To standardize the protocol for callus induction. (3) To extract preliminary phytochemcials and Qualitative analysis of phytochemicals.

Initially the explants spilanthes were raised in jars and culture tubes. The explants were treated with 0.1% bavistin for 15min. 3 times washed with distilled water then 70% ethanol for 10min. further, wash 3-4 times with distilled water and add mercuric chloride 0.1% for 5min. again wash 4 times with distilled water. Then these surface sterilized explants were inoculated into bottle and culture tube containing MS media with different concentration BAP.

The seedling Explants were initiated on MS medium supplemented with MS+ 0.5 BAP, MS+1.0 BAP, MS+1.5 BAP and MS+2.0 BAP mg/lit, for shoot initiation from seedling Explants. Best Shoot elongation was observed in two concentration of BAP (0.5 mg/lit & 2mg/lit) after two weeks. The Callus were initiated on MS medium supplemented with 0.5 BAP and different concentration of 2,4-D i.e.MS+ 1.0mg/l 2,4-D, MS+ 1.5mg/l 2,4-D, MS+ 2.0mg/l 2,4-D and MS+2.5mg/l 2,4-D. The callus obtained after 30 days of incubation was 100% in MS+0.5 BAP+ 2.0mg/l 2,4-D.

In the study of phytochemical analysis in callus of *Spilanthes acmella Murr*. phytochemical extraction was done with help of crude extract. Then Qualitative test was successfully done with phytochemical i.e. carbohydrate, Tannins, Saponins, Flavonoids, Alkaloids, Ouinones, Acids, Protein, Terpenoids, Cardic glycosides, Glycosides, phytosteroids, steroids, phenol, Phlobatannins, Anthraquinone, Anthocyanin, Betacyanin and Coumarins with three different solvents, i.e. Methanol, Ethanol, distilled water. The preliminary phytochemical analysis revealed that these phytocompounds are mainly present in the methanolic extract as compared to ethanolic or aqueous extract (distilled water).

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ANALYSIS OF EXCEPTION IN DEFFERENT OBJECT ORIENTED PROGRAMMING LANGUAGE

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1. ABSTRACT

Exception handling is the process of responding to the occurrence, during computation, of exceptions – anomalous or exceptional conditions requiring special processing – often changing the normal flow of program execution. When an error occurs within a method, the method creates an object and hands it off to the runtime system. The object, called an exception object, contains information about the error, including its type and the state of the program when the error occurred. Creating an exception object and handing it to the runtime system is called *throwing an exception*. Exception handling is used to prevent application from being stuck due to unusual occurrences. If the exceptions are handled properly, the application will never get terminated abruptly. Exceptions provide the means to separate the details of what to do when something out of the ordinary happens from the main logic of a program. In traditional programming, error detection, reporting, and handling often lead to confusing spaghetti code.

2. Introduction

In computer science error is the occurrence of an incorrect result produced by a computer. In computer error may be generated in hardware as well as software also. According to occurrence of error we can categorized error in different types.

Hardware error - error resulting from a malfunction of some physical component of the computer.

Software or Programming error – error resulting from bad code in some program involved in producing the erroneous result.

Algorithm error – error resulting from the choice of the wrong algorithm or method for achieving the intended result.

2.1 Types of Error –

In computer programming error is categorized in three types.

I. Syntax or Compile Time Error
II. Runtime Error
III. Logical Error

2.1.1 Syntax or Compile Time Error – syntax error occur when you mistype a command or leave out an expected phrase or argument. Object Oriented Program detects these errors as they occur and even provides help in correcting them. Generally it is occurred at time of source code compilation that's why it is also called compile time error. You cannot run a program until all syntax errors have been corrected.

When programming we use a language to speak to the computer. That language has syntax. If the rules of the syntax are broken, then the compiler complains and offers the term syntax error. In the same vein, all of the programming code that is written must be translated and compiled into something the computer can understand. If there are errors in that process the compiler complains and throws a compiler error. These errors are given types, numbers, and brief English explanations. They offer the engineer a way to debug their programs in an orderly fashion.

2.1.2 Run-time error – any abnormal condition by witch our program can be terminated is called runtime error and are usually beyond your program's control. For example when a variable takes on an unexpected value (divide by zero), when a drive door is left open, or when a file is not found. Object oriented programming language allows you to trap such errors and make attempts to correct them.

2.1.3 Logic errors – logic errors are the most difficult to find. With logic errors, the program will usually run, but will produce incorrect or unexpected results. The object oriented programming language provide debugger is an aid in detecting logic errors.

3. Exception

An Exception is a software or hardware problem that prevents a program from working correctly. Exception might cause you to lose information in the file you're working on, cause errors in the file (corrupt the file) so you can't work with it, or prevent you from using a feature. An Exception is detected after or during the execution (running state) of a program, whereas a compile-time error is detected by

the compiler before the program is ever executed. Type checking, register allocation, code generation, and code optimization are typically done at compile time, but may be done at run time depending on the particular language and compiler.

3.1 Types of Exception

There are main three types or exception

I. Checked Exception
II Unchecked or runtime Exception
III Error

3.1.1 Checked Exception

A checked exception is an exception that is typically a user error or a problem that cannot be foreseen by the programmer. These exceptions cannot simply be ignored at the time of compilation. Checked exception is checked before compilation of program and it is must to handle checked exception. Without handling checked exception program never be compiled and it generate an error message.

3.1.1.1 Types of Checked Exception

Following is the list Checked Exception.

3.1.2 Unchecked or Runtime Exception

A runtime exception is an exception that occurs that probably could have been avoided by the programmer. As opposed to checked exceptions, runtime exceptions are ignored at the time of compilation. It is optional to handle runtime exception because it depends on the runtime situation that if exception will generate program will terminate otherwise it runs properly. For good programming it is necessary to handle runtime exception.

Exception	Description
ClassNotFoundException	Class not found.
CloneNotSupportedException	Attempt to clone an object that does not implement the Cloneable interface.
IllegalAccessException	Access to a class is denied.
InstantiationException	Attempt to create an object of an abstract class or interface.
InterruptedException	One thread has been interrupted by another thread.
NoSuchFieldException	A requested field does not exist.
NoSuchMethodException	A requested method does not exist.
IOException	readLine() or read() method not handled

3.1.2.1 Types of Unchecked Exception

Following is the list of Java Unchecked Exception.

3.1.3 Errors

Errors which are generally cannot be handled and usually refer catastrophic failure e.g. running out of System resources, some examples of Error. Error is not meant to catch as even if you catch it you cannot recover from it. For example during OutOfMemoryError, if you catch it you will get it again because GC may not be able to free memory in first place. Error are often fatal in nature and recovery from Error is not possible.

Exception	Description
ArithmeticException	Arithmetic error, such as divide-by-zero.
ArrayIndexOutOfBoundsException	Array index is out-of-bounds.
ArrayStoreException	Assignment to an array element of an incompatible type.
ClassCastException	Invalid cast.
IllegalArgumentException	Illegal argument used to invoke a method.
IllegalMonitorStateException	Illegal monitor operation, such as waiting on an unlocked thread.
IllegalStateException	Environment or application is in incorrect state.
IllegalThreadStateException	Requested operation not compatible with current thread state.
IndexOutOfBoundsException	Some type of index is out-of-bounds.
NegativeArraySizeException	Array created with a negative size.
NullPointerException	Invalid use of a null reference.
NumberFormatException	Invalid conversion of a string to a numeric format.
SecurityException	Attempt to violate security.
StringIndexOutOfBounds	Attempt to index outside the bounds of a string.
UnsupportedOperationException	An unsupported operation was encountered.

4. Literature Review

4.1 Mechanism of Handling Exception in different Object Oriented Programming.

4.1.1 Python

If you have some *suspicious* code that may raise an exception, you can defend your program by placing the suspicious code in a **try:** block. After the try: block, include an **except:** statement, followed by a block of code which handles the problem as elegantly as possible.

SYNTAX:

Here is simple syntax of *try....except...else* blocks:

```
try:
        You do your operation here;
        ……..
except Exception1
        If there is Exception1, then execute this block.
```

except Exception2
If there is Exception2, then execute this block.
else
If there is no exception then execute this block.
Here are few important points about the above-mentioned syntax:
A single try statement can have multiple except statements. This is useful when the try block contains statements that may throw different types of exceptions.
You can also provide a generic except clause, which handles any exception.
After the except clause(s), you can include an else-clause. The code in the else-block executes if the code in the try: block does not raise an exception.
The else-block is a good place for code that does not need the try: block's protection.

The try-finally clause:
You can use a **finally:** block along with a **try:** block. The finally block is a place to put any code that must execute, whether the try-block raised an exception or not. The syntax of the try-finally statement is this:
try:
You do your operations here;
……….
Due to any exception, this may be skipped.
finally:
This would always be executed.
……..
Python allows a try statement to have both except clause and a finally clause. You cannot use *else* clause as well along with a finally clause.

Raising an exceptions:
You can raise exceptions in several ways by using the raise statement. The general syntax for the **raise** statement.

raise [Exception [, args [, traceback]]]

Here, *Exception* is the type of exception (for example, NameError) and *argument* is a value for the exception argument. The argument is optional; if not supplied, the exception argument is None.
The final argument, traceback, is also optional (and rarely used in practice), and if present, is the traceback object used for the exception.

4.1.2 Rubi
Ruby provide a nice mechanism to handle exceptions. We enclose the code that could raise an exception in a *begin/end* block and use *rescue* clauses to tell Ruby the types of exceptions we want to handle.

```
begin
# -
rescue OneTypeOfException
# -
rescue AnotherTypeOfException
# -
else
# Other Ecxception
ensure
# - always will be executed
end
```

Everything from *begin* to *rescue* is protected. If an exception occurs during the execution of this block of code, control is passed to the block between *rescue* and *end*.
For each *rescue* clause in the *begin* block, Ruby compares the raised Exception against each of the parameters in turn. The match will succeed if the exception named in the rescue clause is the same as the type of the currently thrown exception, or is a superclass of that exception.
In an event that an exception does not match any of the error types specified, we are allowed to use an *else* clause after all the *rescue* clauses.

Using *retry* Statement:
You can capture an exception using *rescue* block and then use *retry* statement to execute *begin* block from the beginning.
Syntax:

```
begin
# Exceptions raised by this code will
# be caught by the following rescue clause
rescue
# This block will capture all types of exceptions
retry  # This will move control to the beginning of begin
end
```

Using *raise* Statement:
You can use *raise* statement to raise an exception. The following method raises an exception whenever it's called. It's second message will be printed. Program
Syntax:

```
raise
OR
```

raise "Error Message"
OR
raise ExceptionType, "Error Message"
OR
raise ExceptionType, "Error Message" condition

The first form simply reraises the current exception (or a RuntimeError if there is no current exception). This is used in exception handlers that need to intercept an exception before passing it on.
The second form creates a new *RuntimeError* exception, setting its message to the given string. This exception is then raised up the call stack.
The third form uses the first argument to create an exception and then sets the associated message to the second argument.
The fourth form is similar to third form but you can add any conditional statement like*unless* to raise an exception.

Using *ensure* Statement:
Sometimes, you need to guarantee that some processing is done at the end of a block of code, regardless of whether an exception was raised. For example, you may have a file open on entry to the block and you need to make sure it gets closed as the block exits.
The *ensure* clause does just this. ensure goes after the last rescue clause and contains a chunk of code that will always be executed as the block terminates. It doesn't matter if the block exits normally, if it raises and rescues an exception, or if it is terminated by an uncaught exception, the *ensure* block will get run.
Syntax:
begin
#..process
#..raise Exception
rescue
#..handle error
ensure
#..finally ensure exception
#..this will always execute
end

Using *else* Statement:
If the *else* clause is present, it goes after the *rescue* clauses and before any *ensure*.
The body of an *else* clause is executed only if no exceptions are raised by the main body of code.
Syntax:
begin
#..process
#..raise Exception
rescue
#..handle error
else
#..executes if there is no exception
ensure
#..finally ensure exception
#..this will always execute
end

Catch and Throw:
While the exception mechanism of raise and rescue is great for abandoning execution when things go wrong, it's sometimes nice to be able to jump out of some deeply nested construct during normal processing. This is where catch and throw come in handy.
The *catch* defines a block that is labeled with the given name (which may be a Symbol or a String). The block is executed normally until a throw is encountered.
Syntax:
throw: lablename
#..this will not be executed
catch: lablename do
#..matching will be executed after a throw is encountered
end

4.1.3 C Sharp
Exceptions provide a way to transfer control from one part of a program to another. C# exception handling is built upon four keywords: **try**, **catch**, **finally**, and **throw**.

- **try**: A try block identifies a block of code for which particular exceptions is activated. It is followed by one or more catch blocks.
- **catch**: A program catches an exception with an exception handler at the place in a program where you want to handle the problem. The catch keyword indicates the catching of an exception.
- **finally**: The finally block is used to execute a given set of statements, whether an exception is thrown or not thrown. For example, if you open a file, it must be

closed whether an exception is raised or not.

throw: A program throws an exception when a problem shows up. This is done using a throw keyword.

Syntax

Assuming a block raises an exception, a method catches an exception using a combination of the try and catch keywords. A try/catch block is placed around the code that might generate an exception. Code within a try/catch block is referred to as protected code, and the syntax for using try/catch looks like the following:

```
try
{
        // statements causing exception
}
catch(ExceptionName e1)
{
        // error handling code
}
catch(ExceptionName e2)
{
        // error handling code
}
catch(ExceptionName eN)
{
        // error handling code
}
finally
{
        //Statement to be executed
}
```

You can list down multiple catch statements to catch different type of exceptions in case your try block raises more than one exception in different situations.

4.1.4 Java

All exception classes are subtypes of the java.lang.Exception class. The exception class is a subclass of the Throwable class. Other than the exception class there is another subclass called Error which is derived from the Throwable class.

Catching Exceptions:

A method catches an exception using a combination of the **try** and **catch** keywords. A try/catch block is placed around the code that might generate an exception. Code within a try/catch block is referred to as protected code, and the syntax for using try/catch looks like the following:

```
try
{
        //Protected code
}
catch(ExceptionName e1)
{
        //catch block
}
```

A catch statement involves declaring the type of exception you are trying to catch. If an exception occurs in protected code, the catch block (or blocks) that follows the try is checked. If the type of exception that occurred is listed in a catch block, the exception is passed to the catch block much as an argument is passed into a method parameter.

Multiple catch Blocks:

A try block can be followed by multiple catch blocks. The syntax for multiple catch blocks looks like the following:

```
try
{
        //Protected code
}
catch(ExceptionName e1)
{
        //catch block
}
catch(ExceptionName e2)
{
        //catch block
}
catch(ExceptionName eN)
{
        //catch block
}
```

The previous statements demonstrate three catch blocks, but you can have any number of them after a single try. If an exception occurs in the protected code, the exception is thrown to the first catch block in the list. If the data type of the exception thrown matches ExceptionType1, it gets caught there. If not, the exception passes down to the second catch statement. This continues until the exception either is caught or falls through all catches, in which case the current method stops execution and the

exception is thrown down to the previous method on the call stack.

The throws/throw Keywords:

If a method does not handle a checked exception, the method must declare it using the**throws** keyword. The throws keyword appears at the end of a method's signature.

You can throw an exception, either a newly instantiated one or an exception that you just caught, by using the **throw** keyword. Try to understand the different in throws and throw keywords.

The following method declares that it throws a RemoteException:

```
import java.io.*;
public class className
{
    public void deposit(double amount) throws RemoteException
    {
        // Method implementation
        throw new RemoteException();
    }
        // Remainder of class definition
    }
```

A method can declare that it throws more than one exception, in which case the exceptions are declared in a list separated by commas. For example, the following method declares that it throws a RemoteException and an InsufficientFundsException:

```
import java.io.*;
public class className
{
    public void withdraw(double amount) throws RemoteException,
    InsufficientFundsException
    {
        // Method implementation
    }
    // Remainder of class definition
}
```

The finally Keyword

The finally keyword is used to create a block of code that follows a try block. A finally block of code always executes, whether or not an exception has occurred.

Using a finally block allows you to run any cleanup-type statements that you want to execute, no matter what happens in the protected code.

A finally block appears at the end of the catch blocks and has the following syntax:

```
try
{
    //Protected code
}
catch(ExceptionName e1)
{
    //catch block
}
catch(ExceptionName e2)
{
    //catch block
}
finally
{
    //statement to be executed
}
```

4.1.5 C++

A C++ exception is a response to an exceptional circumstance that arises while a program is running, such as an attempt to divide by zero. Exceptions provide a way to transfer control from one part of a program to another. C++ exception handling is built upon three keywords: **try, catch,** and **throw**.

throw: A program throws an exception when a problem shows up. This is done using a **throw** keyword.

catch: A program catches an exception with an exception handler at the place in a program where you want to handle the problem. The **catch** keyword indicates the catching of an exception.

try: A **try** block identifies a block of code for which particular exceptions will be activated. It's followed by one or more catch blocks.

Assuming a block will raise an exception, a method catches an exception using a combination of the **try** and **catch** keywords. A try/catch block is placed around the code that might generate an exception. Code within a try/catch block is referred to as protected code, and the syntax for using try/catch looks like the following:

```
try
{
    //Protected code
```

```
}
catch(ExceptionName e1)
{
        //catch block
}
catch(ExceptionName e2)
{
        //catch block
}
catch(ExceptionName eN)
{
        //catch block
}
```

You can list down multiple **catch** statements to catch different type of exceptions in case your **try** block raises more than one exception in different situations.

Throwing Exceptions:

Exceptions can be thrown anywhere within a code block using **throw** statements. The operand of the throw statements determines a type for the exception and can be any expression and the type of the result of the expression determines the type of exception thrown.

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A Study on Computer Literacy among Higher Education Teachers in Pt. Ravishankar University, Raipur

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ABSTRACT

Current literature is plentiful on computer-based technology's influence on college teachers. There are only a few studies which have looked at the influence that computer-based technology has on teachers. This is a study of factors which influence teachers' use of computer-based technology.

It is based on inconsistencies in previous studies, areas not addressed in previous surveys and the dramatic changes in computer-based technology and Internet access using Web browsers since the previous surveys on computer-based technology were conducted.

A survey was conducted among 31 college teachers of various subjects and different colleges (including government, aided and private) participating in Orientation Program -01 of Academic Staff College at Pt. Ravishankar Shukla Univeristy, Raipur. This survey found that use of computer is inevitable and everyone is trying to cope up with the current technology of teaching-learning system. Access of the internet makes user most dynamic by updating their knowledge continuously.

Lack of Internet access and obsolete computer equipment resulted in a negative influence to the teachers. Teachers also expressed a desire for a continuous type of training program for the use of computers.

Keywords: *Elementary education; Improving classroom teaching; Technology training; Teacher education.*

OBJECTIVES

1. To find out the computer applications and competency in college teachers who are participating in the Orientation Program;
2. To find out the applications of computers and resources in their daily life and updating of the teachers curricular, co-curricular and research work activities;
3. To study the use of information and communication technology (ICT) in teachings;
4. To assess teachers themselves how much they are coping with the current trend of technological word.

HYPOTHESIS

1. It has been hypothesized that college teachers should competent of Computers, Internet and their applications for teaching-learning process and

It has been hypothesized that teachers uses these ICT based teaching technique and well update with the current technological era.

LIMITATIONS OF THE STUDY

Study was limited only to the participants of Orientation program - 01 that consist of 31 members of the Chhattisgarh state mainly and 3 colleges of Maharashtra,

Selection of newly appointed teachers was made from the various colleges who are participating for the orientation program

Identification of respondents is participants belongs to only 19 different subjects are included for the survey,

Only 17 participants belongs to Govt. colleges, 7 belongs to aided college and 7 belongs to private college are the respondents for the survey,

Respondents belongs to 23 different institutions perhaps they are not the perfect representative of the institution,

Prevalence finding has been done only for a small group of teachers,

Authenticity of data is based only on the information given by the respondents.

INTRODUCTION

The use of computers in education opens a new area of knowledge and offers a tool that has the potential to change some of the existing educational methods. The teacher is the key to the effective exploitation of this resource in the educational system. As computer use continues to increase in society, educators must also prepare for the use of computers within the classroom. This involves all levels of education, including higher education to elementary schools (McCannon & Crews, 2000).

The role of the teacher is evolving from that of a giver of information to that of a facilitator of student learning. New technologies already exist to help teachers complete that evolution

(Downs, Clark & Bennett, 1995). Applying information technology to effective learning and teaching is the key point in the current education policy. Positive teacher attitudes toward computers and computing skills are recognized by researchers as a necessary component for effective use of computer technology in the classroom. Hizal (1989) indicated that the process of planning for technology use should consider the teacher's beliefs and knowledge about technology. This affects the decisions they make about strategies, procedures and materials for instruction.

Confidence with computers can be attributed to familiarity and computer knowledge. Lack of computer knowledge results in high anxiety and negative attitudes. It has been shown that attitudes toward computing can be improved significantly with training.

In research about the perceptions of instructional materials, classroom teachers generally demonstrated little knowledge of the technologies (Odabasi & Namlu, 1997).

The majority of computer use was in actual computer classes, and this mostly took place in vocational institutions. Teachers' lack of knowledge and skill about using computers for instructional purposes was the problem encountered the most in implementing computer use in teaching. Lack of software, insufficient training opportunities, insufficient expertise, guidance and help for instructional use, insufficient technical assistance, and insufficient number of computers available were other important problems.

Computer technology has become a fundamental part of education and will likely be more so in the future. Unfortunately, Information Technology innovation initiatives in India are still characterized by a lack of research into possible options for policies and strategies. There is also a noted lack in studies of the impact of the actions that are taken. As there has been no evaluation, very little is known about the extent of use of computers in teaching and learning, the factors affecting the use of computers, or the effectiveness of the in-service programs.

It is very important to examine teachers' perceptions since research studies have found that teacher perceptions of computer and technology are closely related to their computer knowledge and computer use. New data is presented that reveals the perspectives and awareness levels of teachers about specific technologies, the role of technology in education, and how they see the technological problems that that basic education school system faces.

REVIEW OF LITERATURE

The twentieth century has witnessed a revolution in computer science and technology. It is the boon to the human beings. Every aspects of our life get assisted by the computers and technology. It became an important part of our profession i.e. teaching. As it is said that "Teaching -Learning is a continuous process", the teacher should be aware of this system to inculcate and update in daily practice.

Studies have documented the increasing use of complementary and alternative technique over the last decade and century, especially in distressed individuals with support of internet, e-library, tutorials and other materials like power point presentations, animated and multimedia resources of teaching-learning aid and other digital artefacts.

There are several perceptions by teachers in the use of computer-based technology that seem to be significant:

(a) Technology will support superior forms of learning (Means, Blando, Olson, Morocco, Remz, & Zorfass, 1993),

(b) computer-based technology can change the way teaching/learning occurs (Dwyer, Ringstaff, & Sandholtz, 1991; OTA, 1988, 1995; Sheingold & Hadley, 1990),

(c) computer-based technology helps teacher to accomplish things that they cannot do by themselves (Albright & Graf, 1992),

(d) computer-based technology enhances teacher/student productivity (OTA, 1995; Sheingold & Hadley, 1990), and

(e) computer-based technology prepares students for the work world (Albright & Graf, 1992). Teachers who hold these perceptions tend to be the most successful in adopting and using computer-based technology.

METHODOLOGY

This study is concerned with an objective to find out the computer awareness among the college teachers of different types of colleges of Chhattisgarh and a significant part of the Maharashtra State. The description of the methods and procedures during the course of investigation are briefly presented under the following heads:

3.1 Research Design

3.2 Study Site and Description of the Population

3.3 Type of Sampling

3.4 Size of Sample

3.5 Research Tools for Data Collection

3.6 Data Analysis and Interpretation.

3.1 Research Design – The current work is a brief study designed to explore the hidden truth about the computer awareness and implementations among the newly appointed college teachers. According to a customized questionnaire the survey was adopted for this study**.**

To conduct the survey various multiple choice questionnaire was applied so that the subject's reality and perceptions can be documented, understood and interpreted. Details of the respondents is tabulated as below –

Varables	Part.	No	Percent
Gender	Male	14	45.16
	Female	17	54.84
	Total	**31**	**100.00**
Position	Asst. Prof.	31	100.00
Teaching Experience	< 1 Yr	5	16.13
	>1 Yr and <=5 Yrs	18	58.06
	>5 Yrs and < =10 Yrs	6	19.35
	> 10 Yrs	2	6.45
	Total	**31**	**100.00**
College Type	Governement	17	54.84
	Aided	7	22.58
	Private	7	22.58
	Total	**31**	**100.00**

Table 1 : Demographic Information of Respondents

3.2 Study Site and Description of the Population – The study area concentrates mainly the 31 male and female participants of Orientation Program of Academic Staff College at Pt.Ravishankar Shukla Univeristy, Raipur.

3.3 Type of Sampling - A purposive sampling was designed to perform the study. A variety of college types and teachers from different subjects are the target group to collect sample for the survey.

3.4 Size of Sample – Participants having experience from 4 months to 22 years belong to 19 subjects and 23 different institutions were selected. Participants from government, aided and private colleges of Chhattisgarh as well as 3 colleges of Maharashtra State (from Chadrapur and Amravati Distt.) are included.

3.5 Research Tools - Tools which have been used to collect the primary data were questionnaire in 4 parts. First parts includes basic and computer operational related questions.. The second part includes implementation of computer aids like "I use computer-based technology for".

Similarly the third part includes operational training related questions and the fourth part includes familiarity and usage of the computer hardware parts. In a such way we tried to unveil interest, applications and skills on computer of the teachers.

3.6 Data Interpretation – Collected data were tabulated and analyzed in the light of the objectives set for the study. The statistical measured used for the present study included – percentage prevalence of usage of a particular fact. The results are discussed and interpreted with the help of the observations obtained.

RESULTS AND INTERPRETATION

(I) Computer related basic questions and responses -

All three types of colleges (government, aided and private) and their teachers have been included for the survey where they belongs to different subjects in their teachings. They are mainly from Arts, Commerce and Science group. A summarized and tabulated data of respondents is as below –

SNo.	Questions	Yes		No	
		No	%	No.	%
1	Are you a computer user?	30	96.77	1	3.22
2	Do you think that you are computer literate?	23	74.19	8	25.80
3	Do you own a computer?	24	77.42	7	22.58
4	Do you have a formal education of computer?	24	77.42	7	22.58
5	Does your institution have computers for your usage?	28	90.32	3	9.67
6	Does your institution have sufficient computer resources?	18	58.06	13	41.93
7	Do you read computer and Internet related stuff?	17	54.84	14	45.16
8	Do you have attend seminars or other events related to computers?	12	38.71	19	61.29
9	Do you have access to the Internet?	22	70.97	9	29.03
	If Yes then you use the internet for -				
10	Social Media/ Mailings?	25	80.65	6	19.35
11	Academic enrichment?	24	77.42	7	22.58
12	Information access via Web browsers (e.g. Netscape)?	21	67.74	10	32.25
13	News or bulletin boards?	22	70.97	9	29.03
14	Downloading software or Database Access?	23	74.19	8	25.80

Table 2 : Results of Self Report of Respondents on Computer Availability, Computer Usage and Computer Interest

a. Results of Self Report of Respondents on Computer Availability, Computer Usage and Computer Interest-

Interactive teaching-learning through technology is the inevitable for the current era. Teachers from elementary school to the higher studies should be well aware of the system. The system makes the process more interesting and effective. Along with the young generation teachers senior teachers should also include by developing their computer oriented skills.

As it is seen from Table 2, 96.77% of the respondents are assumed themselves as a computer user, but 74.19% of them reported that they are computer literate. 77.42% respondents are having their own computers and 90.32% respondents reports that their institution is providing them computers for their usage.

This is a very good sign towards approaching these type of technology by them. Fact about inclination and keenness to update themselves by collecting computer and internet related stuff is 54.84% while attending seminars is only 38.71%.

Fig 1 Describing about accessibility of internet that 80.65% respondents use social media/ mailing and very important 77.42% respondents use internet for their academic enrichment. Concerning to the information access is 67.74%, watching for News bulletin boards is 70.97%

S No	Particulars	Daily		Every Other Day		Weekly		Monthly		Some Times		Never	
		No	%	No	%	No	%	No.	%	No	%	No	%
1	Tutorials	4	12.90	1	3.23	4	12.90	0	0.00	11	35.48	2	6.45
2	Testing	2	6.45	3	9.68	3	9.68	1	3.23	10	32.26	3	9.68
3	Presentation of new materials	1	3.23	4	12.90	5	16.13	2	6.45	9	29.03	1	3.23
4	Remediation / acceleration	4	12.90	2	6.45	3	9.68	0	0.00	9	29.03	4	12.90
5	Keyboarding	4	12.90	3	9.68	2	6.45	0	0.00	10	32.26	3	9.68
6	Drill and Practice	6	19.35	0	0.00	1	3.23	1	3.23	12	38.71	2	6.45
7	Recreational & educational games	4	12.90	1	3.23	1	3.23	0	0.00	9	29.03	7	22.58
8	Enrichment activities	4	12.90	1	3.23	2	6.45	1	3.23	12	38.71	2	6.45
9	Experimentations / simulations	3	9.68	0	0.00	4	12.90	3	9.68	8	25.81	4	12.90
10	Information access via CD-ROMs (i.e. ERIC or Encarta)	2	6.45	0	0.00	4	12.90	0	0.00	8	25.81	8	25.81
11	Information access via the Internet	9	29.03	4	12.90	2	6.45	0	0.00	3	9.68	4	12.90
12	Word Processing, Tabulation and Presentation, etc.	6	19.35	3	9.68	2	6.45	0	0.00	6	19.35	5	16.13
13	Authoring	4	12.90	1	3.23	1	3.23	3	9.68	7	22.58	6	19.35
14	Multimedia appli.	4	12.90	4	12.90	2	6.45	1	3.23	8	25.81	3	9.68
15	Collecting Materials for Research Work	7	22.58	3	9.68	3	9.68	0	0.00	6	19.35	3	9.68

Table 3 : Responses of "I use computer-based technology for"

and downloads of software or database is 74.19%.

