# Identification of Gifted Students and Study of their Personality and Creativity in Four Different Types of School 

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SOCIAL PSYCHOLOGY OF EDUCATION

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## DECLARATION

Certified that the dissertation entitled " IUENTIFICATION OF GIFTED STUDENTS AND STUDY OF THEIR PERSONALITY AND CREATIVTFY IN FOUR DIFFERENN TYPES OF SCHOOL," submitted by Jabin Danu is for the award of the Degree of Master of Philosophy of this University. This dissertation has not been previously submitted for any other degree of this University or any other University and is her own work. We recommend that this dissertation may be placed before the examiners for evaluation.



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## 

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## CHAPTER - I

INTRODUCTION

## INTRODUCT ION

The Indian Constitution which was adopted in 1950 states in regard to education that "the state shall endeavour to provide within a period of 10 years from commencement of this constitution for free and compulsory education for all children untill they complete the age of 14 years".

Today the world over, there is a growing consciousness to build up with utmost care,plans and programmes for talented children, lest the nation get impoverished as a result of misuse or destruction of talents. Ihis has been the concern expressed in the first world conference on Gifted children held in London in 1975 .

During the last three decades the number of primary institutions have increased from (5.04 lakhs) over the period (1950-83) and in the year 1950-51 there were only 7.300 secondary schools in the country. Elementary and secondary education is the most crucial stage of education spanning the first eight years of schooling and laying the foundation for the personality, attitudes, social confidence and habits of popils. Because India's socio-economic structure both at national and international level demands leadership of the highest quality and keenest intelligence. This leads to the inferences that such persons could be obtained from amongst those of high intellectual faculty.

Uptill now no special attention at the national level had been given to the gifted. In the recent year the Govt. of India has been focussing a great deal of attention on this aspect as is evidenced from the New Education policy Document (1986). The new education policy has placed considerable emphasis on the development of talent amongst children and wants the schools to identify the gifted and exceptional children who can became the future scientist and leaders in India because a gifted child is of incalculable value to the society.

Accepting the need for having more gifted children it becomes imperative to find ways and means not only to identify the gifted but also to devise materials and instru ments to realise the potential giftedness and talent in children. This task in turn calls for intensive researches, In this context the review of the available studies shows the paucity of work in this area.

A few studies in the field of educational psychology and exceptional children show that the concept of giftedness itself is not clear. However the noted contributions have been those of Raina (1965, 1968, 1979. 1980. 1981, 1984) pachaury (1984), Deshmukh (1981, 1984) Ghakkar (1984) Bhatt (1973) Khan (1967) Desai and Desai (1973) Deo (1969) pandit (1973) and walia (1967), who have all attempted to understand the problem of the gifted children.

## The concept of Gifted Children

The important step in the successful handing of gifted children is to understand what constitutes giftedness, only then one can develop an instrument to identify the gifted and then find ways and means to channelise giftedness constructively and how to cope with the problems.

In order to deciae whether a child is gifted, it is first necessary to know what is meant by giftedness. When a teacher or psychologist speaks of giftedness, the term "giftedness" is not used to describe exceptional intellectual ability as distinct from talent. The concise dictionary of education defines "gifted child" as one whose ability level is far above average academically. physically, or artistically. Encyclopaedia Dictionary of education has defined gifted child as a child possessing special talents of a high level of very high general intelligence attainable by only $2 \%$ of the population of that age. Educators Encyclopaedia defines "gifted children" as those who possess exceptionally high level of learning ability. But talented children are those with unusual ability in a special area like art, music, mechanics or some academic field. The New Encyclopaedia Britannica defines "gifted children" as those who are naturally endowed with a high degree of mental ability either general or special. Giftedness, as defined by 57th yearbook of the national society for the study of Education is - "The
talented or gifted child is one who shows consistently remarkable perforthance in any worthwhile line of endeavour. Thus we shall include not only the intellectually gifted but also those who showspromise in other fields.

Thus giftedness emerges from an interactive process which involves the innate oapablities of an individual and the stimulating environment in which he grows. Thus although the gifted child inherits his abilities, they may not bloom unless they are properly nurtured. Gifted children if nurtured carefully will benefit not only themselves but also their community, nation and the world.

## Characteristics

There is a genuine need to specify characteristics and behaviours phich indicate a human being as gifted in terms of the above classification. Intellectual ability is not a single entity thus according to researchers not only they should possess intellectual skill but also verbal. numerical, spatial and reasoning skills. 。

As for verbal skill, this has two partsvfirst the ability to comprehend written or spoken material and second the ability to use words effectively in speaking or writ "ing. Gifted children have a high degree of skill in verbal comprehension.

Numerical skill is the ability to handle ideas that are expressed by numbers. Children with this skill
are more than simply good at doing the basic operations of adding subtracting, multiplying and dividing.

On the other hand spatial skill is the ability to understand how parts of things fit together.

Reasoning skill which is also called as"logical ability" is composed of several abilities - abilities to make plans on the basis of known facts, to learn from past experiences to foresee the consequences of a particular course of action, to figureout the sequence of incidence leading upto particular event and to the relationship between seemingly separate and unrelated facts or events.

A gifted child is one who should manifest superiority in enyone or more of these skills. He may be above average in any of them but outstanding atleast in one or two. For instance a child may be good at numbers and another child adept with words and so on. But a child who is considered gifted in some particular field is usually intellectually superior in general and excels all others in that field in which he is gifted.

Not many studies are reported in this area. A very few studies deals with personality traits, identification of giftedness or educational interest of gifted.

And also it is reported that many researchers have studied giftedness mainly on the basis of the intellim gence which is an inadequate criteria to identify the gifted. According to Bacquer Mehdi and C.L. Bhat (no one method taken singly would be of much help to identify the gifted, rather all these tests combined together can do a reasonably good job of identifying most of our academically gifted. Thus taking any one factor in identifying the gifted can not be considered an appropriate measure.

The present study has therefore made an attempt to devise a special instrument for identifying the gifted In addition to the Intelligence Test and class performance. In this respect this study differs from all the other earlier researches. And again in this study an attempt has been made to relate giftedness to various personality dimensions such as sizothynda versus Affectothymia, low Intelligence versus high intelligence, lower ego strength versus higher ego strength, Phlegmatic temperament versus excitability, submissiveness versus dominance etc.

Since these personality dimensions give an idea of what typical characteristics are possessed by the gifted, by comparing them with average children, one could understand the gifted better, particulary in terms of their typical characteristics. May be such a personality dimension if leads to a typical characteristics
profile of the gifted vis-a-vis average children, one may be able to try and develop such characteristics in average children associated with the giftea through curricular development, school programmes and special training etc.

Statement of problem

The present study has the main focus on gifted children. In this regard the present study proposes to identify the gifted with a specially devised tool and after identifying, compar $y$ them with average students (not gifted) to find out in what all respects do they differ from them.

This study to ascertain if giftedness is in anyway related to creativity. An attempt will also be made to correlate thesetwo factors and compare the extent of correlation between the two groups.

The present stuay aims to ascertain the personality profile of gifted children and to ascertain if they differ from average students \& if so in what ways. It also endeavours to study the personality profile of gifted as well as those factors which may lead to creativity.

In short the present study aims to identify the gifted and ascertain whether giftedness is related to
creativity and whether the personality profile of the gifted differs from that of average students and if so in what ways. Thus the present study has taken a totally different approach to understand the gifted children.

It is hoped that the findings of this study would be of much help in formulating new curriculum anc other training materials so as to help average chiloren too to develop the exceptional qualities of the gifted. Though considerable work needs to be carried out before the formulation of such a curriculum or training as envisaged above, it is hoped that the present study may be able to throw light on some of the important aspects closely related to giftedness.

## CHAPTER - II

## REVIEW OF LITERATURE

## REVIFW QF LITERATURE

A research study on any topic cannot be undertaken without knowing what had been covered in earlier studiés in the particular field concerned and which areas need further exploration and investigation.

It is well known that the field of gifted children has been of great interest to researchers and educators because of its contribution to the society and various fields.

Inspite of her best efforts the researcher could not locate any substantial number of investigations on iden.tifications of gifted children in India and study of their personality or other dimensions. The relevant data which were studied included materials collected from doctoral reports, project reports,research articles and psychological abstracts.

A lot of work on the gitted have been carried out in different parts of the world, by individuals as well as by team of experts. Growing interest in talented children during the first two decades of the 20 th century was mainly confined with learning more about the intellectually gifted.

In 1921, Terman inagurated a long series of investigations concerning gifted chilaren. Volume I of the Genetic studies of the Genius by Terman and others (1925) nade a rroct ina : $t$ on research in the field of gifted chilaren.

The following section presents the available relevant literature in the areas of gifted children.

## STUDIES IDENT IFY ING GIFTEDNESS :

Bhatt (1966) identified gifted children by employing inexpensive proceaures. It is that children with superior intellectual ability and high academic achievement based on teachers observation and academic record were grouped as gifted children. After identifying gifted children froma large group of students he made an attempt to study their personality.

Deo (1969) made a study which aimed at developing a better procedure for identifying the gifted and nongifted groups. She used verbal and non-verbal tests for . identification.: .... The main findings of this study were
(1) Gifted boys were more self accepting and scored higher on gociel and emotional adjustment than average boys.
(2) When the gifted boys and girls were compared on the Bernreuter's personality inventory, it was found that gifted girls were almost equal in neurotic tendency , extroversion-introversion, ominance-submission and selfoconfidence,but higher on intellectural independence and lower on socioabllity scale than average girls.

Pendit (1973) icentified gifted and non-gifted student on the basis of coccher's ratings, school achievement, end inteligence test. iie also studied adjustment problems of gifted nd non-ifted students and found that the gifted had less adjustment problems than the non-gifted. It was observed that gitted and non-giftea reactea aifterently to experimentally roonced irustrations and also the gifted evaluated the sicuation more positively and critically than the non-giftea.

Walia (19\%3) icientified gifted students with the help of Jalotg!s Inteliigence rest, singh's group test of mentai ability and Reven's progressive metrices. After the Identification his aim wre to compre the perceived ideal and self-concept of gifted vith those of average children. whe

The study revealed that
(1) Foctor of intelligence had e significont effect on the self-yerception of the individuals and on the different dimeasion of sele; (2)
(2) Also sox has a significant effect $u$ on the self-retings of the gifted as ell as the averae males and femeles:
(3) the interaction of intell gence and sex, intellegence and age, and sox and age, brought about significant variations in the self reting ot the subjects;

Gnanamial, (1982) study had the objectives
(1) To inind out he Eactors which vere rolated to giftemess of children;
(2) Io finc out the eriectiveness ois
teacher's opinion and standardized test in identifying the gifted children to study the reletionship of giftedness to social qualities; and to study whether socio-economic status had any relationship (to giftedness. $:$ The major findings were that giftedness was not found to be related to sex but was signficantly related to the social qualities of the subjects and their socio-economic status. The gifted students were found to be superior to the non-giftea students in their social qualities.

Bhaila (1970) constructed and standaraized a test
 compered the two groups with respect to their self-concept, and Gifteciness, and fount the fennex híghex on giftedmess.

Surinder Kumar (1985) identified gifted students who scored on or above 95th percentile in bboth Raven's progiessi. ve matrices test as well as in the Jalota Group Test of Intelligence. The student who scored between the 25 th and 75 th percentiles and also who scored at 50 th percentile were treated as averase students. He studied their interest, need and adjustment problems of gifted and average students. He found that the gifted children were highly interested in scientific and medical areas as compared with other interests and were seen least interested in household work.

Baquer mel:di stated that the teacher's observation with the help of observation guides is the best available method of discovering the children with special aptitudes. No one method taken singly would be of much help. rather all these test combined together can do a reasonably good job of identifyiog most of our academically gifted..

With a growing interest in the education of the gifted there is also a continuing search for identifying them. The country as such was becoming more aware of the need for gifted personnel.

CREAT TVITY AID GIFTED:

Sharma (1972) studied creativity as a function of intelligence. Results showed that at lower IQ levels, rise in creativity was more in line with the rise in intelligence score. At higher Iq levels there was not much of this oteend.

Sharma (1974) conducted a study to ascertain the correlation between intelligence and creativity. Intelligence was measured by the Samohik Manasik Yogyata Pariksha. He concluded that intelligence is necessary ror the develop. ment of creative thinking.

Gakhar (1975) investigated a sample of 730 girls of higher secondary schools of urban students, he observed
that (1) Creativity and intelligence were the distinguishable modes of the same intellectual functioning.
(2) High and low groups of girls on verbal creativity differed significantly in respect of status, intellectual efficiency and flexibility. (3) Personality traits of self-accepted and self-sufficiency were distinguishing characteristics of girls on non-verbal creativity and (4) Thece was a consistent increase in the scores on all the verbal as well as non-verbal reasons of creativity upto age of 15.
patel (1978) made an inquiry into the relationship of creativity to intellectual giftedness with respect to two groups of intellectually gifted from a high school and compared (1) Capably gifted with. IQ 120 and above (2) Functionally gifted with $I Q 120$ and above alongwith school achievement score of $60 \%$. The findings suggested that it may be useful to keep traditional $I_{Q}$ and creative concepts separate. He found that the correlation between creativity and intelligence of the giftedi , was . 0144.

Raina (1968) observed a positive but non-significant relationship between creativity and intelligence among eigth, ninth and tenth class students. He used the Minnesota verbal tasks of creativity and Jalota's Group Test of
mental abilities. So also passi (1971) and Sharma (1972) found a positive and significant relationship between these two variables..

On the contrary, Bedi (1974) could not find any significant relationship between creativity and intelligence amongst the ninth class students, whereas Mehdi (1977) indicated a negative relationship between creativity and intelligence on the urban sample, though it was positive and significant in the case of rural sample.

Rawat and Agrawal (1977) adminstered their standard creativity test to eighth and ninth class students. The rem sults showed that high achievers on intelligence were not always high on creativity.
singh (1972) reported a significantly high relationship between creativity and intelligence among secondary school children.

Reddy and Reddy (1983) indicated positive and signim, ficant relation between creativity and intelligence.

Hasan and Khan (1976) conducted a study on 8th graders. A Battery of creativity tests were used as a measure of creativity and Raven's progressive matrices as measure of intelligence. The creativity scores namely fluency, flexibility
and originality were found. It was found that the inter correlations among the three creativity scores were relatively higher than the correlation of any one of them with intelligence.

Chadha and sen (1981) conducted a study using tools like T.T.C.T., Raven's progressive matrices and kul ishreshta's scale Results showed significant difference. between high creative and low creative boys as well as girls on intelligence. The product moment coffenf correlation also found to be moderate and significantly positive.

Findings lin general indicate that there is a moderate relationship between intelligence and creativity. It is not necessary to be highly intelligent to be creative.

Yamamoto (1972) took 272 subjects from grede 9-12 and gave them Minnesota test of creative thinking; and inteliligence test. He idertified in each grade three groups of gifted children. (1) High intelligence group (2) High creative group (3) High intelligence and creative groups. Although the high intelligence groups averaged 20 points higher on IQ than the high creative groups they were only 7 point higher on IQ than the high intelligence creative groups.

31 gifted 7th graders-onatest of measuring selection aspects of creativity with those of all the children in the grade with the exception of ideational fluency. The gifted group performed at a significantly higher level than did the total group. They were significantly superior on the measure of originality and sensitivity to problem aswoll as in conceptual fore sights.

Kurtzman (1967) compared three groups of adolscents with different levels of creativity. The results indicate that more creative students tend to be more intelligent.

Gowan (1971) suggested that IQ level for intellectual giftedness be changed from 100-120 because below an İ af approximately 120, crativity and intelligence are highly correlated, while above that point there seems to be little correlation.

Welsh (1966) found that non-verbal and verbal (Terman concept mastery test) intelligence shows no correlation with creativity for 368 gifted high school adolscents.

CREAT TVITY AYD PERSONALITY OF THE GIFIED:

Raina (1968) discovered that high creative students
exhibited greater achievement autonomy, dominance, and change wher -as, the latter were high in hetero sexuality.

Goyal (1974) discovered that the creative pupils possessed a higher level of energy, they rejected suppression for control of impulses, they were more introverts and more independent in both thought and action, had open minds, could tolerate ambiguity and entertained opposing values.
paramesh (1972), ... concluded that highly creative individuals are significantly high in strength than the low creative individuals. The high creatives differed significantly from the low creatives on theoretical and aesthetic values.