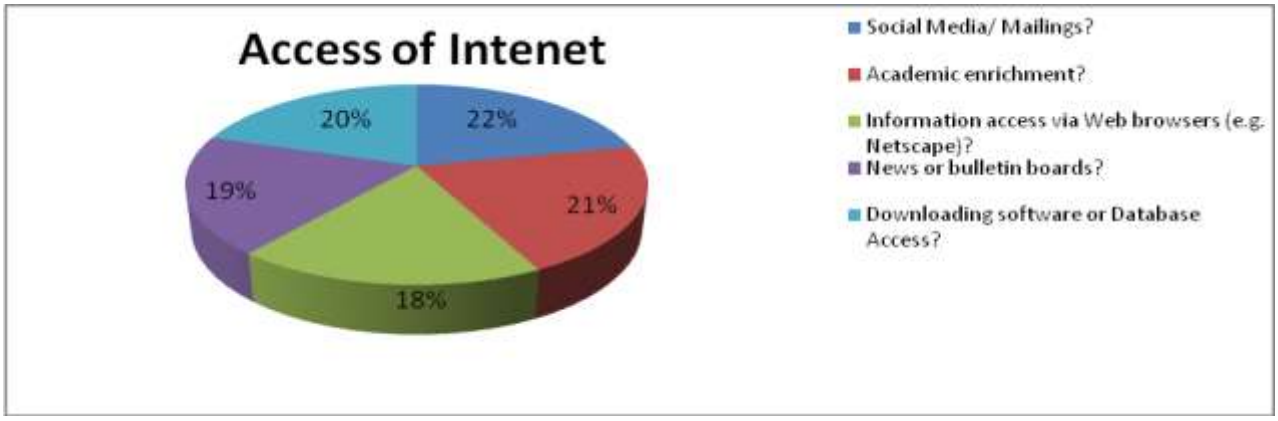

Fig. 1 : Access purpose of Internet

b) Response for "I use computer-based technology for"-
The very important part of the study that is describing the uses of computers where

they apply this technology actually. Only 12.90% respondents asked that they use tutorials daily while 6.45% users never used tutorials till date. Only 12.90% users apply computer for Enrich-ment activities while 22.58% of users collects research work materials through the Internet. Other details of the usage of the computers are shown in table 3.

c) Response of "If type(s) of computer training I have had of"-
Among the participants only 51.61% are trained for initially while 48.39% of users trained

Just-in-time. A very less 25.81% users learned in continuous classes while 35.48% users trained in academic classes. 54.84% of users are trained by Peer while the same ratio of 54.84% are Self taught.

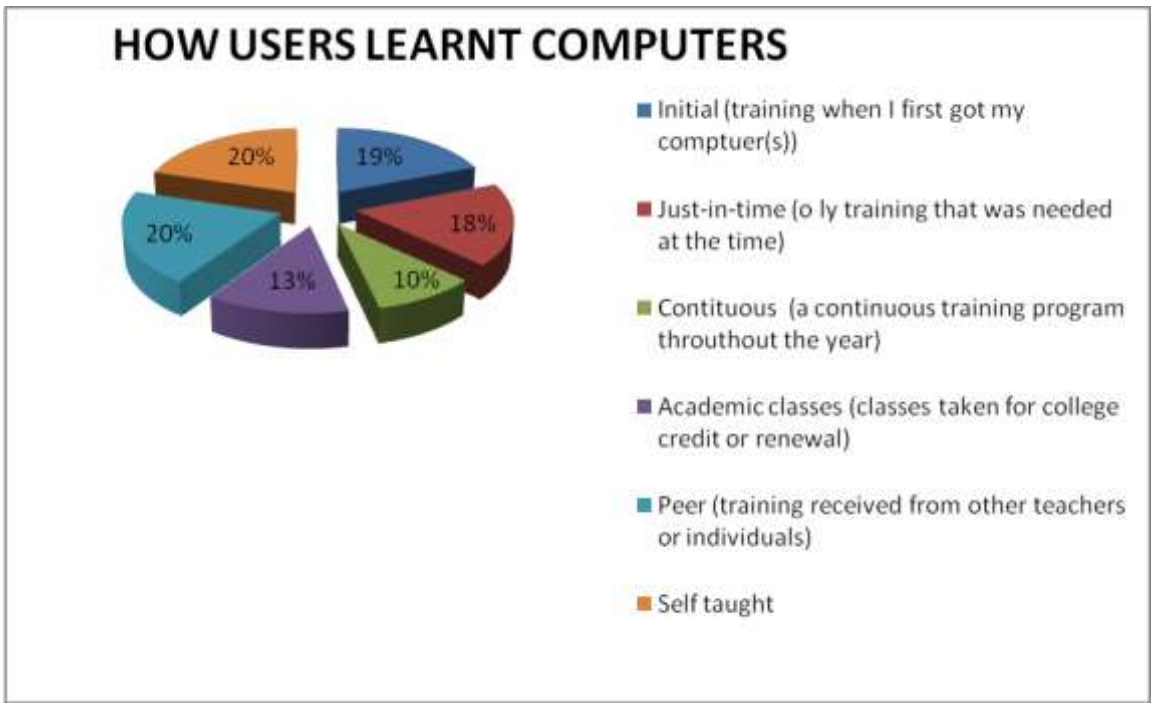

Fig. 2: How users learnt Computers

A ratio of 48.39% of respondents assumes that whatever they taught is competently to operate computers while 58.06 users respondents that the training taught them how to implement computers into curriculum similarly 51.61% of respondents assume that the training taught them how to evaluate software / hardware for instruction.

S.No.	Particulars	Yes		No		Yes, I would if Available	Yes, I would if Available
		No	%	No.	%	No.	%
1	Initial (training when I first got my comptuer(s))	16	51.61	7	22.58	1	3.23
2	Just-in-time (only training that was needed at the time)	15	48.39	6	19.35	3	9.68
3	Continuous (a continuous training program throughout the year)	8	25.81	13	41.94	3	9.68
4	Academic classes (classes taken for college credit or renewal)	11	35.48	11	35.48	2	6.45
5	Peer (training received from other teachers or individuals)	17	54.84	5	16.13	2	6.45
6	Self taught	17	54.84	6	19.35	1	3.23
7	My training taught me to competently operate computers?	15	48.39	8	25.81	1	3.23
8	My training taught me how to implement computers into my curriculum?	18	58.06	5	16.13	1	3.23
9	My training taught me how to evaluate software / hardware for instruction?	16	51.61	6	19.35	2	6.45

Table 4 : Responses of "If type(s) of computer training I have had are"

In this study, significant differences were found to exist between males and females in their familiarity with some types of computer technologies. More male teachers than female teachers were familiar with Keyboard, Mouse, Monitor, Sound Card, Microphone/Speaker, and Digital Camera. A possible explanation for this is that most people in Turkey view computer and related technologies as male domains. The amount of teaching experience appeared to have an effect on teachers' familiarity with computer technologies.

d) Teachers' Familiarity with Computer Technologies –

In the third part of the survey, respondents reported their familiarity with different types of computer technologies. The group as a whole seemed generally unfamiliar with computer technologies. The frequency distributions showed that 12.65 % of total teachers were not familiar with computer technologies, while 87.35 % percent of teachers were familiar.

DISCUSSION AND RECOMMENDATIONS

This study, based on a survey of college teachers in Chhattisgarh as well 3 colleges of Maharashtra state, examined teacher's perceptions and awareness level about specific technologies, and about the role of technology in education, and how they see the technological problems that are faced by educational systems.

It is clear from the results that, of the 31 respondents, 1 (3.22%) indicated that he/she could use computers but they did not feel they were proficient. These results reveal that many teachers are computer users and the computer literacy level of teachers is very high.

SNo	Particulars	Familiar		Not Familiar		Familiar and Used		Familiar but not used	
		No	%	No.	%	No.	%	No.	%
1	Hard disk	13	41.94	2	6.452	14	45.16	2	6.45
2	RAM	14	45.16	2	6.452	11	35.48	4	12.90
3	CD-ROM	13	41.94	2	6.452	15	48.39	1	3.23
4	CD	9	29.03	1	3.226	20	64.52	1	3.23
5	DVD	12	38.71	1	3.226	15	48.39	3	9.68
6	Disk Drive	14	45.16	4	12.9	12	38.71	1	3.23
7	Floppy Disk	9	29.03	3	9.677	16	51.61	3	9.68
8	Keyboard	9	29.03	2	6.452	20	64.52	0	0.00
9	Mouse	10	32.26	1	3.226	20	64.52	0	0.00
10	Monitor	10	32.26	1	3.226	20	64.52	0	0.00
11	Printer	10	32.26	1	3.226	18	58.06	2	6.45
12	Scanner	9	29.03	3	9.677	16	51.61	3	9.68
13	Sound Card	8	25.81	6	19.35	15	48.39	2	6.45
14	TV/Radio Card	10	32.26	4	12.9	14	45.16	3	9.68
15	Microphone/ Speaker	8	25.81	4	12.9	18	58.06	1	3.23
16	Digital Camera	8	25.81	3	9.677	17	54.84	3	9.68
17	Video Camera / PC Compatible	10	32.26	4	12.9	15	48.39	2	6.45
18	Joystick	12	38.71	9	29.03	6	19.35	4	12.90
19	Optical Scanner	13	41.94	7	22.58	7	22.58	4	12.90
20	Datashow	10	32.26	10	32.26	9	29.03	2	6.45
21	Overhead projection / PC Compatible	11	35.48	5	16.13	11	35.48	4	12.90
22	Fax / PC Compatible	12	38.71	4	12.9	10	32.26	5	16.13
23	Modem	11	35.48	5	16.13	12	38.71	3	9.68
24	Ethernet Card	10	32.26	8	25.81	9	29.03	4	12.90
25	WebCam	6	19.35	6	19.35	16	51.61	3	9.68

Table 5 : Responses of Questionnaire – 03 regarding components of the Computers and awareness with them

Of the 31 respondents, 54.84% indicated that they read computer and Internet magazines and 38.71% attend seminars or other events. These findings demonstrate that funding and access to proper training prevents teachers from upgrading their skills. The educational policy-makers of the state need to allocate more funds for training for in-service teachers.

Overhead projector, printer, keyboard, modem, hard disk, and video camera were ranked as the most essential items for teaching and learning at basic education schools. CD (compact disk), digital camera, monitor, WebCam were least ranked as the most essential items or not ranked at all. Teachers' most ranked items were mainly well-known items and could be classified as peripheral devices. As mentioned above from the findings of this study, teachers in basic educational schools in Turkey have a lack of fundamental concepts, knowledge and skills for applying technology in educational settings.

This study found that gender, amount of teaching experience, and school status has a significant relationship in familiarity with some types of computer technologies. Problems such as lack of hardware, lack of knowledge and skills about using computers, lack of training or insufficient training opportunities makes teachers not upto the marks.

Conclusion

In this study, teachers' perspectives, their awareness level of specific technologies and the roles this technology plays in education are researched. Technical problems that inhibited the use of computers in their schools are also identified. Data was elicited from a sample of 31 teachers who were working in higher educational institutions.

The results revealed that some of the teachers were not computer users. Some teachers lacked a functional computer literacy foundation upon which to build new technology and skills. Analysis of teachers' knowledge of computer technologies revealed an average level of technical knowledge, as well as some interesting perceptions of the role of some specific computer-related items. For some teachers, the use of computers and related technologies had not been a routine part of their own educational environment.

This study showed that gender, years of teaching, and college status have a significant relationship to familiarity with computer technologies in Chhattisgarh and Maharashtra state. Lack of hardware, lack of knowledge and skills about using computers, lack of training or insufficient training opportunities. Data suggest that college teachers need to be increasingly encouraged to explore the emerging technologies for teaching. The results of this study can be used in the educational systems of newly developing countries to overcome the difficulties mentioned in the case.

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"गोपाल मिश्र" के 'जैमिनी अश्वमेध' का समीक्षात्मक अध्ययन

Mk- fot;y{eh ckti;h
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प्राक्कथन (सारांश)

रीतिकालीन कवि "गोपाल मिश्र" का नामोल्लेखन मिश्रबंधु, विनोद में मिलता है, किन्तु उसके बाद लिखे गये fgUnh lkfgR; d bfrgkl e budk foLej.k dj fn;k x;kA vkpk; 'kDy rd dh nf"V bu ij ugh iM ik;hA loiFke bud leLr xFkk dk Lor= :i l leh{kkRed v/;;u Mk- 'k"kukjk;.k pny u fd;kA mudk bl fo"k; e fy[kk 'kk/k ic/k lu 1974 e ih-,p-Mh- d fy, Lohdr gvkA xkiky dfo u tk रचनायें दीं, वे किसी भी रीतिकालीन राष्ट्रीय स्तर के कवि से कम नहीं हैं।

यह लघुशोध आठ अध्यायों में विभक्त है। प्रथम v/;k; e xkiky feJ dk lkekU; ifjp; fn;k x;k gA fgUnh dk0; ijEijk e NRrhlx< d iFke dfo xkiky dfo dk tUeoRr vUr%lk{; l ikIr ugh gkrk gA bud tUe rFkk eR;dky d lc/k e bfrgkl loFkk eku gA mud firk dk uke xxk- jke rFkk i= dk uke ek[ku FkkA ;g rF; i- ामाणिक है। 'जैमिनी अश्वमेध' खण्डकाव्य में इस मत dh if"V gkrh g%&

iju i.; irki lxxkjke d]
fru unu xkiky jfld gfj uke dA
fru lr ek[ku dfg; gr lu fyft;]
अश्वमेध इतिहास कथा करि दीजिये।

tUe LFky&

xkiky dfo dk tUe LFkku lc/kh rF; fooknkLin gA i- ykpu ilkn ik.M; th mUg eyr% "छत्तीसगढ़" का मानते है। स्व- ineyky iUukyky c['kh u mUg iokl h Lohdkj fd;k FkkA o mUg मूलतः उत्तरप्रदेश का निवासी मानते थे।

xkiky feJ u NRrhlx< dh ijEijk d vulkj ^HkfDr fpUrkef.k^ rFkk ^jkeirki^ e fookg o.ku d lnHk e Hkkth f[kyku dk mYy[k fd;k gA

Mk- 'k"kukjk;.k pny d vulkj&

"इन समस्त तथ्यों के आधार पर हमारा अन. eku g fd xkiky dfo tUer% NRrhlx< d gA संभव है, इनके पूर्वज उत्तर प्रदेश से आये हों और उनका वंश कई पीढ़ियों से यहाँ निवास कर रहा हो।"

tUedky&

xkiky dfo dk tUedky Hkh mudh dfr;k d vk/kkj ij vue; gA

Mk- चंदेले का उक्त ग्रंथ (गोपाल मिश्र की काव्य साध ाना) ही गोपाल मिश्र पर सर्वप्रथम प्रकाशित शोधग्रंथ g] ftle mUgku vuekur% lor 1706 d yxHkx xkiky dfo dk tUe dky fu:fir fd;k gA

Tkhou ;kiu&

गोपाल मिश्र, मध्यप्रदेश अब (छत्तीसगढ़) के fcykliur ftykUrxr jRuipqj d jktkfJr dfo FkA हैहयवंशी राजा रत्नदेव ने सन् 1050 के लगभग रत्नपुर की नींव डाली। "खूबतमाशा" में जो उनका प्रथम ग्रंथ है, तत्कालीन हैहयवंशी राजा राजसिंह की प्रशंसा की गई है।

,slk dgk tkrk g fd jRuipqj NkMdj o [kjkx< py x;A dkdj e Hkh mud fuokl dh ckr dgh tkrh gA

प्रमुख कृतियाँः– xkiky feJ dh fuEufyf[kr कृतियाँ उपलब्ध हैः– खूबतमाशा, जैमिनी अश्वेमध, lnkekpfjr] HkfDr fprkef.k] jkeirkiA bue सुदामा चरित को छोड़कर सब प्रकाशित हो चुके है। द्वितीय अध्याय में जैमिनी अश्वमेध की कथावस्तु प्रस्तुत की गई है। जैमिनी अश्वमेध के मूल कथानक e iklfxd dFkk chp&chp e fijkb xb gA bldh dFkkoLr dk rhu Hkkxk e foHkDr fd;k tk ldrk g%&

i"BHkfe%& bld vUrxr] ;f/kf"Bj dh fpUrk] d".k का स्मरण, श्याम कर्ण अश्व की प्राप्ति, भीम बनासु के द्वारा आश्वासन तथा दिग्विजय के निमित अश्व dk NkMk tkuk] ie[k ?kVukvk dk fp=.kA

fnfXot; ;k=k%& dFkkukd dk ;g e[; Hkkx g] ftl ge jh< dh gMMh Hkh dg ldr gA bld अन्तर्गत प्र थम युद्ध से लेकर अंतिम युद्ध तक का o.ku gA

उपसंहारः– यह कथावस्तु का अंतिम अंश है। इस Hkkx e efu;k dk vkuk] mudk Lokxr lRdkj करना तथा यज्ञ क्रिया का विशद वर्णन है।

प्रासंगिक कथा में लवकुश कथा, चंद्रहंस कथा, जैमिनी अश्वमेध का उपजीव्य ग्रंथ

तृतीय अध्याय में जैमिनी अश्वमेध के काव्य रूप की ppk dh xb gA

ik;% [k.Mdk0; d lc/k e vkpk;x.k eku gA egkdk0; ij ikphu vkpk;k u ftl foLrkj d

lkFk fopkj fd;k g] ogk ij [k.Mdk0; d lc/k e केवल आचार्य विश्वनाथ की दृष्टि गई है।

egkdk0; ,o [k.Mdk0; e lf{kIr Hkn%&

महाकाव्य एवं खण्डकाव्य में वैसे कोई विशेष अंतर ugh g] fQj Hkh bu nkuk e l{e Hkn g&

[k.Mdk0; egkdk0; dk vx ugh ekuk tkrkA

खण्डकाव्य का उद्देश्य तथा कथावस्तु सीमित होते हुये Hkh Lo; e i.k gkrk gA [k.Mdk0; e thou dk ,dkxh dृf"Vdk.k gkrk g] egkdk0; e lHkh lnHkk dk foopu gkrk gA egkdk0; e vFk] /ke] काम और मोक्ष में से कोई एक फल होना आवश्यक है, इसके विपरीत खण्ड काव्य में जीवन के एक अंश dk fp=.k gku d dkj.k Qy dh ikfIr ugh jgrhA

आचार्य विश्वनाथ के अनुसारः–

"खण्डकाव्य भवेत्काव्यत्स्यैक देशानुसारि च।"

ic/k dk0; dk Hkn gku d dkj.k [k.Mdk0; dk dFkkdk0; Hkh dgk tkrk gA

[k.Mdk0; dk dyoj y?k gku d dkj.k mldk dFkkud thou dh fdlh ,d egRoi.k ?kVuk ij vk/kkfjr gkrk gA mle xk.k dFkkvk d fy, vf/kd l vf/kd egRo dk LFkku ugh jgrkA

खण्डकाव्य का कथानाक सर्गबद्ध हो, यह आवश्यक ugh gA ble uk;d d lhfer x.kk dk ifjp;] fdUr e;knk d vUrxr gh gkrk gA uk;d d lnHk e gh vU; ik=k dk egRo gkrk gA

bld lnHk e [k.Mdk0; e fdlh ,d jl dh egRrk gA blh d vk/kkj ij dFkkukd dk foLrkj gkrk g] rFkk o.ku 'kyh dk ekfed :i /kkj.k djuk iMrk gA

एक रस की भाँति खण्डकाव्य में एक ही छंद का विध ाान है, आवश्कतानुसार अन्य छंदों को भी समाविष्ट fd;k tk ldrk gA

कोई भी काव्य निरूद्देश्य नहीं होता, अतः खण्डकाव्य का उद्देश्य मर्यादित होता है।

जैमिनी अश्वमेध में उपर्युक्त विशेषताओं की संगतिः– जैमिनी अश्वमेध संक्षिप्त होते हुए भी स्वयं में पूर्ण gA ;g ,d ;) dk0; g rFkk 51 Hkkxk e foHkDr gA ,d [k.Mdk0; gkr g, Hkh egkdk0; d x.kk l ;Dr gA ble ;f/kf"Bj 0;kl d lokn l ;K i.k gku dh dFkk gA bl dk0; dk uk;d vtu है। साधारणतः नायक धीरोदात्त, धीरललित, धीरप्रशांत अथवा धीरोद्धत होते हैं। "जैमिनी अश्वमेध" का नायक vtu /khjknkRr gA uk;d vtu g] vr% Jhd".k] ;f/kf"Bj] Hkhe] l/kUok] jktk ekj/ot] pn- हंस जैसे अन्य पात्रों का अपना विशेष महत्व है। राम, लक्ष्मण, लव कुश तथा भरत भी अन्य पात्रों मे आते gA

prFk v/;k; e ik= ,o pfj= fp=.k gA ik= viu Lo dk mi;Dr o.k] olu ,o vkHk"k.k vkfn l vkPNkfnr dj eu l Hkh i;kxdky rd d fy, jkee; ;k n";re; gk tkrk gA

egkdk0; e ik=k dh l[;k vf/kd gkrh g] fdUr खण्डकाव्य में इसके विपरीत संख्या निश्चित लक्ष्य से gh dFkk dh J[kyk c<rh gA vr% xk.k ik= U;u होते है। जैमिनी अश्वमेध में पात्रों की संख्या अधिक होने पर भी शिथिलता नहीं आई है। प्रमुख पात्रों में vtu] Jhकृ".k] ;f/kf"Bj ,o Hkhe vkr gA

i/kku ik= d ek/;e l dFkk dk lpkyu gkrk g] rFkk xk.k ik= lgk;rkFk iLrr gkr gA bl खण्डकाव्य में गौण पात्रों में क्रमशः शल्य, बनासु, ljR;] uhy/ot] gl/ot] cHkokgu] pnglkfn gA L=h ik=k dh l[;k e e[; :Ik l ifeyk] dirh] nkinh rFkk lR;Hkkek gA

Mk- 'k"kukjk;.k pnyh dh vuqlkj&

^dfo u ik=k d ykd foJr pfj= e lk/kkj.kr% ifjoru ugh fd;k gA ;g okNuh; Hkh g] D;kfd पाठकों के विशिष्ट संस्कारमूलक चित्तवृत का विपरीत vuk[kk fp= xkg; ugh gkrk vkj jlkuHkfr e 0;o/kku mifLFkr djrk gA^

'जैमिनी अश्वमेध' में कवि ने उपजीव्य ग्रंथ के जितने ik= fy[k g] lk/kkj.kr% mud ekfyd pfj= dk lj {k.k fd;k g] fdUr ,sk ugh g fd xkiky dfo u vuokn ek= djd j[k fn;k gkA ey Lo:i dh j क्षा करते हुए भी कतिपय अन्य विशेषतायें भी उन्होंने dfri; ik=k e lfUufo"V dh gA

Mk- jkcd u fy[kk g ^pfj= 0;fDr d 0;fDrRo dk og Hkkx g] tk 0;fDr dh 'kkjhfjd {kerk] le>u की क्षमता, प्रभाव उन समस्त गुणों का समावेश होता g] tk ik= 0;ogkj e fufgr jgrk g] fQj Hkh pfj= dN gn rd cf) ij fuHkj g] vkj og LoHkko d vk/kkj ij ekuk tkrk g ;k de l de mldk lc/k LoHkko l ekuk tkrk gA^

पंचम अध्याय में जैमिनी अश्वमेध में कवि का वर्णन वैशिष्ट्य प्रस्तुत है। इसके अन्तर्गत युद्धवर्णन का मु [; :Ik l foopu gvk g] rnijkUr fookg o.ku] feyki o.ku ,o ;Ko.ku d dfri; mnkgj.k iLrr g, gA

d- ;|) o.ku e&

v- ;|) ioZ dh fLFkfr&

1-ohjk dk mRlkg& o"kdr dk mRlkg] uhy/ot] Hkhe] gl/ot d mRlkg Hkko dk Li"V dju के साथ–साथ अर्जुन, शल्य, प्रमिला आदि का उत्साह o.ku Hkh fd;k x;k gA

2- ;k) kvk dk 0;fDrRo

3-xokfDr

ohjk dh ifrKk

;) lkexh& /ku"kck.k] luk] jFk] xtA जैमिनी अश्वमेध में युद्ध शत्रुतापूर्ण नहीं हुये है, केवल शौर्य प्रदर्शन के लिए हैं। वीररस की रसानभूति के लिए सेनाओं की तैयारी एवं उनके प्रमाण का विशद वर्णन आवश्यक होता है।

lU; iLFkku& fofo/k vL= 'kL=k l lfTtr gkdj j.k d fy, iLFkku dju oky ohjk dk vud LFkku ij xkiky dfo u lrho o.ku fd;k gA dfo u viu dk0; e prjfx.kh lU; ;ktuk dh gA

;) dh io fLFkfr d vUrxr db LFkkuk ij efgykvk dk vVkjh l >kdr fn[kku dh iofRr mYy[kuh; gA

v- ;) dh fLFkfr&

1- j.kok|

2- irkdk;

3- ?kkr&ifr?kkr

4- ;) d idkj& ck.k;)] xnk;)] ckg;)] ek;k;)A

;)kijkUr fLFkfr& j.kHkfe] Jhd".k dh dhfr

[k- fookg o.kZu&

e/; ;x e fookg ,d fpje;kfnr lLFkk Fkh] bld आदर्श, उद्देश्य तथा कार्य स्थिर हो चुके थे, यद्यपि bud Lo:lk rFkk idkj e le;≤ ij ifjoru होते रहे हैं। धर्म और दर्शन की दृष्टि से विवाह का lc/k thou d i:"kkFkk l FkkA /ke d vH;kl vkj lLdkj d fy, cgep; vkJe dh 0;oLFkk FkhA vFk dh miyfC/k rFkk dke d lou d fy, गार्हस्थ्य और उसके आधारभूत विवाह की आवश्यकता FkhA

'जैमिनी अश्वमेध' में सांगोपांग विवाह का वर्णन कहीं नहीं है। एकाध जगह विवाह का अंश ही दिखाई देता gA

x- feyki o.kZu& 'जैमिनी अश्वमेध' में आयोजनपूर्ण मिलाप वर्णन दर्शनीय है। यह सामान्य दो व्यक्तियों का मिलन नहीं है, बल्कि दो समाज या दो विशाल legk dk feyu gA

cukl&;f/kf"Bj feyu] Jh d".kkfn ;f/kf"Bj feyu] vtukfn&;f/kf"Bj feyuA

nkuk i{kk dh r;kjh] ij dh ltkoV] mYykle; वातावरण। 'जैमिनी अश्वमेध' में मिलाप के प्रसंग में uxjoklh iQfYyr gkr gA pkjk vkj 'kgukb dh xt ,o exypkj lukb nrk gA

^ckt nnfHk nhg tg] exy gkfg vikjA
ekr pj.k onr Hk;] egklexy pkjA^

?k- ;K o.kZu& fooP; [k.Mdk0; dh vk/kkjHkfe ;K gh gA ;K d fufeRr gh fnfXot; dk lkjk c[kMk [kMk fd;k x;k gA dfo u nRr&fpRr gkdj ;K dk o.ku fd;k gA bld अन्तर्गत सर्वप्रथम यज्ञ का प्रस्ताव, पश्चात कठिनाइयों तथा व्यवधान पर विचार, परामर्श की तैयारी, मण्डप fuek.k] vfrFk vkxeu] xxkty ykuk] g; itu] cfynku] jkT;kfHk"kd rFkk fonkb dk o.ku n"V0; gA

षष्ठ अध्याय में 'जैमिनी अश्वमेध' की भक्ति पर चर्चा की गई है। गीता में उपलब्ध चारों प्रकार (आर्त, जिज्ञासु, अर्थार्थी, ज्ञानी) का 'जैमिनी अश्वमेध' में साम्य मिलता है। जैमिनी अश्वमेध, में आर्त रूप vf/kd Li"V gvk gA ftKkl HkDr fn[kkb nr g] fdUr vkr:lk dh vi{kk deA vFkkFkk HkfDr ugh fn[kkb nrhA Kkuh HkDr d :lk e ;f/kf"Bj gh fn[kkb nr gA

o/kh HkfDr d vUrxr uo/kk HkfDr dk mYy[k 'जैमिनी अश्वमेध' में मिलता है।

'जैमिनी अश्वमेध' में भक्ति न पुष्टिमार्गी है, और न ही उसमें विशिष्टाद्वैतवाद की मान्यता ही परिलक्षित होती gA mudh HkfDr fdlh lkEinkf;d HkfDr l c/kh gb ugh gA lep [k.M dk0; e JhenHkxorxhrk rFkk Hkkxor dh HkfDr ijEijk dk vk/kkj fy;k x;k gA

llre v/;k; e& dk0; rRok d vk/kkj ij xFk dk foopu gA jl d vUrxr ohjjl dk ie[krk nh xb gAvU; lgk;d jlk d Hkh dN mnkgj.k iLrr fd; x; gA xkiky dfo dh Hkkouk] fpru rFkk dYiuk HkfDr dk ifjp; fn;k x;k gA

Mk- 'k"kukjk;.k pnuyh dh vuqlkj

^bl ,d gh dfo e lkfgR; dk ohjxkFkk dky] HkfDrdky vkj jhfrdky ,d lkFk vorfjr gvk gA^

v"Ve ,o vfre v/;k; e db foy{k.k Nn] भाषा, अलंकार, शब्द गुण, एवं शब्द शक्ति जैसे काव्य d cfgjx dh Nkuchu dh xb gA vrjx lkn; dk egRo ckg;kx lkn; d ifji{; e gh g]

" A sound mind in a sound body"

d- छन्द– 'जैमिनी अश्वमेध' में प्रयुक्त छन्दों dh l[;k 61 g] tl&Nli;] nkgk] minotk] dj [kk] xhfrdk] dlefofp=k] pnoRe] pMh] ppjh] pkej] pkckyk] tygj.k] >yuk] rkVd] rkej] nhid] nk/kd] ujkp] lyoxe] Hktxi;kr] etek-fyuh] eRrx;n] e/kHkkj] enu] eukgj] eknd] jkyk] lkjBk] jkeNn] ljlk] olrfrydk] L=X/kjk] f=Hkxh] gfjxhfrdk] vudyk] lkjorh] lo;k] ljLorh] y {eh/kj] 'k[k/kkjh] nfeyk] ?kuk{kjh] dfoRr] flfgdk]

i)fVdk] fuf/kkfydk] e/kekfyuh] rkejl]pnyhyk] fofp=in] mfM;kuk] erx:id] irkfydk] efYydk] संयुता, मुखारि, शिष्यनंद, चकित, नरेन्द्रा, मंजुतिलका, ujUnke[kA

[k- अलंकार– 'जैमिनी अश्वमेध' में मुख्यतः 'kCnkydkj d vUrxr vuikl ,o lng rFkk अर्थालंकार में उपमा, उत्प्रेक्षा, संदेह तथा अतिशयोक्ति vydkj dk i;kx e[; :Ik l gvk gA

x- Hkk"kk& Hkk"kk Hkkokfhk0; tuk dk i/kku lk/ku है। काव्य की उत्कृष्ट अभिव्यंजना सशक्त भाषा द्वारा gh lHko gA

'जैमिनी अश्वमेध' में ब्रजभाषा, अरबी, फारसी, संस्कृत, प्राकृत अपभ्रंश भाषा देखने भी मिलता है।

xkiky dfo u lk/kkj.krk f}Ro dh iofRr dk viuk;k gA ikdr dh ;g ijEijkxr 'kCnkoyh ^tfeuh अश्वमेध' में द्रष्टव्य है– पन्नगारि, पब्बत, दर्प, सर्प्प।