Joshi (1974) identified the following relationship: (1) Age was an important correlate of creativity at 15 years age level (2) None of the main effects of $I Q$, age and sex upon the personality factor A (cycolthymia versus schizothyma) was significant. (3) Giftedness was à significant contributing factor to the personality factor B (General intelligence versus mental defects in all cases.) (4) Giftedness contriputed towards emotional maturity in the case of boys. (5) Giftedness, sex and age did not contribute significantly to surgency. (6) There was a low positive significant correlation between intelligence and all types
of creative scores. (7) There was no significant correlation between different creativity scores and different personality traits except in factor B (General intelligence versus mental defect) factor $G$ (Super ego strength versus lack of Rigid internal standard), factor $I$ (premsia versus Marria), factor $L$ (protension versus Relexed security). factor $Q_{3}$ (High self-sentiment formation versus poor selfsentiment formation) and factor $Q_{4}$ (High ergic tension versus Low ergic tension).

Gakhar (1975) investigated a sample of 730 girls of higher secondary schools and observed that personality traits of self-accejtance and self-sufficiency were distinguing characteristics of girls high on non-verbal creativity.

Bhargava (1979) found that creativity ${ }_{\text {h was }}$ signifycantly related tol anxiety, independence, education and occupation while alert, poise extroversion and family size were negatively related. Age and income showed no relationship with creativity.

Mallappa and Upadhaya (1977) compared the personality of high creative person with that of low creative persons in an attempt to determine personality correlates of creativity. 40 high creative and 40 low creative students were selected on the basis of scores on a creativity test designed, according to :Guilford (1950)'stheory of crea-
tivity and were administered on Indian adaptation of the 16 P.F. Find: -img show the ub ng crentives persons differed from the dow creatives in personality, although both groups had a nearly average personality pattern. High creatives were more intelligent, more socially bold, were less tense and had a stronger self-sentiment than the low creative subjects.

Weisberg and Springer (1961) conducted a personality study in depth of 32 intellectually gifted fourth grade children. Using the median of this group as a cutting, point, they comparac the personality characteristics of the highly creative children with those of the less creative ones. The findings showed that the highly creative children were rated significantly higher on strength of self-image, ease of early recall, availability of oedipal anxiety and uneven ego development. On the basis of their responses on Rerschsch Inkblots, children ranking high on the criterion measures were found to be at the same time more sensitive and more independent than less creative but equally intelligent.

Drevdahl (1956) conducted a study to explore the relationship between ratings of creativity and certain objectively measured personality and intellectual factors in a high school population. Analysis of data revealed that the tests which significantly differentiated the creative
from the non-creative students included Thurstone's verbal meaning, Cattell's radicalism versus conservatism, selfsufficient versus lack of resolution, cyclothymias versus schizothymia and surgency versus desurgency and superior verbal faculty, fluency, flexibility and originality as measure by Guilford test of creativity.

## INTELLIGENCE AND PERSONALITY

Ghat (1966) identified gifted children by employing inexpensive procedures and studied personality traits by employing a list of 34 traits validated against the sriterion of known groups and contrasted groups, for which retest- reliability was also ascertained. He found that gifted were distinctly superior to the : non-gifted in intellectual pursuit, regularity in studies, leadership qualities, originality, understanding, self-confidence. politeness and in choice of comparison.

## Deo (1969) used verbal and non-verbal test and

 studied gifted and non-gifted groups of adolescent for di- personality inventory and questionnaire for home and school background. The main findings showed that (1) Gifted boys were more self-accepting and scored higher on self-consept and social environment, emotional adjustment, th average boys. (2) Gifted girls were more self-rejecting*
then the average giris. (3) Gifted boys scored higher on extraversion, doninance, self-confidence sociandity than the everage boys. (4) Gifted girls were almost equal in neurotic tendency, extraversion - introversion. dominance - zubmission and selfaconficence but higher on intellectual Independence and lower on socioability scale than average girls. (5) The Bell's adjustment inventory scores indicated that gifted boys were better adjusted than average boys but for the two groups of girls, there were no differences.

Suri (1973) by employing verbal intelligence test. H.S.P.Q. test and Kuppuswany's socioneconomic status scale indicated that the superior boys were more intelligent. emotionallystable, tough minded. placid, controlled and rem laxed while the average boys were less intelligent more affected by feelings, expedient, tender minded, apprehenm sive, indisciplined, self-conflicted and tense. The superior girls were intelligent, assertive, venturesome, relaxed and emotionally stable than average and below average girls.

Tha (1975) probed into the personality profiles of 35 creative persons. Using the centroid method he dism covered four factors. The main factors resulted rational optimism, high ego strength, realistic and healthy attitude towards life openness to experience, assertive, self-confindence and tendency for selfactualisation.

Pandit (1973) by using problem cheklist for selecting the adjustment problem indicated the gifted had less adjustment problems than the non-gifted. Gifted boys were more problamatic than gifted girls in their overall, ade justment. It was observed that gifted and non-gifted reacted differently to experimentally produced frustrations. The gifted evaluated the situation more positively and critically than the non-gifted.

## CREATIVITY AND DEMOGRAFHIC VARIABLES:

The research findings of Raina (1968) Paramesh (1970)
Gagneju (1972), Hussain (1973). Goyal (1977), Jawa (1971). and Joshi (1974) reveal that there is a significant relationship between creativity and the demographic variables.

Mukerji (1967) indicated that fifty eight percent of talent come from the highly educated homes, forty percent from semi educated homes and 23.8 percent from the not so well educated homes. In terms of income groups 31.6 percent of talent came rom the income groap of over RS. 1,000\% 23.5 percent from the income group of R3. 5011.000. 19.6 percent from the incane group of Rs. 301-500. 12.7 percent fran the incane group of Rs. 151-300 and 2.7 percent from the income group of less than Rs. 150.

Jarial (1979, 1981) reported the effect of birth order on creative thinking of children. Contrary to these findings Jawa (1971) reported that birth order of the sub jects had no significant effect on their creative attainment.

Singh (1984) reported that cultural background had no relationship with creative thinking abilities of gifted high school ichildren.

On the basis of various studies, reviewed in the above pages, pertaining to different aspects of giftedness
the following conclusions may be drawn.
(1) So far as the identification of gifted children is concerned, the following criteria have been reported by the researchers (i) IO scores (ii) Achievement scores (iii) Teacher'a observation and (iv) Creative thinking scores.
(2) The personality traits predominantly presented, by the gifted, creative and talented are - autonomy, self. acceptance, highly socially and emotionally adjusted. self-confidence, socioability, extraversion, dominance, high level of motivation, selfesentiment formation, superego strength, independence of thought and action, open-mindedness persistancy. possession of aesthetic knowledge, risk-taking, self-assertation, self-gufficiency, sensitivity to problems and unconventionality.
(3) On the basis of correlational studies, there exists a relationship between creativity and intelligence of the gifted children. But its nature and extent depends upon the nature of samples studied and the tools used.

But at the same time most of the stadies show low positive relationship between intelligence and creativity.
(4) The research findings of denographic variables show that there is a significant relationship between creativity and demographic variables of gifted children. But in the context of altural variation no significant effect of culture on giftedness has been reported.

A lot of work is being done in other countries. but in India, the gifted are still neglected as before. Various investigations reported in the literature have pointed out the differences in the physical conditions. educational attainments, possession of special abilities. interests and in the psychological adjustant of the gifted as compared to the non-gifted groups, all differences being in favour of the gifted groups. All these studies are conducted in western countries and the interpretations are based on the special social-cultural conditions obtainable there. Therefore, research is needed in India with regard to gifted children.

## $\underline{M} \underline{\underline{T}} \underline{\underline{H}} \underline{\underline{O}} \underline{\underline{O}} \underline{\underline{L}} \underline{\underline{O}} \underline{G} \underline{Y}$

Having reviewed the available literature on the topic it is now in order to present the methodology used in this study.

As mentioned earlier the present study aims to investigate the following objectives :

1. Identifying the gifted children studying in class VIII from four different types of school .
2. To ascertain $\ddagger f$ creativity in any way varies between the gifted and average students.
3. To ascertain if personality factors in any way vary betm ween the gifted and average students.
4. To ascertain if there are differences between gifted and average students in their creativity and personality
factors and if they vary in terms of the four different types of school.
5. To ascertain if socio-demographic factors and certain personal attributes of the students in any way are associated.with giftedness.

To identify the gifted, a special instrument has been devised and administered on.the students taken up for this study. The scores obtained on this instrument and the IQ scores obtained by intelligence test by, Jalota, together would determine the "gifted" children.

To empirically verify the above objectives the following hypotheses were formulated.

## HYPOTHESES

1. "The proportion of gifted children to the total strength of a particular class will vary amongst the four types of school."

The above hypothesis has been formulated due to the rationale that -..- schools differ amongst themselves in terms of providing opportunities for alround development of one's personality, intelligence and creativity. Though giftedness may be more an innate quality and thus express itself despite availability of opportunities, one may however expect that a good educative, informative and stimulating environment may be an important prerequisite to develop one!s ability and talents. Thus one may say that for school students to display their skill and talents, it is important to have a conducive environment in schools, and this environment in schools also varies from school to school depending upon various factors. One may thus expect that manifestation of giftedness to also accordingly vary, and hence the hypothesis - one was formulated.

4\%-
2. Where will be a difference in the creativity scores between the gitted and average students."

Jósbí-(1974) studied creativity of gifted students and found that giftedness was the post effective contributor to all types of creativity scores.
significant relationship between creativity and intelligence in the case of gifted children. Thus thereappears to be a relationship between giftedness and creativity. So one may expect that creativity will also accoraingly vary between gifted and average children.

Thus the hypothesis - 2 was formulated which states that creativity will vary between gifted and average students.
3. The gifted and average students will vary on all the 14 dimensions of personality. These variation will be statistically significant."

Studies by Mallappa and Upadhyaya (1977) compared the personality of $h i g h$ creative personswith that of low creative persons and found that high creatives were more intelligent. more socially bold, were less tense and stronger self-sentiment than that the low creative subjects.

Suri (1973) by employing H.S.P.Q test indicated that the more intelligent boys were more emotionally stable, tough minded, placid, controlled and relaxed while average boys were less intelligent, more affected by feelings, expedient, tenderminded, apprehensive, indisciplined and self-conflicted.

Joshi (1974) found that giftedness was a significant contributing characteristic for the $B$-factor of the personality. It has shown that the personality profile of the creative children/intelligent children vary from those of average children.

It was therefore thought that children with giftedness will also show varying personality traits as compared to average children. Hence the hypothesis - 3 was formulated.
4. There will be a linear correlation between(a)creativity and intelligence, (b) creativity and personality factors (c) intelligence and personality factors and all these correlations will vary between gifted and average students".

Sharma (1974) conducted a study and found that inteIligence is necessary for the development of creative thinking. Gakhar (1975) found that high and low groups of girls on verbal creativity differed significantly in respect of students intellectual efficiency. Raina (1968). Goyal (1974) and Paramesh (1972) have concluded that highly creative individuals are significantly high in intelligence than the low creative individuals. Bhatt (1966) and suri (1973) found that gifted were distinctly superior to the non-gifted in intellectual pursuit, regularity in studies, leadership qualities, originality, understanding and self-confidence.

The above findings led to the conclusion that correlation between these variables will vary when a comparison will be made between gifted and average students. Hence the hypothesis 4 was formulated to test if any such variation existed between the gifted and average students.
5. There will be a difference in the sociomeconomic and family background of the gifted and average students."

The research findings of Raina (1968) Paramesh (1970), Gagneju (1972) and Joshi (1974) revealed that there was a significant relationship between creativity and demographic variables.

Mukherjee (1967) indicated that $58 \%$ of talent came from highly educated homes.9n Interms of income groups 31.6 percent of talents came from the income group of over Rs.1,000 and 23.5 percent from the income group of $501-1,000$.

Hence one may expect that socio-economic and family background of gifted and average students will also vary accordingly. Thus the present study set up hypothesis - 5 to ascertain if there is a difference in the socio-economic background of gifted and average students.
6. There will be a difference in the attitude, behaviour aspiration and temperament of the gifted and average students."

On the Dasis of various studies Pandit (1973) Jha (1975) Suri (1973) and Bhatt (1966) pertaining to different aspects of giftedness it was found that gifted and non-gifted varied significantly in their temperament, behaviour, aspiration and attitude.

Pandit (1973) had indicated that the gifted faced lesser adjustment problems than the non-gifted. It was observed that gifted and non-gifted reacted differently to experimentally produced frustrations, within which trend, the gifted evaluated the situation more positively and critically than the nongifted.

Hence one may expect that there may be a different in attitudes and behaviour of the gifted and average students. Hypothesis -6 was set up to test it this was so.

## RESEARCH DESTGN

To test the above hypotheses an experimental-control group paradigm was used. To be more specific after identification of the gifted children from the four different schools, they were taken as the experimental group and were compared with a control group of average students (who were not falling in the "gifted" category) on a number of variables.

Though one can not say that this was in anyway a strictly experimental group where manipulation of the independent variables is carried out, for the purpose of convenience the gifted group has been termed as experimental group. Hypothesis two, three and five were tested with the help of the above paradigm.

Hypothesis 4 was tested with a correlational paradigm to ascertain the relationship between giftedness and creativity, intelligence and personality factors.

## SAMPLING

A total of 4 schools were selected for the present studye: These schools were classified into 4 categories as per the study by Sengupta and Veeraraghban (1985). These schools were:
(i) Public School (ii) Central school (iii) Delhi Administration run School and (iv) Missionary School.
public School is defined a member of the Indian public Schools Conference (IPSC) and there by meets all the statutory requirements of this body. These requirements relate to the academic freedom of the head-master, conditions of service of the staff, facilities for games and extra curricular activities and residential accommodation for a certain proportion of the student body (De Souza 1974). The public School, selected in the study fulfiled all these requirements. Missionary school $\therefore$ defined as a type of school; which is run by Christian Mission.

Central School is a school run by the Central Government. Central schools, all over the country follow a uniform syllabus and prepare their students for the CBSE examinations. Government School is a school run by the state Government. In Delhi, the Delhi Administfation is responsible for middle, secondary and senior secondary schools.

One school each from the 4 types of schools was chosen for this study.

According to piaget (1952) the formal operational stage of intellectual development in children comes at the age of 12 and above. This is the stage when the child can think in abstract terms, follow loyical propositions and reasons for hypothesis. He can isolate the elements of a problem and systematically explore all possible solutions to problem. Keeping this aspect in mind the sample of the present study consisted of students of class VIII belonging to the age group of 12-13 years; from each class, only one fourth of the total number was chosen using random numbers after listing them all in an alphabetical order. To these selected children the "giftedness" scale and intelligence test by Jalota administered. On the basis of the score obtained by each student on the two tests, the final sample was chosen, after excluding those who could not qualify the minimum requirement (i.e. below score 38 which is below average intelligence on the Intelligent test and below score 30 which is below average score-on the giftedness scale). According to 9 point stanine scale in Jalota's intelligence test, the score 30-35 were described as low score and whereas the score 39-47 have considered as average score. Thus it was considered to take up score 38 as the cut point to include: students in sample.

Similarly in"giftedness scale" the score 30 represent the absence of all most all traits. So the student with score 30 was considered to be excluded from the sample.

Thus in all 20 students were available from public school 22 students from central school, 24 students from Delhi Administration school and 34 students from Missionary school. The distribution of the sample school-wise is presented in the table 1 below.

TABLE 1
DISTRIBUTION OF THE STUDENT SAMPLE IN TERMS OF THE 4 SCHOOLS

|  | public <br> School | Central School | Delhi <br> Admn. <br> run <br> school | $\begin{aligned} & \text { Missionary } \\ & \text { School } \end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Male | 11 | 15 | 24 | 18 | 68 |
| Female | 9 | 7 | - | 16 | 32 |
| Total | 20 | 22 | 24 | 34 | 100 |

## TOOLS USED

(a) Giftedness Scale :

For identifying the gited children a giftedness scale was devised. This scale consisted of some of the major characteristics which were generally possessed by gifted students. These characteristics were chosen from the various studies, which were conducted earlier and presented in Review Chapter.

The items are drawn mainly based on the studies by Bhatt (1966) W. Abraham (1958), P. Witty (1952), and Deo (1969).

The present scale has been prepared keeping in view the academic out put of students, original contributions that they make in various fields including proficiency in class subjects, ability to grasp and comprehend, language fluency, mathamatical ability, abstraction capability, curricular activities and original contribution towards the same, ability to generate new ideas and new methods of problem solving.

The teachers ratings in the identification of gifted children though may not have a reliability high enough to be entirely depended upon, yet it has been found to be used jointly with other criteria. :

Various Researchers like Bhatt (1966), Deo (1969) and panait (1973) have used some trait ratings for identifying talents. According to them ratings are not reliable enough to be solely relied upon and at the same time not unreliable enough to be summarely discarded. Rather it can be used jointly with other as a criteria and as an effective instrument for identifying talents among school children.

Not only the giftedness scale was administered on students, the teachers were also given a scale equivalent to the students scale and asked to rate each child on it for gifteaness.

To obtain further more reliability on giftedness a similar equivalent scale was also given to parents requiring them to rate their respective children on the giftedness dimension.

Thus the scores obtained by each child on all the 3 scales were compiled to determine the giftedness of a child.

For the students the scale contained 13 items each to be scored on a 3-point scale, viz., never, sometimes, always. 'Never' being assigned a weight of' 1 ', 'Sometimes' assigned a weight of ' 2 ' and 'Always' being assigned a weight of '3'. The total maximum score a child can obtain on this scale was 39 , and a minimum of 13 .

The scale on which the teachers rated student on gifteaness consisted of 7 items to be scored on a 3-point scale as in the case of student's scale. The maximum score a teacher can assigned for a student was 21 nd the minimum was 7. The scale given to parents for identiflcation of the gifted again was to be score on a 3 -point scale as in the other 2 scales, with the scores ranging between a minimum of 6 and a maximum of 18.

The total scores obtained by each child on all the 3 scales of giftedness was noted down, and a composite score on giftedness dimension was worked by adaing them up. The range of these scores was 26-78.

Gifted children were identified as those who scored above 66 out of the maximum total scores possible (78). In other
words those who scored $85 \%$ (percent) and above on those 3 scales taken together were considered as gifted on this scale.

To arrive at the final selection of the gited, the scores on Jalota's Intelligence test for each student was also considered. Those who scored above $85 \%$ (percent) (73+) on this scale were " included for identifying the gifted.

Thus in the final analysis gifted were those who scored $85 \%$ (percent) and above on the giftedness scale as well as $85 \%$ (percent) and above on Jalota's Intelligence test.
(b) Intelligence Test (Jalota, 1950):

This standardized test was developed by S. Jalota in 1950. This test consists of activities which involve verbal, numerical and reasoning tasks. This test of general ability consisted of 100 items, divided into five separate categories of 20 tasks each. The 5 categories were (i) vocablary (ii) Classitication (iii) Number series (iv) Analogies (v) Reasoning. The items were mixed and arranged in an empirically determined order of increasing difficulty.

Scoring
Jalota had devised 9 point stanine scale for total scores.

TABLE 2
9 POINT SCALE INDICAT ING SCORE OF INTELLIGENCE TEST


Scores
$\begin{array}{lllllllll}0-11 & 11-20 & 21-29 & 30-38 & 39-47 & 48-56 & 57-65 & 66-72 & 73+\end{array}$

## (c) Personality Trait Test :

Cattell (1958) developed the H.S.F.Q. The H.S.P.Q. is useful for teachers, guidance specialist, for clinical and research workers. This instrument gives an objective analysis of the students personality which also supplement the teachers personal evaluation. The H.S.P.Q measures fourteen distinct dimension of traits of personality. By working with these 14 scores the psychologiests can obtain preaiction of school achievement, of vocational fitness of danger of delinquency, of livelihood of leadership qualities and of need for clinical help in avoiding neurotic conditions. The reading level of the test is adapted to ages $11-12$ through 18 years, and the scoring can be done rapidly by a stencil key.

Each of the 14 dimensions of personality is measured by the H.S.P.Q. Each dimension is defined by two poles of extemes.

The left hand one is score at the low end and the right hand at the high end. The description of the 14 dimensions are given below :

TABLE 3
PERSONALITY DIMENS IONS OF H.S.P.Q

|  | Low sten score | Factor | High sten Score |
| :---: | :---: | :---: | :---: |
| 1. | Reserved | A | Outgoing |
| 2. | Less Intelligent | B | More Intelligent |
| 3. | Affected by feelings | C | Emotional stable |
| 4. | Phlegmatic | D | Excitable |
| 5. | Obedient | E | Assertive |
| 6. | sober | F | Happy-go-1ucky |
| 7. | Expedient | G | Conscientious |
| 8. | Shy | H | Venturesome |
| 9. | Tough minded | I | Tender Minded |
| 10. | Vigorous | J | Doubting |
| 11. | Placid | 0 | Apprehensive |
| 12. | Group dependent | $Q_{2}$ | Self-sufficient |
| 13 | Indisciplined | $Q_{3}$ | Controllea |
| 14. | Relaxea | $Q_{4}$ | Tense |
| - |  |  |  |

This test covers quite comprehensively all the major dimension of human personality. However in this inventory high
scores are not necessarily "good" and low scores "bad". This may be true of abilities, but in personality each type of temperament usually has both good and bad points. For example, in dimension "A" the high scoring warm hearted person is rated as good, natural attentive to people and trustful. But his easy goingness means that his promises do not always mean as-such as those of person at the low score pole ot tactor A. The latter is precious and dependable in his work but his aloofness and stiffness is not so attractive socially.

## (d) Creativity Test Battery :

This battery was developed by Baquer Mehdi (1973 ) In the preparation of the verbal and non-verbal test of creativity tasks pertaining to four traits such as tluency, tlexibility, originality and elaboration have been used. The nonverbal test measure the inaividuals ability to deal with figural content in a creative manner. The type of activities included in this test are - picture construction, picture completion and triangles and ellipses.

The non-verbal test of creative thinking is intended to measure the individuals ability to deal with figural content in a creative manner. The pictures are scored for elaboration and orginality.

In the scoring guide the weights have been given for all original responses. The scores may be airectly entered in
the answer sheets by closely following the scoring guide.

The scores on the test give information about those thinking abilities which are not measure by intelligence tests. These abilities have been found to be related to creative thinking. Only the composite creativity score should be used for grading pupils on creativity. The total raw scores of each activity was converted into sten scores by applying the formula $\frac{x-m}{\sqrt{v}}$ with mean 50 and $S D$ 10.

PROCEDURE :

In order to collect the needed information from the schools, the principals were contacted for permission and the teachers were requested to give one hour a day for conducting these tests.

The data were collected by adrainistering the test in a group all the students, selected as given in sampling section in four sittings on different days. Before final data collection, a pilot study wos carried out to test the suitobility of the giledness scale. The giftedness scale was given to the class teacher, parents of students and to the students themselves of each school.

The other tests were also administered to students on different days. While administering the tests chosen for the stuay, the instructions were given to students as it is given in the manuals concerned. The objective of the study was ex-
plained to the students before the start of the test. STAT TST ICAL ANALYS IS USED:

To identify the number of gifted and average students in the four different types of school "giftedness scale" devised by the researcher and Jalota's intelligence scales were used (Details in the Tools section).
(1) The mean and SD of the creativity scores of the gifted and average students were calculated for each school. The obtained differences were subjected to t-test to ascertain if the creativity scores of students differed in terms of the types of school.
(2) The mean and SD of the H.S.P.Q. scores of the gifted and average students were calculated- for each factor separately. The obtained differences in the scores on each dimension for both gifted and average students were subjected to a t-test to ascertain if the scores on each personality dimension differed in terns of the two groups.
(3) The pearson product moment co-efficient of correlation was used to ascertain the relationship between intelligence and creativity, creativity and personality, and intelligence and personality of gifted and average students.

ANALYSIS

## ANALYS IS AND INTERPRETAT ION OF DATA

The main objective: of the present study was to compare the gifted and average students in terms of creamtivity and personality factors. Specifically the study aimed to find out if gifted children were significantly more creative than average children and if they differed in certain personality traits from the latter.

For this purpose it was essential to first identify the gifted children from the average ones in a school setting. As mentioned in the methodology chapter four types of school: were chosen from which children of class VIII were taken and were administered the specially devised giftedness scale as well as the Jalota Group Intelligence scale. All those who scored above $85 \%$ on the intelligence scale were taken as gifted children and the remaining were taken as average children. Those who scored 30 per cent in giftedness scale and below 30-38 per cent in Jalota's intelligence test were excluded from the study as they did not come up to even average level. Thus a total number of 100 children were available of which 23 were gifted children according to the definition oi this study "Iuentirication of gifted students and study of their personality and creativity in tour aifierent type of schools".

The gifted and type of School
The gifted children in the four types of school: are presented in table 1 below

> Table-1

Distribution of gifted children in the 4 types of school

| Total <br> population <br> covered | Public <br> School | Central | Delhi <br> Admini- <br> stration <br> run <br> school | Missi- <br> onary |
| :--- | :---: | :---: | :---: | :---: |
| Gifted | $7($ | 3 | 9 | 4 <br> Average |
|  | 13 | 19 | $(14 \%)$ | 15 |

As is observed in the above table - there appears relatively more gifted students in the public school as compared to the other 3 schools. Though no significant results could be obtained, the trend of differential number of gifted children identified in the different types of school, to an extent validates the Hypothesis which states that WThe proportion of gifted children to the total strength of a particular class will vary amongst the four types of school

Those identified as gifted children ( $\mathrm{N}-23$ ) were compared with the average children ( $\mathrm{N}-77$ ) on a number of variablessuch as creativity, personality factors and socio-demographic variables across the four types of schools.

## Creativity Amongst the Gifted and Average

In the present study an attempt was made to ascertain if there is a correlation between Intelligence and creativity and if this in turn varied in terms of the gifted and average children of 4 different types of school: Those identified as gifted were 23 in all and 77 were average students. Table-2 presents the mean creativity scores, $S D$ and tovalues between the gifted and average students.

Table - 2
Mean Creativity Scores $S D$ and $t$ values of the gifted and average students

| Gifted | Average |  |
| :--- | :---: | :---: |
| Mean | 52.25 | 65.25 |
| SD | 7.37 | 9.69 |
| $N$ | 23 | 77 |
| $t=7.26$ | $p=<0.05$ | $d f=98$ |

It is evident from the above results that gifted students were significantly more creative than average students, irrespective of the schools in which they studied. This finding. "validated ${ }_{n}^{\text {he } h y p o t h e s i s ~ w h i c h ~ s t a t e d ~}$ that "there will be a difference in the creativity scores between the gifted and average students". When this factor (creativity) was seen in terms of the four types of schools viz, public school, central school. Delhi Administration run school and missionary school the following picture emerged. Table (3 and figure 1).

## Table -3

Creativity scores in terms of 4 types of schools


FIGURE 1: MEAN CREAT IVITY SCORE. GIFTED AND OF AVERAGE STUDENTS.



INDEX
Gifted Students.

Following conclusions emerge from the above analysis.

1. Of the four schools, public school students had the highest mean creativity scores (M 47.15) followed by students of Delhi Administration run school, missionary school and central school in that order.
2. Within the same school there was a significant difference, ' in creativity score between gifted and average students in three schools, except central school where no such significant differences were found between gifted and average students.

In other words gifted students had shown significantly higher creativity scores as compared to the average students in all except central school. These results have been sub-stantiated by the graph (fig-1) where-in it is seen that the length of the bar of the gifted is far shorter than that of the average indicating a higher level of creativity (figure-1).

Thus one may conclude that creativity is high amongst the gifted as compared to average across and within the same school.

Personality traits amongst the gifted and average students
, Cattell (1958) developed the H.S.P.Q, which measures fourteen distinct dimensionsor traits of personality. By working with these fourteen scores the psychologists
can obtain predictions of school achivement, of vocational fitness, of dancer of delinquency, of livelihood, of leadership qualities and of need for clinical help in avoiding neurotic conditions etc. Each dimension is defined by two poles of extremes. The left hand one is a score at the low and the right hand at the high end. The description of the fourteen dimensions are given below.

## Table -4

BRIEF DESCRIPTION OF THE FOURTEEN HSPQ PERSONALITY FACTORS $\Varangle$


Reserved, Detached, Critical, Cool

Outgoing, Warmhearted, Easy-going, Participating

Less Intelligent, ConcreteThinking, of Lower Scholastic Mental Capacity

B
A

More Intelligent, Abstract Thinking, Bright, of Higher Scholastic Mental Capacity.

Affected by Feelings. Emotionally less statose é Easily upset, Changeable, of Lower Ego strength

C Emotionally Stable, Faces Reality, Calm, of Higher Ego Strength

Phlegmatice Deliberate, Inactive, stodgy

D Excitable. Impatient, Demanding, Overactive

| LOW STE SCORE | ALPHABET IC | HIGH STAN SCORE |
| :--- | :--- | :--- |
| DESCRIPT ION (1.3) | DESIGNAT ION | DESCRIPTION (8-10) |
|  | OF |  |
|  | FACTOR |  |

Obedient, Mild, Conform- E $\quad$| Assertive, Aggressive, |
| :--- |
| ming, submissive |

Stubborn, Dominant
Sober, prudent. Serious F Happy-go-lucky, Impul- siveiy Lively

Expedient, Evades Rules,
Feels few Obligations.
Has weaker superego strength

G Conscientious, RuleBound, lias stronger superego strength

Shy, Restrained, Diffident, A $H$ Venutresome, Socially Timid

Bold, spontaneous

Tough-Minded, Self-Reliant, I Tender-Minded, Dependent, Realistic:

Over protected. Sensitive

Doubting, Obstructive, Reflective, Internally Restrained, Unwilling to Act
placid, Confident, Serene, 0 Untroubled
$J$
Vigorous, Goes Readily with Group, Zestful, Given to Action

Apprehensive, worrying, Depressive, Troubled, Guilt prone

Group-Dependent. A"Joiner" And Sound Follower

Undisciplined self-Contlict, Careless of protocol. Follows own Urges, Has Low Integration

Self-sufficient, prefers Own decisions, Resourceful

Controlled, socially precise, Self-Disciplined, Has High Self-Concept Control

Relaxed, Tranquil. Torpid. Unfrustrated

Tense, Driven, Overwroaught, Frustrated

The scores on each dimension were converted into sten scores and each student's sten score was calculated. (Refer to Methodlogy for details) Dimensions of Personality and the Gifted

Dimension - 1 : It indicates whether a person is reserved or warm-hearted, detached or participating or aloof. If the sten scores is low, this dimension would indicate: the person to be reserved, detached, critical, aloof, stiff etc. On the other hand if the stens score is high, then it would indicate the person to be warm-hearted, outgoing, easy going, participating etc. When gitted and average students were compared on this dimensions it was found that (Refer Table - 5)

## Table-5

Comparison of gifted and average students on dimension - 1 (Factor A)

|  | Gifted |  |
| :--- | :---: | :---: |
| Mean Sten Score | Mean Sten Score |  |
| Mean | 7.04 | 6.28 |
| SD | 1.53 | 1.56 |
| N | 23 | 77 |
| $t=2.11$ | df $=98$ | $p<0.05$ |

average students were significantly more reserved, critical and aloof than the girted students.

Dimension - 2 and the gifted Factor (B)

This dimension indicates whether a person is dull or bright. Low sten scores would indicate dullness whereas high sten score would indicate brightness and the person's intelligence. In this regard there was a significant difference between gifted and average students with gifted showing orightness \& higher intelligence than the average students. Table below presents the mean sten score for the gifted and average students.

Table- 6
Mean, Sten score of Dimension 2 for gifted and average students (Factor B)

|  | Giftea | Average |
| :--- | :---: | :---: |
| Mean | 7.86 | 5.55 |
| SD | 1.15 | 1.35 |
| $N$ | 23 | 77 |
| $t=8.55$ | df $=98$ | $p=<.01$ |

Dimension-3 and the gitted
The low sten scores on this aimension of H.S.P.Q.
indicates the person to be emotionally less stable, easily
upset and have lower ego strength, whereas high sten score on this dimension would indicate the person to be emotionally stable, calm and have higher ego strengit. When the gifted and the average were compared on this dimension the following picture emerged.

## TABLE - 7

MEAN STEN SCORE OF DIMENSION 3 FOR GIFTED AND AVERAGE STUDENTS

$$
(F A C T O R-C)
$$

|  | Gifted | Average |
| :--- | :---: | :---: |
| Mean | 7.17 | 5.75 |
| SD | 1.24 | 1.58 |
| N | 23 | 77 |

It is seen from the above table that the gifted and average students differed significantly on this aspect of personality. To be more specific the gifted were significantly more stable, emotionally mature and faced realities of life with relatively more equanimity than the average students.

Dimension 4 and the gifted
Higher sten scores on this dimension would indicate excitable, impatient, demanding, overactive whereas lower sten scores woula indicate inactive, stodgy, and phlegmatic etc.

Tablem 8 presents the mean sten scores of the gifted and average students.