'kCn fodfr& vU; dfo;k dh Hkkfr xkiky dfo u भी 'जेमिनी अश्वमेध' में शब्द विकृत कर प्रयुक्त किये हैं, इस प्रकार की शब्द विकृति, तुकांत, मात्रापूर्ति के उद्देश्य से या Nn e lxfr dk feyku d fy, 'kCn dk :Ik cnyk है– यथा परमान (प्रमाण), रजपूत (राजपूत), परणाम (प्रणाम), ध ुरसारनि (घुड़सवारी), सरवज्ञ (सर्वज्ञ)

jlkudy Hkk"kk] ik=kudy Hkk"kk] lokn] egkoj ,o लोकोक्तियां, शब्दगुण–प्रस्तुत खण्डकाव्य चूंकि वीरकाव्य है vkx.k dk vf/kd gkuk LokHkkfod gA dgh&dgh ek/k; fn [kkb i<rk gA ilknx.k cgrk;r gA

शब्दशक्ति में अभिधा, लक्षणा, व्यंजना 'जैमिनी अश्वमेध' e feyr gA

milgkj&

1- 'जैमिनी अश्वमेध' का उपजीव्य ग्रंथ व्यासरचित महाभारत नहीं, बल्कि जैमिनी ऋषि द्वारा प्रणीत आश्वमेधिक पर्व है।
2- fdfpr ifjoru d lkFk xkiky dfo mDr mithi0; xFk dh dk0;/kkjk ij vkx c<r py gA
3- xkiky dfo dk ;g xFk mithi0; xFk dk vuokn ek= ugh g] vfir LFkku&LFkku ij mudh ekfydrk dh >yd feyrh gA
4- 'जैमिनी अश्वमेध' एक काव्य है। वीर इसका अंगीरस है। bl dk0; dk ge fofHkUu ;)k dh dgkuh dg ldr gA ;) o.ku dh 'kyh ikjkf.kd gA
5- चरित्र–चित्रण कवि का उद्देश्य नहीं है, फिर भी मुख्य पात्रों dh lthork mYy[kuh; gA
6- dk0; lokn 'kyh e g] ble ukVdh;rk LokHkkfod :Ik e vorh.k gb gA
7- काव्यशिल्प की दृष्टि से कहीं न्यूनता नहीं दिखाई पड़ती। Hkk"kk ij dfo dk vf/kdkj vydkj] Nn ;ktuk ;x d vu:Ik feyrh gA
8- छंद–वैविध्य उनकी विशेषता है।
9- xkiky dfo u ;) dk0; fy[kk g] fdUr ;g ;) fdlh
10- ,frgkfld dky l lc) u gkdj ikjkf.kd ;x l lc/k g] bll li.k ilxk e /kkfedrk dk jx p<k gvk gA
11-'जैमिनी अश्वमेध' में शास्त्रीय दृष्टि से भी खण्डकाव्य का Lo:Ik feyrk gA
12-oLrik=] jl] o.ku 'kyh] vydkj] Nn] Hkk"kk]
13-fcEcfo/kku vkfn leLr miknkuk dh nf"V l ^tfeuh अश्वमेध' ,d lQy [k.Mdk0; gA
14- xkiky dfo dh dk0; ifrHkk dk ;fn vkdyu fd;k tk;] rk jhfrdkyhu dfo;k e mudk egRoi.k LFkku curk gA
15- ml Jxkj ;x e HkfDrijd nk egkdk0; fy[kdj उन्होंने निश्चित ही विशिष्ट स्थान प्राप्त किया है। आशा है Hkfo"; mUg {k=h;rk dh ldfpr nf"V l u n[kdj राष्ट्रीय स्तर का LFkkfir djxhA

lanHk xFk dh lph&

- *xkiky feJ dh dk0; lk/kuk& Mk- 'k"kukjk;.k pny*
- *साहित्य रूपः शास्त्रीय विश्लेषण– डॉ- ज्ञानराज काशीनाथ गायकवाड़*
- *हिन्दी साहित्य का इतिहास– देवीशरण रस्तोगी*
- *dk0; d :i&xyk/kc jk;*
- *नरोत्तम दास (हिन्दी), प्रेमानंद (गुजराती) के सुदामा चरित काव्यों का तुलनात्मक अध्ययन– हेमवतीशर्मा*
- *ykpu ilkn ik.M; d fuc/k&'NRrhlx< e ikphu fgUnh dfo'&lEikn& noh ilkn oek*
- *fgUnh dk0; 'kkL= dk bfrgkl& Mk- HkxhjFk feJ*
- *भारतीय पाश्चात्य काव्य सिद्धांत– डॉ- देशराज flg HkkVh*
- *jhfrdkyhu ohjdk0; e jhfr rRo& Mk- सतीश dekj Hkkxo*
- *JhenHkxorxhrk*
- *Hkkxor*
- *Nn iHkkdj& txUukFk nkl Hkku*
- *vydkj ikfjtkr& ujkRre nkl Lokeh*
- *dk0; Lo:i& Mk- xxkpj.k f=ikBh*
- *jhfrdky vkj vk/kfud fgUnh dfo& Mk- रमेशकुमार शर्मा*
- *x: xkfon flg vkj mudk dk0;& Mk- ifl Uuh lgxy*
- *Hkjr vkj Hkkjrh; ukV;dyk& ljnukFk nhf{kr*
- *jkedFkk d ik=& Mk- Hk-g- jktjdj*
- *विनयपत्रिकाः विश्लेषण एवं मूल्यांकन– डॉ-ekyrh 'kkL=h*
- *lkfgR; rFkk mldh fofo/k fo/kkvk dk v/;;u& Mk- rkfj.kh pj.knkl fpnkunA*

TEACHER-STUDENT RAPPORT

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ABSTRACT

A teacher can be compared with a captain or a pilot who leads the passengers from one side to other safely. Here class room is a ship or a plane in which teacher is a caption or a pilot and students are the passengers. As pt. Jawaharlal Nehru rightly said, the future of the nation is build inside the class room. At this juncture it is not that easy to manage the class room. For that teacher should be equipped with some tips to lead the students ahead with much love and care.

A teacher can be compared with a captain or a pilot who leads the passengers from one side to other very safely. Here the passengers keep their complete trust on the leader who leads the ship or plane. In the same manner, the leader should know the route of the destiny. He must lead them with much courage. This is what happens in the classroom too. Classroom is a ship or a plain in which teacher is a captain or a pilot and students are the passengers. Teacher should know the destiny where he or she is taking the students. Teacher must have a crystal clear aims and objectives of the destiny. While the teacher leads the students, it is very necessary to take care of the individual differences of the students such as the chronological age, mental age, ability to comprehend, interest towards different subjects etc. In order to manage a classroom efficiently teacher should keep these variations in the mind. When a captain sails the ship towards the destiny he has to face various unexpected hurdles in which he never loses his faith or allow to wreck the ship .Likewise a teacher also may have to face lot of troubles .

Nowadays it is very difficult to manage a classroom and maintain discipline. Students respect towards teachers is declining day by day. And most of the parents stand by their children whatever mistakes they commit and may accuse the teacher. Another reason for causing indiscipline is that parent's have sufficient money to spare on extra coaching for their wards. Such students do not pay attention in the class as well as they disturb others too.

Years ago it was very easy to teach and manage the class. Because teachers had all the power to control the child and bring him/her to the right track. They enjoyed full support of the parents. Today the situation has been changed. Teacher must be patient enough against any sort of mischief done by students. In such condition teacher must learn how to handle the class efficiently. Following are some of the tips to be used:-

HAVE MASTERY OVER THE SUBJECTS. Students appreciate and respect the teacher who has excellent knowledge on his/her subject. For this excellence a teacher should acquire sufficient knowledge by referring various sources. He/ she must be ever ready to clear the doubts of the students without post ponding. Teacher has to be equipped with the advanced technology and new methods of teaching. Inefficiency of a teacher in presenting contents will cause indiscipline in the classroom.

ENGAGE THE STUDENTS WITH DIFFERENT INTERESTING ACTIVITIES

Instead of managing the class only with the text book teacher should have some knowledge to bifurcate the method of teaching by introducing some activities related to topic.

HAVE GOOD EYE CONTACT AND INTERACTION WITH STUDENTS

However a teacher is efficient in teaching ,failure of eye contact and interaction with students may cause indiscipline in the classroom.

USAGE OF ADVANCED TECHNOLOGY

It is an era of science and technology. Even a small child is aware of the usage of computer, internet ,mobile etc. in such situation a teacher should sharpen the knowledge time to time. For that he/she has to read daily news papers, current periodicals and have knowledge on advanced technologies like smart class, multimedia , language lab, power point presentation, O.H.P etc. They also should take pain to accept

and learn the advanced technology and by using it teaching should make more effective and interesting.

IMPART MORAL VALUES ALONG WITH EVERY SUBJECT

A teacher should not forget that we are the models to our students and society. It is not the matter that whether cent percent of your students are influenced by your good exemplary life or not . but we must stick on to it. At this juncture students are interested in internet, chating, s.m.s, movies etc rather than listening moral stories, biography of great personalities moral advice etc. whether they are happy or not it is the duty of a teacher to impart moral values along with other subjects.

POINT OUT MISTAKES AND SHORT COMINGS INDIVIDUALLY

Never insult the students in front of other students or teachers. Find out some time to sit with the concerned student and point out the mistakes with love and affection. A teacher should not keep any prejudice or grudge towards them.

Teacher should learn to love all students **irrespective of caste, creed, religion, beauty, richness etc.**

Teacher should accept every student with **their talents , abilities and weaknesses**.

Teacher should love **them as our own son/ daughter or brother/sister.**

Teacher should **learn everyone's name and call them by name.**

This is the happiest moment of a student when he/she is called by his /her name. They feel that they are captured the heart of the teacher who knows their name. When a person is called by his name there the depth of the relationship is strengthened. So it is very important that every teacher must learn the names of their pupils.

TEACHER SHOULD DEVELOP A FRIENDLY AND CONGENIAL ATMOSPHERE IN THE CLASSROOM.

A teacher should be a democratic instead of an autocratic. Students suggestions should be taken in to account. They should be able to approach a teacher at any time. In order to develop such condition in the classroom teacher can include some games which are related to the subject.

STUDENTS SHOULD FEEL THAT THEY CAN HAVE THE HEART OF TEACHERS.

There are some students who may not be staying with their parents or who are very scared of their parents to share their problems. In such situation they find their teacher as the best person to half the heaviness of their heart. Here teacher should be ready to spent their time for such students to listen them. And he/ she has a moral obligation to keep up the shared matter with them. If the teacher feels that certain shared things must be brought in to the notice of their parents/ principal , this also should be done only with the permission of the concerned student. In such cases students feel more free to share their problems with the teacher otherwise they lose their confidence on teacher and remain as a problem child.

TEACHER SHOULD BE IMPARTIAL AND SYMPATHETIC.

A classroom is like a beautiful garden which has varieties of plants and flowers. This variety makes beauty. In the same way a classroom consists of different types of students. Here we get students of different caliber, different religion, caste, different economic condition, social condition, physical condition etc. This difference makes the classroom colorful and active. In this type of school garden the gardener (teacher) should understand each plant is important and according to the capacity of each different manure should be put and wherever the pruning is essential should be done time to time. Instead of getting angry on students' misbehavior we should empathize and try to rescue them from their problems.

While I was scribbling this article in the college staffroom one of the professors happened to see the matter and appreciated the points he read and shared an incident that happened with him so many years back and still remaining it as an unhealed wound in him.

The incident that occurred with him was that during his schooling teachers never loved him or appreciated him and encouraged him to take part in any activity . Where the same teachers used to love ,appreciate and encourage of some students who were fair in complexion and were from well-to- do family. And he shared with me that he was neglected by his teachers only because of his dark complexion. We the teachers never think that when some partialities are shown to few that other tender hearts are observing our behavior and getting hurt which may never heals. Therefore a teacher should be impartial in

his/her thoughts words and action.

A TEACHER SHOULD KNOW THE BACKGROUND OF EACH STUDENT

Every student comes from different background of their family and their way of talking, walking ,thinking etc will be differed. So teacher must find some time to sit and chat with them and understand their background individually. A student who creates problem in the class will definitely have some problem with his family background. So it is very essential to know about it.

Here I have got an incident to share with that when I was teaching in one of the reputed schools I found a 10^{th} class boy who ever disobeys and back answers to teachers and all teachers used to scold him for this misbehavior. Another day when I went to class 8^{th} there too was a boy who was disobedient to teachers. There I made an attempt to have a personal talk with him. Then I realized those two boys (10^{th} & 8^{th}) were brothers. He shared with me that they lost their mother years back and now they are under the control of step mother who never loved them or cared them. She used to complaint about these boys to their father and he used to beat them unnecessarily. On the other hand she loved her own children very much. From the school too they got only scolding and insult. This made them to develop an aversion towards everyone specially to ladies. It was an eye opener to me to love them more and to understand the back ground of my students. Later I talked to his brother too and I could help them a lot to get rid of from their problems.

TRY TO COMMENT POSITIVE REMARKS RATHER THAN SURCASTIC REMARKS

A small +ve remark or an incentive by a teacher may take the students as high as to sky whereas a sarcastic remark like idiot, fool, rascal will ever remain in the mind of child as an arrow mark which never heals. So help the students to soar high on your positive remarks.

MAKE A VISIT TO STUDENTS HOME.

There are many cases I have experienced that a visit to students home brought tremendous changes in the behavior and attitude of children. When we visit the home we develop a friendly atmosphere with the students as well as the parents. It also can fill the gulf between parents-teachers-students.

One thing we should take care of that in the first visit talk only positive things about the students .Gradually you can win the mind of parents and students there you can talk anything about a child's behavior and they can accept easily. Later parents and child will consider you as their family member.

STRETCH YOUR HANDS IN STUDENTS GREAT NEEDS

Students will be in need of various things in which a teacher can help them .For example some students may not be able to pay their school fees there if you can do something do ,otherwise inform the authority and get done something for them. There can be students who cannot spare money on tuition and no one at home to help in studies. In such condition try to spend one hour for him. There can also be students who are not getting sufficient love and care from parents, who do not have someone to share their problems and get guidance etc. there all a teacher can stretch the hands towards them.

CONCLUSION

Class management is one of the most important parts of a teacher. Lack of congenial atmosphere no expert will be able to impart the knowledge fruitfully. A good class management reflects the efficiency of a teacher. If a teacher can understand and accept the students with their individual differences, it is easy to manage the class.

lkfgR; e ;FkkFk dk mnHko o fodkl

MkO Jherh tLlh tkl
क्राइस्ट महाविद्यालय जगदलपुर, जिला बस्तर छत्तीसगढ़ 494001

सारांश

fgUnh e e[;r% ;FkkFkokn dk fodkl iepUn th l ekuuk pkfg,] ijr mld cgr dN y{k.k ge HkkjrUn dky l fn[kyk;h iMu yx tkr gA

ckc t;'kdj ilkn u fgUnh lkfgR; d vUnj ;FkkFkokn dk vkjHk HkkjrUn d le; l ekuk gA mud vulkj loiFke ;FkkFkokn HkkjrUn th d ukVdk vkj mudh dforkvk e vk;k vkj ^ie;kfxuh dk fgUnh lkfgR; e bl <x dk igyk i;kl le>uk pkfg,A ^n[kh rEgkjh dkl h* okyh dfork dk Hkh उन्होंने इसी श्रेणी में रखा है। भारतेन्दु जी ने राष्ट्रीय वेदना के साथ ही जीवन के यथार्थ रूप का भी fp=.k vkjEHk fd;k FkkA bl idkj HkkjrUn th l iHkkfor ,o iepUn ;x d y[kdk e ;FkkFk d fpUg ;=&r= fn[kyk;h iMu yx tkr gA*

lkfgR; e ;FkkFk dk mnHko o fodkl

iR;d ;x e ;FkkFk dk n[ku&le>u d i;Ru gkr jg gA LoHkkor% gh ;FkkFk lc/kh nf"V e ifjoru vkr jg g] blfy, lkfgR; e ;FkkFk 'kCn dk vFk vR;f/kd fookni.k jgk gA ;FkkFk 'kCn dk 0;RifRrijd vFk g & Bhd] okftc] mfpr] tlk gkuk pkfg, olkA ;Fkk $ vFk e ;Fkk ^tlk* dk |krd g vkj vFk ^oLr* dkA bl idkj ^;FkkFk* dk 'kkfCnd vFk gvk& ;FkkoLrA

;FkkFkokn tlk fd uke l gh Li"V g] ,d ,lk nk'kfud fl)kr g ftld vulkj oLrvk dh lRrk ;FkkFk g] vFkkr ge tk dN n[kr g vFkok vuHko djr g] ogh lR; gA iR;{k txr n"Vk l LorU= lRrk j[krk gA eu"; dk Kku iR;{k vuHko d }kjk gkrk gA

bl idkj ;FkkFkoknh Hkkfrd tM&txr dk ;FkkFk ekur gA ; okLrfod 0;kogkfjd vkj ykfdd thou dk vf/kd egRo nr gA bud vulkj oLrvk dk vfLrRo Kku l LorU= gA gekjk Kku K; dk iHkkfor ugh djrkA ge tk x.k oLrvk e fn[kykb iMr g o mUgh oLrvk d vx gA bu oLrvk dk Kku iR;{k gkrk g] ;g Hkh ykxk d vuHko dk fo"k; gA fHkUu&fHkUu 0;fDr fHkUu&fHkUu nf"Vdk.k l ,d gh oLr dk vyx&vyx :lk e n[kr gA oLr ckgj gkrh g vkj fopkj efLr"d e gkrk g] fdUr fopkj oLr d vu:lk gkrk gA

vk/kfud lkfgR; e ;FkkFkokn l tk rkRi;] ge yr g og fgUnh&lkfgR; dk ;jkih; lkfgR; dh nu gA MkO gtkjhilkn f}onh d vulkj rk ;FkkFkokn 'kCn Hkh ^vxth d fj;fyTe* dh rky ij x< fy;k x;k g] ijr fgUnh lkfgR; d vUnj ^;FkkFkokn* dk fodkl ,d fopkj/kkjk d :lk e ugh ik;k tkrk tlk fd ;jki e gvkA fgUnh d dfo;k vkj y[kdk u ifjfLFkfrtU; आवश्यकताओं के अनुसार प्रभाव ग्रहण क्रिया और lkfgR; d vUnj ;FkkFkokn dh vfHk0;fDr dh जिसके ही कारण हिन्दी में इस प्रवृत्ति का क्रमिक fodkl ugh ik;k tkrkA bXyM e vxt tkfr dh dN viuh fo'k"krkvk d dkj.k ^;FkkFkokn* dk विकास 'प्रकृतवाद' की प्रवृत्तियाँ एक साथ ही दिखलाई पड़ने लग जाती है परंतु फ्रांस में जब यह dyk ej>k jgh Fkh rk :lh lkfgR;dkjk u ml uohu thou inku fd;kA

रूसी कलाकारों ने यद्यपि प्रेरणा फ्रांस के उपन्यासों l xg.k dh Fkh] ijUr bud miU;kl k e mul अधिक यथार्थ जीवन की स्पश्ट व्याख्या हो सकी। ^VkyLVk;* rFkk mud iHkkfor miU;kldkjk dh eu"; tkfr dh 'kr&'kr ncyrkvk] Hkyk vkj HkkfUr;k d ckotn] egkekou d Hkhrj fufgr vkfRed 'kfDr;k dh fot; ij vkLFkk cuh jghA bud lk'pkr gh miU;kl lkfgR; d vUnj etnjk dk mnck/ku vk;kA xkdh d miU;kl k e logkjk vkfFkd fo"kerkvk rFkk mud nfud thou d l?k"kk dk fp= efreku gk mBkA fgUnh lkfgR; d अन्दर 'यथार्थवाद' के विकास का क्रम यह नहीं रहा, D;kfd blu iHkko fofHkUu idkj l rFkk fofHkUu le;k e xg.k fd;kA

;FkkFkokn dk mnHko %

ckc t;'kdj ilkn u fgUnh lkfgR; d vUnj ;FkkFkokn dk vkjHk HkkjrUn d le; l ekuk gA mud vulkj loiFke ;FkkFkokn HkkjrUn th d ukVdk vkj mudh dforkvk e vk;k vkj 'ie;kfxuh' dk fgUnh lkfgR; e bl <x dk igyk i;kl le>uk pkfg,A 'n[kh rEgkjh dkl h' okyh dfork dk Hkh mUgku blh J.kh e j[kk gA भारतेन्दु जी ने राश्ट्रीय वेदना के साथ ही जीवन d ;FkkFk :lk dk Hkh fp=.k vkjEHk fd;k FkkA bl

idkj HkkjrUn th l iHkkfor ,o iepUn ;x d y[kdk e ;FkkFk d fpUg ;=&r= fn[kyk;h iMu yx tkr gA

;FkkFkokn dk okLrfod vkjHk %

io iepUn ;x dh iofRr;k l ge doy bruk gh vueku yxk ldr g fd miU;kldkjk dk >dko ekuo d thou&lc/kh leL;kvk dh vkj rk gk pyk Fkk] ijr ^;FkkFkoknh* fopkj/kkjk dk dkb Hkh fuf'pr :Ik rRdkyhu miU;kldkj ugh n ik; FkA miU;kl&lkfgR; e ;FkkFk dk okLrfod Lo:Ik iepUn th d vkxeu l gh feykA

1936 d ixfr'khy y[kd l?k d iFke vf/ko'ku e iepUn th u tk Hkk"k.k fn;k] mle mUgku ie dh c<rh gb 0;tuk dh rho vkykpuk dhA mUgku ml oreku foiUukoLFkk d ifrfcEc :Ik e pkgkA ixfroknh dk0; dk vkjHk 1938 e i0 lfe=kuUnu iUr vkj ujUn 'kek d lEiknd Ro e fudyu oky dkykdkdj d ekfld i= ^:ikHk* l feyrk gA 1941 e lcy :Ik e dk'kh dh ^gl* uked if=dk e] ftldk lEiknd f'konku flg pkgku djr Fk] ;g 'kCn ngjk;k x;kA

;FkkFkokn dk fodkl %

fgUnh e e[;r% ;FkkFkokn dk fodkl iepUn th l ekuuk pkfg,] ijr mld cgr dN y{k.k ge Hkkjrun dky l fn[kyk;h iMu yx tkr gA भारतेन्दु जी की मूल प्रेरणा राष्ट्रीय थी, परन्तु राष्ट्रीय Hkkouk d lkFk&lkFk mUgku thou d ;FkkFk :Ik dk Hkh fp=.k vkjHk fd;k FkkA vkx pydj /khj/khj onuk vkj ;FkkFkokn dk Lo:Ik vkj Hkh Li"V gk x;kA

norkvk dh vkj l ekuoh; Hkkoukvk d fp=.k dh tk ijEijk pyh vk jgh Fkh mld LFkku ij lh/k&lh/k eu"; d vHkkok vkj mldh ifjfLFkfr;k dk fp=.k Hkh fgUnh&lkfgR; e mlh le; vkjHk gk x;kA ifj.kkeLo:Ik fiNy dky d l/kkjd d".k rFkk jk/kk vkj jkepUn dk fp=.k oreku ;x e vudy gku yxkA ^^/kkfed v/kfo'oklk rFkk lkEinkf;d :f<;k d Loj tk vkoj.k Lo:Ik cu x; Fk] mUg gVkdj viuh ikphu okLrfodrk dk [kktu dh p"Vk gku yxhA* Qyr% ^^vkjfHkd ijr lekt l vyx 0;fDr dh li.k foopuk lkgli.k vkj fofp=rk l Hkjh vk[;kf;dkvk d LFkku ij ftudh ?kVuk, jktdekjk l gh lEc) gkrh Fkh& eu"; d okLrfod thou dk fp=.k vkjHk gkrk gA**

Hkkjr e ml le; nk ox mifLFkr FkA (1) जन–साधारण दरिद्र (2) और महाशक्तिशाली ujifrA Hkkjr d 'kfDr'kkyh ujifr Hkkjr d lkekT; dh j{kk dju e vlQy gk pd Fk ftll mudh okLrfod lRrk ij l fo'okl fMxu yxk Fkk] vkj vc o gh lk/kkj.k eu";] tk igy vfdpu le> tkr Fk viuh okLrfodrk e fojkV fn[kyk;h iMu yxA bl le; d ;FkkFkokn e vHkko] onuk vkj iru d v'k iHkr ek=k e fo|eku FkA

iepUn th d le; e doy viu rFkk viu lekt dh ncyrkvk ,o nk"kk dk n[kuk gh b"V ugh jgk] cfYd mld vnj l/kkj dh ij.kk FkhA n'k d vUnj tu&lk/kkj.k dh ij.kk nu dk dk; e/;ox djrk g] ijUr okLrfod 'kfDr turk d vUnj gh fufgr jgrh gA ftl idkj tMk dk lhpu l o{k d leLr vxk e gfj;kyh vk tkrh g] mlh idkj turk d vnj tkxj.k vku l lkj lekt ij mldk iHkko iMrk gA fgnh lkfgR; d vnj e/;ox dk lhfer djd vf/kd fnu rd pyu okyk l?k"k ugh vk ldk gA bldk ,dek= dkj.k ;g g fd xk/kh th d iHkko l tkxj.k turk d vnj lh/k vk;kA mUgku lkr yk[k xkok dk viuh 'kfDr dk L=kr ekuk vkj fdlku d vnj tkxj.k QdkA

iepUn th u yxHkx rhl o"kk rd gekj lkfgR; rFkk lekt dk ij.kk inku dhA ftl dky e mUgku viuh jpuk vkjHk dh] li.k n'k d vnj ,d fo"kerk dh ygj 0;kIr gk jgh FkhA ,d&,d fnu d vnj u;h&u;h 0;oLFkk, curh fcxMrh tk jgh FkhA l/kkjd lLFkkvk dh ck< vk x;h Fkh vkj dkxl d lkFk&lkFk db jktufrd ny Hkh viuk vyx&vyx jkx vyki jg FkA bu lHkh ifjfLFkfr;k dk lE;d iHkko प्रेमचन्द के ऊपर पड़ा और उनका सहज, संवेदनशील हृदय मर्माहत होकर उपन्यासों के रूप में निकल iMkA ;fn rhl o"kk dk bfrgkl ylr gk tk, rk ge iepUn d miU;kl k d }kjk] lkekftd] /kkfed rFkk jktufrd xfrfof/k;k d bfrgkl dk i.k Kku ikIr dj ldr gA eyr% l/kkjoknh nf"V j[ku d dkj.k iepUn th u viu miU;kl k e LokHkkfod :Ik l vkn'kkUe[k ;FkkFkOkkn dh ifr"Bkiuk dhA iepUn th u lekt vkj 0;fDr dk fofHkUu ifjfLFkfr;k e j[kdj rk n[k fy;k Fkk] mud lkfgR; e ugh gk ik;h Fkh iepUn th u miU;kl k e ;FkkFkokn dh ftl lhek rd vfHk0;fDr dh Fkh] mud ckn dh ih<h u ml vkj Hkh vkx c<k;k gA vk/kfud miU;kl k e ekuo ifjfLFkfr;k ,o eukHkkok d fofHkUu :ik dk ydj cM gh dykRed <x l ekuo dh okLrfodrk dk lkeu yku dk i;Ru fd;k tk jgk gA

रूसी राज्य–क्रांति के बाद साहित्य को मार्क्सवादी

ldrk ij pyu d fy, ck/; fd;k x;kA u; lekt d fuek.k gk tku ij :lh fopkj d ipkjd vkj leFkdk u u; okn dk uke x<kA og था 'समाजवादी यथार्थवाद' (सोशलिस्टिक रियलिज्म) ftldh 0;oLFkk lkfgR; d vUnj ;FkkFk0kkn d Hkhrj gh dh tkrh gA

vkjHk dk ;FkkFk0kkn vkn'kkUe[k FkkA ckn dk ;g Hkh ekuk tku yxk fd eu"; e ncyrk dk gkuk vfuok; g ftl fn[kyku d fy, ekuo thou d fodr v'k dk Hkh lkfgR; e LFkku feyu yxk] ftl idrokn d uke l vfHkfgr fd;k x;kA fp=dyk d }kjk fy, x; fp=k d }kjk vR;Ur uXu ,o xkl; fp=k dk Hkh mHkkMdj idk'k e yk;k x;k ftl ^vfr;FkkFkokn* dk pkxk iguk;k x;kA eukoKkfud l lkfgR; d iHkkfor gku d dkj.k eukfo'y"k.k dh 'kyh ij euk-oKkfud ;FkkFk0kkn dh Hkh vfH0;fDr dh p"Vk dh tk jgh gA dN miU;kldkjk u ikphu bfrgkl dk lUnHkZ xUFk

संक्षिप्त हिन्दी शब्दसागर (नागिरी प्रचारिणी सभा से प्रकाशित) : रामचन्द्र वर्मा : पृष्ठ सं0 – 840

[2] *efDrck/k dh dfork ;FkkFkck/k % 'kf'k ckyk 'kek % i"B l0 & 17*

[3] *fgUnh miU;kl ;FkkFk0kkn % f=Hkou flg % i"B l0 65*

f'k{kk dk futhdj.k

सोहन मिश्रा, क्राइस्ट कॉलेज, जगदलपुर
cLrj] NRrhlx< & 494001 ek- u- 09644614641 e-mail--sohan1180@yahoo.co.in

lkjk'k %&

f'k{kk dk vFk fl[ku dh fd;k l g tgk fo|ky; e ckyd dk lokxh.k gkrk gA f'k{kk dk ikphu dky l vk/kfud dky rd cgr ifjoru gvk gA tgk igy fo|kFkh x:dyk e f'k{kk xg.k djr Fk A fQj mld ckn o fo|ky; e tk dj f'k{kk xg.k dju yx tgk fo|ky; e ljdkjh depkjh f'k{kd gh fo|kFkh;k dk f'k{kk xg.k djokr Fk A lkFk gh mud ,d vkj f'k{kk i/nfr dk mnxe bl vk/kfud ;x e gvk A ftle xj lgdkjh ox fo|ky; [kky x, ftle f'k{kk dk ,d 0;olk; cu x;k ftle ,d vfPN f'k{kk dk fodkl dk dkj.k cu x;k tk f'k{kk lgdkjh fo|ky;k e miyC/k djk;k ftle f'k{kk mPp Lrj rd fo|ky;k dk ekufld fodkl ,o 'kkjhfjd dk ekufld fodkl ,o 'kkfjfjd fodkl vPNk l gku yxk gA tgk f'k{kk u mpk LFkku ikIr dj fy;k g ;g vPNh ckr gA fdUr bll mu Nk=k dk i<uk lEHko gk ikrk g tk ,d /kuh ox d gkr gA mud cPpk gh vPNh f'k{kk xg.k dj ikr gA cfYd tk fu/ku ox d cPp g o bl f'k{kk dh futh dj.k e LFkku ikIr ugh dj ikr rFkk bul dklk nj g bldk dkj.k ;g g fd fo|ky; ,d vPNh jde ydj f'k{kk nrh gA tk fd mu fu/ku ox d ifjokjk d cPpk d fy, सम्भव नही हो पाता है। जो केवल अपने परिवार के भरण पोशण की सामग्री तो मुश्किल से जुटा पाती gA og mu fo|ky; d ekVh jde dk dl pdk ik;x bl dkj.k bud cPp ogk dh f'k{kk dk ykHk mBk ugh ikr g A fdUr ogh /kuh ox d fy, ;g dkb ef'dy ckr ugh gA ftld dkj.k mud cPp bPNh f'k{kk rduhfd e i<kb dj ikr gA

tgk f'k{kk dk futhdkj.k gvk g ogh fo|ky; e vud ifrLij/kk, Hkh gk xb g A ftld कारण आज शिक्षा का स्तर ऊंचा हो गया है जंहा एक विद्यालय एक दुसरे से आगे बढ़ने के लिए अनेक lfo/kk, n jgh g A ftld dkj.k cPpk dk Hkh lfo/kk, fey jgh g tk fd f'k{kk e mudk mi;kx ,o ckyd d fodkl e lgk;d g A fuft f'k{kk e x.koRrk dh vf/kdrk gkrh g rFkk ckyd d fy, :fpi.k f'k{kk gkrh g tk mUg dju e ;k xg.k dju d fy, lgk;d gkrh g ckyd dk f'k{kk d {k= e tk lfo/kk, ikIr gkuh pkfg, og fuft fo|ky;k e vklkuh l ikIr gk tkrh g A lkFk gh ckyd d f'k{kk d ifr ekrk firk dh fpUrk gkrh g og bl rjg dh fo|ky;k d dkj.k de gk tkrh g D;k fd ogk fd f'k{kk mPp Lrj dh gk xb g tk Nk=k dk mud vk; ox d vulkj i.k rjg fn;k tkrk g ftll Nk= dk i<u e mRlkg jgrk g A

f'k{kk dk vFk %&

f'k{kk 'kCn dk vfHkik; lh[kuk rFkk fl[kkuk gkrk है। इस दृष्टि से शिक्षा एक प्रक्रिया है जिसमें सीखने rFkk fl[ku dh ifd;k pyrh jgrh g A ;g ifd;k ckyd d tUe l ikjEHk gkrh g rFkk vkthou pyrh jgrh g A blhfy, dgk tkrk g fd iR;d 0;fDr ,d fo|kFkh g vkj lEi.k thou f'k{kk dky gA

ykd d 'kCnk e %&

thou gh f'k{kk g vkj f'k{kk gh thou gA f'k{kk dh dN fo|okuk }kjk nh x;h ifjHkk"kk, fuEu idkj gA

vjLr| d vu|kj %&

''शिक्षा व्यक्ति की मानसिक शक्ति का विशेष रूप मे fodkl djrh g rFkk ftll og ije lR;] f'ko vkj lUnj d fpUru dk vkuUn ikIr dj ldA**

राष्ट्रपिता महात्मा गांधी के अनुसार %&

^^f'k{kk l ejk rkRi; ml ifd;k l g tk ckyd o eu"; d 'kjhj] vkRek o eu dk lokRd"V fodkl dj ldA**

tku Mh-oh d vu|kj %&

^^f'k{kk 0;fDr dh mu leLr vkUrfjd 'kfDr;k dk fodkl g ftll og viu okrkoj.k ij fu;U=.k j[k ld rFkk viuh lHkkoukvk dk i.k dj ldA

f'k{kk dk mnn'; %&

ikphu dky e f'k{kk dk mnn'; ;k ckyd d ekufld] fodkl ij cy nrh Fkh] ftld vulkj doy Kkuktu dk gh f'k{kk dk ,d ek= mnn'; माना जाता था। वर्तमान समय में शिक्षा शास्त्री 0;fDr dh idfr dk v/;;u djr g; ekufld fodkl d lkFk&lkFk mld 'kkjhfjd] ekufld rFkk vk/;kfRed fodkl ij Hkh cy nrh gA bl nf"V l

vk/kfud f'k{kk dk mnn';&ckyd d 0;fDrRo dk lokxh.k fodkl rFkk mle lkekftd d'kyrk d x.kk dk fodkl djukA

f'k{kk dk egRo %&

f'k{kk dk egRo vud nf"V;k l g A bldk dk; {k= bruk 0;kid g fd bld vUrxr o lHkh dk; vk tkr g ftldk ijk dju l 0;fDr viu thou dk l[kh rFkk lQy cukr g, lkekftd dk;k dk mfpr le; ij ijk dju d ;kX; cu tkrk gA lkekU; :Ik l f'k{kk dh ey iofRr;k dk fu;=.k] ekxUrhdj.k rFkk mldh tUetkr 'kfDr;k d fodkl e bl idkj lgk;rk inku djrh g fd mldk lokxh.k fodkl gk tk,A f'k{kk 0;fDr e pkfjf=d rFkk ufrd x.kk ,o lkekftd] Hkkoukvk dk fodflr djd ml ik< thou d fy, bl idkj r;kj djrh g] fd og viuh lLdfr rFkk lH;rk dk lj{k.k djr g, mRre ukxfjd के रूप में सामाजिक सुधारक तथा राष्ट्रीय सुरक्षा के fy, viu ik.k dh vkgfr nu e rfud Hkh ugh fgpfdpkrk gA f'k{kk 0;fDr dk pfj=oku] cf)eku] ohj rFkk lkglh mRre ukxfjd ,o vkRefuHkj cukdj mldk lokxh.k fodkl djrh gA f'k{kk राष्ट्रीय एकता, भावनात्मक एकता, सामाजिक कर्तव्यों को पूरा करते हुए राष्ट्रीय हित को प्राथमिकता देने के fy; vkr&ikr gk tkrk gA f'k{kk lkekU; rFkk राष्ट्रीय जीवन में इतने कार्य करती है, जिससे व्यक्ति तथा राष्ट्र निरंतर उन्नति के शिखर पर चढ़ते रहते gA

ikphu le; e f'k{kk dk Lrj %&

ikphu le; e f'k{kk ikIr dju d fy, vkJe tk;k djr FkA f'k{kk ikIr dju d fy, ckyd ckfydkvk dk x: dk ?kj tkuk iMrk FkkA x: मे जो भी ज्ञान रहता था उसको बालक के ऊपर Mky nrk FkkA ikphu le; e f'k{kk dk Lrj cgr vf/kd fiNMk FkkA /khj&/khj f'k{kk dk Lrj vkx बढ़ता गया। प्राचीन समय में पाठ शाला शहरों में gvk djrh FkA blh dkj.k l ykx de i<&fy[k हुआ करते थे। पाठ शाला दुर होने के कारण अधिक ek=k e vui< ykx ik; tkr FkA ikphu le; e d{kk igyh l 'k: fd;k tkrk FkkA ikphu le; e k1, k2, k3 ugh gvk djrk FkkA oreku e iR;d गॉव में पाठ शाला है। जिसे सभी लोग शिक्षा प्राप्त dj ldr gA f'k{kk dk Lrj mPp gku d dkj.k lHkh 0;fDr viu ijk e [kMk gkuk pkgrk g A f'k {kk dk Lrj mpk gku d dkj.k lH;rk d ckj e tkur g vkj ykxk l fdl rjg dk 0;ogkj djuk pkfg, ;g lc f'k{kk dk nu gA oreku le; e k1, k2, k3 d ckn igyh d{kk e io'k djr gA yfdu ikphu le; e ckyd&ckfydk, igyh d{kk e io'k djr gA vkt d le; e f'k{kk dk Lrj bruk vf/kd vkx c< x;k g fd i<&fy[k ykx Hkh cjktxkj d dkj.k ?kj e cB g, gA f'k{kk dk Lrj vR;f/kd mPp gku d dkj.k fo|ky;k e rduhdh dk mi;kx dju yx gA ikphu le; e f'k{kk ekrHkk"kk e gvk djrk FkkA yfdu oreku le; e f'k{kk ekrHkk"kk vkj vxth ek/;e l i<k;k tkrk gA f'k{kk dk Lrj mPp gku d dkj.k ikB'kkykvk e okn&fookn dfork dk Hkh vk;ktu fd;k tkrk gA rFkk le;≤ ij db dk;de Hkh 'kkfey fd; tkr gA ftl fo|kFkh dk fodkl lHkh vkj l gk ldA ; lHkh ifr;kfxrk Hkh f'k{kk का स्तर को ऊपर उठने में सहयोग देते हैं। शिक्षा का Lrj gku d dkj.k ykx fon'k vk tk ldr g A ;g lc f'k{kk dk nu d dkj.k ykx vkil e vxth e ckr djr gA f'k{kk dk Lrj bruk vkx c< x;k fd ykx ij fo'o e ?ke ldr gA f'k{kk dk Lrj mPp gku d dkj.k fo|ky; e dEI;Vj tl pht dh i<kb tkrh gA dEI;Vj d ek/;e l ge ykx Hkh dke vklkuh l vkj rjUr ikIr djr g f'k{kk dk Lrj mPp gku d dkj.k db lLFkkvk e LekV Dykl gkrk gA oreku le; e ykx bruk vf/kd vkx c< x; g fd ;g lc f'k{kk dk gh nu gA

oreku e f'k{kk dk Lo:lk %&

f'k{kk gekj thou dk ,d egRoi.k vx gA 0;fDr d lokfx.k fodkl d fy, 0;ofLFkr f'k{kk dk ic/k ije vko';d g dkb Hkh 0;fDr ;fn viu lkekftd thou e lQyrk ikIr djuk pkgrk g rk mld fy, f'kf{kr gkuk vfuok;rk gk tkrh g A

oreku e ik;% ;g ppk gkrh g fd f'k{kk dk nfud thou e dkb lEcU/k ugh g ;g doy l/kkfUrd g bldk vFk g fd nfud thou e lpk: :Ik l thou ;kiu dju d fy, eu"; e tk ;kX;rk; ;k {kerk; gkuh pkfg, mudk fodkl f'k{kk }kjk ugh gk ik jgk gA ifj.kke Lo:lk f'kf{kr 0;fDr d thou e lek;kftr egll ugh djrk rkRi; ;g g fd oreku e f'k{kk d Lo:lk e ifjoru dh vko';drk g] ikB;de e ifjoru dh vko';drk gA f'k{kk ,lh gkuh pkfg, tk 0;fDr e okNuh; ;kX;rk o n{krk fodflr dj tk nfud thou d fy, vko';d gA oRkeku ;x foKku dk ;x g oreku e f'k{kk oKkfud rjhd l f'k{kk inku dh tk jgh gA vf/kdk'k rduhdh f'k {kk viuku tk jg gA ;g Hkh lR; g fd f'k{k.k ifd;k, vrxr f'k{kd dk vif{kr fd;kvk dju d fy, fof'k"V lk/kuk dh vko';drk gkrh gA

ftlh Nk=k e okfNr 0;ogkj mRiUu fd; tk ldA

f'k{kk dk thou e ?kfu"B lc/k gkuk pkfg, ijUr oreku e f'k{kk thou d fy, mi;kxh lkfcr ugh gk ik jgh gA mnkgj.kkFk eu"; dk lekt e jgu d fy,] thou ;kiu dju d fy; Lo; dk fodkl dju d fy, fo'k"k {kerkvk dh vo';drk gkrh gA lk/kkj.k lh ckr g thou ;kiu d fy, 0;fDr dkb 0;olk; purk gA ijUr bl 0;olk; l lEcf/kr Kku mld ikl ugh gkrk tcfd og 14&15 o"k rd f'k{kk ikIr djrk g A blh idkj lekt e jgu d fy, ekuoh; lEc/kk dk Kku vko';d g tcfd fo|ky;k e ;g Hkh ugh lh[kk;k tkrkA ,l db mnkgj.k g tk bl ckr dh if"V djr g fd f'k{kk dk nfud thou l dkb lc/k ugh gA

bl idkj f'k{kk vkt thfodkiktu dk egRoi.k lk/ku g vk/kfud ;x dh ie[k leL;k thfodkiktu g Hkktu] oL= rFkk fuokl LFkku ekuo dh eyHkr vo';drk, gA bu vo';drkvk dh ifr d fy, gh 0;fDr f'k{kk dk ek/;e ekurk g oreku f'k{kk dk Lo:Ik 0;kolkf;d f'k{kk ekuk tk jgk gA ikFkfed Lrj l f'k{kk dk vk/kkj r;kj gkrk g bll Nk=k e lk{kjrk vkrh g eukofRr fufer gkrh g i<u fy[ku fxuu dh ;kX;rk ikIr djr g viu vkl&ikl d lk;koj.k dh tkudkjh ikIr djr g A f'k{kk [ky }kjk vPNh rjg l inku dh tkuh pkfg, oreku e f'k{kk [ky i)fr }kjk f'k{kk inku dh tk jgh g D;kfd [ky e Nk=k dh lgt :fp gkrh g bld ek/;e l og viuh iofRr;k dk idV djrk gA

ek/;fed Lrj ij f'k{kk d nk ie[k dk; gkr gA ,d rk vf/kdk'k Nk=k d fy, vfre f'k{kk Lrj gkrk g bld ckn o fdlh vkfFkd fd;k e yx tkr gA ;g mudk Lo; dk jktxkj /k/kk ;k e/;e ox d depkjh ;k dk;ky;] dkj[kku e dke djr g o [krh] nLrdkjh] f'kYidkjh djr g A

nlj ek/;fed f'k{kk ikIr dj Nk= mPp f'k{kk ikIr djuk pkgr g A o viu :fp l fo"k; dk p;u djr gA mPp ox dk ikB;de ;k fo"k; depkfj;k dk fuek.k djrh gA mPp f'k{kk vf/kdk'k 0;olkf;d gkrk gA ble viuh ;kX;rk ,o {kerk l 0;olk; dk p;u dj f'k{kk inku dh tkrh g A bl idkj ikB;de 0;fDr d ;kX;rk ,o {kerk ij vk/kkj ij oreku e inku dh tk jgh gA

oreku f'k{kk ,oa futhdj.k %&

oreku e n[kk tk, rk ckyd ink gku l yxkrkj thou d vUr rd dN u dN lh[krk gh jgrk gA vkjEHk e ?kj e ekrk & firk rFkk vU; ykxk d lEid l] fo|ky; e v/;kid rFkk vU; lgikfB;k d lEid l rFkk thou e io'k dju ij lekt rFkk vU; /kkfed] jktufrd] vkfFkd rFkk lekftd lLFkkvk d }kjk og viu Kku rFkk vuHko e of) djrk gA

lekt fd fofHkUu ifd;kvk dk iR;{k vFkok viR; {k :Ik l lcd thouij iHkko iMrk g A vkt dh f'k{kk dk vk/kkj lekftd rFkk eukfoKkfud g A ifjfLFkfr rFkk okrkoj.k mld thou dk fujUrj idkf'kr djr jgr gA vkj bl lcdk iHkko fdlh u fdlh :Ik e mldh f'k{kk ij iMrk gA f'k{kk 0;fDr;k rFkk n'k dh lH;rk rFkk lLdfr dh ifjpk;d gA bfrgkl bl lc/k e gekjk ekx n'ku djrk gA

futhdj.k f'k{kd e tc ge fdlh mnn'; dh ikfIr d fy; dk; djr g rk mld fy, ge ftu NkVh&NkVh ckrk dk /;ku e j[kuk iMrk gA mUg ml mnn'; d ikIr mnn'; dgk Hkh tkrk gA bld vFk dk vkj vf/kd Li"V djr g, xM ckrk /;ku fn;k tkrk gA ikIr mnn'; Nk= d 0;ogkj e og bfPNr ifjoru g tk fo|ky; }kjk iFk inf'kr vuHko dk ifj.kke gkrk gA bl idkj ikIr mnn'; ;k futhdj.k e 0;kogkfjdrk vf/kd gkrh gA nlj bldk ikIr dju dk nkf;Ro f'k{kd d d/kk ij gkrk gA

f'k{kk dk futhdj.k ,oa iHkkoh rRo %&

futhdj.k dk vFk g fdlh lLFkk ;k oLr dk viuh n[kj[k e lpkfyr A futhdj.k vkt d nkj e vke ckr gA futhdj.k vkt d nkj e gj {k= e gkoh gk x;k g] dkb Hkh {k= bll vNrk ugh gA futhdj.k l dgh vf/kd ykHk fey jgk g rk dgh bld n"ifj.kke Hkh fey jg gA f'k{kk dh x.koRrk dk gkl o fodkl nkuk n[ku dk fey jg g A bld iHkkoh rRo fuEu g &

1-futhdj.k vkj xjhch& futhdj.k vkj xjhch flDd d nk igy dh rjg gA futhdj.k vkj xjhch d chp ?kfu"B lc/k gA f'k{k.k lLFkkvk dk futhdj.k gku l f'k{k.k dyk dk fodkl gvk gA f'k{kd vf/kd egur djr g, fo?kkFk;k dk ekx-n'ku djr gA ljdkjh fo?kky;k dh ryuk e futh fo?kky;k e vPNh i<kb gkrh g fo?kky; e i; ty dh lefpr 0;oLFkk jgrh g dgk tk, rk f'k{kk dh lefpr 0;oLFkk futhdj.k }kjk gh gk ik jkgk gA

yfdu nljh vkj f'k{kk dk futhdj.k gku l fuEu ox d ykxk dk fodkl ugh gk jgk gA fo?kky;k dh Qhl bR;kfn pdku e xjhc cPp vleFk jgr

g] ftld dkj.k mUg mfpr Kku ugh feyrk gA f'k{kk d futhdj.k e bl vlekurk dk vkt ge fdlh Hkh rjg l utj vnkt ugh dj ldr gA

2-**mRrjnkf;Ro %&** f'k{kk dk mRrjnkf;Ro iR;d blku dk Qt gA vkt ifjo'k cny pdk gA Ldy vkj dkyt dk tekuk gA f'k{kk dh uhfr vyx gA gekjk Kku iLrdk dh iUuk ij lhfer jg x;k gA gekjh f'k{kk uhfr 0;fDrxr lQy gku ij vf/kd tkj nrh gA ge Lo; d fy, vf/kd lkpr g vkj lekt d fy, de A fo?kky; gh og ije fo?kk dk efnj g tkg f'k{kd :ih itkjh fo|kFkh :ih f'k"; dk vkn'k eY;k dk e= nrk gA ftld QyLo:Ik fo?kkFkh lekt 'kCn d fuekrk cur gA

3-**tul[;k %&** f'k{kk d futhdj.k ,o bld iHkkoh Hkfedk gA tul[;k c<u d dkj.k gh f'k{kk dk futhdj.k gkrk gA f'k{kk dk futhdj.k gku l f'k{kk d egRo dk le>k tku yxk gA ftl nj l tul[;k dh c<krjh gk jgh g A ml fglkc l fo?kky;k e lHkh ykxk dk lefpr f'k{kk ugh fn;k tk jgk gA bl fo'kky tul[;k dk futh Ldy e lk;kIr txg ugh feyu d dkj.k vf/kdk'k cPp ljdkjh fo|ky;k tku dk foo'k gA

f'k{kk dk futhdj.k ,oa iHkkoh rRo %&

ge ,lh f'k{kk dh 0;oLFkk djuh pkfg,] ftll fo|kfFk;k e LokyEch cuu dh Hkkouk fodfIr gkA vkt dh f'k{k.k i}fr vk/kfudrk e fofHkUurk gA f'k{kk lHkh d fy, vR;r vko';d gA f'k{kk e ljdkjh r= d iHkkoh 0;oLFkk d u gku d dkj.k gh f'k{kk d futhdj.k dk fuek.k gku yxkA f'k{kk d futhdj.k dk cgr l rRo iHkkfor djr g] ftue l dN g&futh ,o lkotfud fo|ky;] ?ku dk dfUndj.k] jktuhfrd iHkko Hk"Vkpkj] 0;kikj vkfnA

;gk loky ;g mBkrk g fd f'k{kkFkh vkf[kj D;k lkotfud fo?kky;k l futh fo|ky;k dh vkj :[k dj jg gA ljdkjh foHkkx d f'k{kkdeh;k dk viu dr0; d ifr dRr0;fu"B u gkdj f'k{kkfFk;k dk mfpr f'k{kk inku u dju d dkj.k f'k{kkFkh futh lLFkkvk ;k futh fo|ky;k e f'k{kk ikIr djuk pkgr gA f'k{kkFkh lkotfud fo|ky;k e ljdkjh lfo/kkvk d dkj.k viu mTtoy Hkfo"; dh dkeuk fy, tkr rk g] ij mUg mfpr f'k{kk] mRre 0;oLFkk vkj lgh ekxn'ku ugh fey iku d dkj.k o bul vlr"B jgdj futh fo|ky;k dk :[k dj jg gA

n'k e gj ukxfjd dk f'k{kk ikIr dju dk volj ikIr gk] bld fy, ljdkj u fuEu ox d fy, vkj{k.k dh 0;oLFkk dh g] ftll lkotfud fo|ky;k e lo f'k{kk vfHk;ku }kjk eDr f'k{kk pyk;h x;hA fQj Hkh ;g f'k{kk dh vk/kfudrk d dkj.k bruh lfo/kkvk d ckotn f'k{kk d futhdj.k dk iyMk Hkkjh iM jgk D;kfd f'k{kk d futhdj.k dk ,d dkjd /ku Hkh gA ftud ikl /ku g] o mfpr f'k{kk ikfIr dh mi{kk djr gA bl mi{kk e o futh fo|ky;k dh vkj :[k djr gA il oky f'k{kkfFk;k dk futh fo|ky;k l o lHkh lfo/kk, ,o vko';drk, fey tkrh g] tk lkotfud fo|ky; mldh ifr ugh dj ldrA il d ne ij futh fo|ky;k }kjk gj idkj dh f'k{kk ikIr dh tk ldrh gA ge ;g dj ldr g fd f'k{kk d futhdj.k dk dUn fcUn /ku gA ftud ikl /ku g] o f'k{kkFkh viuh Hkkfrd lfo/kk, Hkh fo?kky; e pkgr g bu lcl ; futhdj.k dh vkj vkdf"kr gkr gA

blh vkd"k.k d dkj.k cgr lh jktuhfrd lLFkk, Hkh futh fo|ky;k l tMu yx gA o f'k{kk dk jktuhfrd d rjkt e rkyu yx gA jktuhfrd ikfV;k futh f'k{k.k lLFkkv ;k futh fo|ky;k l viuk uke dekdj ykHk dekuk pkgrh g] ftll mudh [;kfr QyA

jktuhfr d f'k{kk e inki.k l gh Hk"Vkpkj vkjHk gvk gA jktuhfr e jkturk Hkh puko thrdj lRrk e vku d fy, Hk"V uhfr;k dk viukr gA mlh idkj f'k{kk dk {k= Hkh Hk"Vkpkj l vNrk ugh gA uhft fo|ky;k e Hkh Hk"Vkpkj cgr l :ik e Qyk g] tl&fo?kky;k e fj'or yh tkrh g] rkfd nkf[kyk fy;k tk,] Qhl d ckotn vfrfjDr 'kYd yh tkrh g] db idkj d ifr 'kYd fy, tkr g ; lHkh f'k{kk e futh fo|ky;k e eukQk [kkjh] dky /ku d rkj ij dek, tkr g bu lc d ckotn f'k{kk futh fo|ky;k e vf/kd Qy&Qy jgk gA tu firk viu cPp l dgr g fd cVk vki gekj fy, ; dke dj nk] ge vkidk pkdyV nxA ftld dkj.k cPpk cMk gkdj dkb Hkh dk; dju e fj'or t:j yxkA ,lk futhdj.k d dkj.k gh gk jgk gA Hk"Vkpkj l dek, /ku l f'k{kk vkt 0;kikj cu x;k gA

f'k{kk dk 0;olk; l tkMk tku yxk gA cM&cM 0;kikjh vf/kd ykHk deku d mnn'; ; futh f'k{k.k lLFkkvk dk fuek.k dj jg gA bu futh f'k{k.k lLFkkv e lkjh l[k&lfo/kkvk d lkFk f'k{kkFkh dh mRre f'k{kk dk ijk [;ky j[kk tkrk gA vkt d f'k{kkFkh Hkh ,lh gh f'k{kk dh pkg j[kr g] ftul 0;kikfj;k dk f'k{kk dk 0;olk; cuku e dkb vkifRr ugh gkrh vkj fnuk&fnuk futh f'k{k.k lLFkkvk ;k futh fo|ky;k dh l[;k e fujrj of} gkrh tk jgh g] ftll f'k{kk dk

0;kikj Hkh fujrj c<rk gh tk jgk gA

f'k{kk dh futhdj.k dk egRo ,oa fu;=.k %&

futhdj.k m?kkx&/k/kk] 0;olk; ,tlh ,o Ldy] dkyt ;k lkotfud lok d LokfeRo dk jkT; ;k n'k dh ljdkj l futh {k= ;k xj&ykHk lxBuk d ikl LFkkukrfjr gku dh id;k gA

nlj 'kCnk e dg ldr g fd futhdj.k jktLo lxg.k rFkk dkuu ioru tl ljdkjh idk;k lfgr] ljdkjh idk;k d futh {k= e LFkkukrj.k dk lnfHkr djrk gA

f'k{kk d futhdj.k dk cgr gh vf/kd egRo gA Hkkjr n'k vktkn gku d ckn gh f'k{kk d Lrj dk mBku d fy, vud i;kl fd;A mUgku i;kl fd;k fd xjhc l xjhc cPp pkg ok xko d gk ;k 'kgj d fdlh Hkh tkfr] /ke d gk] lHkh dk lEeku :Ik l f'k{kk dk volj feyA

vr% mUgku db ljdkjh fo|ky;k dh LFkkiuk lnj xkok ,o xyh egYy e dhA vPN oru d lkFk f'k{kdk dh fu;fDr dh xbA xjhc cPPkk dk Ldy dh vkj vkdf"kr dju d fy, e/;ku Hkktu fn;k tkrk gA Qhl dh nj cgr gh de j[kh xbA 14 o"k rd d cPpk dk fu'kYd f'k{kk nu dk Hkh iko/kku gA cPpk dk fdruk dkih cPpk dk eDr e forj.k Hkh fd;k tkrk gA lkFk gh ljdkj dh vkj l vulfpr tkfr ,o vulfpr tu&tkfr;k d fy, Nk=ofr dh Hkh lfo/kk ljdkj dh vkj l miyC/k gA

vr% f'k{kk d Lrj dk mPp mBku d fy, ljdkj dh vkj l gj lHko i;kl fd; x, gA yfdu nHkkX;o'k ljdkjh lxBuk dh f'k{kk 0;oLFkk fcYdy Bhd ugh gA bldk dkj.k tul[;k e vf/kdrk ;k f'k{kdk dh xj ftEenkjh gA tk cPpk d vPNh f'k{kk ,o lLdkj ugh n ikr gA ljdkjh lLFkkvk e cPpk d mTtoy Hkfo"; dh vkj /;ku ugh fn;k tku yxk ftll vfHkHkkod ,o cPp nkuk gh vlr"V gA

vr% fo|ky;k dkytk dk futhdj.k gkuk ikjHk gvkA f'k{kk dh 0;oLFkk dk l/kkju d fy, vud futh Ldyk ,o fo|ky;k dkytk dh LFkkiuk dh xbA bu futh Ldyk ,o dkytk e f'k{k.k ij fo'k"k /;ku fn;k tkrk gA ;gk ljdkjh Ldy dkyt dh cPpk dh l[;k dh ryuk e cPPkk dh l[;k de gkrh g ftld dkj.k lHkh cPpk ij fo'k"k /;ku fn;k tkrk gA

rduhdh f'k{k.k vkj mPp f'k{k.k ljdkjh 0;oLFkk }kjk pyk;h tkrh g yfdu mfpr 0;oLFkk ugh gku d dkj.k ;g lgh :Ik e Nk=k rd ugh igp ikrk gA lkFk gh bldh l[;k Hkh lhfer gkrh gA ftll Nk= tk bll bPNk j[kr g o ofpr gk tkr gA

vr% bu Nk=k dk futhdj.k lLFkkvk e nkf[kyk yuk iMrk gA ;gk bUg vPNh rjg l f'k{k.k fn;k tkrk g yfdu ;gk Qhl cgr gh vf/kd gkrh gA ljdkjh lLFkkvk }kjk Bhy ndj f'k{k.k ifd;k fd;k tkrk gA futhdj.k lLFkkvk e f'k{k.k ifd;k ij tkj 'kkj l gkrh gA

futhdj.k lLFkkvk }kjk gh vud 0;olkf;d dkl djok; tkr gA ftll mUg jktxkj fey ldA lkFk gh efgyk f'k{kk ik< f'k{kk ij Hkh vf/kd cy fn;k tkrk gA vr% vkt vud efgyk Ldy dkyt ,o ik< f'k{kk 0;oLFkk futhdj.k lLFkkvk }kjk miyC/k g ftll gj ox d Nk=k dk cgr gh vf/kd ykHk gk jgk gA

futhdj.k lLFkkvk dk fu;=.k djuk Hkh cgr gh vko';d g D;kfd futhdj.k lLFkkvk d vf/kdkfj;k ij ljdkj dk dkb gLr{ki ugh gkrk gA ftll o lLFkku dk eueku <x l pykr gA Qhl dh nj vf/kd j[kr gA vodk'k e dVkrh djr gA Qhl le; ij ijk dju d fy, ck/; djr gA

vr% lHkh rduhdh ,o mPp f'k{k.k lLFkku d futh dj.k ugh gku nuk pkfg, vkj ;fn gkr g Hkh rk FkkMk cgr ljdkj dk fu;=.k mu ij gkuk pkfg, ftll futhlLFkku Hkh lpk: :Ik l py ldA lkFk gh ljdkjh lLFkkuk e Hkh vPN ,o l{ke f'k{kdk dh fu;fDr gkuh pkfg,A

f'k{kk dk futhdj.k dk mi lgkj %&

oreku lkotfud f'k{kk lLFkk e f'k{kk xg.k djr le; [kp de iMr g ijUr bl lLFkk e lhfer in gku d dkj.k vkj tu l[;k vf/kd gku d dkj.k cgr de gh ykxk dk io'k fey ikrk g vkj cgr l ykx io'k iku l ofpr jg tkr gA dkj.k rk ;g Hkh g fd lkotfud f'k{kk lLFkk e vu'kklu ugh gku d dkj.k lkotfud f'k{kk lLFkk e dke dju oky f'k{kk deh viu fo|kFk;k dk mfpr f'k{kk ugh inku djr g blfy, vf/kd [kp gku d ckotn Hkh futh f'k{kk lLFkk e f'k{kk xg.k djr gA

oreku e futh f'k{kk lLFkk cgr vf/kd ek=k e [kkyh tk jgh g dkj.k d tul[;k of} lkotfud f'k{kk lLFkk dk vHkko mfpr vu'kklu u gkuk rFkk mfpr f'k{kk u inku djuk vkfn bld dkj.k gA futh f'k{kk lLFkk d vu'kklu d lkFk&lkFk mfpr f'k{kk inku fd;k tkrk g ftld dkj.k futh f'k{kk lLFkkvk dh l[;k fnuk&fnu c<rh gh tk jgh gA oreku le; e xjhc l xjhc ykx Hkh futh f'k{kk lLFkk e f'k{kk xg.k djuk pkgr gA f'k{kk vkt 0;olk; d :Ik e fodflr gku yx gA

ROLE OF COLD STORAGES IN CONSERVATION OR PRESERVATION OF MINOR FOREST PRODUCTION IN BASTAR.