TABLE-8
MEAN STEN SCORE OF DIMENSION 4 FOR GIFTED AND AVERAGE STUDENIS

|  | Gifted | Averag |
| :---: | :---: | :---: |
| Mean | 6.17 | 5.62 |
| SD | 1.78 | 1.59 |
| N | 23 | 77 |
| $t=1.37, d f=98$ |  | $\mathrm{p}=\mathrm{N} . \mathrm{S}$. |

It is found from the above table that though the gifted appeared to be relatively over active and more demanding as compared to the average students, these differences were not found to be statistically significant.

Dimension 5 and the gifted
Higher sten score on this dimension would indicate traits like assertive, aggressive, stubborn and dominant, whereas low sten score would indicate obedient, mild and submissive. $T$ able 9 presents the mean, $S D$ and t-value of the scores of this dimension.

TABLE - 9
MEAN STEN SCORE OF DIMENS ION 5 FOR GIFTED AND AVERAGE STUDENIS


From the above analysis it is seen that the sten scores of the gifted is significantly more than those of average students. In other words gifted are significantly more dominant than the average students.

Dimension 6 and the gifted

This dimension indicates to what extent a person is sober, prudent or happy-go-lucky and impulsively lively. Higher sten score on this dimension would indicate happy-go-lucky, and impulsively lively whereas low sten score would indicate sober. prudent and seriousness. Table below presents the comparison between gifted and average on this dimension.

$$
\text { TABLE - } 10
$$

MEAN STEN SCORE ON DIMENSION 6 FOR GIFTED AND AVERAGE STUDENIS

|  | Gifted | Average |
| :--- | :---: | :---: |
| Mean | 6.48 | 5.40 |
| SD | 1.74 | 1.92 |
| N | 23 | 77 |

The above findings show that gifted and average very significantly on this dimension, with gifted showing significantly more enthusiasm and a happy - go- lucky disposition than the average students.

Dimension 7 and the gifted (factor G)

Higher sten score on this dimension would indicate conscientious, rule-bound and has strong superego strength and whereas lower sten score on this dimension would indicate expedient, evades rules and has weaker superego strength. Table - 11 presents the results of gifed and average students compared on this dimension.

TABLE 11
MEAN STEN SCORE OF DIMENSION 7 FOR GIFTED AND AVERAGE STUDENTS

|  | Gifted | Average |
| :--- | :---: | :---: |
| Mean | 6.65 | 4.94 |
| SD | 1.50 | 1.83 |
| N | 23 | 77 |
|  |  |  |

From the above table it is seen that the gifted are significantly more conscientious, persistent and have a stronger superego than the average students.

## Dimension 8 and the gifted (factor $H$ )

Higher sten score on this dimension would indicate traits such as venturesome, socially bold-and spontaneous whereas the lower sten score would indicate traits like shy, restrained and diffident. Table-12 presentsthe results of gifted and average students.

```
TABLE - 12 .
```

MEAT STEN SCORE OF DIMENSION 8 FOR GIFTED AND AVERAGE STUDENTS

|  | Gifted | Average |
| :--- | :---: | :---: |
| Mean | 5.69 | 4.70 |
| SD | 1.92 | 1.74 |
| $N$ | 23 | 77 |
| $t=2.25$ | $d f=98$ | $p<0.05$ |

Comparative analysis of the sten score of the gifted and average students showed that the gifted students were significantly more adventurous and socially bold than the average students.

Dimension 9 and gifted (factor I)
Higher sten score on this dimension indicates tendermindedness, overprotected, spontaneous whereas lower sten score would indicate traits as tough-minded, self-relionit realistic and nononsense. Table below presents the mean sten scores for the two groups and the $t$ values.

TABLE 13
MEAN STEN SCORE OF DIMENSION 9 FOR GIFTED AND AVERAGE

|  | Gifted | Average |
| :---: | :---: | :---: |
| Mean | 5.21 | 5.31 |
| SD | 1.93 | 1.92 |
| N | 23 | 77 |
| $\mathrm{t}=0.22 \mathrm{df}=98$ | $\mathrm{p}=\mathrm{N} . \mathrm{s}$ |  |

The findings from the above table indicate that the gifted and the average students did not differ significantly on this dimension though the gifted were found to be relatively more toughminded, self-relinnt and realistic than the average students.

Dimension 10 and the gifted (factor $J$ )

Higher sten score on this dimension would indicate doubting, obstructive, reflective whereas lower sten score would indicate as goes readily with group zestful, and $\%$ given to action. Table. 14 presents the score on this dimension for the two groups.

TABLE 14
MEAN STEN SCORE OF DIMENS ION 10 FOR GIFTED AND AVERAGE STUDENTS

|  | Gifted | Average |
| :--- | :---: | :---: |
| Mean | 5.39 | 5.71 |
| SD | 2.06 | 1.98 |
| N | 23 | 77 |
| $\mathrm{t}=0.67$ | $\mathrm{df}=98$ | $\mathrm{p}=\mathrm{N} . \mathrm{S}$. |

As it is evident from the above table that there appears to be no significant differences between the gifted and average students on this dimension though the average students appear to be relatively more reflective, doubting, unwilling to act and internally restrained.

Dimension 11 and the gifted (factor 0 )

This dimension of personality refers to traits such as self-assured, placid secure versus worrying, troubled , insecure and self-reproaching.

Higher sten score on this dimension would indicate worrying, depressive, troubled; guilt prone whereas lower sten score would indicate placid, confident, serene, and untroubled. The table below presents mean sten score of the two groups.

TABLE 15

MEAN STEN SCORE OF DIMENSION 11 FOR GIFTED AND AVERAGE


It is evident from the above findings that the average students appear to be more worrying, troublediguilt prone whereas gifted students appear to be more confident, serene, and untroubled though these differences were not found to be statistically significant.

Dimension 12 and the gifted (Factor $Q_{2}$ )
Higher sten score on this dimension would indicate a person who is self-sufficient, prefers own decisifm and whereas lower sten score would indicate him to be a group dependent, a joiner and a sound follower.

Table 16 presents the mean scores for gifted and average.

TABLE 16
MEAN STEN SCORE OF FACTOR $\Omega_{2}$ OF GIFTED AND AVERAGE

|  |  | Gifted |
| :---: | :---: | :---: |
| Mean | 6.61 | 4.05 |
| SD | 1.61 | 1.77 |
| $N$ | 23 | 77 |

The above results shows that gifted were significantly more self-sufficient, resourceful and preferred their own decision whereas the average students were socially group and others dependent.

Dimension 13 and gifted (factor $Q_{3}$ )

Higher sten score on this dimension would indicate traits like controlled, socially precise, seltwaisciplined, and has high self-concept control whereas lower sten score would indicate follows own urges, has low integration and undisciplined self-conflict. Table below presents the mean score of gifted and average students.

TABLE 17
MEAN STEN SCORE OF FACTOR $Q_{3}$ OF GIFTED AND AVERAGE STUDENTS

|  | Gifted | Aver age |
| :---: | :---: | :---: |
| Mean | 5.61 | 5.38 |
| SD | 1.74 | 2.04 |
| N | 23 | 77 |
| $\mathrm{t}=0.55$ | $\mathrm{df}=98$ | $\mathrm{p}=\mathrm{N} . \mathrm{S}$. |

From the above table it is observed that gifted and average students did not differ significantly on this dimension though the gifted were found to be more socially precise, self-disciplined, and has high self-concept control as compared to average students.

## Dimension 14 and the gifted

Higher sten score on this dimension indicates tense, driven, overthought whereas lower sten score would indicate relaxed; tranquil and unfrustrated.

TABLE 18
MEAN STEN SCORE OF G IFTED AND AVERAGE STUDENTS

|  | Gifted | Average |
| :---: | :---: | :---: |
| Mean | 5.91 | 5.49 |
| SD | 2.22 | 2.18 |
| N | 23 | 77 |
|  | $d \mathrm{f}=98$ | . S . |

From the above table it is seen that gifted and the average do not differ significantly on this dimension, though gifted seem to be significantly more frustrated driven and overthought as compared to average students.
profile of the gifted and average students on all the 14 personality dimensions

Figure II presents the profile of the gifted and average on all the 14 personality dimension. From the figure, one may derive the following conclusions (1) The gifted are high on dimension one Dimension: two, Dimension three, Dimension four, Dimension five, Dimension six, Dimension seven, Dimension eight, Dimension twelve, Dimension thirteen, and Dimension fourteen. These factors deal with those aspects of personality such as intelligence,participating, emotionally stable, demanding, assertive, happy-go-lucky, conscientious, venturesome, self-sufficient, controlled and overthought.
(2) The average students are found to be high on dimension hine, Amension ten and dimension eleven which states that the average $\}$ appears to be more tenderminded reflective, internally restrained, troubled and guilt prone as compared to gifted students. Thus the gifted are by and large found to be warmhearted, easy going, bright, emotionally stable etc.



#### Abstract

These findings of personality dimensions have partially hypothesis which states that the "gifted and average students will vary on all the 14 dimensions of personality".


Relationship between creativity and intelligence amongst gifted and average students

Since gifted students were found to be significantly more creative than average students an attempt was made to ascertain if creativity was also a function of intelligence. In other words if a student is more intelligent would be more creative also. To answer this query product moment coefficient of correlation was computed between the creativity scores and IQ of gifted and average students separately. Table 19 below presents the r-value between creativity and intelligence for the two groups that is, gifted and average for each school. When the creativity scores are correlated with IQ scores, it is seen that higher the intelligence higher the creativity scores and vice-versa. When these correlations are compared between the gifted and average the following picture emerges (Table 19 below)

TABLE 19
r VALUES BETWEEN CREATIVITY AND INTELLIGENCE

| Category | public <br> school | Central <br> School | Delhi <br> Adminis. <br> tration <br> run <br> school | Missionary School |
| :---: | :---: | :---: | :---: | :---: |
| Gifted | $\begin{aligned} & +0.39 \\ & p=605 \end{aligned}$ | $\begin{aligned} & +0.84 \\ & p=\$ 01 \end{aligned}$ | $\begin{aligned} & +0.93 \\ & p=.01 \end{aligned}$ | $\begin{aligned} & +0.39 \\ & p=601 \end{aligned}$ |
| Average | $\begin{aligned} & -0.90 \\ & p=\{01 \end{aligned}$ | $\begin{aligned} & -0.68 \\ & p=\$ 0.1 \end{aligned}$ | $\begin{aligned} & -0.88 \\ & p=\langle 01 \end{aligned}$ | $\begin{aligned} & -0.82 \\ & p=601 \end{aligned}$ |
| For all schools $r$ between |  |  |  |  |
| Gifted | $\begin{aligned} & +0.53 \\ & p=\{01 \end{aligned}$ |  | , |  |
| Average | $\begin{aligned} & -0.73 \\ & p=0.7 \end{aligned}$ |  |  |  |

Following conclusions emerge from the above table

1. The gifted students from all schools possess high correlation between intelligence and creativity.
2. On the other hand in the case of average students there appears a negative correlation between intelligence and creativity.
3. Correlation between intelligence and creativity also varies significantly amongst the four types of schools in the case of gifted category.

These findings validated the hypothesis which states that "There will be a linear correlation between creativity and intelligence and correlation between these variables
will vary when a comparison will be made between gifted and average groups.

To sum up the above results, one may say that in the case of gifted children higher the $I Q$ higher the creativity and lower the IQ the lower the creativity. On the other hand in the case of average students there is a reversal in the trend viz: higher the $I Q$ lower the creativity and lower the $I 0$ higher the creativity.

Relationship between creativity and personality traits amongst the gifted and average students

Table - 20 below presents correlation between creativity and personality dimension after due corrections for low score in creativity indicates high creativity for the purpose of inferences: Only those correlations which had $r=.30$ and above have been taken as significant relationship.

TABLE 20
r VALUES BETWEEN CREATIVITY AND PERSONALITY TRAITS AMONGST THE GIFTED AND AVERAGE

| Name of traits | Gifted | Average |
| :---: | :---: | :---: |
| Factor A | -.24 | -.09 |
| $B$ | +.42 | +.02 |
| C | -.09 | -.08 |
| D | -.10 | -.15 |


| Name of traits |  | Gifted | Average |
| :---: | :---: | :---: | :---: |
| Factor | E | + $\quad 20$ | $+.<1$ |
|  | F | $+.13$ | $+.08$ |
| - | G | + ${ }^{\circ} 36$ | +.11 |
|  | H | $+.24$ | $+.13$ |
|  | I | $+. .22$ | -. 19 |
|  | J | $+.07$ | -. 29 |
|  | 0 | $+.43$ | -. 11 |
|  | $Q_{2}$ | $+.51$ | -. 02 |
|  | $8_{3}$ | -. 17 | -. 12 |
|  | $Q_{4}$ | $+.51$ | $+.13$ |

The following results emerge from the above table. (1) In the case of gifted children, creativity is higher amongst those who are less reserved, more intelligent, possessing stronger super-ego strength, self-reproaching, :self-sufficient and with high tension.
(2) On the other hand in the case of average students not a single $r$ value was above . 30. This indicates that creativity scores do not correlate, with any of the 14 factors.

This validated the hypothesis which states that there will be linear correlation: "-between creativity and personality factors.

To sum up the results, one may say that ". creativity is higher among gifted childrer., because they possess
degree of intelligence, ego strength, high ergic tension and more creative than the averagechildren.

Intelligence and Personality dimension amongst the gifted and average students.

Since ${ }_{n}^{\text {the }}$ gifted students were found to be significantly more intelligent than average students an attempt was made to ascertain if intelligence was also a function of different personality traits.

Only those correlation which (were - is above . 30 are considered. The r value less than . 30 have taken as indicating negligible relationship: Table 21 below present the r-value for gifted and averige students. TABLE 21
r VALUES BETWEEN INTELLIGENCE AND PERSONALITY TRAITS AMONGST
THE GIFTED AND AVERAGE STUDENIS
Name of traits
Gifted
Average

Factor A
$-0.11$
$-0.10$
B
$+0.05$
$-0.03$
C
$-0.21$
$-0.05$
D
$-0.01$
$-0.09$
E
$-0.17$
$+0.18$

F
$-0.34$

- 0.03

G
$+0.10$
$+0.05$

H
$-0.02$
$+0.04$

| Name of traits | Qifted | Average |
| :---: | :---: | :---: |
| Factor | -0.07 | -0.09 |
| $J$ | -0.26 | -0.11 |
| $\emptyset$ | +0.29 | -0.13 |
| $Q_{2}$ | +0.09 | +0.12 |
| $Q_{3}$ | -0.16 | +0.05 |
| $Q_{4}$ | +0.31 | +0.52 |

1: It is evident from the above taile that there appears a positive but very negligible correlation between intelligence and personalit: factor $E$, factor $G$, factor $O$ and factor $Q_{2}$ in the case of gifted children.
2. The other hand there is a positive relationship between intelligence and factor $Q_{4}$ (High ergic tension) in the case of giftea childron.
3. A positive but negligible correlation mas found between intelligence and personality factor $E$, factor $G$, factor $H$, $Q_{2}$, factor $Q_{3}$, in the case of average children. 4. Intelligence mas also found to be positively correlated with factor $Q_{4}$ in case of average chilaren.

The above findings hypothesis that intelligence and personality fectors will vary between gifted and average stuaents.

Tor. sum up, there appears a relatively very very low relationship betreen intelligence and personality factors in the case of both gifted and average children for all schools.

## Socio - demographic profile of gifted students.

Having compared the gifted and average students on ocreativity and 14 dimensions of personality and having found a significant difference between the gifted and average students on many of these factors, it was deemed necessary to ascertain if the gifted and average also differ in their socio - economic and demographic status. The factors considered under socio demographic factors include age, sex, parent's education, parent's occupation, number of members in the family, parental attitude towards children etc.

Residence - Since the schools were chosen from the city of Delhi all the studens constituting the sample resided in the city of Delhi from childhood and thus were all from urban background.

Age - Being 8th class students, all of them more or less belonged to the same age group $12+$ years with a few months varation on either side.

Sex - Of the 100 students 68 were males and 32 were female students. When the sex factor was considered in terms of giftedness the following picture emerged as given in the table below.

## TABLE 22

SEX-WISE DISTRIBUTION OF STUDENTS IN THE FOUR SCHOOLS

| Public <br> School | Central <br> School | Delhi <br> Adminis- <br> tration | Missionary |
| :--- | :--- | :--- | :--- |


|  | $A$ | $G$ | $A$ | $G$ | $A$ | $G$ | $A$ | $G$ | $A$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Male | 5 | 6 | 1 | 14 | 9 | 15 | 1 | 17 | 16 | 52 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Female | 2 | 7 | 2 | 5 | $\mathbf{x}$ | $\mathbf{x}$ | 3 | 13 | 7 | 25 |
| Total | 7 | 13 | 3 | 19 | 9 | 15 | 4 | 30 |  |  |

There appears to be relatively more gifted amongst the malesthan in the females. Gifted are relatively more in the public school and within this there appears to be more male gifted than females. However the sample of gifted children is very small no specific conclusions could be drawn. Parent's education and occupation

When the educational level of the parent's was compared between gifted and average students it was found that of the 23 gifted students there was none who had both parents uneducated, whereas 37 students from the average group had parents who had studied less than higher secondary level or even primary level. Table - 23 shows the background of education level of parents of the gifted and average students.