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Abstract

Cold storages are meant to preserve the perishable commodities of food items for a longer period with retention of the original colour, flavor and taste. This study was conducted to know about the cold storages in Jagdalpur city, to know the minor forest products found in Bastar region and a detail study of product stored, durability of products, facilities provided by cold storages to clients and suppliers. Finally to know the basic problems in cold storage and to find out the solutions.

Keywords: Cold storage, Durability, Refrigeration, Demand, Forest products, Conservation..

Introduction

A cold storage business is a service company that warehouses products and processes orders according to the owner's instructions.Typically cold storage companies work on a per box rate and offer services like forced air cooling, hydra-cooling or basic repacking services.

Cold storage means the storing or keeping of articles of food in a cold storage warehouse or in any refrigerated space leased for public use other than an individual locker.

Minor Forest Products in Bastar

Tamarind, Chilly, Mahua, Jaggery, Cashew, Amchur, Turmeric, Potatoes.

Tamarind

The tamarind is a tree in the family Fabaceae. It is a tropical tree native to Africa. Tamarind trees are very common in south india, in Tamilnadu and Andrapradesh. It is a major product of Bastar and it is exported from Bastarto other states. Bastar is the largest producer of Tamarind in Asia. Hence this is a major product stored in cols storages.

Chilly

Chilly is the fruit of plants from the genus Capsicum, members of the nightshade family. Chilli peppers and their cultivators originate in America , they are now grown around the world because they are widely used as spices or vegetables in cuisinse and as medicine.

Chilly is also found in large quantity in bastar forests and this is stored in large quantity in cold storages.

Mahua

Madhuca longfolia, commonly known as Mahwa or Mahua is an lndian tropical tree found largely in the central and north Indian plains and forests. The tree is considered a boon by the tribals who are forest dwellers and they are keen conservators of this tree. Mahua flower is edible and is a food item of tribals. Flowers are used to male syrup for medicinal purpose. The flowers of Mahua are fermented to produce an alcoholic drink called Mahuwa , country liquor.

Tribal people consume this drink and is an obligatory item during celebrations and evening activities as part of their cultural heritage. Mahua is greatly produced in bastar and is consumed enormously. Hence it is stored as a chief product in cold storages.

Jaggery

Jaggery is considered as a sweet and is eaten by children and adults alike. Some people consider it as a wholesome sugar it retains more mineral salts. Moreover the process does not involve chemical agents. Indian Ayurvedic medicine considers jiggery to be beneficial in treating throat and lung infections. Jaggery is also a major product of Bastar and stored in cold storages of Bastar.

Cashew

It is a small evergreen tree growing to 10-12 m tall.The cashew is a popular snack , and its rich flavor means that it is often eaten on its own. The cashew fruit is popular all across the country.

Some cold storages store cashew as seasonal

food items.

Amchur

The spice amchur is unripe or green mango fruits which have been sliced and sun dried. The name comes from Hindi am, mango. The mango tree is so old and of such popularity in India and far east that it is not surprising that every part of it yields some specific or other.

In Bastar it contributes near about 500 crores to business . Thus it is a major item preserved in cold storage.

Turmeric

Turmeric is thought to have many medicinal properties and many people in south asia use it as a readily available antiseptic for cuts burns and bruises.Indians in addition to its ayurvedic properties , use turmeric in a wide variety of skin creams that are also exported to neighbouring countries. Turmeric is also a major product which is stored in cold storages in Bastar.

Potatoes

The potato is a starchy , tuberous crop . potatoes are usually cured after harvest to thicken their skin. The skin is very thin and delicate.

Storage facilities need to be carefully designed to keep the potatoes alive and slow the natural process of decomposition, which involves the breakdown of starch.

Under optimum conditions possible in commercial warehouses, potatoes can be stored for up to six months, at homes usually for several weeks. Hence potatoes are also a major product stored in cold storages of Bastar.

Research Methodology

In my research paper I used two types of data collection method

- Primary data
- Secondary data

For my research paper I used Questionnaires to know the profile , products stored and facilities provided by the cold storages. Also I had face to face communication with owners and employees of cold storage.

For secondary data I reffered to various websites , books for collecting information regarding project under study.

Limitations of the study

- The owners of the cold storages were not so co-operative.
- This study does not include consumer behavior.
- It was difficult to meet all the workers as they work in three shifts.

Importance of Cold Storage for Minor Forest Production:

The cold storage helps to store our minor forest products and to increase the life and durability of goods that are produced in our forest division. The cold storage is used to meet the fluctuation in demand.

1. Cold Storage helps to meet seasonal demand for the forest product.
2. Many business men stores the commodities in the cold storage in order to get long term profit in future.
3. Cold storage is a specific and a suitable place where we can store our product in a proper manner.
4. It helps in best utilization of natural resources.As cold storage stores excess product , the products are safely placed in a area where there is no tension of any abiotic factor destroying it.

S. N	Name & Add of the cold storage	Capacity in metric tons	Sector	Products stored
1	Heliwal cold storage Pvt Ltd.	9512	PRIVATE	MULTIPURPOSE
2	B.R cold storage Pvt Ltd.	9771		
3	M.S cold storage Pvt Ltd	2420		
4	Danteshwari cold storage Pvt Ltd	5092		
5	Veeyom cold storage Pvt Ltd	11000		
6	INdravati cold storage Pvt Ltd	10000		
7	Srinivasa cold storage Pvt Ltd	8000		

Cold Storages in Jagdalpur

Stored Products in Cold Storage

Tamarind,Mahua,Dry mango powder, Cashew, Jaggery, Dates, Dry Chillies, Potatoes, Amla, Dry fruit, Sugar cake

Capital used to start Cold Storage

S.N	Name & Add of the cold storage	Capital Used (in crores)
1	Heliwal cold storage Pvt Ltd.	1.5
2	B.R cold storage Pvt Ltd.	1.25
3	M.S cold storage Pvt Ltd	1.60
4	Danteshwari cold storage Pvt Ltd	2.5
5	Veeyom cold storage Pvt Ltd	1.35
6	INdravati cold storage Pvt Ltd	3
7	Srinivasa cold storage Pvt Ltd	3.5

Operation of Cold storages in Jagdalpur

Method of collection

Different cold storage have different methods of collection. Some use polythenes , bags, sacs trolleys or packets.

In many cold storage products like mahua , tamarind ,amchur, chilly are stored in two different types of bags namely gunny bags and plastic bags. Capacity of gunny bagsis 50 kgs and plastic bags is 25 kgs. The quality of these bags is good.

Temperature for storing

In cold storage all the products can be stored according to the temperature required. All the products which are stored in cold storage needs temperature upto 40-45 degree fahrenhiet

Durability of stored products

It is generally not mentioned how long a product can be saved in a cold storage.

The cold storage take lease for 1 year amd after every year customer has to renew there lease if they want to store a product for another year.

Machinery and Equipments

Machinery used to keep the temperature cool inside the building is compressor and ammonia gas.

Problems Regarding Cold Storages in Jagdalpur

The cold storages mainly face the following basic problems:-

- Labour Problem
- Working conditions of labour
- Rats problem
- Power cut problem
- Leakage problem
- Leakage of ammonia gas
- Problem related to supply of materials
- Problem of technician
- Problem realated to durability of goods

Suggestions for Cold Storage:

Following are the suggestions to overcome the problems faced by cold storage.

1. Labours should be given bonus and incentives atleast once in a year so that they are motivated to work effectively.
2. For the problem of rats and other pests fumigation tablets must be used or pesticides should be sprayed periodically.
3. Back ups for the power cut problem should always be present in cold storages. Like Generators as per Euro norms 180 kv for plant and 35 kv for light should be maintained.
4. If in case of high pressure ammonia gas leaks, safety valve should open automatically and the gas should be discharged directly into water tank. Also the gas masks should be present for emergency.
5. There should be proper and reliable supply of materials.
6. Technicians should be well trained to undertake various operations in cold storage.
7. Goods should be stored according to their durability and must be well preserved at the required temperature.

Conclusion

Cold Storages in jagdalpur are very useful as it stores the major forest products of Bastar. Bastar has enormous production of products which has a business of nearly 500 crores. They are of

great helpto farmers as it stores all the perishable goods and helo them to do business profitably. Not only farmers they also help their clients to earn supernormal profits and thus helps in meeting the fluctuating demand.

The scope of cold storages in jagdalpur is more as it stores the major forest products which contribute a lot in Export business.

After undertaking the survey it is found that viyom cold storage has maximum capacity and has two buildings. B.R cold storage provides best facilities to its clients, employees and labours .

Many cold storage do not provide transportation facility and many don't provide incentives and bonus to employees. All cold storage in Jagdalpur want to see their cold storage as the topmost cold storage in chhattisgarh. Also they want to have more machineries and extra safety norms.

Hence it is seen that cold storage plays very important role in our society hence it gives us a lot of benefits.

Some features of cold storage are listed below:

- Provide Employment
- Increase economy of a country
- Helps in preservation of a commodity
- Better utilization of resources
- Removes fluctuation of resources depletion etc.

WOMEN EMPOWERMENT IN BASTAR

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ABSTRACT

Women Empowerment is to create environment to make independent decisions and shine as equals in the society. It is a subject to debate. From 1200 BC (Post-vedic) to 600 BC they had equal status with men. Due to major difficulties they were treated as slave. From post 19th century their status has been changed gradually. In this era we saw unique leadership capabilities of the women. A great daughter of ILTUTMISH named Razia Sultana became first women ruler of India, from north-central part of India a Maratha queen of Jhansi Rani Laxmibai was one of the leading figures of the Indian Rebellion of 1857 and for Indian nationalists a symbol of resistance to the rule of the British East India Company in the subcontinent, Sarojini Naidu (earlier name Sarojini Chattopadhyay) served as the first governor of the United Provinces of Agra and Oudh from 1947 to 1949, and India's first women Prime Minister Smt. Indira Gandhi (1966 -1984) are motivation examples of women empowerment. Today we have seen the women occupied the respectable positions in all walks of the fields. Yet, they have not absolutely freed some discrimination and harassment of the society. A few numbers of women have been able to establish their potentialities.

Keyword : Women Empowerment, Bastar, Health profile of bastar, tribal, Work profile of bastar tribes, maternal profile of bastar

INTRODUCTION

Women empowerment is the process, and the

outcome of the process, by which women challenge gender-based discrimination against men in all the institutions and structures of the society. Empowerment is the expansion of assets and capabilities of poor people to negotiate influence and control the accountable institutions that affect their lives.

India has lopsided sex ratio whereby about 49% population has been recorded for women. Population of women in BASTAR is 50.59% in which about 88% women are illiterate and about 99.12% women are poor. They face eccentric educational, cultural, social, political and allied tribulations. [1]

In Bastar, women plays extensive and imperative role in the society. Not only tribal, general women are also very hard worker because they work hard and the family economy and management depends on them. Even after industrialization and the resultant commercialization flooded the economy of Bastar, women continued to play a significant role.

PROFILE OF TRIBAL WOMEN OF BASTAR

HEALTH PROFILE - In the present study, the health from the perspectives of mortality patterns and selected infectious and non-infectious illnesses were reviewed. The prevalence of sexual transmitted disease (STD) syndromes is 29.6% carried at least one STD syndrome. The highest prevalence was observed in the age group of 30-34 years followed by 35-39 years group. The hypertension among females was 40.3%.Gastrointestinal problems like acid peptic disease were found in 3.5% to 22% of cases. Malaria and Typhoid was marked in 13.2% to 25.2%. Tuberculosis (TB) found among 19.3% women. [6]

Maternal death rate is very high 27% (in which labor 63.02%, farmers 36.05%, street beggar 0.88% and others 0.05%) due to their high illiteracy rate and lower family income level (about Rs. 2100/- per month) as shown in the following table.[7]

WORK PROFILE - Women's are busy from July to November for agricultural work. Paddy is the main crop. In July-august women engage in breaking up sods of earth, sowing and weeding. In October-November women are involved in harvesting, drying, pounding and de-husking paddy. Agricultural lands are far away from homes, and men and women must leave for work early in the morning.[1]

In the month of April-June women collect for-

est products. From the forest they obtain foods such as fruit and oil, and needed items for the home such as bidi, brooms, baskets, mats, rope, home-made toothbrushes, leaf plates and medicines. Some forest products are also sold for a small cash income. Women often walk a long way to get to the forest, suffer scratches from thorny bushes and work in the heat without water. [3]

Women are in-charge of wall maintenance. Walls are plastered with mud twice in a year. Every five to eight years, women rebuild the house with new walls.

NEED OF WOMEN EMPOWERMENT IN BASTAR

Women empowerment is essential to reduce poverty worldwide since women represent most of the poor population. Eliminating a significant part of a nation's work force on the sole basis of gender can have detrimental effects on the economy of that nation. In Bastar, it has been observed that women are less literate than men. According to 2011 census, rate of literacy among women is only 39.52% in rural area but in urban area it is little better (75.1%)[2]. Thus, increasing education among women is very important for empowering them. They need empowerment of all kinds in order to protect themselves and to secure their purity and dignity.

It must be stated here that In Bastar the status of women in tribal societies and their egalitarianism has often been over emphasized. Economic freedom does not always speak their better status, as it is habitually done out of compulsion or necessity. Women are given the responsibilities of children and arranging food, fuel and water. This has been established culturally and symbolically in various ritual aspects among them.[5]

To sum up, women empowerment cannot be possible unless women come and help to self-empower. There is a need to formulate reducing feminized poverty, promoting education of women, prevention and elimination of violence against women.

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Development and Analysis of Restriction based Sequential Pattern Mining

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Abstract

A beneficial technology for applications is Sequential pattern mining. From the large number of customer transactions, it can find out the sequential purchasing behavior of customers. The present researches are based on the concept of frequency and presume that the customer purchasing behavior sequences do not fluctuate with change in time, purchasing cost and other parameters. It is possible to discover more user-centered patterns by integrating certain constraints with the sequential mining process. To adapt the sequential patterns to these changes, constraint is integrated with the traditional sequential pattern mining approach. In this paper, monetary and compactness constraints with frequency and length are included in the sequential mining process for discovering relevant sequential patterns from sequential databases. An algorithm is proposed by integrating these constraints, which allows discovering all RFML sequential patterns from the sequential database. The proposed RFML-PrefixSpan algorithm has been validated on synthetic sequential databases. The experimental results ensure that the efficacy of the sequential pattern mining process is further enhanced in view of the fact that the purchasing cost, time duration and length are integrated with the sequential pattern mining process. Keywords: Sequential pattern mining, constraint-based sequential pattern mining, constraint, prefixspan, monetary, compactness.

Keywords : Sequential Pattern Minining, RFM, Restriction based Sequential Pattern Mining, Constraint, Data Mining, performance.

1. Introduction

The sequential pattern mining algorithm [2], deals with the problem to determine the frequent sequences in a given database [24]. Sequential pattern mining is strongly related to association rule mining, excepting that the events of sequential pattern are associated by time [27]. Sequential patterns signify the association among transactions while association rules describe the intra transaction relationships. In association rule mining, the mined output is about the items that are bought together frequently in a single transaction [30]. Whereas, the output of sequential pattern mining represents which items are bought in a particular order by the customers in various transactions [31]. The goal of sequential pattern mining algorithms is to discover the sequential patterns from sequential database. Recently, researchers have found that the frequency is not the best measure that can be used to determine the significance of a pattern in different applications. The user prospects on the discovery process of the mining patterns and the background knowledge of the user have not been considered. The sequential pattern mining that handles sequential data face the same drawbacks. Restrictions that limit the number and range of mined patterns are utilized by sequential pattern mining algorithms to reduce this complexity. The Restriction based sequential pattern mining algorithms [23], have drawn much attention among researchers. The goal of Restriction based sequential pattern mining is to determine the entire set of sequential patterns that satisfying a constraint C. A constraint C for sequential pattern mining is a Boolean function C (α) on the set of all sequences [26]. Constraints can be evaluated and distinguished from diverse point of view. In this paper, we have proposed an efficacious restriction-based sequential pattern mining called RFML algorithm. The proposed algorithm is devised from the conventional sequential pattern mining algorithm, PrefixSpan [25] used for mining the restriction sequential patterns. We have considered here two concepts namely monetary and compactness that are derived from the aggregate and duration restrictions presented in the literature. Initially, the proposed algorithm mines the 1-length Compact Frequent patterns (1-CF) by considering the compactness threshold and support threshold. Subsequently, the 1-Length Compact Frequent Monetary sequential patters (1-RFML) are filtered from the mined 1-CF patterns by inputting the monetary restriction. Then, a projected database corresponding to the mined 1-CF patterns is constructed and then the 2-CF patterns are generated using this database. Again, 2-RFML sequential patterns are determined from the 2-CF patterns by integrating the monetary restriction and the process is applied repeatedly until all length constrained-RFML sequential patterns are discovered.

2. Review of Related Research A handful of re-

searches is available in the literature for effective mining of sequential patterns from sequential databases. But recently, most of the researches focus on mining sequential patterns by integrating certain restrictions. Some of the recent researches are portrayed here. A Delimited Sequential Pattern (DELISP) technique has been proposed by Lin and Lee [17], which provides the facilities present in the pattern-growth methodology. DELISP has utilized bounded and windowed projection methods to diminish the size of the proposed databases. The time-gap valid subsequences have been maintained by bounded projection and the non-redundant subsequences fulfilling the sliding time-window restriction have been preserved by windowed projection. As well, the delimited growth technique has directly discovered restriction-satisfactory patterns and increased the pace of the pattern growing process. It has been found that the DELISP has excellent scalability and performed better than the eminent GSP algorithm in discovering sequential patterns with time restrictions. The temporal restrictions employed for generalized sequential pattern mining have been softened by Fiot et al. [10]. Some work focuses on extracting generalized sequential patterns. But, such restrictions required a very accurate assessment to evade flawed information.

An algorithm has been developed on the basis of sequence graphs to manage the temporal restrictions while data mining. These unstrained restrictions may discover more generalized patterns, a temporal accuracy measure has been proposed for supporting the analysis of several mined patterns. For restriction based frequent-pattern mining, Pei et al. [26], have designed a framework on the basis of a sequential pattern growth technique. Here, the restrictions were effectively pushed deep into the sequential pattern mining under this proposed framework. Also, the framework has been extended to restriction-based structured pattern mining.

A sequential frequent Patterns mining with tough Aggregate Restrictions (PTAC) algorithm has been proposed to diminish the cost of using tough aggregate restrictions by integrating two efficient approaches. One shuns checking the data items one by one by using the promising features revealed by some other items and validity of the respective prefix. The other evades building a superfluous projected database by successfully, eliminating those bleak new patterns, which may otherwise function as new prefixes.

Experimental studies performed on the synthetic datasets produced by the IBM sequence generator as well as a real dataset have revealed that the proposed algorithm has gained better performance in speed and space by means of these approaches. Sequential patterns were seen as temporal relationships between data present in the database where the considered data was simply the features of individuals or observations of individual behavior. The intent of generalized sequential patterns is to provide the end user with a more flexible handling of the transactions embedded in the database.

A proficient Graph for Time Restrictions (GTC) algorithm has been proposed to discover such patterns in giant databases. It was based on the idea that handling the time restrictions in the initial phase of the data mining process would be highly advantageous. One of the most vital features of the proposed approach is that the handling of time restriction can be easily taken into consideration in conventional level-wise approaches because it is carried out prior to and independently from the counting step of a data sequence. Experiments have shown that the performance of proposed algorithm was substantially faster than the existing sequence mining algorithm. Chen et al. [8] have defined the RFM sequential pattern and proposed an algorithm for mining all RFM sequential patterns from the customers' purchasing data by integrating the Recency, Frequency, and Monetary (RFM) concept described in the marketing literature. A pattern segmentation framework has been designed by using this algorithm to obtain significant information regarding customer purchasing behavior for managerial decision-making. Experiments have been done on synthetic datasets and a transactional dataset gathered, to analyze the proposed algorithm as well as to empirically expose the benefits of using RFM sequential patterns in examining customers' purchasing data. The Rough Set Partitioning algorithm was atleast ten times faster than the naive time restric-

tion based sequential pattern mining algorithm GSP. As well, an extra knowledge regarding the time interval of sequential patterns has been determined using the technique.

3. Problem Statement The problem of discovering sequential patterns was first introduced in [2], and extended in [28]. This section presents a succinct description of sequential pattern mining and restriction based sequential pattern mining. As well, a detailed description of PrefixSpan is given, which is a prominent approach for mining sequential patterns.

3.1. Sequential Pattern Mining The sequential pattern mining problem is to extract the entire set of sequential patterns with respect to a given sequence Database (DB) and a support threshold minsup. Let, DB be a sequential database wherein each transaction T holds a customer-id, transaction time, and a set of items involved in the transaction. Let, I={p1, p2, …, pm} be a set of items. An itemset is a nonempty subset of items, and an itemset with k items is called as k-itemset. A sequence S is an ordered list of itemsets based on their time stamp, which is represented as <q1, q2,…, qn>, where q_i, j∈1, 2,…, n is an itemset. A sequence of k items (or of length k) is called as k-sequence. A sequence <q1, q2,…, qn> is a sub-sequence of another sequence <q1, q2,…, ql'>, (n≤l) if there exist integers i1<i2<…ij…<in such as ', ', , ' 1 i1 2 i2 n in q ⊆ q q ⊆ q q ⊆ q ⋯ . The mining of sequential patterns is to discover all sequences S such that sup(S)≥min-sup for a database DB, given a positive integer min-sup as a minimum support threshold [20, 25]. 3.2. Restriction Based Sequential Pattern Mining The goal of restriction-based sequential pattern mining is to mine the entire set of sequential patterns satisfying a specified restriction C. The literature [26] presents various restrictions that are utilized in the sequential pattern mining process. By analyzing all restrictions in the literature, it is found that the aggregate and duration restrictions would be more advantageous in mining sequential patterns from the customer purchasing database. The definition of these two constrains is given below. The proposed algorithm has utilized monetary and compactness restrictions that are derived from these two restrictions, respectively.

• **Aggregate Restriction:** An aggregate restriction [19], describes that the aggregate of items in a sequence should be above or below a given threshold value, which is represented as: Cagg ≡ Agg (α) ω T where, ω∈{≤ ≥}, Agg(α) may be sum, average, max, min, standard deviation, and CT is a given integer.

• **Duration Restriction:** A duration restriction [19], describes that the time difference between the first and last items in a sequence should be greater than or less than a predefined threshold value. The duration restriction is represented as:
C ≡ Dur (α) ω T
where, ω∈{≤ ≥}, and CT is an integer value.

• **Length Restriction:** A length restriction details the requirement on the length of the patterns, where the length can be either the number of occurrences of items or the number of transactions. For instance, a user may desire to find only the long patterns (for example, the patterns consisting of at least 20 transactions) in market-basket analysis. Such a requirement can be expressed by a length restriction, which is defined as: len C ≡ len(α) ≥ 20 3.3. Prefixspan: An Eminent Sequential Pattern Mining Algorithm PrefixSpan [25] is the most propitious pattern-growth approach, which is based on constructing the patterns recursively. On the basis of apriori (e.g., GSP algorithm) and pattern growth (e.g., PrefixSpan algorithm) approaches, quite a few algorithms have been proposed for successful sequential pattern mining. Normally, the apriori-like sequential pattern mining approach fall upon some difficulties such as: A large set of candidate sequences could be created in a giant sequence database; scanning of database multiple times, and an explosive number of candidates was generated by this apriori-based technique during the time of mining long sequential patterns. In order to overcome such problems, a PrefixSpan algorithm is introduced to effectively discover the sequential patterns. The PrefixSpan algorithm mainly examines the database to identify the frequent 1-sequences. Then, as per these frequent items, the sequence database is projected into different groups, where each group is the projection of the sequence database with respect to the parallel 1-sequence. For these projected databases, the PrefixSpan algorithm continues to find the frequent 1-sequences to form the frequent 2- sequences with the same respective prefix. Repetitively, the PrefixSpan

algorithm produces a projected database for all frequent k-sequences to discover the frequent (k+1)-sequences. The basic outline of the PrefixSpan algorithm is given below: Input: Sequence database D and minimum support threshold min-sup.

Output: Complete set of sequential patterns. Method: Call PrefixSpan (⟨⟩, 0, D), Subroutine: PrefixSpan (α, l, D|α). Parameters: α is a sequential pattern; l is the length of α; D|α is the α-projected database if α≠⟨⟩ (null) otherwise, the sequence database D. Method: 1. Scan D|α once and find the set of frequent items f such that, a. f can be assembled to the last element of α to generate a sequential pattern or b. ⟨f⟩ can be affixed to α to generate a sequential pattern. 2. For each frequent item f, append it to α to form a sequential pattern α', and output α'. 3. For each α', create α' -projected database S|α' and call PrefixSpan (α', l+1, D|α'). 4. Proposed Pattern Growth Algorithm by Incorporating Compactness, Monetary and Length Restrictions Sequential pattern mining is the technique of mining sequential patterns whose support is greater than user defined minimal support level. Several researches are available in the literature for discovering the sequential patterns that are mined only based on the concept of frequency. The frequency is an excellent measure for mining the relevant sequential patterns but in real-life problems, frequency alone is not sufficient for finding the user's sequence behavior in any application. Thus, recently, some of the researchers have applied the concept of restrictions to discover the most significant patterns in order to forecast the customer sequence behavior. In a supermarket database, the customer behavior in purchasing will not always be static. The customer buying behavior might be changed based on the time and purchasing cost.

Accordingly the length of the sequence or the transaction length may also differ. With the aim of facing these challenges in the mining process, we have included three new concepts namely, monetary, length and compactness, into the conventional sequential pattern mining algorithm of our proposed method.

1. Monetary: Normally, the sequential patterns that occur often in the sequential database are employed to find the significance of the user buying sequences. But in business point of view, there is always a need to consider the cost of an item. This is primarily because there are some patterns that are frequently occurring in the sequential database and are not providing much income. Moreover, the purchasing behavior of the user will be changed based on the cost of an item. For example, the daily required items such as, milk, bread, butter, and cheese are frequently bought by customers, but the valuable goods like gold and diamond are not frequently purchased. It has been though observed the latter items give better profit compared to frequently purchased items.

2. Compactness: In most practical problems, specifically, pattern learning for managerial decision support, it is vital to include time restriction in the sequential pattern mining task because the customer's purchasing behavior can be varied over time in customer purchasing database. Hence, there is a necessity to consider the time, so that the decision makers who are attempting to find the user sequence behavior can develop better marketing and product strategies. The benefit of compactness is that, it allows drawing out sequential patterns that occur within a reasonable time span. It enables the mining algorithm to provide better solutions for decision makers.

3. Length: Length restriction for sequential pattern mining is crucial in supermarket data to obtain the interesting patterns. It is well-known that the length is entirely correlated with the time, so including the length restriction into the sequential patterns may result in good decision making in supermarket environment. In order to discover the most relevant RFML-patterns, we included the concept of monetary and compactness to the sequential mining process along with the frequency and length. The number of purchases made within a certain period, where a higher frequency specifies higher loyalty is called frequency. Monetary is the amount of cost spent during a certain period, and a higher value discloses that the company should pay more attention to the customer. Compactness defines that the number of purchases made by the customer should be within a reasonable time period. The number of items in a sequence or the number of transactions defines the Length restriction. If the mining process includes the above four concepts, then the decision makers can clearly categorize their customers, and provide a specific score to their customers based on

these concepts. As well, the mined patterns can help the company to find out the customers who are more significant.

RFML-PrefixSpan Algorithm In this part, we describe an efficient algorithm called RFML-PrefixSpan, which mines all the RFML patterns from the sequence databases. The RFMLPrefix-Span algorithm is developed by modifying the prominent PrefixSpan algorithm, which exploits the pattern growth methodology for mining the frequent sequential patterns repetitively. We begin by defining the Subsequence, Compact subsequence, Compact Frequent subsequence, Monetary subsequence, and Compact Frequent Monetary subsequence because the proposed RFML-PrefixSpan algorithm utilizes these definitions. Subsequently, we provide a concise description about the proposed RFML-PrefixSpan algorithm. Let, S=⟨(p1, t1, M1), (p2, t2, M2), …, (pn, tn, Mn)⟩ be a data sequence of database D, where pj is an item, mj is a purchasing money, and tj represents the time at which pj occurs, 1≤j≤n and tj-1≤tj for 2≤j≤n. P denotes a set of items in the database D.

• **Definition 1 Subsequence:** A sequence SS=⟨(q1, t1, M1), (q2, t2, M2),…,(qm, tm, Mm)⟩ is said to be a subsequence of S only if: 1). Item set SS is a subsequence of S, SS∈S and 2). t1<t2<…<tm where, t1 is the time at which q1 occurred in SS, 1≤r≤m.

• **Definition 2 Length**: Constrained Subsequence: A sequence SS=⟨(q1, t1, M1), (q2, t2, M2),…,(qm, tm, Mm)⟩ is said to be a length constrained subsequence of S only if: Item set SS is a subsequence of S, SS∈S and the number of items in S should be equal to lS.

• **Definition 3 Compact Subsequence:** Let, SS=⟨(q1, t1, M1), (q2, t2, M2),…,(qm, tm, Mm)⟩ be a sequence of itemsets, where, t1<t2<…<tm and TC be the predefined compact threshold. SS is known to be a compact subsequence of S if and only if: 1). SS is a subsequence of S, and 2). the compactness restriction is satisfied, i.e. tm-t1≤TC.

• **Definition 4 Compact Frequent Subsequence [19]:** Let, D be a sequential database containing item sets, I and TC be the predefined compact threshold. SS is said to be a compact frequent subsequence of D if and only if:

1). SS is a subsequence of D,

2). the compactness restriction is satisfied, i.e., tm-t1≤TC, and

3). SS is a frequent subsequence of database, D.

• **Definition 5 Monetary subsequence [19]:** Let, SS=(q1, t1, M1), (q2, t2, M2),…,(qm, tm, Mm) be a sequence of itemsets, where, t1<t2<…<tm and Tm be the predefined monetary threshold. SS is said to be the monetary subsequence of S if and only if:

1). SS is a subsequence of S, and

2). The monetary restriction is satisfied, i.e., $\left(\frac{M_1+M_2+\ldots+M_m}{m}\right) \geq Tm$

• **Definition 6 Compact Frequent Monetary Length Subsequence:** Let, D be a sequential database containing itemsets (I), TC be the predefined compact threshold, and Tm be the predefined monetary threshold. SS is said to be a compact frequent monetary subsequence of D if and only if: SS is a subsequence of D; The compactness restriction is satisfied, i.e., tm-t1≤TC; SS is a frequent subsequence of database D; The monetary restriction is satisfied, i.e., $\left(\frac{M_1+M_2+\ldots+M_m}{m}\right) \geq Tm$, and the number of items in S should be equal to lS. The important steps involved in the proposed RFMLPrefix-Span algorithm are described below:

Input: Sequence database D, minimum support threshold min-sup, monetary table MT, predefined compact threshold TC, and predefined monetary threshold Tm.

Output: Complete set of RFML-sequential patterns β.

Method: Call RFML-PrefixSpan (⟨⟩, 0, D, MT)

Subroutine: RFML-PrefixSpan (α, l, D|α, MT)

Parameters: α is a sequential pattern; l is the length of α; D|α is the α-projected database if α≠⟨⟩ (null) otherwise, the sequence database D; MT is the monetary table.

Method:

1. Scan D|α once and find the set of compact frequent items f such that,

a. f can be assembled to the last element of α to generate a sequential pattern or

b. ⟨f⟩ can be appended to α to generate a sequential pattern.

2. For each compact frequent item f, append it to α to form a sequential pattern α'.

3. For each α',

a. Check monetary using MT.
b. Check length threshold lS.

4. Create a set β from α' by substituting the findings of step 3.
5. For each α', create α' -projected database D|α', and call PrefixSpan (α', l+1, D|α', MT).

Step 1: Finding 1-RFML Patterns: Originally, the sequential database D and monetary table MT are given to the proposed RFML-Prefix Span algorithm. Then, the 1-RFML sequential patterns are mined from the sequential database by scanning the database once. The 1-CF patterns (compact frequent) that satisfy the predefined compact threshold and support threshold are mined from the sequential database by simply scanning the database. Subsequently, the monetary restriction is applied on the 1-CF patterns, so that we can obtain a set of 1-RFML patterns.

Step 2: Dividing Search Space: The mined 1-CF patterns are then employed to create a projected database, which is the collection of postfixes of sequence with regard to the prefix (1-CF pattern).

Step 3: Finding Subsets of Sequential Patterns: Here, a set of 2-length compact frequent patterns are mined by scanning the projected database once. Subsequently, a set of 2-CF patterns are obtained by applying the monetary restriction on the 2-length compact frequent patterns. Again, the projected database is created using the mined 2-CF patterns and this process is repeated recursively until all RFML patterns are determined for the given threshold lS.

5. Experimental Results and Performance Analysis

The experimental results of the proposed RFML - PrefixSpan algorithm for efficacious mining of RFML patterns is described in this section. The proposed RFML-PrefixSpan algorithm is programmed by means of JAVA (jdk 1.6). The sample database taken for experimentation is given in Table 1 and the monetary restriction is given in Table 2. Such database and monetary table are given as an input to the proposed RFML-PrefixSpan algorithm for successful mining of RFML sequential patterns. Originally, we mined the 1- RFML patterns based on the thresholds, TC=4, min- sup=2, Tm=10, lS=2. Subsequently, the projection was done based on the mined 1-length compact frequent patterns. The projected database for the 1-CF pattern is shown in the Table 3. Eventually, we obtained a complete set of RFML patterns for the given input sequential database. The obtained complete set of RFML patterns is {<toothpaste>, <toothpaste soap>, <soap>}.

The comparative results of the PrefixSpan with our proposed RFML-PrefixSpan algorithm are given in Table 4. It clearly ensures that the proposed algorithm provides lesser number of sequential patterns than the PrefixSpan algorithm. The PrefixSpan algorithm contains less profitable and longer time length sequentialpatterns (<shampoo>, <shampoo toothpaste>, <shampoo soap>, <hair oil> and <toothpaste hair oil>) whereas, the proposed algorithm generates only the profitable and relevant RFML sequential patterns (<toothpaste>, <toothpaste soap> and <soap>). Thus, from the business point of view, the RFML-PrefixSpan algorithm is more applicable for developing better business strategies than the PrefixSpan algorithm.

5.1. Performance Analysis for Various Length- Threshold

In order to evaluate the performance of proposed algorithm, a synthetic dataset has been employed. Here, we have created a sequential database that holds 10,000 sequences of 10 items. The synthetic dataset is given to the proposed RFML-PrefixSpan algorithm for mining the RFML sequential patterns. The predefined threshold values given to our algorithm are, TC=4, min- sup=1000, and Tm=10. Based on the given database and other parameters, the algorithm produced a complete set of RFML sequential patterns for the given length-threshold lS. Then, the same sequential database is given to the PrefixSpan algorithm for mining the sequential patterns. The results obtained from both the algorithms are shown in Table 5 and the plotted graph is illustrated in Figure 1. That Proves that less number of patterns are generated by the proposed algorithm than the PrefixSpan algorithm.

Then, the computation time is considered, one of the important parameters to find the intricacy of the algorithm. Initially, by inputting the min-sup=1000 and T_m=10, we discover a set of sequential patterns such a way the time taken by the algorithms are obtained for various threshold TC (for RFML-PrefixSpan) and length

(PrefixSpan). The time required to complete the mining task is computed and the values are plotted in a graph, which is shown in Figure 2. While comparing the computational complexity, it has been found that the proposed algorithm has taken less computation time than the PrefixSpan algorithm for higher threshold values.

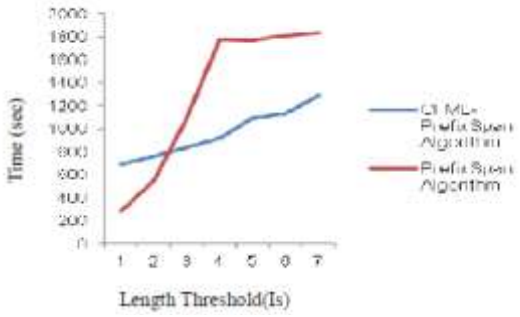

Figure 2. Run time performance of the algorithm

5.2. Performance Evaluation

For performance comparison, the synthetic datasets are given to both the proposed algorithm as well as PrefixSpan algorithm in order to discover a set of sequential patterns. These two algorithms are compared in terms of the number of useful sequential patterns obtained for diverse support thresholds. By inputting the min-sup=1000 and Tm=10, the results are computed by varying the TC and the obtained results are shown in the Figure 3. From the graph, it is clear that the sequential patterns obtained by the proposed algorithm are considerably less compared to the PrefixSpan algorithm because the proposed algorithm is capable of discovering more relevant sequential patterns.

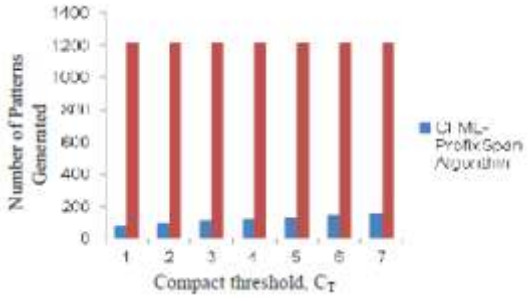

Figure 3. Comparison graph of the min-sup=1000 and T_m=10.

6. Conclusions

We have presented a robust RFML-PrefixSpan algorithm for mining all RFML sequential patterns from the customer transaction database. The RFMLPrefixSpan algorithm has utilized a pattern-growth methodology that discovers sequential patterns via a divide-and-conquer strategy. Here, we have mainly applied two innovative concepts namely, monetary and compactness that are derived from the aggregate and duration restrictions in addition to frequency for mining the most interesting sequential patterns. In our algorithm, the sequence database was recursively projected into a set of smaller projected databases based on the compact frequent patterns. As well, CFsequential patterns were determined from each projected database by exploring only the locally compact frequent items and then, the RFML sequential patterns were discovered. The mined RFML sequential patterns has provided the valuable information regarding the customer purchasing behavior and ensure that all patterns have reasonable time spans with good profit. The experimental results have confirmed that the potency of sequential pattern mining algorithms can be improved substantially by integrating the monetary and compactness concepts into the mining process.

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A STUDY ON PERFORMANCE OF CORPORATE STOCK BROKERS of JAGDALPUR CITY WITH INVESTOR'S POINT OF VIEW

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ABSTRACT

A stock brokerage is an investment services company that is primarily involved in the business of buying and selling stocks and other financial securities on behalf of its clients in return for a fees or commission. The industry operates under close government regulations that aim to protect the investing public. A stock brokerage may not open for business without filing for appropriate registrations and obtaining certain membership. A stock brokerage may focus on different investment services and clients. It must also be able to provide a wide range of security information to clients for investment research and trade selections.

As per sec.65 (93) of finance act , 1994 "stock brokers means" a person who has either made an application for registration or is registered as stock broker, in accordance with the rules and regulations made under the securities and exchange board of india act 1992. A retail brokerage serves only individual investors, whereas an institutional brokerage has the capacity to handle large order flows from institutional investors such as mutual funds. The objectives of the study are to study the performance analysis of stock brokering services and providing findings/ results and conclusions based on analysis. Exploratory research design has been adopted the study is based on secondary data and primary data containing annual number, fees, and other charges , type and turnover of registered stock brokers from 2009 to 2014. The data is collected from SEBI.gov.in , money control.com and various other reports like magazines, journals , published books , official websites and personal interview with stock brokers. The statistical tools applied for data analysis in the present study are descriptive statistics correlation and hypothesis testing. It is concluded that stock brokering services plays a major role in mobilizing funds through its expertise in attracting investors to make investment by its suitable guidance. It has become lucrative service in terms of earning.

STOCK BROKERS:

A stockbroker is person who is licensed to trade in shares. Brokers also have direct access to the share market and can act as your agent in share transactions. For this service they charge a fee i.e. brokerage. They can also offer additional services like advice on shares, debentures, government bonds and listed property trusts and non -listed investment options (cash management trusts, property and equity trusts).

A stock broker is regulated professional individual, usually associated with a brokerage firm or broker- dealer, who buys and sells stocks and other securities for both retail and institutional clients, through a stock exchange or over the counter, in return for a fee or commission. Stockbrokers are known by numerous professional designations, depending on the license they hold, the type of securities they sell, or the services they provide.

In the United States, a stockbroker must pass both the Series 7 and Series 63 and or Series 66 exams in order to be licensed. In most English speaking venues, the two word term stock broker, like stock brokerage, normally applies to the brokerage firm, rather than to the individual.

An agent that charges a fee or commission for executing buys and sells orders submitted by an investor. The firm that acts as an agent for a customer, charges the customer a commission for its services. Stock Broker is a licensed agent who has to pass certain qualifying tests to be certified to offer securities investment advice to investors. He or She may counsel what and when to buy, counsel whether to hold or sell securities, execute buy-sell orders on behalf of the investors, and charge a percentage of the transaction amount as brokerage fee for the services rendered. He is also called as registered representative.

A stock broker is also known as an individual/ organization that is specially given license to participate in the securities market on behalf of clients. The stock broker has the role of an agent. When the Stockbroker acts as agent for the buyers and sellers of securities, a commission is charged for this service.

As an agent the stock broker is merely performing a service for the investor. This means that the broker will buy for the buyer and sell for the seller, each time making sure that the best price is obtained for the client. An investor should regard the stockbroker as one who provides valuable service and information to assist in making the correct investment decision. They are adequately qualified to provide answers to a

number of questions that the investor might need answers to and to assist in participating in the regional market.

OBJECTIVES of the STUDY:

A study about Stock Brokers of Jagdalpur city.

Comparison among different Stock Brokers of Jagdalpur city.

Research Methodology:

Primary Data:

Basically there are two types of sampling one is census sampling and another is random sampling as it is not possible for us to go through all the people in Jagdalpur so we have taken random sampling were a sample size of hundred respondents were taken for the survey entitled on Performance of Corporate Stock Brokers of Jagdalpur city with reference to Indian Stock Market. These 100 respondents were from different fields in works. They were businessman, Lecturer, Bank Employees, Professionals and Housewives. These 100 respondents were given questionnaire to be filled and through response given by them we have analyze and interpreted our data and on the basis of this our conclusion are made.

Secondary Data:

For Secondary Data I have used books like Financial Market Operations (Prof. V.P Agrawal), Research Methodology (C.R. Kothari), Finance Management and Investment Management were referred and various Web Sites through internet like:

- www.sebi.gov.in
- www.wikipedia.com
- www.investopedia.com
- www.scribd.com
- www.thestreet.com

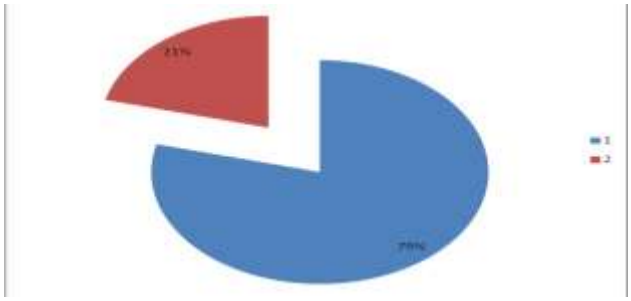
Stock Brokers of Jagdalpur City (Bastar Dist.):

1. Sykes Ray & Equities
2. Angel Broking
3. Share Khan
4. Anand Rathi
5. KARVY
6. HDFC
7. ICICI
8. SBI
9. ARIHANT
10. VENTURA
11. DANTESHWARI

Findings and Results:

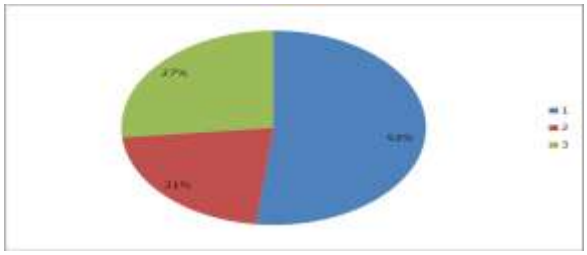
After completing my survey, I found that:

Out of 100 respondents, 79% of the respondents prefer to make Investment while 21% of the respondents notprefer to make Investment. So the maximum no. of respondents preferred to make Investment and minimum no. of respondents preferred not to make investment.

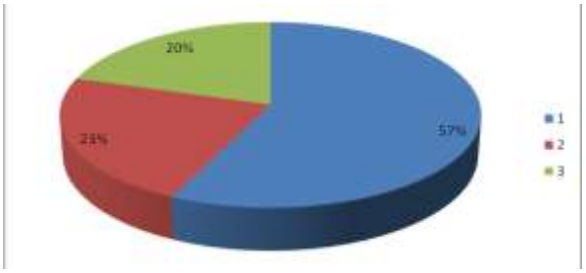


. Out of 79 respondents,19% people prefer to invest below 10% of their Annual Income, 52% people prefer to invest 10-25% of their Annual Income, 23% people prefer to invest 26-50% of their Annual Income, 6% people prefer to invest 51% and above of their Annual Income. So the maximum no. of investors Invest 10-25% of their Annual Income and minimum no. of investors Invest 51% and Above of their Annual Income.

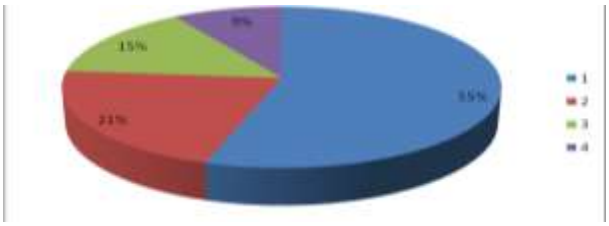
Out of 79 respondents,52%people know about Investment options available on Stock Market, 21% people don't know about Investment options available on Stock Market &27% people know somewhat options available on Stock Market. So we can say that maximum no. of people know about Investment options available on Stock Market whereas minimum no. of people don't know about Investment options available on Stock Market.



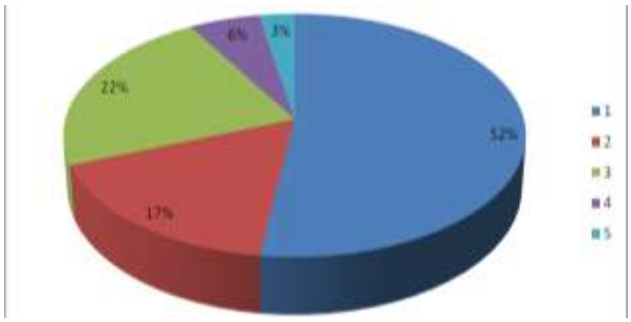
Out of 79 respondents,57%people are aware of Stock Market and its Trading System, 23% people are not aware of Stock Market and its Trading System, 20% people are Not Interested to know about Stock Market and its Trading System. So we can say that maximum no. of people are aware of Stock Market and its Trading System whereas minimum no. of people are not even interested to know about Stock Market and its Trading System.



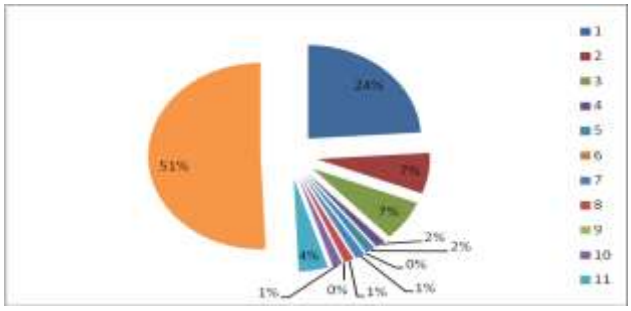
Out of 79 respondents, 55%people are investing on Stock Market from 1-5 years, 21% people are investing on Stock Market from 5-10 years, 15% people are investing on Stock Market from 11-15 years and there is no one who is investing on Stocks from 15 years and above whereas 9% of people are not interested in Investing on Stocks. So we can say that maximum no. of people are investing on Stock Market from 1-5 years whereas minimum no. of people are not interested to invest in Stocks.



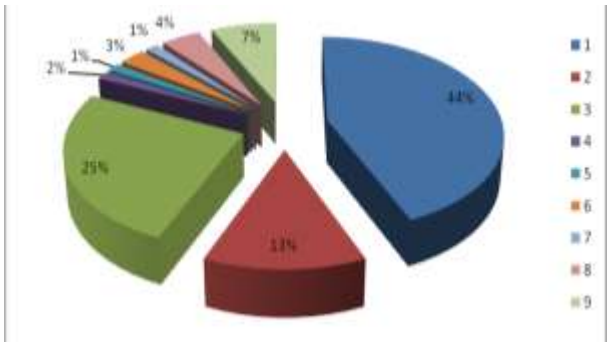
Though 8 respondents are not interested in investing on Stocks, so now our respondents are 71 in number. Out of 71 respondents,52%people invest for Returns, 17% people invest for Capital Appreciation, 22% people invest for Tax Benefit, 6%people for Risk Covering and 3% people invest for multipurpose. So we can say that maximum no. of people invest for Returns and minimum no. of people for Risk Covering.



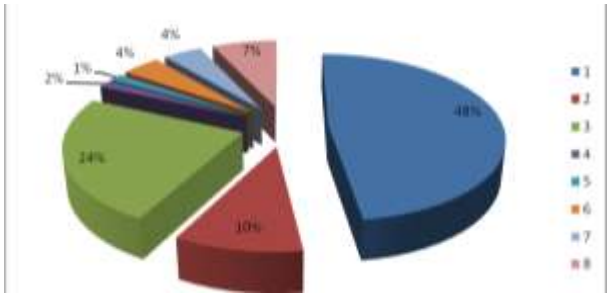
Out of 71 respondents,24%people are aware of SRE, 7% people are aware of SHARE KHAN, 7% people are aware of Angel Broking, 2% people are aware of Anand Rathi, 2% people are aware of Karvy, 1% people are aware of SBI for Investment, 1% people are aware of ICICI, 1% people are aware of Ventura, 4 %of people are aware of Danteshwari 51% of people are aware of multi Stock Brokers. So we can say that maximum no. of people are aware of mutli Stock Brokers & SRE whereas minimum no. of people are aware of Anand Rathi, Karvy, SBI, HDFC & Ventura



Out of 71 respondents,44%people prefers SRE for Investment, 13% people prefers SHARE KHAN for Investment, 25% people prefers Angel Brokingfor Investment, 2% people prefers Anand Rathi for Investment, 1% people prefers Karvy, SBI for Investment,3% people prefers ICICIfor Investment, 4 %of people prefers Danteshwari for Investment and 7% of people prefers multi Stock Brokers. So we can say that maximum no. of people prefers SRE whereas minimum no. of people prefers Anand Rathi, Karvy abd SBI.



Out of 71 respondents,48%people say SRE is the best Stock Broker, 10% people say Share Khan is the best Stock Broker, 24% people say Angel Broking is the best Stock Broker, 2% people say Anand Rathi is the best Stock Broker, 1% people say Karvy is the best Stock Broker, 4% people say SBI, Danteshwari is the best Stock Broker and 7% people say multi Stock Brokers as the best. So we can say that maximum no. of people say SRE is the best Stock Broker whereas minimum no. of people say Karvy is the best Stock Broker.



Conclusion of the Study:

In Jagdalpur it is found that SRE is the market leader in the preferable Stock Brokers and is also the best service provider. People like the service provided by SRE. According to people SRE person has good knowledge and educate people very well about the Stock Market. SRE has highest customers or investors among all the Stock Brokers and is one of the oldest Stock Broker in Jagdalpur city. He is trading from past 11 years and have a good experience on Stocks and Securities.

According to the respondents, SRE is the one who is continuing the market even after strong crisis of 2008; he maintained a flow of Up's and Down's, people have faith and confidence on him that makes him lead the market and termed as the Best "STOCK BROKER" also

After SRE, the second Stock Broker who is leading the market is Angel Broking. Though he is very new to the market and is among the latest Stock Broker of Jagdalpur city still he has an experience of 4 years of trading and brokering also. According to the respondents Angel Broking person has good knowledge and provides good service also. After Angel Broking, the third Stock Broker who leads the market is Sharekhan

Awareness among people has increased of Stock Markets. The investment % is also increased of investors. Investment options are increased with respect to past years & people are also having good knowledge about Investment options available in our city.

Suggestions of the Study:

The broking agent who provides good service and educates regarding the stock market will have good relation with the investors and will surely perform best among others.

People are very much interested for investment today basically for good return. The broker who make a good "call" to the investors and direct them in right path will surely have a good number of investors.

The broking agent who have been working for so many years and have a good working experience & have seen the market "Bubble" as well as "Up" will have a good knowledge about its trading and "Up's and Downs". Since practical knowledge is mostly appreciable and is effective for Trading.

As per the study, future of Investment Market especially Stock Market will be of Technical Research and Analyst. The one who can analyse the market and have the knowledge about past, present and somewhat about future will lead the market surely.

बस्तर जिले के ग्रामीण विकास में अनुसूचित जनजाति महिला नेतृत्व की भूमिका का व्यावहारिक विश्लेषण (ग्राम – पंचायत कोटपाड़ का एक अध्ययन)

Dilip Kumar Shukla
Assistanat Profesar,Christ College, Jagdalpur C.G.

iLrkouk %& *xke fodkl e vulfpr tutkfr efgyk ljipk ,o ipk dh Hkfedk d lcU/k e lo{k.k ,o 0;fDrxr Ik {kkRdkj d ek/;e l tk v/;;u fd;k x;k] mld vk/kkj ij ;g dgk tk ldrk g fd bl vulfpr tutkfr efgyk urRo u LFkkuh; egRo d dk;k tl lMd fuek.k] ukyh fuek.k o ejEer vkxuckMh dUn vkoklghu ykxk dk iVV dk vitarण, स्कूल बाऊंड्री का निर्माण, तालाबों की सफाई व गहरीकरण आदि कार्यो का आंशिक रुप से सफलतापूर्वक संपादन किया है। यह भी कहा जा सकता है कि ग्राम विकास से सबंधित कुछ योजनाओं जैसे मध्यान्ह भोजन योजना, शिक्षा deh ;kstuk vkfn dh tkudkjh lHkh efgyk ifrfuf/k;k d lkFk&lkFk vke turk dk Hkh g] fdUr foMcuk ;g g fd dN vR;f/kd egRoi.k ;kstukvk ;Fkk tokgj jktxkj ;kstuk] tu LokLF; j{kk ;kstuk] xke j{kk ;kstuk] tlh ;kstukvk dh जानकारी 20 प्रतिशत महिला प्रतिनिधियो को है, जबकि 80 प्रतिशत प्रतिनिधियों को नही है। जहां तक आम जनता का प्रश्न है तो यह कहा जा सकता है कि लगभग 80 प्रतिशत जनता इन योजनाओं से आज भी अनभिज्ञ है।*

jktuhfrd lgHkkfxrk ,o jktuhfrd fodkl

cLrj fty dh ipk;rh jkt 0;oLFkk e vulfpr जनजाति महिलाओं (ग्राम पंचायत कोटपाड़) की jktuhfrd lgHkkfxrk ,o jktuhfrd fodkl l सम्बंधित विभिन्न पहलुओं पर विश्लेषण प्रस्तुत करता gA ikFkfed L=kksrk d vk/kkj ij ikIr rF;k l जनजातिय महिलाओं का (ग्राम पंचायत कोटपाड़) cLrj fty e jktuhfrd lgHkkfxrk dh fLFkfr rFkk ipk;rh jkt 0;oLFkk e uohu vk/kkj efgykvk dk fn;k x;k gA ml uohu vk/kkj l vulfpr tutkfr efgykvk dh jktuhfr e lgHkkfxrk ;Dr Hkfedk mlls iHkko ,o ikfjokfjd ifLFkfr dk vu-eku yxk;k tk ldrk gA efgyk lgHkkfxrk dk ipk;rhjkt ifLFkfr dk vueku yxk;k tk ldrk gA efgyk lgHkkfxrk dk ipk;rh jkt 0;oLFkk e efgyk vkj{k.k d lUnHk e n[kk x;k gA ble e [; #i l mRrjnkrkvk dh jktuhfrd lgHkkfxrk उद्देश्य, आर्थिक स्थिति, महिला सशक्तिकरण, jktuhfrd #fp lcf/kr] ipk;r lpkyu lc/kh] राजनीतिक दल सबंधी, पंचायतो के सशक्तिकरण lc/kh] ipk;r jkt lc/kh mld ifr nf"Vdk.k efgyk fodkl lEc/kh] efgyk tuifrfuf/k;k dh jktuhfrd lgHkkfxrk d vk/kkj ,o lc/kk dh idfr] fodkl dk;k e mudh #ph ,o fu.k;d fLFkfr rFkk jktuhfrd lgHkkfxrk d iHkko l सबंधित तथ्यों को सारिणियों के माध्यम से दर्शाया x;k gA lkj.kh l[;k 1 e mRrjnkrkvk dh jktuhfr lgHkkfxrk dk Li"V fd;k x;k gA dy mRrjnkrkvk e l 266-65 प्रतिशत (120), उत्तरदाता jktuhfr e vkuk dk leFkku ndj 83-33 प्रतिशत (30), 66-66 प्रतिशत (20) उत्तरदाता अर्थिक एवं lkekftd ntk l/kkj dk leFkku nr gA 66-66 प्रतिशत (20) विधान सभा/लोक सभा में आरक्षित का समर्थन देते है। 50 प्रतिशत (15) राजनीति महिलाओं d fy, ljf{kr dk leFkku nrh gA fu"d"k #i e jktuhfrd lgHkkfxrk dh nf"V l vulfpr जनजाति महिला बस्तर जिले (कोटपाड़ पंचायत) में सर्वाधिक प्रतिशत राजनीति सहभागिता का है। lgHkkfxrk dk ;g Lo#i mRrjnkrkvk d Lor= fopkj LoPN jktuhfrd okrkoj.k dk cuk; j[ku dh vkj ldr djrk gA ipk;r dh ykxk e vc ;g le> vk pdh g fd mUg fdl idkj l jktuhfrd lgHkkfxrk fuHkkuh gA Lo; jktuhfr vkuk] vkfFkd ,o lkekftd nt l/kkj djuk]fo/kku lHkk@yk dl lHkk e vkjf{kr gkuk lkekU; gA इस दृष्टि से अनुसूचित जनजाति जिले में (कोटपाड़ पंचायत) लोगो की राजनीतिक सहभागिता किसी न किसी रुप में अवश्य होती है। यह की अनुसूचित tutkfr efgyk jktuhfr d ifr /kh j & /kh j viuk ;kxnku c< jgh gA

lkj.kh dekd 1
jktuhfrd lgHkkfxrk

dekd l[;k	प्रश्न	mRrjnkrkvk dh l[;k	हाँ	ugh	प्रतिशत
1	jktuhfr e vkuk	30	25	5	83-33
2	vkfFkd ,o lkekftd nt l/kkj	30	20	10	66-66
3	fo/kku lHkk@yk dl Hkk e vkjf{kr	30	20	10	66-66
4	jktuhfrd efgykvk d fy, ljf{kr	30	15	15	50
	Dy	120	80	40	266-65

lkj.kh dekd 2

पंचायत राज व्यवस्था का उद्देश्य सबंधी प्रश्न

d l[;k	प्रश्न	mRrjnkrk vk dh l[;k	हाँ	ugh	प्रतिशत
1	ifrfuf/k cuu dk उद्देश्य पुरा gvk	30	10	20	66-66
2	nkf;Ro Lo; ogu djrh g	30	10	20	66-66
3	viuk fu.k; Lo;	30	15	15	50
	dy	90	35	55	183-32

lkj.kh dekd 2 e ipk;rh jkt 0;oLFkk dk उद्देश्य सबंधी जानकारी को स्पष्ट किया गया है। उत्तरदाताओं से प्रश्न इस प्रकार है–क्या आपका पंचायत प्रतिनिधि बनने के उद्देश्य पुरा हुआ इसमें 66-66 प्रतिशत पंचायत प्रतिनिधि बनने के उद्देश्य पुरा नही हुआ है। द्वितीय प्रश्न 66-66 प्रतिशत प्रति. fuf/k viuk nkf;Ro Lo; ogu ugh djr gA rrh; ipk;r e viuk fu.k; Lo; yr gA ble 50 प्रतिशत उत्तरदाता करते/नही करते है। सार रुप में n[kk tk; rk cLrj fty d vulfpr tutkfr (कोटपाड़ पंचायत) महिलाओं ने राजनीतिक सहभागिता एवं पंचायत राज व्यवस्था के उद्देश्य lcf/kr ikIr rF;k d vk/kkj ij dgk tk ldrk gA fd jktuhfrd lgHkkfxrk vf/kd gA vFkkr ,l उत्तरदाताओं का प्रतिशत अधिक है,जो अपने अधि kdkjk d ifr lpr gA dN gh lpr ugh gA इसका कारण अशिक्षा व इसका प्रचार प्रसार की कमी gA

lkj.kh dekd 3

आर्थिक स्थिति सम्बंधी प्रश्न

क्र l	प्रश्न	mRRkjnkrk vk dh l[;k	हाँ	ugh	प्रतिशत
1	vkj{k.k l efgykvk dk fodkl	30	25	5	33-33
2	vk; dh dfBukb	30	25	10	66-66
	dy	30	25	15	149-99

lkj.kh dekd 3 e vkfFkd fLFkfr lc/kh tkudjh को स्पष्ट किया गया है। उत्तरदाताओं से प्रश्न किया x;k gA ipk;r e efgyk vkj{k.k l fodkl 83-33 प्रतिशत लोग लाभ ले रहे है। आय की कठिनाई 66-66 प्रतिशत लोगों में होती है। इस पंचायत में महिला. vk e vkRe fuHkj u gkuk budh detkjh gA y- fdu bu vkdMk d vk/kkj ij tkx#d gku dk ldr fn[k jgk gA

lkj.kh dekd 4

महिला सशक्तिकरण सम्बधी प्रश्न

dekd l[;k	प्रश्न	mRrjn krkvk dh l[;k	हाँ	ugh	प्रतिशत
1	ljip cuku l	30	25	10	66-66
2	efgyk vf/kdkj dkuu	30	5	25	83-33
3	vf/kdkjk dh j{kk gr dkV ;k Fkkuk	30	5	25	83-33
4	efgykvk dk ljip cukuk fgr j{kk	30	15	15	50
	dy	120	45	75	283-32