TABLE 23

EUUCAT IONAL LEVEL OF PARENTS OF THE GIFTED AND AVERAGE STUDENTS SCHOOL-WISE

| Educational <br> level or | public <br> School |  | Central <br> School |  | Delhi Admn. |  | Missionary |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | G | A | G | A | G | A | G | A | G $A$ |
| Both ${ }^{-\quad \text { - parent's }}$ Graduate and above | 4 | 2 | 2 | 2 | 5 | 1 | 3 | 2 | 147 |
| Both Graduation | 2 | 6 | 1 | 8 | 4 | 7 | 1 | 13 | 834 |
| One or both <br> less than <br> Higher <br> Secondary | 1 | 5 | 0 | 9 | 0 | 7 | - | 15 | (1) 36 |
| Total | 7 | 13 | 3 | 19 | 9 | 15 | 4 | 30 | 2377 |

Since the frequencies are very small, and in some cases nil, no attempt has been made to statistically treat the data t:o ascertain if there is any significant difference between the gifted and average in regard to their parents educational level. However a glance at the table reveals that gifted students appear to have parents who were more educated than those of the average students. In fact it is striking to note the total absence of gifted children in the category of low of parental level/ education. On the other hand $37 / 77$ ( $48 \%$ ) of the average students had reported that their parents were educated less than
higher secondary or lower levels.
Occupation of parents
An investigation into the occupation of the parents of the gifted and average children in four different schools showed the following results.

TABLE 24
PARENTAL OCCUPAT ION OF THE GIFTED AND AVERAGE STUDENTS

professions as compared to the average students. Thus, it may be concluded that gifted children generally appear to have better educated and better employed parents than the average students.

## Income level and the gifted

Comparison of the gifted and average on SES was carried out with a view to understand if this factor is in anyway associated with the giftedness in children.

The income levels were taken into 3 categories viz., Rs. 2,000/- and above Rs. 1,500 - 2,000/- and Rs. 1,500/and below. Table - 25 presents the school-wise distribution of the students in these three income categories.

TABLE 25
TABLE REPRESENTS THE SOCIO - ECONOMIC STATUS OF GIFTED AS WELL
AS AVERAGE PARENTS

| Income <br> Category | Public <br> School | Central <br> School | Delhi <br> Adm <br> run | Mission- <br> nary <br> school |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | Total


| Rs. 2,000 <br> and above | 5 | 3 | 2 | 2 | 6 | 3 | 3 | 3 | 16 | 11 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Rs. 1, $500-$ <br> 2,000 | 2 | 10 | 1 | 11 | 3 | 9 | 1 | 19 | 7 | 49 |
| Rs. 1,500 <br> and below | 0 | 0 | 0 | 6 | 0 | 3 | 0 | 8 | 0 | 17 |
| Total | 7 | 13 | 3 | 19 | 9 | 15 | 4 | 30 | 23 | 77 |

It is clearly evident from the above table that majority of the gifted children, 16 out of 23 , belonged to higher income group. On the other hand, amongst the average students, only $11 / 77$ belonged to the higher income group. While there was no gifted children in the lower income group, 17/77 of the average students belonged to the latter group. Thus one may infer that gifted children come from relatively higher income group than average children.

Letsure time pursuits and the gifted children
The leisure time pursuits of the two groups showed that the gifted involved themselves in all sorts of activities whereas the average though active tended generally to prefer the non-academic type of activities. Both the groups were also found to vary to some extent regarding their interest in extra and co-curricular activities. While the gifted were more interested in co-curricular activities the average students were more involved in extra curricular activities.

Leadership and other traits amongst gifted children
Amongst the traits considered the two groups did not differ much interms of the qualities such as being kind, quarrelsome anc talkative. However the groups ditfered on the qualities such as politeness, calmness etc which were found to be more amongst the gifted than the average stuadents.

TABLE 26
TEMPERAMENT OF THE GIFTED AND AVERAGE CHILDREN OF 4 SCHOOLS

| . | Public <br> school |  | Central <br> school |  | Delhi <br> 关dinas <br> run <br> school |  | Mission ary school |  | - Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | G | A | G | A | G | A | G | A | G | A |
| Irritable | - | 8 | - | 7 | 1 | 8 | - | 10 | 1 | 33 |
| Polite | 4 | 2 | 1 | 5 | 4 | 4 | 4 | 5 | 13 | 16 |
| changing | 3 | 3 | 2 | 7 | 4 | 3 | - | 15 | 9 | 28 |
| Total | 7 | 13 | 3 | 19 | 9 | 15 | 4 | 30 | 23 | 77 |

It is seen from the above table that only one out of the 23 gifted was irritable, whereas $33 / 77$ (42.8) were reported to be irritable amongst the average students. While $38 \%$ of the gifted had changing temperament $36 \%$ of the average had the same. Nearly 3 times more gifted had reported polite temperament as compared to the average students. This validated the hypothesis that there will be a difference in the temperament = - .... of thegifted and average students.

Number of family members of gifted and average students

The table below presents the family size of the gifted and average children.

## TABLE 27

NUMBER OF FAMILY MEMBERS AT GTFTED AVERAGE STUDENTS


| 4 and below | 5 | 2 | 2 | 3 | 6 | 3 | 3 | 5 | 16 | 13 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5 | 1 | 3 | 1 | 5 | 1 | 5 | 1 | 10 | 4 | 23 |
| 6 | 1 | 2 | - | 4 | 2 | 4 | - | 5 | 3 | 15 |
| 7 | - | 2 | - | 3 | - | 3 | - | 5 | 0 | 13 |
| 8 | - | 3 | - | 2 | - | - | - | 2 | 0 | 7 |
| 9 and above | - | 1 | - | 2 | 0 | - | - | 3 | 0 | 6 |

It is observed from the table that 16 gifted students out of 23 ( $69.5 \%$ ) are from the families consisting of only $3-4$ members. And other 7 gifted students have come from homes consisting off 5-6 members only. Out of 77 average students $26(33.7 \%$ ) belonged to families having 7-9 family members. Thus one may conclude that relatively more gifted children come from smaller families as compared to average students.

## Disciplinary attitudes of elders of gifted and average students

 The academically conducive atmosphere and disciplinaryattitude of elders of gifted and average students were compared. The table below presents the results.

TABLE 28
DISCIPLINARY ATT ITUDE OF PARENTS OF GIFTED AND AVERAGE

| Discipline Category | Public <br> school |  | Central school |  | Delhi <br> Admn. <br> run <br> school |  | Missionary school |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | G | A | G | A | G | A | G | A | G | A |
| strict | 4 | 3 | 2 | ( 3 | 3 | 2 | 3 |  | 12 | 10 |
| Liberal | 1 | 4 | 1 | 4 | 2 | 3 |  | 5 | 4 | 16 |
| Strict/Liberal suiting to the situation | 2 | 6 |  |  | 4 | 10 | 1 | 23 | 7 | 51 |
| Total | 7 | 13 |  | 19 |  |  |  | 30 | 23 | 77 |

It is seen from the above table that nearly $52 \%$ of gifted students have parents who are strict disciplinarian and only onemsixth appear to be liberal. On the other hand $53.2 \%$ of the average students had parents who were strict suiting to their situation and $16 / 77$ were liberal.

Thus it may concluded that parents of the gifted appear to be more strict than the parents of average students. And these all findings validated the hypothesis that there will be difference in the socio-economic and family background of gifted and average students.

## Other general characteristics of the gifted students

It was found from the check list that 85 percent gifted students were regular in attending classes and doing homework. Most of them took down class notes and asked questions for clarification. Gifted students also appeared to possess a keen desire to excel others in academics. Average students, on the other hand, though appeared regular in attending school did not ask questions for clarification in class or did their homework as regularly as the gifted student.

Both the groups took additional help in studies when needed but their sources were different. The average group depended on co-students and family members, whereas the gifted student stuāied extra books and some took private tưtions for particular subjects concerned, and generally learnt lesson ahead of the class.

It was also observed that most students of both the groups observed school rules and regulations and had interest in almost ali subject.

## Concluding Note on this chapter

The present study set out to ascertain the differences between gifted and average students of class VIII of 4 different types of school in regard to creativity, personality traits, intelligence, and socio- (iemographic factors and other personal attributes. The results which emerged ffom the analysis were as $\ddagger 01.10 w s:$

1. The number of gifted children had differed significantly in terms of the typesof school the students attended. Gifted students were relatively more in public school than in any other school.
2. Gifted students were found to be significantly more creative than average students irrespective of the schools in which they studied.
3. Gifted students of all schools were found to be more warmhearted, easy going, intelligent, emotionally stable, assertive, enthusiastic, persistent, adventurous and self-sufficient, as compared with average students on these traits of personality.
4. On the other hand it was observed that no statistically significant differences were found among gifted and average students when they were compared on the traits such as excitability, patience, sensitiveness, tough mindedness (Harria versus premsia) zestfulness, reflectiveness, self-assuredness, self-reproaching (Untroubled adequacy versus guilt pronenes) and uncontrolled versus controlled. Low self-sentiment integration versus High strength of self-sentiment etc.
5. Average students were relatively more tender minded. self-dependent, reproaching, worrying and trouble, as compared to gifted children.
6. There existeù a positive correlation between intelligence and creativity in the case of gifted children of all schools, whereas a negative relationship was found between these two factors amongst average students.
7. Creativity was positively correlated with personality factor B (Bright vs Dull) factor $G$ (Weaker super-ego strength versus stronger super-ego strength) factor 0 (Untroubled adequacy and guilt proneness) factor ${ }^{\prime} \Omega_{2}$ ' (Group dependency versus self-sufficient) and factor ${ }^{\prime} \Omega_{4}$ ' (Iow ergic tension versus High ergic tension) in the case of gifted children. On the other hand it was found that not a single $r$ value was above .30 in the case of average students. This indicated that creativity does not correlate with the 14 factors of personality in the case of average children, though a positive but very low relationship was noted between creativity and traits like factor E, factor $F$, factor $G$, Eactor $H$, and factor $Q_{4}$.
8. There was a negligible but positive relationship between intelligence and personality factors in the case of gifted and average children.
9. From the demographical analysis it was found that gifted were from relatively better socio-economic background as compared to average students, and had strict disciplinarian parents.
10. Gifted students were more serious and regular in their studies possessing high ambition and followed the school rules and regulations more strictly as compared to average students.

## CHAPTER - V

## DISCUSSION

## DIS

The present study set out with the objectivesof (1) identifying the gifted children in the four types of school. (2) Ascertaining if creativity in any way varied between the gifted and average students. (3) To ascertain if personality factors in any way varied between the gifted and average students.

The study had a sample of 100 subjects from VIII cless of four different types of school.

The gifted students were identified with the help of a specially devised giftedness scale as well as intelligence test. The main thrust of the present study was to ascertain if gifted students were more creative and possessed different personality profiles as compared to the average students (non-gifted).

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The result showed that :
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(1) The number of gifted children had differed significantly in terms of the type of schools the students attend.
(2) Gifted students, were found to be significantly more creative than average students irrespective of the schools in which they studied.
(3) Gifted students of all schools were found to be more

Warm-hearted, easy going, intelligent, emotionally stable, assertive self-sufficient when they were compared with average students on these traits of personality.
(4) On the other hand it was observed that no statistically significant differences were found among gifted and average student when they were compared on the various traits of personality test.
(5) It was also found that there exists a positive correlation between intelligence and creativity in the case of gifted students of all schools.
(6) From the demographical analysis it was found that gifted were come from relatively better socio-economic background as compared to average students.

The following section discusses in detail the above results in the light of work done in the field, in the following order :
(1) Giftedness and type of schools
(2) creativity and the gifted
(3) Personality and the gifted
(4) Gifted and demographic variables
(5) Gifted and related behaviour and attitude

It may be recalled that four types of school
(i.e. Public School, Central School, Delhi Administration run School and Missionary School) were taken as sample for this study, with a sample of 100 students from class VIII.

As mentioned in the earlier chapter it has been found that the number of gifted students had differed significantly in terms of the types of school. Specifically. the public school had significantly more number of students who were gifted than the other three schools. These findings validated the hypothesis that the proportion of gifted children to the total strength of a particular class will vary amongst the four types of school.

These findings imply that to inculcate giftedness amongst school children a good educative informative: environment is an important prerequisite which perhaps the Pưolic school is able to provide. These children of this school are able to display their inner talents when they are provided with a conducive environment in schools.

In an umpublished work, singh (1981) had found distinguishing features between the public and Government School which included differences in (a) reliance on text
books (b) political awareness amongst the teachers (c) extra curricular activities (d) the socio-economic status of teachers (e) parent - teacher association (P.T.A.) (f) leadership training and (g) socio-economic status of students. She had also argued that these differences influenced to a great extent the performance of students, and as such she concluded that the type of school a student attends has a very significant influence over the performance in the class. Studies by Veeraraghavan (1983), Veeraraghavan and sen Gupta (1985) and samal (1986), have all categoricaly shown that types of school play a very significant role in the academic performance of students.

## CREAT TVITY AND GIFTEDNESS :

Analysis of the creativity scores of gifted and average students of four schools showed that creativity was significantly higher amongst the gited as compared to average students. But when these scores were seen in terms of the four types of school, public school students showed the highest mean creativity score ( $M=47.15$ ) followed by students of Delhi Administration run school ( $M=51-28$ ) Missionary School ( $M=57.61$ ) and Central school ( $M=59.93$ ) in that order.

These findings validated the hypothesis which stated that there will be a difference in the creativity
scores between gifted and average students, and that the same would vary significantly amongst the four types of school.

These results supported those of Joshi (1974) who studied creativity of gifted students and found that giftedness was the post effective contribution to all types of creativity scores. passi and sharma (1972) foum nd that creativity was related to giftedness.

The findings showing the differences in creativity scores of students of the four types of school, appears to support the findings (though in another context) of Rao (1978), Opal and Sen (1979) and Veeraraghavan (1983) who had compared the privately managed school with Public and Government school and found that public school students not only performed better but also had higher ambitions as compared to students from other schools. In the present study the public school students had proved. to be more creative in comparison to all other three schools.

On the basis of several correlational studies researchers like Torrance (1960) Yamnato (1964), Passi(1972) Khire (1976). 'Mehai (1977) and Majumdar (1978) had all found that there: was a positive correlation between intelligence and creativity. so far as the gifted-ness was con-
cerned it can be inferred from the above studies that gifted children were creative than average students. However these findings had been contradicted by those of Welsh (1966), Eisenman and Robinson (1967) and Lindeman (1975) who had all shown that there was no significant correlation between creativity and intelligence.

The present study however has shown categorically that gifted children were more creative and that creativity and intelligencecorrelated positively only in the case of gifted students. One may perhaps argue that gifted children are both intelligent and creative and hence the high positive correlation between the two factors; whereas in the case of average students they are intelligent but not creative and hence there is no positive correlation between these two factors.

## PERSONALTTY AND GIFTED :

The findings of the present study comparing the gifted and average students on 14 dimensions of personality in the four types of school showed that the gifted and average students differed significantly on each factor of personality test. For instance, the gifted students were found to be superior on traits such as factor A (sizothymia versus


#### Abstract

Affectothymia) factor $B$ (Low intelligence and High intelligence), factor $C$ (Low ego strength versus Higher ego strength) Factor $E$ (Submissiveness versus Dominance) factor $F$ (Desurgency versus surgency) factor $G$ (Weaker ego strength versus Stronger ego strength) factor $H$ (Threctia versus parmia) and factor $Q_{2}$ (Group dependency versus self-sufficiency). These findings implied that gifted students were more intelligent, conscientious, self-sufficient, warm-hearted, easy going, bright, emotionally stable, assertive, competitive, persism tent adventourous, self-sufficient and resourceful as comm pared to average students.


On the other hand average students were found to be more reserved, detached, dull, emotionally less stable, obedient, sober, expedient, timid, socially group dependent and sound follower.

It was also observed that gifted and average did not differ significantly on the personality factors such as factor D (Fhelgmatic temperament versus Excitability) factor I (Harria versus premsia) factor $J$ (Zeppia versus Coasthenia) factor o (Untroubled adequacy versus Guilt proneness) factor $Q_{3}$ (Low self-sentiment integration versus High strength of self-sentiment) and factor $Q_{4}$ (Low ergic tension and High ergic tension). Though in all these traits mean score of
gifted students are relatively found to be more than the average students but their differences were not found to be statisticelly significant.

When these personality factors were correlated with creativity scores of gifted and average students it was found that creativity was positively related to personality factor $B$ (Low intelligence versus High intelligence) factor $G$ (Weaker superego strength versus stronger superego strength), factor 0 (Untroublea adequacy and Guilt pronness) factor $\Omega_{2}$ (Group dependency versus selfsufticiency) and factor $\Omega_{4}$ (Low ergic tension and High ergic tension) in the case of gifted children only. In the case of average students not a single r value was significant, indicating thereby that creativity has no relationship with personality factors in the average students.

These finding partially validated the hypothesis that gifted and average students will vary on all the 14 dimensions of personality in the sense that only on certain factors they differed and another factor there was no significant difference. Further the hypothesis that there will be a linear correletion between creativity and personality factors was also only partially validated, in the sense amongst the gifted there was a correlation whereas in the aver-
age students, there was no correlation between personality and creativity.

These findings were supported by the findings as investigated by Mallapa and Upadhaya (1977) who found that high creative persons were more intelligent, more socially bold and were less tense.

Suri (1973) by employing H.S.P.Q test indicated that the more intelligent boys were more emotionaly stable, tough-minded, placid, controlled whereas average boys were less intelligent, more affected by feelings expedient, tender-minded and self-conflicted.

The findings of the present study have also been in line with the above study. Joshi (1974) found that giftedness was significantly contributing factor to the personality factor $B$ (Higher intelligence versus Low intelligence) The present findings appear to support the above view point.

## GIFIED AND DEMOGRAPHIC VARIABLES:

In the present study it was found that gifted were from relatively better socio-economic background as compared to average students. These findings validated the hypothesis that there will be a difference in the socio-economic and family background of the gifted and average students.
(1970) Joshi (1974) have shown a very significant relationship between creativity: and demographic variables. Mukherji (1967) had indicated that $58 \%$ of talents came from highly educated homes whereas only 23.8 percent came from less educated homes. The present finding appear to support the above findings by showing gifted children : as coming from better socio-economic status homes than average students.

Another interesting finding in this study was that gifted students were found to possess high aspiration, and were polite or exhibiting changing temperament, were more regular in studies, showing more curiosity as compared to average students.

These indings validated the hypothesis that there will be a difference in the attitude, behaviour, aspiration and temperament of the gifted and average students.

These tinaings appear to be in line with a number of researchers for instance, Goyal (1974), Paramesh (1972) and Deo (1969) had found that gifted students were more adjustive possessing stronger superego strength, relaxed and assertive as compared to non-gifted students.

CHAPTER = VI

SUMMARY AND CORCLUSION

## SUMMARY AND CONCLUS ION

India's greatest. resource is her gifted children. In any nation advance progress and work have been possible only due to gifted and creative individuals. Whether in agricultural field, or in industry, or in science, the gifted have been responsible for enriching and exploring this world with tremendous knowledge. Hence the first step should be to search out the bright and talented students in every school and the community at large, so that the most capable boys and girls may be given suitable educational opportunities. Schools can make a airect ana vitally impontant contribution to the country's strength and progress by raising the standard of students achievement and reducing "academic wastage".

The Kothari Commission (1964-66) rightly pointed out that "every little of available talents should be discovered and developed". The Comnission emphasized the need for locating the talents early and then allowing it to grow in the best atmosphere and under the best teachers.

Schools in India are extremely complex in their composition, structure and organisation. As a result of these vast Qifferences; one finds differential performances of students in(terms of types of school. (Veeraraghban 1983). Thus it is the tirst and toremost duty of all schools to search out talents ana provide an environment that can stimulate, en-
courage and promote the desire to create. "Stimulating environment means, environment that generates warmth, freedom; commitment instead of fear, mistrust or arrogance. An atmosphere that is pregnant with opportunities for carrying out such pursuits would undoubtedly help in early exploration of the giftedness.

The present study has attempted to identify the gifted children in four different types of school. The present study has taken a totally different approach to understand the gifted. The major objectives of the premsent study were :
(1) To identify gifted children in a school setting.
(2) To ascertain if creativity and personality traits are in any way different between the gifted and average students.
(3) Io ascertain if socio-demographic factors and certain personal attributes of the students in any way are associated with giftedness.

Keeping the above objectives in mind following hypotheses were formulated.
(1) The proportion of gifted children to the total strength of a particular class will vary amongst the four types of school.
(2) There will be a difference in the creativity scores bet-
ween the gifted and average students.
(3) The gifted and average students will vary on all the 14 dimensions of personality.
(4) There will be a difference in the sociomeconomic and family background of the gifted and average students.

One hundred students of class VIII, drawn from 4 different types of school viz., Public School, Missionary School, Central School, Delhi Administration run School were taken as sample for this study. The tools used to collect information were :
(1) Self-devised'giftedness' scale.
(2) Intelligence test devised by S. Jalota in 1950.
(3) High school personality questionnaire devised by Cattell (1958) and adapted by S.D. Kapoor and K.K. Mehrotra
(4) Creativity test Battery (verbal and non-verbal) devised by Bacquer mehdi (1973).
(5) Checklist to obtain some demographical data students and , their parents.

The results obtained show that :
(1) The number of gifted children had differed significantly in terms of the type of schools the students attended. Specifically, the public school had significantly more number of students who were gifted than the other three schools.
(2) Gifted students were found to be significantly more crea-
tive than average students.
(3) Of the four schools public school students have the highest mean creativity scores (M47.15) followed by students of Delhi Administration run school, Missionary school and central school in that order.
(4) Gifted students of all schools were found to be more outgoing, war hearted, participating (factor A), more intelligent bright (factor B), enotionally stable calm of higher ego strength (factor C), assertive (factor E), happy-go-lucky (factor $F$ ), rule bound has strong superego strength (factor G), venturesome, socially bold (factor H$)$ self-sutiticient (factor $Q_{L}$ ), tough minded (factor $I$ ), zestful (factor $J$ ) and confident (factor $O$ ) as compared to average students.
(5) On the other hand average students were tound to be more tenderminded, protected (tactor I), obstructive, reflective, and unwilling to act (factor $J$ ) and worrying troubled (factor 0) than gifted students. However ', these differences were not found to be statistically significant.
(6) Though gifted of all schools were found to be high on factor $D$ (Impatient, over active) factor $Q_{3}$ (controlled, socially precise) and factor $Q_{4}$ (tense and driven) as compared to average students, these differences were not found to be statistically significant.
(7) Thus average students in comparison to gifted students were more reserved, less intelligent, affected by emo-
tions, stodgy, obadient, serious, has weaken superego strength tender minded, restrained troubled, group dependent and had low integration.
(8) It was also found that creativity was positively related with intelligence in the case of gifted children of all schools ( $r+0.53$ ).
(9) The creativity was found to be positively related to personality factor $B$ (Intelligence versus less intelligence). factor $G$ (Expedient versus conseientious ), factor 0 (Placid versus worrying), factor $Q_{2}$ (group dependent versus self-sufficient) and factor $Q_{4}$ (Relaxed versus tense) in the case of gifted children of all schools.

> But in the case of average students none of the rvalues was above . 30 and thus was not found to be statistically significant.
> (10) The factor $Q_{4}$ was found to be significantly correlated with intelligence in the case of both gifted and average students of all schools. Thus it is seen that a very low relationship exists in the case of both gifted and average children.
> (11) From the demographical analysis it was found that gifted were , from relatively better socio-economic background as compared to average students.
(12) Both gifted and average students were found ${ }^{\text {to }}$ be regular in attending school, were taking additional help in studies, observed school rules and showed interest in almost all subjects.
(13) Besides, gifted students were found to be cool in temperament and high in ambition as compared to average students.

ITMITATION OF THE STUDY:
(1) The four types of school taken for the study do not represent all the schools falling under the representative categories. The sample would have been representative if stratified random sampling method had been used for instance - Delhi could have been taken at 4 zones - viz., North, South, East and West. Within the 4 zones all the schools could have been listed down and categorized into public school, missionary school, Delhi adninistration run school, and central school. Pive or ten percent of the categorized schools could have been chosen out of the total from which students could have been randomnly selected. This, however was not possible because of the nature of the study being exploratory and covering large number of schools would have been too large to accommodate such a vast area in a small study of this type. However, it is intended to take up such a study for Ph.D.
(2) The three major variables considered in the study apart from the typesof school were personality, creativity and social and psychological variables. Various other factors such as interest, nef is, adjustment problems, motivation and educational opportunities available to
them and other problems of gifted students have not been com vered in this stuay due to lack of sufficient time to study all these variables of gifted children. These could incorporated at the $\mathrm{Ph} . \mathrm{D}$. level work.

Despite the above limitations the present study has been able to convincingly demonstrate that the performance of gifted students varied significantly in terms of the typesof school;' and again the gifted and average students varied significantly in intelligence, creativity and personality.

The study has thus been able to prove that the gifted children possess high mental ability. They show mental precocity from an early age. They have a strong disposition towards intellectual activity, a liking for teflective and abstract thought and ideas and interest in scholarly pursuits.

The purpose with which the present study was set up has been to guite an extent fulfilled, in the sense that it has shown that gifted children surpass average children in intellectial traits, in theirdesire to know, in their originality in determination and preserverance and common sense.

The findings of the present research have paved the way for further research work in this area which could focus attention on the causative factors leading to higher performance as
well as possession of personality traits amongst gifted children.

The researcher proposes to extend the topic for her Ph.D. work to include some more types of school and also rectify some of the limitations of the present study mentioned above.

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## APPENDICES

## APPENDIX - I

## CHECKLIST FOR TEACHEAS

Dear Sri

A study of the gifted pupil in grade VIII is undertaken. Some points have been noted down with a view to studying in detail the probable giftea". Kindly supply infomation regarding the pupil mentioned belout. Responses to many questions are supplied. In such cases please underline the appropriate responses. When a response is notgiven answer the point th your own way. I am thankful to you for your cooperation.
N.E.:- In case you do not have specific information regarding any point please leave it unresponded -

Name of the School
Name of the Pupil
Sex
Cless

1. Is he regular in attending school?
2. Is he regular in doing homework?

Regular, Irregalar. V. Irregular

Always, Generally, Sometimes
3. Doss he study in advance what Always, generally, sometimes is to be taught in the classroom?
4. Ask question for clarification Yes, No, Sanetines of a complex points
5. Does he answer quastion in Yes, no, sometimes the class regularly?
6. Pupil's intellectual level High, average, low
7. Interested in reading material Very, partly, not at all other than school subjects

## APPENDIX - II

## CHECKLIST FCR PARENTS

Dear parent.

The information about your child are required for a research study Responses to many questions are supplied. In such cases please underline the appropriate response. The information will be treated as confidential:

Ne. You may omit an item to which you have no specific response to make.

Datez:

Child's name:-

School:-

1. Fond of additional readingsregarding school subjects
2. Self reliant in studies
3. Gresping capacity
4. Is he ambitious?
5. Does any creative work
6. Emotionally balanced

Yes, no, sometimes

Completely, partly, not at all

Good, Average, Poor

Very, moderately, not

Yes, Scmetimes, No

Yes, No

## CHECKLIST EOR STUDENE

Dear Student,

The information about you required below is absolutely essential for research study. Responses to many questions are supplied. In such cases, please underline the appropriate response. The information vill be treated as configential.
N. E. (i) Please do not take anyone's help in filling this questionaire.
(ii) You may omit an item to which you have no specific response to make -

Name -

Age -
Sex -

Caste -

1. Rank in the VII class

Final Examination
2. Do you desire to know new things?

Yes, No, sometimes

| 3. | Do you desire to excel others in studies? | Yes, No, sometimes |
| :---: | :---: | :---: |
| 4. | Do you maintain a high level in scholastic achlevement? | Yes, No |
| 5. | Do you spend leisure time in reading material other than school subjects? | Yes, No, Sometimes |
| 6. | Do you show maturity beyond your agemates in use of oral language fluency in speaking and giving oral response? | Yes, NO, Sometimes |
| 7. | Do you like to study? | Yes, NO, Sometimes |
| B. | Do you learn easily and quickly at schools: need less explanations and repetitions than your agemates? | Yes, No, Sometimes |
| 9. | Have you wide fond of information in social studies, grasps principles in social sciences, does reading beyohd your classmates in these areas. | Yes, No |
| 10. | Are you interested in reading material other than school subjects? | Very, partly, not at all |
| 11. | Do you prefer the company of pupils who are | More intelligent, equally intelligent, less intelligent. |
| 12. | Do you make an outstanding contribution? | Always, somet mes, never |
| 13. | Do you accept leadership in class school activities? | Always, sometimes, never |

## APPENDIX - IV

## Information regarding pupil and their socioneconomic

background

## Checklist for parents

Dear Parent,
The general basic information about you and your
child are required for a research study. Please underline
the appropriate responses. The information will be
treated as confidential.

I would be thankful to you for your comoperation.

NoBz- In case you do not have specific information regaraing any point please leave it unresponded -

Name of the School
Name of the Pupil
Sex
Class

Health

1) Physique Very good, good, average
2) Physical disabilites: if any m

Femily

1. Father's qualification
(please specify)
2. Mother's qualification
3. Present parent's occupation
4. Sociomeconomic status

Upper, Middle, Lower
5. Total members in the family
6. The attitude of elders in the family

Strict, Changing, generally not strict
7. You have usually lived in

City, town, village

## Social Aspect

8. Do you prefer the company of pupils who are

More intelligent, equally intelligent, less intelligent
9. Interest in extra-curricular activities
10. Temperameat and behaviour
11. Do you help others?

Often, sometimes, never
12. Do you like to observe the school regulations?

A11, most of thern, same

## School Studies

13. Ace you regular in doing home assignment?

Always, generally, sometimes
14. Do you take help of your co. Yes. No, sometimes
students in studies
15. For how many hours do you usually study at home
16. If you have changed school say how many and why
17. Who helps you at home in
studies?
18. Are you interested in music or drawing?
19. Mention your achievements in axts, if any.
20. Is he getting any special Yes, No coaching?
21. Failed in subjects
22. Do you create hindrances Yes, No, sometimes in class work
23. If yes, how?

By asking useless questions. by moving noise, any other way.

## Intellectual Aspects

25. Temperament
26. Self-confidence

Cala, polite. Irritable.

Remarkable, Average, Insignificant
E.G. wxite poams or essays. frame problems stuay and attempt scientific research.
28. Handles mathematical process Yes, sometimes, never easily, long division, fraction, decimals, geometry, mathematical tables, handles written problem in mathematics with quick understanding.
29. Subjects liked
30. Subjects disliked



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## अभ्पास के लिए उदाम्रण

इस परीकां में जिस प्रकार के प्रह्न पूके गये हैं, उन के दो दो उदाहुरण नीचे दिये गये हैं हन में से पहले का उत्तर भी उत्तर-पत्र पर छपा है। किन्तु दूसरे का उचित उत्तर देने का अम्यास अपप सरलता से कर सकेंगे।

आशूये अब हम इन को पढ़ें, लोर इन को हल करने की विधि समशें :-
उदाहरण संख्वा

1. वृक्ष का अर्थ है,
(1) पेड़े,
(2) जमोन,
(3) घास,
(4) फल.
2. आाज़ा का अर्थ है,
(1) कठोर,
(2) ₹्वामी,
(3) निवेश
(4) पालन. (2)
3. अच्छाई का उल्टा है,
(1) चालाकी,
(2) बुराई,
(3) लड़ाई,
(4) नम्रता. (3)
4. जोवन का उसटा है,
(1) निराशा,
(2) अनन्द,
(3) मिट्टी,
(4) मृत्यु.
5. नीचे दिए सर्या कम के लनुसार कागे की एक संख्या उत्तर-प श्र

पर लिखें :- $1, \quad 2,3,4$ 4, 5 , 6
6. नीचे दिए संक्या कम के अनुसार आगे की एक संख्या उत्तर.पत्र पर लिखें :-
1.,
14,
13,
12,
11,
10
(6)
7. इन पाँच घब्दों में ोो बेमेल शचद्द को संख्या उत्तर-पत्र पर लिखें :-
(1) घोड़ा,
(2) मुगी,
(3) हाथी,
(4) मोश;
(5) लड़का,
8. इन पांच शंद्दों में से बे भेल रुन्द को संख्वा उत्तर-पत्र पर लिखें :-
(1) निबाध,
(2) लेखक,
(3) उपन्यास, (4) कविता,
(5) सतन्म,
9. छ्ञाता एक लाभदायक वस्तु है, इसलिए कि वह
(1) कपड़े का बनता है।
(2) हमें वूप व वर्षा से बचाता है।
(3) वह सव देग्रों में मिलता है ।
(9)
10. लोग विल्लियां इसिए दालते हैं, कि
(1) उनकी खाल कोमल होती है ।
(2) बे कुन्तों से डरली हैं। $\quad$ (3) वे चूहे पक ड़ती हैं।
11. कलम: लिखना: छत्रू: (1) आम, (2) काटना, (3) लोहा, (4) खाना.
12. खोर: घादलः: हल्वा: (1) टूर्श,
(2) दही,
(3) दूध,
(4) सूजी.
13. हरदेव से सुगजीत लम्दा है, किन्तु हुगदेव से जगजीत नाटा है। तो सब से लम्बा कोन है ?
(1) हरदेव,
(2) मुरजीत,
(3) जाणीत

खढ़ा है, तो सब से पीछे कीज खढ़ा है ? (1) राम, (2) गोबदद, (3) चन्दन, (4) हाि.