सारणी कमांक 4 में महिला सशक्तिकरण से सबंधी प्रश्न पूछा गया है। इसमें सरपंच बनाने से महिला सशक्तिकरण होना 66-66 प्रतिशत उत्तरदाता सरपंच बनाने से माहिला सशक्तिकरण का समर्थन fn;k g efgyk vf/kdkj dkuu 83-33 प्रतिशत महिला ugh tkurh g] vf/kdkjk dh j{kk gr dkV ;k Fkkuk x; gA 83-33 प्रतिशत महिला समर्थन नही जाती है। 50 प्रतिशत महिलाओं को सरपंच महिला समर्थन देती है, निष्कर्श से पता चलता है। अपने अधिकार @dr0;k d ckj e vkx fodkl dk ldr fey jgk gA

lkj.kh dekd 5

राजनीति रुचि सम्बंधी प्रश्न

dek d l-	प्रश्न	mRrjnkrkvk dh l[;k	हाँ	ugh	प्रतिशत
1	Nk= thou l jktuhfr	30	5	25	83-33
2	ifjokj e jktuhfr e Fk	30	4	26	86-66
3	vkUnkyu e Hkkx fy;k	30	1	30	100
	Dy	90	10	81	269-99

lkj.kh dekd 5 e efgyk jktuhfr #ph lEc/kh प्रश्न पुछा गया है। जिसमें अनुसूचित जनजाति efgyk, Nk= thou e FkA 83-33 प्रतिशत महिलएं #ph ugh yrh FkhA ifjokj e jktuhfr e Fk A 86-66 प्रतिशत अनुसूचित जनजाति महिलाओं के

ifjokj d ykx igy l jktuhfr e ugh FkA fdlh आन्दोलन में भाग लिया है, 100 प्रतिशत महिलाएं vkUnkyu e Hkkx ugh fy;k FkkA bll Li"V gkrk g fd efgyk, igy l jktuhfr #ph ugh j[krh FkhA yfdu oreku e jktuhfr #ph fn[kkb nu dk ldr nrk gA

lkj.kh dekd 6

पंचायत सम्बंधी प्रश्न

क्र-l	प्रश्न	mRrjnkrk vk dh l [;k	हाँ	ugh	प्रतिशत
1	ipk;rh jkt 0;0kLFkk vPNh g	30	25	5	83-33
2	ipk;r fujh {kd fu;fer vkr gA	30	5	25	83-33
3	lfpo ipk;r lpkyu e lg;kx	30	20	10	66-66
4	leL;k dk निदान ीघ्रता gkrk gA	30	15	15	50
	Dy	120	65	55	283-32

सारणी कमांक 6 में पंचायत सबंधी प्रश्न मि. gykvk l fy;k x;k g tk fd efgy, bld ifr fdruk tkx#d g ipk;rh jkt 0;oLFkk vPph g] 83-33 प्रतिशत महिलाएं पंचायती राज व्यवस्था में lgHkkfx gA ipk;r fujh{kd fu;fer vkr gA 83-33 प्रतिशत महिलाएं सहभागी नही है। सचिव पंचायत lpkyu e lg;kx djr gA 66-66 प्रतिशत महिलाएं lpkyu e lg;kx e lgHkkxh gA ipk;r d समास्या का निदान शीघ्रता से होता है। 50 प्रतिशत efgyk, lgHkkfx gA fu"d"k #i e ;g dgk tk ldrk g fd ipk;rh lc/kh fodkl dk;k e lgHkkfxrk jgrh gA

lkj.kh dekd 7

महिला विकास सबंधी प्रश्न

d-l	प्रश्न	mRrj nkrkvk dh l	हाँ	ugh	प्रतिशत
1	ipk;r e vkj{k.k t#jh	30	20	10	66-66
2	jktuhfr Hkkxhnkjh l efgykvk dk fodkl	30	20	10	66-66
3	jktuhfr e vku l ifr ifRu d lc/k e Qd	30	15	15	50
	dy	60	55	35	183-33

lkj.kh dekd 7 e mRrjnkrkvk dh efgyk fodkl सबंधी में विकास से सम्बंधी प्रश्न पंचायत में आरक्षण t#jh gA 66-66 प्रतिशत महिलाओं ने सहभागिता है। jktuhfrd Hkkxhnkjh l efgyvk dk fodkl gkxk 66-66 प्रतिशत महिलाएं सहभागिता है। राजनीति में vku l ifRr ifRu d lc/k e Qd iMrk gA 50 प्रतिशत महिलाएं इस पर सहभागिता है। इससे स्पष्ट g fd efgyk, viu fodkl lc/kh ;ktukvk e lgHkkfxrk nrh gA yfdu bl fu"d"k l ;g yxrk g fd oreku e bld ifr tkx#d gk jgh gA

milgkj %& cLrj fty dh ipk;r jkt 0;oLFkk e अनुसूचित जनजाति महिलाओं (ग्राम पंचायत कोटपाड़) में राजनीति सहभागिता एवं महिला सशक्तिकरण को Li"V fd;k x;k gA v/;;u {k= e mRrjnkrkvk dh jktuhfrd lgHkkfxrk] ikFkfed L=krk d vk/kkj ij Li"V gkrk g fd efgykvk dh jktuhfrd lgHkkfxrk e of} gk jgh gA ;/kfi efgyk, uohu jktuhfrd ,o lo/kkfud iko/kkuk l i.k #i l ifjfpr ugh g ijUr bl 0;oLFkk l ifjfpr gku का प्रयास कर रहे है। महिला सशक्तिकरण की दृष्टि l efgykvk dh ikfjokfjd ifLFkfr e l/kkj gvk gA vc efgyk, ifjokj e i#"kk d leku fu.k;d Hkfedk, fuHkku dk i;kl dj jgh g] xfgLFk d vfrfjDr vkfFkd fd;kvk e lgHkkxh gku yxh g] efgyvk dh bl ifLFkfr e ifjoru dk e[; vk/kkj mudh jktuhfrd lgHkkfxrk g] i#"k i/kku lekt e tgk i#"k iHkRo vf/kd FkkA vc ml iHkRo e deh vkb gA efgyk, ikfjokfjd fu.k;k e भी प्रभावशाली होने लगी है। पंचायती राज व्यवस्था में efgykvk dk tk uohu vk/kkj feyk g] {k= d ykx ml mfpr ekur gA bl uohu vk/kkj l efgykvk dk jktuhfr e uohu volj ikIr gk ldx rFkk fodkl dk;k e #fp ydj d {k= ,o xke dh fodkl dj ldxh o viuh ifLFkfr e l/kkj dj fofHkUu {k=k e ixfr d volj ikIr dj ldxhA ;/kfi efgyk tuifrfuf/k;k e i;kIr jktuhfrd Kku vuHko dh deh gA fdUr ;g /khj /khj ;g nj gk tk;xh efgykvk e c<rh gb शिक्षा तथा स्थानीय राजनीति में उनकी बढ़ती हई lfd;rk l LFkkuh; fodkl dk xfr feyxhA ipk;r jkt 0;oLFkk }kjk vc vkj{k.k inku dj jktuhfrd fodkl d fy; ekx cuk fn;k x;k gA bl jkg dk vkx c<ku dk nkf;Ro vc efgykvk ij g] efgykvk dk viu vf/kdkjk dk okLrfod :i e ikIr dju d fy; [kn mud lek/kku [kktu dk i;kl djuk gkxk]rkfd xkeh.k समाज व देश का विकास पूर्ण रूप से सभव हो सके।

l>ko ,oa fu"d"k

Hkkjrh; ykdr= i)fr dk ey vk/kkj ipk;rh jkt

व्यवस्था रही है। भारत का परिवेश सदैव से ही xkeh.k i"BHkfe l lEc/k jgk gA lH; lekt dh स्थापना से ही पंचायती राज के आदर्श और मूल सिद्ध kr mldh pruk e fodflr gkr jg gA bl 0;oLFkk dk vyx&vyx dkyk e vyx&vyx uke l idkjk x;k yfdu bu lkjh 0;oLFkkvk e viu vki ly>ku dh iofRRk fujrj fodflr gkrh jgh] lgdkfjrk vkj vkRefuHkjrk ;k Lokoycu bl 0;oLFkk dk ey e= jgk gA

Lor= Hkkjr e Hkh ikphu ipk;rh jkt lLFkkvk l lcf/kr vo/kkj.kk dk gh ifjofrr Lo:lk e iLrr fd;k x;k gA egkRek xk/kh u भारत में पंचायती राज शासन पद्धति का सपना संजोया, जिसमें शासन कार्य की सबसे पहली इकाई, ipk;rk dk ekuk ipk;rk dk ykdr= dk ey vk/kkj cuk; tku d Hkjld i;kl fujrj gkr jgA yfdu jktlRrk d fodUnhdj.k dh tk प्रक्रिया व्यवहार में शुरू हुई, वह देश की लोकतांत्रिक 0;oLFkk d vk/kkj dk 0;kid cuk; tku d Hkjld i;kl fujrj gkr jgA yfdu jktlRrk d विकेन्द्रीकरण की जो प्रक्रिया व्यवहार में शुरू हुई, वह देश की लोकतांत्रिक व्यवस्था के आधार को व्यापक cuku d fy, lgHkkxh ykdr= dh vk/kkjHkfe r;kj करने जैसे उद्देश्य से प्रेरित न होकर, मूलतः ऊपर से ykx fd; tku oky fodkl dk;dek e lkotfud सहयोग सुनिश्चित करने की नीयत से चलाई गई। ये सीमित उद्देश्य पंचायती राज के दार्शनिक मूलाधारों से ey ugh [kkr FkA lHkh jkT;k e bld vyx vyx ijh{k.k py dN vlQy jg rk dN lQy cuA लेकिन पूरे देश में प्रशासन का विकेन्द्रीकरण करके cu;kfn Lrj ij ipk;rh jkt dh LFkkiuk vkj जनता को सीधे अधिकार देने की शुरूआत जनता को सीधे अधिकार देने की शुरूआत संविधान के 73 वें संशोधन द्वारा की गई ।

l{ki e cLrj fty d dkVikM ipk;r e bu vulfpr tutkfr efgyk tuifrfuf/k;k d ^^?kj dh pkdV l ipk;rh ep rd d lQj]] dk ;fn ge 0;kogkfjd eY;kdu dj rk ifj.kke बहुत आशाजनक नही कहे जा सकते। राजनीतिक lLdj.k] jktuhfrd] lkekthdj.k] jktuhfrd विकास जैसे पहलुओं पर इनकी भूमिका प्रश्नावाचक fpUgk d nk;j e gA bl fLFkfr d fy,] dN rF; व कारक निश्चय ही उत्तरदायी कहे जा सकते है, tk fuEukfdr&

eukoKkfud dkj.k %& ckY;koLFkk l o} koLFkk rd fdlh i:"k d lj{k.k e gh ljf{kr jg ldu dh ghu Hkkouk bu ifrfuf/k;k d Lor=rkiod fu.k; yu ,o viu vf/kdkjk dk i;kx dju d ekx e ck/kd gA ,lh ghu Hkkouk की शिकार व परंपरागत आदिवासी समाज में पली c<h efgykvkk dk vpkud ?kj d pkd pYg l fudky dj egRoi.k ,o mRrjnk;h ink ij fCkBk fn;k x;k g &,lh fLFkfr e o Lor=rkiod dl viu vf/kdkjk dk i;kx dj ldrh gA

vkfFkd dkjd %& 0;kogkfjd nf"V l n[k rk jktuhfr e lQy gku d fy, fdlh Hkh 0;fDr dk vkfFkd nf"V l l{ke ,o Lokoyckh gkuk आवश्यक है। इस पंचायत की अधिकांश महिलाये vkfFkd nf"V l Lokoych ugh gA ird ,o lljky dh lifRr ij firk ,o ifr d thfor jgr mudk dkb vf/kdkj ugh gkrk QyRkh puko thru d fy, bUg viu ifjokj d i:"kk dh bPNkulkj dk; djuk iMrk gA ,lh detkj vkfFkd ifjfLFkfr;k d dkj.k vulfpr tutkfr efgyk; ipk;r d ek/;e l viuh Lor= ,o fu"i{k igpku cuku e vlQy jgh gA

lkekftd dkjd %& cLrj fty d dkVikM ipk;r e vkfnokslh lekt dh ijijkoknh :f<okfn ,o i:"k i/kku xkeh.k lekt की कट्टरपंथी एवं पुरातनपंथी मानसिकता के कारण vulfpr tutkfr efgykvk dh lkekftd fLFkfr nk;e nt dh gA lekt e vHkh Hkh cky fookg] Vkuk &Vkuh o cfy iFkk ipfyr gA ,l e flQ vkj{k.k dh i}fr budh jktuhfrd lgHkkfxrk dh प्रभावशीलता की कल्पना, दिखवा स्वप्न मात्र है।

jktuhfrd dkjd %&jktuhfrd nyk dk nf"Vdk.k] vulfpr tutkfr efgykvk d ifrfuf/kRo dk ydj :f<oknh gA ipk;r e vkj{k.k d dkj.k] fdlh fuokpku {k= dh vulfpr tutkfr efgyk lhV gk tku l doy dlh ij cBk 0;fDr cnyk g] mld vf/kdkjk dk i;kx oLrr% i:"kk d }kjk gh fd;k tk jgk gA efgykvk d fot; tyl e ekyk;]efgykvk dk u iguk dj] mud ifr;k dk iguk;h tk jgh gA jktuhfr e c<rh fgLk] vijk/kh dj.k] ekfQ;kdj.k u efgykvk dh jktuhfrd fLFkfr dk xHkhj :i l iHkkfor fd;k gA o ;gk Lo; dk vljf{kr ekurh gA db ,l mnkgj.k Hkh g tc i:"k ifrfuf/k;k }kjk bUg cBdk dh ;Fkk le; lpuk ugh nh xb o le; ≤ ij dkVokj }kjk vulfpr tutkfr efgyk ifrfuf/k;k d gLrk{kj ydj fu.k;k ij eku Lohdfr iklr djuk budh vifjiDo jktuhfrd pruk dk gh ifjpk;d gA

vU; dkjd :—(1) अनुसूचित जनजाति महिला प्रतिनिधियों के प्रशिक्षण की कोई उचित व्यवस्था नही है। प्रशिक्षण देने के लिए कोई वैज्ञानिक तकनीक नही है। प्रशिक्षण देने के लिए कोई वैज्ञानिक तकनीक नही है। प्रशिक्षण लगातार नही दिया जाता

तथा एक बार के प्रशिक्षण को ही प्रर्याप्त मान लिया tkrk gA

(2) ipk;r d ikl viu dk;k dk lEiUu dju gr i;kIr foRrh; lk/ku ugh gA ,l e bu lLFkkuk dh Lok;Rrrk dk D;k vFk g A

(3) tkfrokn dh iofRr u flQ ipk;rh jkt dh ixfr e ck/kk mRiUu dj jgh g] oju ykdr= d ie[k vk/kkj Lor=rk] lekurk o c/kRo dh Hkkouk dk Hkh detkj dj jgh gA

(4) efgykvk e Hkh /khj &/khj Hk"Vkpkj dh iofRr c<rh tk jgh g] ftll lekt e dY;k.kdkjh nkf;Rok dk i.k dju e o vlQy fl} gk jgh gA

(5) बस्तर जिले (कोटपाड़ पंचायत) में बहुत तेजी l iko ilkj jgk uDlyokn Hkh ipk;rh jkt d fd;kUou d ekx e ,d cMh pukrh d :i e lkeu vk jgk gA

(6) नौकरशाही से यथेष्ट संपर्क एवं प्रर्याप्त lg;kx dk vHkko Hkh bud ekx dh lcl cMh ck/kk gA

bu ifjfLFkfr;k d dkj.k vulfpr tutkfr efgykvk dh jktuhfrd lgHkkfxrk dk लाभ आदिवासी बाहुल्य वाले इस जिले (कोटपाड़ पंचायत) की स्थानीय राजनीति को नही मिल पा रहा gA bu ifrfuf/k;k dk ,d frgkb vkj{k.k nu d Hkh gh vkt ol ldkjkRed o /kukRed ifj.kke ifjyf{kr u gk jg gk] tl vif{kr Fk] fQj Hkh Hkfo"; e bud ykHk ikIr gku dh lHkkoukvk l bdkj ugh fd;k tk ldrkA vkj{k.k ikIr vulfpr tutkfr efgykvk dk tk ih<h vkt dk; dj jgh g] og LFkkuh; jktuhfr e vulfpr tutkfr efgyk urRo dh ,d ,lh ik/kk r;kj करेगी, जो आगे चलकर प्रादेशिक एवं केन्द्रीय स्तर पर महिला नेतृत्व को अधिक सबल, सक्षम, प्रभावश. kyh] tkx:d vkj vkRefuHkj cuku rFkk xk/kh th d xke Lojkt d Lolu dk gdhdr e cnyu d fy, l>ko d fy, Bkl ldkjkRed mik; fd; जाने की आवश्यकता है। ये उपाय /सुझाव fuEukfdr g&

(1) vpy dh vulfpr tutkfr dh efgykvk की शिक्षा एवं सशक्तीकरण को सर्वोच्च प्राथमिकता दिये जाने की आवश्यकता है। संपूर्ण बस्तर जिले में इस हेतु विशेष कार्यक्रम cuk;k tk;A

(2) viu dk; ,o vf/kdkjk d lefpr {k= d vHkko d dkj.k ; vulfpr tutkfr efgyk ifrfuf/k iHkkoh fl} ugh gb] अतः यह आवश्यक है कि अनुसूचित जनजाति dh efgyk ip] ljip] tuin] o fty ipk;r d lnL;k dh v} &of"kd ;k वर्षिक प्रशिक्षण की विधिवत व्यवस्था की जाय, उन्हे कार्यालयीन रीति तथा प्रशासनिक dk;i.kkyh l voxr djk;k tk;A

(3) vulfpr tutkfr d nk;e nt dk e[; dkj.k mudh vkfFkd ijk/khurk g] vr% vulfpr tutkfr efgykvk dk vkfFkd दृष्टि से स्वावलंबी बनाये जाने हेतु विशेष प्रयास किये जाने चाहिए। राष्ट्रीय महिला कोष की कार्यकारी निर्देशक श्रीमती इंदिरा feJ dk Hkh ekuuk g fd &^^vkfFkd :i l Lokoych cuk; fcuk efgykvk d fodkl dh ckr djuk cbekuh gA]]

(4) i:"k tuifrfuf/k;k LFkkuh; vf/kdkfj;k dh eukofRr o ekufldrk dk foLrkj Hkh आवश्यक है, ताकि वे न सिर्फ इन महिला tuifrfuf/k;k dk ek.U;rk o lg;kx n ld] oju le;≤ ij mUg ifjr Hkh dj ldA

(5) vulfpr tutkfr efgyk tuifrfuf/k ipk;rh dk;k e vf/kd l vf/kd le; n ld o :fp y ld] bld fy; mud ikfjokfjd nkf;Rok e Hkh deh fd; tku की आवश्यकता है। इसके लिये भी पुरूषो की मानसिकता को बदलना आवश्यक है।

(6) ;/kkfi ;g lp g fd bu tuifrfuf/k;k dk lkotfud thou e dk; dju d fy, firk] ifr ;k i= ij fuHkj jguk iMrk g] fdUr bUg mul lg;kx dh vi{kk g] अनावश्यक हस्तक्षेप की नही ।

(7) bu tuifrfuf/k;k d fuokpu e ernkrkvk }kjk Hkh bl ckr dk ikFkfedrk nh tkuh pkfg, fd o ,lh vulfpr tutkfr efgykvk dk ojh;rk ;k ikRlkgu n] ftudk Lo; dk 0;fDrRo gk] Lor= vfLrRo gk rFkk tk lkotfud thou e lfd; o tkx:d gkA

(8) xke lHkkvk o ipk;rk dh cBd fu;fer :i l cyk;h tkuh pkfg,A bu बैठकों में महिलाओ की उपस्थिति सुनिश्चित dh tkuh pkfg, rFkk ;Fkk lHko fu.k; erD; d vk/kkj ij fy;k tku pkfg, A

(9) xke leL;kvk dh igpku rFkk mu leL;kvk dk mfpr epk ij vfHk0;Dr dju dh {kerk dk fodkl bu tuifrfuf/k;k e fd;k tkuk pkfg,A

(10) अनुसूचित जनजाति एवं नौकरशाहों में उचित

संपर्क, समन्वय व सामंजस्य आवश्यक है, rkfd ljdkjh ;ktukvk d dkjxj o व्यावहारिक कियान्वन को सुनिश्चित किया जा ldA

(11) ipk;rh jkt 0;oLFkk l lcf/kr fu;ek rFkk mifu;ek dk ljy cuk;k tkuk pkfg,] ftll ; tuifrfuf/k mudk vklkuh l le> ld A

(12) vulfpr tutkfr ox dh efgykvk dk सशक्तीकरण की विशेष रूप से आवश्यकता g] blfy, efgykvk dk lxfBr :i l प्रयास करना आवश्यक है।

(13) ipk;rk d ek/;e l vulfpr tutkfr efgyk eMyk dh LFkkiuk dh tkuh pkfg,] rkfd efgyk tuifrfuf/k;k d lkeu vke efgyk Hkh [kydj viuh leL;k, iLrr dj ldA

(14) jfM;k] Vyhfotu] rFkk lpkj ek/;e l mRd"V vulfpr tutkfr efgyk tuifrfuf/k;k dh miyfC/k;k dk ilkj.k gkuk pkfg,] lkFk gh lkFk vU; ifrfuf/k;k d ikRlkgu gr Hkh mfpr dk;de dk ipkj o ilkj.k gkuk pkfg, A

(15) jkT; }kjk ftyk Lrj ij efgyk fodkl lfefr dk xBu fd;k tkuk pkfg,] ftll fty d fodkl [k.Mk ij pyk; tk jg efgyk fodkl dk;dek dh leh{kk gk ldA गाँवों की क्षेत्रीय विशेषताओं के आधार पर अनुसूचित जनजाति महिलाओं के लिये शिक्षा rFkk jktxkj dh 0;oLFkk dh tkuh pkfg,A

(16) अज्ञानता, अशिक्षा व संकीर्ण विचारधारा इनके ekx dh ie[k ck/kk, gA vr% bud fuokj.k के लिए राष्ट्रीय साक्षारता अभियान, वयस्क शिक्षा कार्यक्रम और शिक्षा के प्रसार को जन. vkUnkyu dk :i fn;k tkuk pkfg, ftll उनमें आत्मविश्वास प्रस्फुटित हो सके व Lor= fu.k; yu dh {kerk tkxr gk ld

(17) uDlyokn dh leL;k dk Rofjr lek/kku आवश्यक है। (चाहे बातचीत से हो या अन्य तरीकों से), अन्यथा समूचे बस्तर में पंचायती jkt 0;oLFkk dHkh Hkh li.k vFkk e lQy ugh gk ldxh A

(18) ipk;r ifrfuf/k;k dk vfuok;; :i l ifr माह एक निर्धारित मानदेय राशि दिया जाना pkfg, ,o vxj vulfpr tutkfr efgyk ipk;r ifrfuf/k gk rk dN vf/kd ekun; राशि दिया जाना चाहिए जिससे वे रोजी &jkVh dh fprk l eDr jgdj dke dj ldA

fu"d"kZ

;g dgk tk ldrk g fd ipk;rk d fofHkUu Lrjk vulfpr tutkfr efgyk tuifrfuf/ायों की सहभागिता एक दशक उपरांत भी lde.kdkyhu nkj l xtj jgh g] yfdu Hkfo"; e bld Bkl ,o ldkjkRed ifj.kke fn[kkb nx] ,l शुभ संकेत अवश्य मिलने लगे है। शासन द्वारा vulfpr tutkfr efgyk ifrfuf/k;k d fy; विशेष प्रशिक्षण शिविर लगाने, प्रदेश पंचायत आयोजित dju rFkk ipk;rk dh cBdk e vulfpr tutkfr efgyk ifrfuf/k;k d ifjokj d i:"kk dk lfEefyr न होने देने के शासकीय निर्देशो के अच्छे परिणाम lkeu vku yx gA bl ipk;rh jkt 0;oLFkk u vulfpr tutkfr efgyk ifrfuf/k;k dh ,d ,lh ik/kk r;kj dh g]tk vku oky o"kk e NRrhlx< e vulfpr tutkfr efgykvk dh jktuhfrd lgHkkfxrk e of} dh lHkkoukvk d u; }kj खोलेगी तथा प्रादेशिक स्तर पर अनुसूचित जनजाति महिला नेतृत्व की एक सशक्त पीढ़ी तैयार करने में lgk;d gkxh ;gh vi{kk g] lkFk gh vkt आवश्यकता, इस अनुसूचित जनजाति महिला नेतृत्व की भावी दशा व दिशा सुनिश्चित करने की भी है, rkfd bDdhloh lnh e ,d uohu xkeh.k lekt का शिलान्यास संभव हो सके व विकेन्द्रीकरण के okLrfod y{;k dk 0;ogkj e ikIr fd;k tk ld] fdUr ,lk rHkh lHko g tc ;g vulfpr tutkfr महिला नेतृत्व सतत् जागरूकता क्रियाशीलता, नियंत्रण –निर्देशन व समन्वय की क्षमता का परिचय देते हुए viu nkf;Rok dk le> viuh eukofRr o मानसिकता को विस्तृत करे, अन्यथा अस्थिर दिशाहीन, अल्पशिक्षित, अनुत्तरदायी व उदासीन अनुसूचित tutkfr efgyk urRo ipk;rh jkt 0;oLFkk d fy; fujFkd fl} gk ldrk gA

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पत्र एवं पत्रिकाएँ

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Mycoflora of paddy and their role in seed health

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Abstract

Paddy (Oryza Sativa) suffers from a number of diseases, The microorganisms attack seeds in pre-harvest stage and in stores in post-harvest stage. The predominant specie of mycoflora are fungal species of Aspergillus, Alternaria, Helminthosporium, Curvularia etc, The most serious form of loss is caused epiphytotic diseases, in the present investigations seeds were collected from local farmers and subjected to seed health tests to isolate the mycoflora and seed analysis was performed for various seed health factors.

Introduction

Seeds are subjected to invasion by a great variety of microflora which develop on seeds from field,harvest transit and storage.(Padhee, 1996) Seed discolouration of rice results in heavy losses to crops. Fungi associated with discolored seeds results in deterioration of nutritive value of seeds, seedling mortality and reduction in germination.(sachan and Agrawal)Mycotoxin producing fungi cause considerable changes in nutritive quality of seeds.(Jayaramana and Kalyana Sundaramam,1990) Fungal contamination can occur at any level from standing crop through to harvest and post harvest handling operations until they reach the consumer. It is a problem in tropical countries like india where the warm and tropical climate provides excellent conditions not only to fast decay and deterioration of grain but also favourable to growth and proliferation of microorganisms(Kalyana Sundarum and Jayaraman,1996)

Review of Literature

Diseases has been one of the factors limiting higher rice production in many parts of tropical Asia.The Blas disease(Pyricularia oryzae), Bacterial blight(Xanthomonas oryzae),Stem rot (Helminthosporeum sigmoideum) are universally present in rice fields. Blast is a serious disease and caus e serious diseases in kharif season and responsible for 5-7% losses dependent on storage and severity of infection(Dubey and Mishra,1993) Blast causes serious epiphytotic in India and losses are up to two thirds of yield (Kulkarni, 1993) This disease is serious in Kharif season and responsible for 5-7 per cent losses dependent on severity of infection. (Dubey and Mishra, 1993) Brown spot caused caused by Helminthosporium oryzae was the cause of Bengal famine in 1942-43 and can induce losses up to 30 per cent of rice grains (Bedi and Gill. 1960)

Sheath blight caused by Rhizoctonia solani is one of the serious diseases of rice crop in areas of Tamilnadu (Kannaiyan and Prasad, 1979) Survey of rice Mycoflora in Mekong delta showed the Highest incidence of Curvularia spp. Followed by Alternaria Padwickii (Pham et al, 2001).

Materials and Methods

I) Collection of Samples- Seed samples of Paddy were collected from different localities of Bastar regions. Most of the samples were collected from farmers harvested from fields. Seeds were col. Seeds were collected in alcohol bags and they were sealed.

II) Seed Testing Methods- Seeds were examined by Microscope for presence of impurities, seed washig test was done,sediments were observed under microscope.

III) Analysis for Health factors- determination of Percentage germination was performed by taking 100 seed of each sample, plated in sterilized petridishes having3 filter paper discd soakd in sterilized distill water, The plates were incubated for 7-8 days and the number of germinated seeds were recorded.

IV) Analysis of Mycoflora: Standard seed health testing methods were used followe by ISTA,1976)

Standard Blotter Test: Sterilized whatmannfilter paper discs were placed i sterilized petridishes and moistened by adding sterilized water and were incubated at fixed temperature of26±2 degree centrigrade in 12/12 alternating cyles of darkness and near ultraviolet(NUV) for incubation period of 7-8 days in incubation chamber and the developed mycoflora was observed under microscope.