# पृषठ (वह्ला) <br> मानसिक योग्यता की सापूहिक्र परोष्षा (72) <br> (उत्तर-पन्र पर फमांक के अनुकल उरचित जत्तः को संत्यु लिखे) प्रेरन संख्य <br> 1. प्रकाषा का उत्टा है, <br> 2. कृपा का अर्थ है, <br> (1) काला, <br> (2) लंम्प, <br> (3) सूट, <br> (4) अन्धरार <br> (1) धें <br> (2) कर्म, <br> (3) दया, <br> (4) दान 

3. पुलिस थाना चोनीस धण्टे खुला रह्ता है, क्योंकि (1) पुलिस अधिकारियों को 24 घण्टे का वेतन मिलना है। (2) लूट गार और दंगे की घटनाएं किसी समय हो सकती हैं। (3) पुलिस वालों को दिन रात की वरदियां मिलती हैं।
4. मोटा का उलटा है, (1) छोटा,
(2) प्तसा,
(3) हलका,
(4) परिश्रमी.
(4)
5. घर का अर्य है,
(1) बोवी,
(2) परिवार,
(3) मकान,
(4) खर्च.
6. इन पांच ईबदों में से बे-मेल इबद का अंक उत्तर पत्र पर लिखें :
(1) लेले,
(2) चर्मचा,
(3) चयाला,
(4) पतोला,
(5) केसा.
(6)
7. भोतर का उलटा है,
(1) बाहर,
(2) खूला,
(3) मैदान,
(4) तोप्र.
(7)
8. विद्या का अर्थ है,
(1) पुस्तक:
(2) ज्ञान,
(3) रहस्प,
(4) विज्ञान.
9. लक्ष्मण से आयु में सीता बह़ी है, परन्तु लक्ष्मण से भरत छोटा है। तब इन में सब से बढ़ा क़ोन है ?
(1) लष्षण
(2) भरत
(3) सीता
10. साधु का उलटा है,
(1) भगड़ा,
(2) दुष्ट,
(3) मजन,
(4) ल
11. इन पांच बन्दों में से बे मेल शब्द्य का अंक उत्तर-पत्र पर लिखें :-
(1) मोटर,
(2) साइ队ल,
(3) तांगर,
(4) तार,
(5) रेलगाड़ी
12. विष का उलटा है,
(1) मीठा,
(2) औषष,
(3) अमूत,
(4) शूष.
13. ऐहमद से घनवर नाटा है, किन्तु अनव़र से हमीद नाटा है, तो सब से नाटा कौन है ?
(1) ऐहमद,
(2) हमीद,
(3) अनवर
14. बनवान का अर्थ है, (1) भोटा,
(2) घनखान,
(3) प्रष्षात्र
(4) शक्तिमान
15. इन पांच शब्दों में से वेमेल शब्द का अंक उत्तर-पन पर लिखें :-
(1) चम्पा,
(2) घमेली,
(3) घाप,
(4) गेवा;
(5) गुलाए
(15)
16. अर्जुनु से कमला अधिक दौड़ती है, किन्तु चपला से कमला पीछे रह जाती है, तो सब से धा़िक तेज
कोन दोड़ता है ?
(1) चपला,
(2) कमला,
(3) अजूंन
(16)
17. इन पांच हब्दों में से वेमेल घबद्द का अंक उत्तर.पत्र पर.लिर्बो :-
(1) मोटर,
(2) रिषशा,
(3) तागा,
(4) पंदल,
(5) सा कलल
(17)
18. "मुख में राम बगल में छुरी" का अभिप्राय है, (1) राम-राम कहने वाले सदा बगल में छुरी रखते

हैं। (2) रांम कहने से छुरी से रक्षए होती है, (3) अनेक दुष्ट लोग धर्म का पाखण्ड करते हैं।
19. नीचे दिए संख्या-कम के अनुसार लागे की एक संख्या उत्तर-पप्र

- पर लिखें :- $8,7,6,5,4,3, \quad .$.

20. इन पांच शबदों में से बेमेल शबद का अंक उत्तर-पत्र पर लिखें :-
(1) हृदय,
(2) आए,
(3) कान, .. (4) नाक
(5) बीच
(20)
[मशन 21 कै लिए देखिए पृष्ठ 2 (दूसरा)]

(ज्तर-प्न पर यवा-स्यान अचचत उत्तर को संख्या किसें।)
धरने संख्या
21. जुते चमड़े के इस लिए् बनते है, (1) कि यह् अधिक चलता है। (2) वहृ मृत पगु की बाल से बनता है
(3) पह सब देषों में काया जाता हैं।
22. नीचे दिए संख्या कम के अनुपार साोे की एक संख्या उत्रर-पच
पर लिबे :-
6,
23. 

21,
26
23. सांच को आंच नहीं होती, इसीलिए कहते हैं कि (1) सच बोलने वाले को आग नहीं जलतो।
(2) संने की विजय होती है :
(3) सच्चे भादमी के पर में आंच नहीं मिलती।
24. नीचे दिए संख्या-कम के अनुसार आगो की एक संख्या उनर-पन्त
पर लिख्बे :-
3. 6 ,
9. 12, 15
18
25. विदेध जाने के लिए लोग निमान याना पसंद करते हैं, इसलिए कि (1) इसमें योढ़ा समप मगता है।
(2) याशरामें खाने पीने का पूरा पयन्ध होता है।
(.) वह हवा में घूल से ऊवर उड़ते हैं
26. इन पांच सबनों में से बे-गेल शब्द का मंक उत्तर पत्र पर लिबें :-
(1) हाफकी,
(2) फुटालन,
(3) घกरंज
(4) ॠिफेट,
(5) टेनिस
27. पावी का मन सदा खंकित रहता हैं, इसलिए कि $\quad$ (1) उसको नरक का कष्ट भोगना पड़ेगा।
(2) इंकित मन वाले पाप करते हैं।
(3) पापी को पोल खुलने का दर रहता है ।
28. नीचे दिए संख्या क्यम के अनुसार भागे की एक संख्या उत्तर-पत्र

पर लिखें :- $5,11,17,23,29,35$,
29. एक देशा में रेल की बहुत सो लाइनें होनो चाहिए, इसलिये कि (1) इन से माल ओर मनुष्यों के जाने जाने में सुविधा होंती है। $\begin{array}{lll} & \text { (2) इन से व्यापार को लाभ होता है। } & \text { (3) इनके तारा देा में }\end{array}$ बाध पदार्थों का मूल्य कम हो जाता है।
30. होरा का अयं है (1) मोतो, (2) महंगा. (3) पलचर, (4) जबाहर
31. नीचे दिए संख्या कम के अनुसार आोे की एक संख्या उत्तर-पग

पर मिबें : $3, \quad 12, \quad 21, \quad 30, \quad 39, \quad 48, \quad . . . \quad$ (31)
32. इन पांच शान्दों में ते बेमेल शब्द का अंक उचार-पत्र पर लिबें :-
(1) कालीवास,
(2) दुलसीवास,
(3) जथगांकर प्राब
(4) बुद
(5) टंगोर
33. नीचे दिए संख्या कम के अनुसार की एक संख्या उनार-पग्र

पर लिखें :- 14, 17, $20,23, \quad 26,29$... (33)
34. घोड़ा : टांग : गाड़ी : (1) बतलक (2) पहिया (3) सउ़क, (4) वव्ट्य ... (34)
35. द्न पांच शान्दों में से बेनेमेल घबढद का अंक उत्तर-पत्र पर लिबें :-
(1) पाष,
(2) g र
(3) परें,
(4) यहां,
(5) घोमा
36. निविक : सध्या :: सीनिक : (1) मादूर, (2) विक्रता, (3) क्षत्तान, (4) घालक्र
37. हन पंच घानदों में से बे-मेल शब्द का मंक उत्तर-पत्र पर लिब्बे:-
(1) बेलना,
(2) सोना,
(3) गाना,
(4) बौड़ना,
(5) नाष्या
38. तरल : ठोस :: पानी
(1) इरफ़,
(2) मछलो,
(3) สैरना,
(4) स्नान
39. नीचे द्विए संख्या कम के बंनुसार आगो की एक संख्या उत्रा-पर्व
$\begin{gathered}\text { वर लिबे : }-1, \\ 2,\end{gathered} 4, \quad 8, \quad 16, \quad 32 \quad . . . \quad$ (39)
40. पनातरी : फरबती :: जुलाई : (1) भांत, (2) भगस्त, (3) रखिवार, (4) जूल (40)
[หलन 41 के किए १क्ना उलटिये, और देसिए पृष्ट 3 (तीसरा)]


[^0]41．नौचे दिए संख्या कम के अनुसार कागे की एक संख्या उत्तर－ๆत्र
पर लिखे ：－ $21,19,17,15,13,11$ ，
42．बहन ：माई ：：मासो ：（1）चाचा，（2）भुभा．（3）दावा，（4）मामा
43．गोबद्धंन की मोटाई चन्ट्रन से कमं हैं，औौर चन्द्रन से अधिक मोटा जिरधारी है，तो सव से
हुवला कोन है ？
（1）चन्द्रन，
（2）किरधारो，
（3）गोवर्बन
44：नीचे दिए संख्या कम के अनुसार आगे की एक संख्या उत्तर पत्र पर लिखें ： $18,16,14,12,10,18$ ，
45．हंसना ：रोना ：：वघपन ：（1）लेलकूद，（2）कुढ़ापा，（3）मारपीट，（4）हार
46．इन पांच घबददों में से बे मेल शब्द का अक उत्तर－पन्र पर लिखें ：－
（1）गाय，
（2）भंस，
（3）घोड़ा，
（4）अेड़，（5）बकरो．

47．䣅र का उलटा है，（1）मज्जन，（2）मला，（3）वयालू，（4）कठोर
48．इन पांच क्ञानदों में से बेमेल बाब्द का अंक उत्तर－पत्र पर लिखें ：－
（1）कूवना，
（2）फांदमा．
（3）मागना，
（4）बड़े रह्ता，
（5）चलना
（48）
49．वद्मा से रणजीत अच्छी सिलाई करता है，किन्तु पुष्पा से पद्या अच्छा कार्यं करती है तब सिलाई？ में सब से अंच्डा कोन है ？（1）रणजोत，（2）पद्व्वा（3）पुछ्वा
50．इन पांच घढदों में से बे $े$ ल झांद का अंक उत्तर पत्र पर लिखें ：－
（1） मम्ट्टी，（ 2 लनड़ी，
（3）हिला，
（4）कंषरे，（5）पतथर

51．उद्यम का उलटा है，（1）दियोग，（2）उएपोक，（3）विक्षाम，（4）आलह्य
52．नीचे दिए संख्या कम के अनुसार आगे की एक संख्या उत्तर－पन्र
$\therefore$ पर लिखें ：－78，67，56，45，34， 23
53 फल ：सेब ：：पुर्ष ：（1）अनार，（3）बादाम，（3）गुलाव，（4）जामुन
54．मोहन से नाटा राम है। बोर किषान से नाटा रुम है। तब सबसे कम लक्बा कोन है ？
（1）मोहन，
（2）किशन，
（3）राम

55．नीचे दिए स स्या－च्वम के अनुसार आगे की एक संख्या उत्तर－पत्र
पर लिखें ：－
5． $6, \quad 8$
11,
15． 20
…（55）
56．＇भूठ के पांव नहीं होते।＂यह्ह इस कारण कहा आाता है कि（1）लंगढ़े मनुष्य बहुत भूठ बोल़ते हैं।
（2）भूठे मनुष्य की पोल शीध बुल जाया करती है।（3）सूट बोलने वाले बहुत बार चलते संमय（56）
i．होकर बाते हैं।
57．नाद ：माओी ：：मोटर ：（1）स्वामी，（2）यानी，（3）नगर，（4）चालक
58．इन पांच घाबदों में से बेमेल बबदद का अका उचार पग्र पर लिखें ：－
（1）सदट，
（2）कुसी
（3）t⿳亠丷厂彡ट，
（4）सोला
（5）पीढा
$(58):$

60 नीचे दिये संब्या क्रम के अनुसार आगो की एक सख्या उत्तर पत्र
पर लिखे ：－$\quad 5, \quad 6, \quad 9, \quad 10, \quad 13, \quad 14, \quad . \quad 160)$
［परनन्न 61 के लिए देखिये पृष्ठ 4 （चौथा）＇

पृष्ट 4 (चौथा)
उत्तर पन्न पर पथा स्यान उचित उत्तर की, संख्या लिखं)
$61^{\text {. संपादक : पत्रिका : : व्यापारी : (!) बाजार, (2) विज्ञापन, (3) वुकान, (4) समाचार: }}$
62. आइचर्व का अर्थं है, (1) निराला, (2) विसमय, (3) घबराहट, (4) अनुमव
63. घन्द्रभा : पृथवं :: पृथवी : (1) सागर (2) मालत्तारा, (3) सुवं (4) मर्छलयां
64. डन पांच शब्दों में से बेनेल शाबद की संख्या उत्तर पत्र पर लिखें :-
(1) गोमी,
(2) गाजर,
(3) कककड़ी
(4) मूली,
(5) घनिया
(64)
65. सोना का अर्थ है, (1) कनक, (2) खाद, (3) घन, (4) माला
66. नीचे दिए संख्या कम के अनुसार आगे की एक संख्या उत्तर पत्र

पर लिखें :- $\quad 9,12,14,17, \quad 19,22$
67. इन चाँच काब्दों में से बेमेल शब्द का अंक उत्तर पत्र पर लिबे :-
(1) भूखा,
(2) मरा,
(3) व्यासा,
(4) थका,
(5) हारा
(67)
68. सदाधिव से मुरारी लभ्बा है। किन्तु मुरारी से वीरेन्द्र नाट। है। और क्रिलोकी से मुरारी नाटा है, त तो सब से लम्बा कोन है ? (1) सदाशिन, (2) मुरारी, (3) बीरेन्द्र, (4) क्ञिलोकी. (68)
69. वृक्ष : लता :: फल : (1) फूल, (2) चर्पा, (3) मोतिया, (4) मॉलस्सरी (99) इ़
70. नीचे दिए संख्या कम के अनुसार आगे की एक संख्या उत्तर-पत्र

पर लिखें :- $\quad 8, \quad 9,12,13,16,17$
(70)
71. नेता : जनता :: अधिकारो : (1) चुनाद, (2) भाषण, (3) कमंचारो, (4) निर्णय (71)
72. आरेखन-कला में राम से गर्गी चतुर है। किन्तु उसकी अपेक्षर सीता चतुर है। धत: सबसे
चतुर कौन है ?
(1) गार्गो,
(2) सीता,
(3) राम
73. इन पांच शबटों में से वेमेल धाबद का अंक उत्तर पत्र पर लिखें :-
(1) घौड़ा,
(2) ऊँट,
(3) काँाए,
(4) गधा $r$
(5) भैसा

74, चित्र : बड़ा :: \{िनेमा :
(1) खाता,
(2) चलता,
(3) हं स़ता,
(4) होता (74)
75. नीचे दिए संख्या कम के अनुसार आगे की संख्या एक उत्तर पग्र