Agar Plate Test: two media, PDA(Potato dextrose agar), and czapek dox agar medium were used in agar plate test. The composition of PDA used was; PDA(Potato dextrose agar) media-(Riker and Riker, 1936)

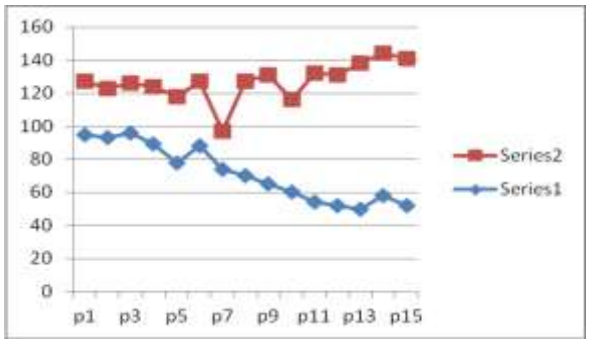
Potato(Peeled and sliced)	: 100g
Dextrose	: 10g
Agar	: 7.5g
Distilled water	: 500ml
pH	:6.5-7.0

After preparating the medium streptomycin was added to the medium to prevent bacterial contamination. The seeds were plated to agar medium. 20 seeds per plate. The plates were incubated for 7-5 days in 12/12 hours of light and darkness in incubation chamber/ the different species of fungi were studied by colony characters and by preparing mounts and identified by standard Text Books of Barnett and Hunter (1972)-Ii=lustrared genera of Imperfect Fungi, A manual of soil fungi-Gilman(1972) etc.Study of total population and distribution of mycoflora was done by calculating percentage frequency and percentage abundance by Weaver and Clements(1938).

RESULTS

Analysis of results showed that seeds collected from local farmers had discolourations ranging from light brown to dark brown colour. The percentage germination of seeds can be correlated with the abundance of mycoflora.Percentage germination ranged from 30%-90%.Viability tests was conducted with samples showed 70-80% seeds were viable. Table:2 Isolation of mycoflora showed a total of 20 fungal species belonging to different genera The predominant fungi detected in order of prevalence were Aspergillus species followed by species of Fusariu, Curvularia, Helminthosporium, alternaria, Drechslera and Penicillium, these species occurred more commonly than other fungi. In addition to these other species like Rhizopus. Mucor,. cladosporium, Tricothecium, Tricoderma and Stemphyllium was also detected. These were less compared to other fungi.

Table:1 Comparitive graph of seed moisture content and % abundance of mycoflora



Isolation of mycoflora showed a total of 20 fungal species belonging to different genera The predominant fungi detected in order of prevalence were Aspergillus species followed by species of Fusarium, Curvularia, Helminthosporium. alternaria. Drechslera and Penicillium. These species occurred more commonly than other fungi. In addition to these other species like Rhizopus. Mucor, cladosporium, Tricothecium, Tricoderma and Stemphyllium was also detected. These were less compared to other fungi.

Among field occurrence of fungi species of Alternaria,Bipolaris Curvularia, Drechslera, Helminthosporium and Fusarium was the highest. The occurrence of storage fungi, Aspergillus niger, A. Flavus, Penicillium Mucor and Rhizopus were dominant in few samples compared to field fungi Percentage frequenc of Aspergillus flavus was highest ranging from 25% & 78% followed by A. fumigatus 25-68% and A. niger12-56%.

Among field fungi incidence of Alternaria alternate was 23-71% followed byBipolaris 32-56%.Helminthosporium 18-58%. Ocuurence of curvularia, stempyhllum, tricothecium was less. The occurrence of all these fungi were dominant in sample number p1 p2 p3 p4 follower by p8 p9 p10 and p12.

The highest incidence of storage fungi correlated with seeds having a higher moisture content as compared with seeds with less moisture content where incidence of field fungi was highest Germination studies showed higher of field fungi confirming their seed-borne nature. The highest number of fungi and abundance recorded was with samples p1 p2 p3 p4 followed by other samples.

Table1: Showing percentage frequency of mycoflora isolated from seeds of Paddy

Isolations made on Blotter and Agar plate method Temperature:26± 2 degree C

SN	Mycoflora	P_1	P_2	P_3	P_4	P_5	P_6	P_7	P_8	P_9	P_{10}	P_{11}	P_{12}	P_{13}	P_{14}	P_{15}
1	Aspergillus flavus	75	81	75	87	68	50	-	93	75	75	68	76	-	68	25
2	A. fumigatus	68	75	81.	62	82	-	6	25	81	93	75	56	6	12	25
3	Aspergillus niger	56	62	75	81	75	80	25	56	93	25	12	52	4	81	12.
4	A.candidus	56	32	28	43	67	57	47	34	57	60	-	44	56	78	37
5	Aspergillus clavatus	56	45	32	33	78	34	78	34	55	21	32	22	14	33	43
6	Alternaria alternata	71	60	66	66	65	44	54	43	23	54	65	43	34	54	67
7	Alternaria tenuis	67	57	74	85	77	44	45	23	49	76	34	43	60	76	34
8	Bipolaris oryzae	45	70	66	43	67	32	57	75	60	44	30	43	-	87	50
9	Chaetomium spp.	28	33	34	21	-	-	24	34	47	23	14	18	22	20	12
10	Cladosporium oxysporum	14	-	26	16	14	15	-	11	9	16	18	-	18	15	11
11	Curvularia lunata	25	18	22	26	20	18	28	16	15	25	24	25	-	35	20
12	Drechslera oryzae	30	11	16	17	33	40	34	22	18	15	26	28	23	15	36
13	Fusarium oxysporium	41	36	56	21	34	26	47	32	50	56	43	49	-	34	27
14	Helminthosporium oryzae	58	24	36	56	41	38	34	24	18	43	29	36	38	29	50
15	Mucor globosus	-	11	17	16	11	16	14	10	-	12	11	16	17	16	-
16	Penicillium chrysogenum	20	14	-	17	13	10	9	18	-	24	19	-	27	22	17
17	Rhizopus nigricans	4	8	10	5	11	9	12	13	4	6	-	3	-	8	9
18	Stemphylium botryosum	2	-	5	-	1	3	3	-	4	2	-	-	3	1	4
19	Trichoderma roseum	12	11	5	7	5	4	2	2	3	4	6	6	3	8	-
20	Tricothecium spp.	-	3	6.2	5	1	6	3	1	-	-	1	2	3	3	5

Discussion:- In the present investigations mycoflora of paddy and their role in determining seed health was investigated. The results indicate that incidence of storage fungi was highest in few samples compared with field fungi.these samples had higher moisture content. consequently higher.

incidence of some fungi the occurrence of such fungi increases with increase in storage time.

Moisture status of seed is an important factor for deterioration of seed by fungi.In storage higher moisture levels of seeds lead to severe destruction of embryos by direct or indirect means .These samples were in different rice seed samples from india(Archana and Prakash, 2013)

Occurence of storage fungi correlated with moisture content. These fungi grow at moisture contents in equilibrium with relative humidities ranging from 66-76%. Minimum relative humid-

ity for Aspergillus species is from 70-90%. Discoloured rice grains showed higher incidence of Alternari.curvulara and stemphylium. These species are well detected by Blotter and Agar Plate Method.Bipolaris oryzae and Fusarium are extreme seed borne pathogens of rice(Ora Et al 2011).The incidence of storage fungi was highest in rice germplasm(Majida et al, 2014).

Conclusion

Seeds must be healthy and disease free to have better crop production. The microorganisms attack seedsin fields in pre-harvest stages and post -harvest stages.They cause biodeterioration of seeds and epiphytotic diseases.The abundance of these fungi utilize the substrare directly or indirectly for their nutritive purpose. These fungi make them unfit for germination and bring about biochemical. Nutritive and physiological changes in seed.

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Treatment of Malaria Popular Among the Tribal Communities of Bastar and Its Relevance with Allopathic and Ayurvedic Method of Treatment

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Abstract

Bastar is a district in southern part of Chhattisgarh state in India. Jagdalpur city is the districts headquarter is located at 19.07°N 82.03°E. Our study area was 6 villages in Alor panchayat of Pharasgaon block approximately 90km. away from the district headquarter. The economy of this region primarily depends on agriculture. Not only demographic diversity is found in this region but the forests of this area are also very rich and diverse. Lots of medicinal herbs and plants are found in this region, which are widely used in traditional medicines by traditional healers popularly known as baigas or gunias. Because of the topography and other regional problems of this region the traditional medical knowledge of this region had been hidden from rest of the world. The peoples are really innocent and that is why they and their resources have always been exploited by outsiders. This is the major reason of their backwardness. Till now appropriate attention has not been paid to their traditional knowledge. The literacy rate is also not good. Due to this peoples are not aware of hygienic lifestyle which in turn causes frequent illness to them. Some of the common diseases prevalent in this region are fever, malaria, diarrhoea, cholera, dysentery, various skin infections etc. Study revealed that there are more than 50 major ethno botanical resources prevalent in the tribal community, which is being consumed in the forms medicines. Our study primarily focuses on the issue of documentation of their traditional knowledge about medicinal plants which are used by them to treat malaria. While documentation we have also checked the relevance of their treatment from the treatment prescribed in Ayurvedic and allopathic literature. In our study we came across lots of plant species which were used by traditional healers of this region but there is no reference to it in any of the popular treatment method which clearly shows that there is lot of work need to be done in this region which will not only raise the health standard of this region but it will make the people of this region economically more stable. From our study we deduced that some of the methods of treatment are really commendable while there are some which needs to be modified. There are also some methods of treatment which are totally wrong and must be stopped.

Keywords: - Ayurvedic, allopathic, *Baigas and gunias*, tribal people (*Aadivasi*), primary health problems.

Introduction

The Bastar district has an area of 8755.79 km². Its population is 14, 11,644. Out of total population more than 50% persons belong to scheduled tribe and scheduled caste. 86.30% people live in rural area while 13.70% people live in urban area. The population density is 140 per square Kilometre. The literacy rate of this region is 54.94. The Sex ratio is 1024 which is highest in the state. 40% of livelihoods are forest based, 30% are agriculture based and 15% of livelihoods are dependent on animal husbandry. Another 15% of the income of people comes from wage labour (Human development report government of Chhattisgarh, 2005). From these data one can easily draw an outline of this region as a natural resource rich, major rural, agro based, sparsely populated, tribal and moderately literate area.

Primary health care (PHC) facilities are also not up to the standard. There are only 3 Hospitals, 57 PHCs, 303 Sub-centres and only 12 Community Health Centres. But more worrying is that the number of Beds is mere 727 (Human development report government of Chhattisgarh, 2005).The infra-structure required is still missing. The government is trying to meet the expectation but due to inaccessible terrain and other regional issues it is hard for them to reach out to innermost areas. Due to all these issues tribal people living in this area depend more on their own traditional methods of *baigas* and *gunias* for treatment of their diseases which they are using since ages.

This study was conducted among the tribal peoples of Alor panchayat of pharasgaon block in bastar district. Questionnaire and personnel interview method is used in our study. Our study surfaced many plants used by tribal peoples. Some of these ethnic plants are wild while some are domesticated in the kitchen garden by few *baigas* for their own use. If this traditional

knowledge of the tribal people is improvised, it could not only improve their economic condition but it also help in improving their health condition. In our study we have concentrated on the documentation of this traditional knowledge. If this knowledge is well marketed before the world it will for sure benefit the inhabitants of this region. Different socio-cultural, spiritual and high ethical values attached with these ethno botanical resources will also play a pivotal role in its sustainable use and conservation. This study demonstrates the significance of ethno botanical resources of this area, used not only for ensuring the food and nutritional security conserved by the tribal people of this region but also put emphasizes on the plants which are of medicinal importance. This study focuses on the issues like how we can improve our Ayurvedic literature by inculcating the traditional knowledge of tribal people. If the tribal people are using some wrong medicine, how we can draw them to right path. How we can encourage tribal people for the farming of medicinal plants.

S. No.	Block	Panchayat	Village	Name of resource person at every village
1.	Pharasgaon	Alor	Ghodasora	Smt. Sukadi Bai
2.	Pharasgaon	Alor	Jhatiban	Jasraj Kuldeep
3.	Pharasgaon	Alor	Bhimabhata	Sri. Nandlal
4.	Pharasgaon	Alor	Manjhapara	Sri. Sunil Korram
5.	Pharasgaon	Alor	Parchhipara	Sri. Durjan Singh
6.	Pharasgaon	Alor	Gantapara	Sri. Phool Singh
Total	01	01	06	06

Study area

The study was undertaken at Pharasgaon block of Bastar, Chhattisgarh in the month of December 2014. Six villages of Alor panchayat were chosen for this study. The major tribal communities found in this area are Gonds, Muria, Halbaa, Bhatra and Dhurvaa.

Methodology

First of all we selected our study area. Selection of area is made on the basis of accessibility, Number of resource persons available in that area, population, socio-economic condition of peoples, governance and administration.

In every village, every community has its own organisation, which governs the community and helps to maintain the social fabric of life. As a result of Panchayati Raj, new facilities have come into the villages. In a village Sarpanch is instrumental in the development of the village. There are various departments and committees of the Government in the village, which offer different services, such as the cooperative societies, forest committees or the van dhan samitis. There are also some self-help groups (SHGs) in the villages that are working to improve the economic situation of the people. Our aim was to use this machinery to make tribal people aware of the importance of their traditional methods of disease treatment.

Questionnaire and personal interview method was adopted for this study. We asked the *baiga* and *gunias* of the village to take part in this study. We prepared a questionnaire and interviewed the selected *baigas and* gunias that helped us in drawing out the desired information from the tribal peoples. We selected the resource person on the basis of their work experience and his popularity among the tribal people of that particular village. The questions are simple and direct.

These questions are from how many years you are doing this?

Is this a hereditary knowledge?

Are you teaching this to somebody or not?

What kind of diseases cases come to you frequently?

How do you treat 'X' disease?

From where do you find these medicines?

The number of patients coming to is increasing or decreasing?

On the basis of the answers from the resource person we made a list of medicinal plants along with its description of usage and dosage. After it referred to various literature related to Ayurvedic and allopathic treatments to check its relevance.

Result

On the basis of our interview with the resource person of different villages, we made a brief table for each disease showing the vernacular name of the plant, its botanical name, part used and its dosage. After that we referred to different literature of Ayurvedic and allopath to check whether same plant is used for that particular disease or not. In many of the cases we found it

to be correct but there are some instances where the method treatments followed by the tribal people are completely incorrect because the medicine which tribal peoples are using has been prescribes for some other disease in Ayurvedic or allopath literature. We have also documented some plants which have no reference in Ayurvedic or allopathic literature but still they cure the disease.

Malaria

Malaria is an infectious disease caused by protists of the genus *plasmodium.* Five species of Plasmodium can infect and be transmitted by humans. Severe malaria is largely caused by P. falciparum while the disease caused by *P. vivax, P. ovale,* and *P. malariae* is generally a milder form that is rarely fatal. The definitive hosts for malaria parasites are female mosquitoes of the

S. No.	Name of resource person	Vernacular name	Botanical name	Part used	Formulation and dosage	Success percentage
1	Smt. Sukadi Bai	Leem	*Azadiracta indica*	Leaves	One teaspoon of powder or 3 tablets of fresh leaves Before meal	75%
2	Jasraj Kuldeep	Bhuin Leem	*Andrographis peniculata*	Entire plant	One tea spoon of powder Before meal up to 7 days	60%

Anopheles genus, which act as transmission vectors to humans and other vertebrates, the secondary hosts. The signs and symptoms of malaria typically begin 8–25 days following infection. (Mandell, Bennett, & Dolin, 2010) However, symptoms may occur later in those who have taken antimalarial medications as prevention. (Nadjm & Behrens, 2012) The presentation may include fever, shivering, arthralgia (joint pain), vomiting, hemolytic anemia, jaundice, hemoglobinuria, retinal damage, (Beare, Taylor, Harding, Lewallen, & Molyn, 2006) and convulsions. Approximately 30% of people however will no longer have a fever upon presenting to a health care facility. (Nadjm & Behrens, 2012) Disease transmission can be reduced by preventing mosquito bites by distribution of mosquito nets and insect repellents, or with mosquito-control measures such as spraying insecticides and draining standing water.

Folk treatment

Allopathic treatment

Uncomplicated malaria may be treated with oral medications. The most effective strategy for P. falciparum infection is the use of artemisinins in combination with other antimalarials (known as artemisinin-combination therapy). (Killeen, Fillinger, Kiche, Gouagna, & Knols , 2002) This is done to reduce the risk of resistance against artemisinin. (Killeen, Fillinger, Kiche, Gouagna, & Knols , 2002) These additional antimalarials include amodiaquine, lumefantrine, mefloquine or sulfadoxine/pyrimethamine. Another recommended combination is dihydroartemisinin and piperaquine. (Raghavendra, Barik, Reddy, Sharma, & Dash , 2011) Recently, malaria with partial resistance to artemisins has occurred in Southeast Asia. (Enayati & Hemingway J, 2010)

Ayurvedic treatment

There are five types of malarial fevers (*Visama Jvara*) are described in Ayurvedic which are treated as follows.

If the fever is continuous for 7 or more days then this panca karma treatment is given - Indrayava (seeds of *Holarrhena pubescens*), Patola leaves (*Trichosanthes cucumerina*), Katurohini (*Picrorhiza scrophulariiflora*)

If fever appears twice in 24 hours then this panca karma treatment is given - Patola (*Trichosanthes cucumerina*), sariba (*Hemidesmus indicus*), musta (*Cyperus rotundus*), patha (*Cyclea peltata*). katurohini (*Picrorhiza scrophulariiflora*)

If fever appears once in 24 hours then this panca karma treatment with fasting is given - Nimba

(*Azadirachia indica*), patota (*Trichosanthes cucumerina*), Triphala (*Phyllanthus emnblica, Terminalia chebula,*and *Terminalia bellirica*), mrdvika (*Vitis vinifera*), musta (*Cvperus rotundus*), kutaja (*Holarrhena pubescens*)

If the fever appears every third day then this panca karma treatment with fasting is given - Kiratatikta (*Andrographis panniculata*), guduci (*Tinospora cordifolia*), candana (*Santalum album*), sunthi (*Zingiber officinale*)

If the fever appears on every fourth day then this panca karma treatment is given - Caturtthaka quartan Asthi, ,majja Panca karma treatments Guduci (*Tinospora cordifolia*), amalaki (*Phyllanthus emblica*). musta (*Cyperus rotundus*) (Unnikrishnan, Venugopal, & D'Souza, 2004)

Conclusion

There are other plants also available in the vicinity of the tribal peoples which also shows anti-malarial activities but tribal peoples are unaware of them. These plants have their relevance in Ayurvedic. Berberine, extracted from *Berberis vulgaris* Linn. when combined with pyrimethamine, was more effective than combinations with other antibiotics in treating chloroquine-resistant malaria. (Sharon, 2002)

Hot water extract of *Jatropha gossypifolia* Linn. exhibits antimalarial activity against *Plasmodium falciparum. Lantana camara Linn. var. aculeata* Moldenke also have anti-malarial activity. Roots of *Ocimum sanctum* Linn. has antimalarial properties. Parthenin extracted from *Parthenium hysterophorus* Linn. and some of its derivatives exhibited significant antimalarial activity against a multi-drug-resistant strain of Plasmodium falciparum. The acetone extracts of *Pogostemon benghalensis* Kuntze. exhibited larvicidal activity against the larvae of malaria vector, *Anopheles stephensi*. Acetone extract of the aerial parts of *Pogostemon parviflorus* Benth.exhibits larvicidal activity against the larva of malaria vector, *Anopheles stephensi* and *Culex quinquefasciatus*. *Vernonia cinerea* Less. can also be used as febrifuge, diaphoretic (infusion of herb, combined with quinine, is used against malaria). (Khare, 2007).

The treatments followed by the tribal people are not popular either in allopath or in Ayurvedic method of treatment. Neem and bhuineem are used in Ayurvedic but not as tribal are using it. There are other extracts of plants also which are mixed with extracts of neem and bhuineem as documented by P.M Unnikrishnan et al (2004). So the tribal method of treatment needs a bit of modification.

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Implementation of N-ary Tree for Sequential Pattern Mining in Progressive Database

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Abstract
Sequential pattern mining is playing important role in the field of data-mining to find behaviour related with time in sequence databases. When sequential patterns are generated, the newly arriving patterns may not be identified as frequent sequential patterns due to the existence of old data and sequences. users are normally more interested in the recent data than the old ones. To capture the dynamic nature of data, addition and deletion, Haung[7] proposed a progressive algorithm Pisa, which stands for Progressive mining of Sequential Patterns, to progressively discover sequential patterns in defined time period of interest (POI). The POI is a sliding window continuously advancing as the time goes by. Pisa utilizes a progressive sequential tree to efficiently maintain the latest data sequences, discover the complete set of up-to-date sequential patterns, and delete obsolete data and patterns accordingly. An extension of this approach we proposed in this paper, users can select the frequently repeated patterns by allowing the Dynamic Period of Interest(DPOI).
Keywords: Sequential pattern mining ,progressive database

Introduction
The functionalities of data mining techniques include association rules mining, classification, clustering, mining time series, and sequential pattern mining, to name a few [2], [3], [4].Sequential pattern mining was first addressed in [1] as the problem: "Given a sequence database, where each sequence consists of a list of ordered item sets containing a set of different items, and a user defined minimum support threshold, sequential pattern mining is to find all subsequences whose occurrence frequencies are no less than the threshold from the set of sequences."

The sequential pattern mining with a static database finds the sequential patterns in the database in which data do not change over time[5]. On the other hand, the sequential pattern mining with an incremental database corresponds to the mining process where there are new data arriving as time goes by (i.e., the sequences database is incremental)[6]. As for the sequential pattern mining with a progressive database, new data are added into the database and obsolete data are removed simultaneously. Therefore, one can find the most up-to-date sequential patterns without being influenced by obsolete data.

The existing algorithms cannot cope with sequential pattern mining with a progressive database efficiently. To remedy this problem, Haung [7] proposed an efficient algorithm Pisa, which stands for Progressive mIning of Sequential Patterns, corresponding to the mining in a progressive database.

Problem Description
POI is a sliding window, whose length is a user specified time interval, continuously advancing as the time goes by. The sequences having elements whose timestamps fall into this period, POI, contribute to the |Db| for current sequential patterns. On the other hand, the sequences

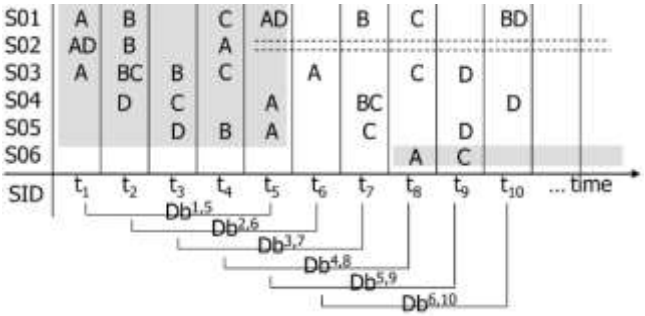

Fig1 sample database

having only elements with timestamps older than POI should be pruned away from the sequence database immediately and will not contribute to the| Db| thereafter.

PS-tree represents elements in the sequence, based on the sequence IDs and timestamps recorded in the nodes and the newly arriving data of the progressive database at each timestamp. PS-tree not only stores the elements and timestamps of sequences in each POI but also efficiently accumulates the occurrence frequency of every candidate sequential pattern at the same time.

Consider the progressive database in Fig. 1,for example. S01; S02; . . . ; Sn represent different sequence IDs. A, B, C, and D are different items in the database and t1; t2; . . . ; tk rep-

resent timestamps. As the time advances, there will be more elements arriving into the progressive database. Every sequence contains a series of elements appearing at different timestamps. Each element consists of a single or multiple items.

For instance, sequence S01 has element A at timestamp t1, element B at timestamp t2, element C at timestamp t4, and element . At the bottom of Fig. 1, Db represents a subset of the database containing the elements from timestamp p to timestamp q. Let the minimum support threshold, min sup, be 0.5 and the POI be five timestamps in this example. There are five sequences having elements in this period. Therefore, the minimum frequency for a frequent sequential pattern is |Db1,5|* min sup = 5* 0:5= 2:5.

We can find a frequent sequential pattern AB, whose occurrence frequency is 3 (in S01, S02, and S03) in the first POI. However, after this POI, AB is no longer a frequent sequential pattern in any POI of five timestamps. PS-tree not only contains the information of all sequences in a progressive database but also helps Pisa to generate frequent sequential patterns in each POI. The nodes in PS-tree can be divided into two different types. They are root node and common nodes.They are root node and common nodes. Root node is the root of PS-tree containing nothing but a list of common nodes as its children. Each common node stores two information, say node label and a sequence list, The label is the same as the element in a sequence. The sequence list stores a list of sequence IDs to represent the sequences containing this element. Each sequence ID in the sequence list is marked by a corresponding timestamp

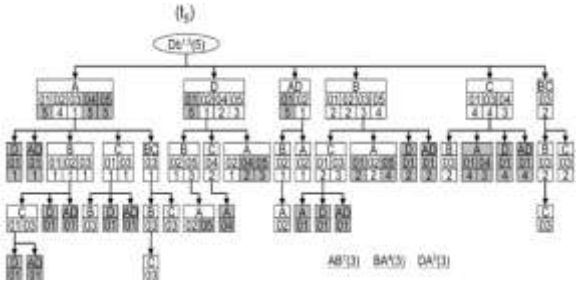

Fig2: PS-tree from t1~t5

If we require frequent patterns in between timestamp 2 and 4 then apply algorithm Dpisa as fig3 Let the minimum support threshold, min_sup be 0.5 and the in this example Dynamic POI is given by startTime **2** and endTime 4. There are three sequences having elements in this period. Therefore, the minimum frequency for a frequent sequential pattern is |Db 2,4|* min sup =3 * 0:5= 1.5. We can find frequent sequential pattern within that period as BC3(2) pattern as Fig4.

Algorithm

Procedure traverse (currentTime , PS)
for(each node of PS in post order)
if(node is Root)
for(ele of every seq in eleset)
for(all combination of elements in the ele)
if(element == label of one of the node.child)
create a new sequence with currentTime and support
else
create a new child with element, seq, currentTime and support
else
for(every seq in the seq_list)
if(seq.timeStamp <= currentTime - POI)
delete seq from seq_list and continue to next seq
if(there is new ele of the seq in eleSet)
for(combination of elements in the ele)
if(element is not on the path from Root)
if(element == label of one of the node.child)
create a new sequence with seq.timestamp and support
else
create a new child with element, seq, timestamp and support
if(seq_list.size == 0)
delete this node and its entire child from its parent
if(seq_list.size >= support*(sequence Number))
Output the label of the path from Root to node as a SP but if there is an
item in between with two support values then take one with higher support
value

Research Methodology

To solve the problem of progressive sequential pattern mining having support coupled items, we modify the progressive sequential tree [4], in such a way that it can accommodate supports so we can get patterns with new support. The data structure we use to construct this tree is N-ary tree.

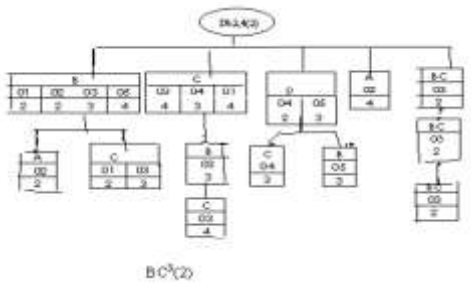

Fig4:PS-tree from t2~t4

DATA STRUCTURE

N-ary tree structure is used to store the details of progressive database. The nodes of the tree are broadly classified as root node and common nodes. The root node consists of header, which links with common nodes. Each common node holds the information such as item-name, sequence-id, time stamp and support of an item. Here item -name is the label of an item which is associated with integer number, denotes the support count of an item by default support count is one.

Sequence-id stores the list of sequence items to represents the sequence containing this element. Each sequence-id in the sequence list is marked by a corresponding time stamp.

ADDING NEW ITEMS TO N-ARY TREE

At each timestamp the insertion of elements in to the N-ary tree at time t results in an updated tree for time t+1. The algorithm traverses the tree in at time t in a post order. The algorithm continues until there is new data in the progressive database. Whenever a series of elements appear in a sequence, path from the root is created labeled by the respective elements of the pattern with the corresponding sequence number, called the candidate pattern. If a path already exists the concerned fields of the nodes are updated with respective information.

To solve the problem of progressive sequential pattern mining having support coupled items, we modify the progressive sequential tree [4], in such a way that it can accommodate supports so we can get patterns with new support. The data structure we use to construct this tree is N-ary tree.

DELETING OBSOLETE ITEMS FROM N-ARY TREE

An obsolete element (i.e., element which lies out of the period of interest) and a node having no sequence number in its sequence list are pruned from the sequential list of the node and the Mary tree respectively.

MINING FREQUENT PATTERNS FROM PROGRESSIVE DATABASES

The main idea of sequential pattern mining is to utilize the N-ary tree to store all sequences from one period of interest to another. When receiving an item at time stamp say t+1, the algorithm traverses the original M-ary tree of time stamp t in post order to delete the obsolete elements from the updated current sequences in and insert newly arriving elements in a progressive databases i.e, whenever a series of elements appear in a sequence, path from the root is created labeled by the respective elements of the pattern with the corresponding sequence number, called the candidate pattern. If a path already exists then the concerned fields of the nodes are updated with respective information. The time stamp for each node of the candidate sequential pattern is marked according to the starting element of the candidate pattern. An obsolete element is the element which lies out of period of interest and a node having no sequence number in its sequence list are pruned from the sequence list of the node and the Mary tree as given in algorithm below. Thus we can ensure that there are only up-to-date candidate patterns in M-ary tree [3].

DATA STRUCTURE N-ary tree structure is used to store the details of progressive database. The nodes of the tree are broadly classified as root node and common node. The root node consists of header, which links with common nodes. Each common node holds the information such as item-name, sequence-id, time stamp and support of an item. Here item name is the label of an item which is associated with integer number, denotes the support count of an item by default support count is one. Sequence-id stores the list of sequence items to represents the sequence containing this element. Each sequence-id in the sequence list is marked by a corresponding time stamp.

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Conclusions

Our proposed work mine Sequentioal pattern in progressive databases seasonally. The major

constraints in mining frequent patterns of progressive sequential databases are that, it should consider the most recent items and they are scanned only once. To achieve this, we have modified progressive sequential tree by using Mary tree data structure mapping scheme. In this, we record the items over a user defined period of interest, which holds the information such as support coupled item-id, sequence-number and timestamp of each of the items.

Every time sales analysis is not uniform so user can extract the pattern s on his own interest. The major constraint is it consider only recent items. To achieve this we modified progressive sequential algorithm by using startTime and end-Time as dynamic period of interest our goal is according to requirement user can extract patterns dynamically.

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