पर लिबे :-- $\quad 29, \ldots 28, \quad 26, \quad 23, \quad 19,14$,
76. मेरे विचार में यदु से सीता चतुर है। किन्तु कमला से रमा निसन्देह चतुर है। और सीता से रमा मन्द :
है। तो सब से चंतुग वैन है ?
(1) युदु
(2) कमला,
(3) रमा
(4) सीसा
(76)
77. नीचे दिए संख्या ₹म के अनुसार आग़ो की एक संख्या उत्तर पत्र पर सिबें : $7, \quad 8, \quad 10, \quad 13 \ldots 17, \ldots 22$
78. तम्यता का अधं है, (1) वस्त्र, (2) कला, (3) ज्ञान, (4) सहकति (78)
79. "जिसकी लाठी उसकी गिस" कह्ने का अभिप्राय है कि (1) मैस वाले के पास लाठी आवश्यक हौती है। (2.) बधिक बलनान की बात सब को माननी पड़ती है। (3) लाठी देख़ कर मेस सधिक् दुध देती है।
(79)
80. जूलियट्ट : रोम्यो :: संघोगिता :
(1) च्वमं वर,
(2) जयचंत्य,
(3) पृथबीराज,
(4) अकबर
(80)

पृष्ट 5 (पाथषा)
(उत्तर पन्र पर पषा?स्थाभ चचित उत्तर की संख्या लिखें।)
x
81. घनेक घंषों वक ह्वाई जहाज सफल ने हुए, घयोंकि (1) वे बहुत मारी बनाये जाते ये ।
(2) उनके कल पूर्जे बहुत जटिस होते थे।
(3) एक उतम इंजन नहीं बन पाया था
82. नीचे दिए संख्या कम के अनुसार कागे की एक संख्या उत्तर पश्र पर लिखें।

पर लिखें :- 4, 6, $9,11,14,16$,
83. इन पाँच शब्दों में से बेमेल धाबद का अंक उत्तर पत्र पर लिखें।
(1) िंड़िया,
(2) बोता
(3) घुलबूल,
(4) कदूतर
(5) गल्लू
84. नी दिए संख्या कम के अनुसार धागे की एक संख्या चत्तर पत्र

पर लिबे:-8, $\quad 9,11, \quad 12,14,15$,
85. इन पांच शब्दों में से बे मेल बाठद का अंक उत्तर पच पर लिखें :-
(1) गषा
(2) पुरी,
(3) प्रयाग,
(4) धारिका,
(5) दिहली,
86. सैनिक : मासिक :: पत्र : (1) कह्नानियो, (2) समाचार, (3) पत्रिका (4) संवाद
87. कण का उलटा है,
(1) घन,
(2) बहत,
(3) बनिया,
(4) हपापार
88. कोट : वै च्ट :: फुरता :
(1) समाधार,
(2) टोवी,
(3) पाजामा, (4) पाऱी
89. बिस्तृत का उलटा है,
(1) विजाल,
(2) कमरा,
(3) पतला,
(4) संपुचित
90. पेनसिल : चाक :: कापी: (1) पुस्तक (2) बोर्ड, (3) ताक, हेन्त
91. इन पांच शब्दों में से बेमेल घहदद का अंक उत्तर पत्र पर लिखें :
(1) पष्र,
(2) प्रभात,
(3) घंटा,
(4) fिनट,
(5) \%ण
92. नीचे दिये संख्या कम के घनुसार आंगे की एक संख्या उत्तर पध्र

पर लिखे :- $2, \quad 3, \quad 5, \quad 6, \quad 8, \quad 9, \quad .$.
93. घवेत : हिम :: हयाम : (1) विन,
(2) चिड़िया, (3) कौषा,
(4) शा
94. नीचे दिए संखया कम के अनुमार आगे की एक संख्या उत्तर पत्र पर लिखें :- 27, 26, 24, 21, 17, 12, .. (94)
95. चहंग का अंध है,
(1) मोर.
(2) पक्षी,
(3) मद्दा,
(4) निषंग
(95)
96. रमा की बुद्वि देवकी से प्रखर है, पर सीता की बुद्धि सावित्री से होन है, किन्तु देवकी की बुद्धि साविशी से उत्तम है, तो सब से बुद्विमान कौन है ?
(1) देवकी,
(2) होता,
(3) रमा,
(4) साविनी
97. इन पांच घाबदों में से बे मेल शबए का अंक उत्तर पग्र लिख्खें :-
(1) हिमाचल,
(2) केरल,
(3) मेघालय,
(4) मोपाल,
(5) हरिपाषा
92. नाटा का उलटा है, (1) भारं।
(2) लfal,
(3) ताड़ा,
(4) कठोर
99. गरल का अथं है,
(1) छृरा,
(2) निष,
(3) कड़ar,
(4) सरम
100. मकड़ी : नकखी बिलली :
(1) कुष्ता,
(2) freता,
(3) बूध,

- 8


# सूजनात्मक चिन्तन का गार्गिदत परीक्षण निर्मित एवं मानकीकृत द्वारT डा० बाकर पेहदी,  रीडर, पनो विद्धान निभागग अलीगढु मुस्लिम विश्र्वृव्वालय, अलीगढ़ 

इन्हें भरो:-
नाम . . . . . . . . . . . . . . . . . . . . . . जन्म ति तिथ . . . . . . . . . . . . . . . . गTयुतु
कक्षा विभाग विघालय
fिता या अभआववक का नाम . . . . . . . . . . . . . . . . . . . . . . . . . . . व्यदस व. . . . .
घर का पता ................................................. . दिनांक

ननदेश
夊ا जीवन में नवीनता, मोनिकला एव़ं रचानत्मकक घोग्यता का बड़ा महत्त है । जीचन की प्रत्येक नई खोज मनुष्य को नये दिंग मे लोचने की योग्यता का ही परिणास है ! तंसार लो बहुत ती ऐसी वन्तुयें हैं जिन्हें नये-नये दिचारों दे .. दारा अनोखी तथा उायोगी वनाया जा सकता है । ऐली योग्यता रखने जाते व्यक्तयेंग

 विचारात्पक एवं हृजनात्मक ढंग से हल बरने का प्रयत्न क्रेंगे तो आप बहुत से
 आTनन्दु आयेगा ।

 बातें सोचते हैं जो आपते दिचार में आपदे साथी नहों सोच वलते C वात्तव में
 नचे दंग से सोचन की हितनी गोग्यता है । अत्तः जितने भी बधिक नये एवं अनोखे विचार आवें, लिखते जाइये चाहें चे अनरभ्भ ही क्यों न पालूम होते हों।

女े आप्रको चTर बार्य करने के लिये दिये गये हैं 1 सुववधा के लिए प्रत्येक कार्य का अलग-अलज समय न्विश्चित है। जहाँ तद संभव हो शीघ्रता हे उत्तर दीजिये 1 यदि आ क्रिती कार्य को fैनशिचत संमय से पहले पूरा कर लेते हैं तो जब तर आपते अगले कार्य के लिये नर्क्री द्राजय, आगे न बढ़ें बfल्ध उत्ती कार्य से बारे में कांतिपूर्वक तोचते रहें और बो आी नया विचार आपके पन में भगये उसे ीी लिख टें । अन्त में प एँच दिनट का सपय आधर दिया जायगा । यदि आपदे मन में दिसी भी प्रश्न से दिती भी भाग के बारे में कोई नवीन विचार आया है उते आTप पहिते नहंनं लिख पाये ेे, तो उते हुता समय लिख सकते हैं ।
 करने को कीज़ाय तो तुरन्त शुराह हर दीजिये।

यदि आपतो कोई बात पूछ़ी है तो इस समय पूछ लीजिये । यदि इस समय तोई एविनाई नहीं है आर बाद में टोई कीठनाई आये तो गांतिपूर्वक्र अपने स्थान मे अपनT हाय उठायें तार्Tए आपड़ी क्िनाई दूर की जा हाके ।

कार्य हैं $1:$
बदि ऐसा हो जाय तो－
निर्देश ：－
\＆ 18 अगले पृषठ पर तीन असमझव बतां दी गई हैं जो कि कभी सत्य नहीं हो सकती । आTप र्वलल गह पान लें कि ऐसा हो गया है 1 जब आप तोचें कि ऐतT हो जाने पर क्या पनरणगम हो संदते है ।

82 20 प्रूनों के उत्तर देते तमय अपने ध्यान अर सोचने ली पाक्ति धो पूरी तरह प्रपोग करने का प्रयत्न फीजि और 15 सिनट में आए जितने उत्तर हे सकते हैं，टीजिए। ऐसे उत्तर ह्ने का प्रयत्न कीजि⿱亠䒑口 ताकि दिए हुए समये में आप अनिद्ध में अधिद्र लिख तरे ।

हु \％उत्तर छोटे－छोटे वाक्य में देने का प्रवत्न तीजिघ तात्रि दिए हुए रामय में आप अधिक से अधिद लिख सें।
${ }_{8} 48$ याद रीखिए आपको 12 पिनट में तीनों प्रूनों कर उत्तर टेना है जब पहले प्रंद्न के विषय में कोर्ध उत्तर सुस्मा में न आए तो आप तुरन्त दूहरे प्रक्न को हल करना घुरु कर दीजिए। अगर बीच में या बाद पें पहले प्रभ्न के विजय में कोई नया उत्तर ध्यान में अये तो उसे भी पहले उत्तरों से साथ लिख टीजिये । हर मिनट समाप्त धने पर आपको समय बता दिया जाएगा।

र 5 \＆जब्र आपसे काम आएरम्भ करने को कहा जाय तो तुरन्त पुरू दर दीजिए ।

नीचे एक उदाहरण दिया जा रहा है जिसे स्पष्ट हो जायगा कि आपदो क्या तरना है ？
प्रक्न－ 1. यह घंतार एक विर्भिन्न प्रकार का गंसार दिखाई टेगा
2．पबुभंभं के राज्य में बहुत से नेता उत्यान्न होंगे ।
3．सम्भव है 安 एंक गधा हमाश नेता हो जाये।
4．यह की संभव है फक वह हपारा प्रधानमंत्री बन जां। ।
5．मनुष्न अपने पशु सिन्रों को अपना राजदार बना लें ।
6．और पश़ की अपने शेद अपने पनुड्य मित्रों ते एट नाें，आदि ।

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-4-
$$

## समस्यापें -

1. यदि मनुष्य पन्ष्षों की भाँति उडने लगें तो क्या होगा ?
-5
2. यदि आपये विधालय सें पहिये लग जाँए तो क्या होगा?
3. यदि मनुष्य को खाने तरो आवश्रयक्षता न रहे तो क्या होगा ?

कर्थ ${ }^{2} 2$

> वस्तुओं के नो-ने प्रयोग

ननर्देश:-


 नोे ओर असाधारण प्रोोग जिन्हें आपके साधी आतानी से नहीं सोच सकते, लिखेंगे तो उतसे वह मालूम हो सरेगा कि आपसें वस्तुओं का नोे दुंग से सोचने की योग्यता है ।

पर 2 प्रत्टेः प्रन्न का उत्तर देना अनिवार्य है ।
 ससय दिया जएगा । जब आप एक वस्तु के प्रशोग लिख चुदें तो तुरन्त दूसरी
 नया प्रघोग पहली वस्तु ते बारे में याद आT जाय तो उते भf लिख दीजिए । उत्तर छोटे-छोटे वाक्यों में लिखिए ताकि आपप अधिक तो अधिक लिख सतें । हर प たैं मिनट के बाद समय बता दिया जायेग ।
\& 4 रनीच दिए उदाहरण से आपझो समझ में जाएगा दि आपपको क्या
तरना है ।
उदाहरण-
साचार पत्र
प्रयोग- 1. लाचार पढ़ने के लिए,
2. धूप हो बचने के लिए,
3. बच्चों हे खेलने की चीजें बनाने 子े लिए,
4. लेेटने के लिए,
5. रद़ी कागज जमा करने के लिए,
6. गंदे स्थान तो ढक्ने के लिए आTदि ।

जत अणासे कर्ता आरक्भ करने को कहा जाए तो तुरन्त आरक्भ कर दीजिये।

## समस्यायें -

1. पत्यर तर टुकड़ा
2. लकड़ी की एक छड़ी
3. पानी

कार्य

> नेे मंम्चन्ध पता लगाना

निंर्देश :-
नीचे हुछ गब्दों के जोत्ड दिए गए हैं जो आपरा सें कई प्रकार ते संवंधधत हो रकते हैं । आपाओ चह तोचना है कि वे जितने प्रकार से आपरा में संचंध रखते हैं । देखने में तो जोड़े हे दोनों प्षबबद अलग-अलग गालूइ हो हकते हैं लेकिन यदि
 सम्बंध भाप तोच सेे उन्हें दिए हुए स्थान पर छोटे-छोटे वाबों में लिख दीजिए । देखना यह है क्रि आप सितने अधिऊ और नवीन तम्बंध तोचरर लिख सकते हैं ।
 वस्तुओं के सी जोड़ों के बारे में fिचार लिखने हैं । अत: जहाँ तद संभव हो ंशीघिता. मे उत्तर दीजिए।

नीचे दिए उदाहरण तें पह स्पष्ट हो जाता 展 आपको कणा हरना है । उदाहरण- भदकी आर जानवर

उत्तर- ${ }^{\circ} 18$ आदखी आर जानवर दोनों में जीवन होता है ।
82 दोनों तो भोजन पानी की आवृ्यक्षत है ।
30 हों दोनों को

रु पर दोनों को सर्दी गी का अनुलव होता है ।


दीजिए ।
$-10-$

## समस्यणें -

## औ। पेड़ और मकान -


$-11-$

3 - हवा और पानी।

डा० बाकृर महदी
प्रोफेलर ऑफ ऐस्बवेशः
एन०सी०ई0आ श०टी०
नई दिल्ली-110016

## नाम - <br> कक्षा - <br> विधालय -

पिता/अभिभांक्क का नाम -
आयु -

व्यदसाय -
दिनांक -
-: निद्देश : -
जीवन में नवीनता, मौलिकता एवं रचनात्मक यो यता का बड़ा महत्व है। जीवन की प्रत्येक नई खोज मनुष्य के नये ढंग से सोचने की यो सता का परिणाम है । संतार की बहुत ती ऐसी वस्तुएं है जिन्हें नये-नये विचारों के बारा अनोखी तथा उपयोगी बनाया जा सकता है। ऐली यो सता खखने वाले व्यक्तियों ने ही नई-नई खोजे एवं आविष्कार Pिये है। आ आगे के पृष्णों पर कुछ ऐेती आवृत्तियां दी गई है जिनको आधार मानदर यदि आप विचारा त्मक एवं सुजना त्मक ढंग से सोचेंगे तो आप बहुत से नवीन तथा रोचक चित्र बनाने में सफल हो सकेंगे। प्रत्येक आकृति को आप ध्यानपूर्ट्क देखिए और फिए चित्र बनाने के लिए अपनी चिन्तन-इत्रित का अधिकाधिक प्रयोग कीजिए। प्रत्येक चित्र के लिए आपको नवीन तथा रोचक शीर्ष्क भी सोचकर लिखना है । आपको इन कार्यो के दरने में बहुत आनन्द आयेगा।

1. इस पत्रिका में आपवोो तीन कार्य काे के लिये दिये गये है । प्रत्येक कार्य के लिए अलगअलग समय आपकी सुव्धिा के जिये निर्चित है : हर कार्य को शीहातापूर्वक करने का प्रयत्न कीजिये। यदि ऊाप किती कार्य को निक्चित ससय से पहले पूरा कर लेते है तो भी जब तर्त आपते आने कार्ये के लिये न कहा जाये, आगे न बढ़े बस्कि उसी कार्य के बारे में शांतिपूर्वक सोचते रहें और जो भी नया विचाए आपके मन में आये उसे भी जोड़ें । अन्त में पाँच मिनट का समय और दिया जाएगा। यदि आपके मन में किती भी कार्य के किसी भाग के बारे में कोई नवीन विदाः जाया है जिसे आप पहले नहीं जोड पाये थे, तो उसे इस समय में जोड़ सकते है ।
2. प्रत्चेक कार्य के हर भाग को पूरा कीजिये। जब आपसे कार्य आइम्भ कहने को तहा जाय तो तुरन्त शुरू कर दीजिये ।

यदि आपको कोई वात पूछनी है तो इस समय पूऊ लोजिये। यदि हुज समय कोई कठिनाई नहीं है और बाद में कोई कठिनाई आये तो शांतिपूर्वक उपने स्थान ते हाथ उणये ता कि आपकी कठिनाई दूर की जा एके ।

कार्य - 1

## निर्देश :-



 हुगा सके है । चित्र को नए-नए विचारों से णितना रोचक जना सकते है बनाइए। चित्र को नवीन और रोचक बनाने के लिए आए जलग से फितनी भी वस्तुयें जोड़ना पाहे जोड़ सकते हैं । जब आप $尸 च त ् र ~ प ू र ा ~ क र ~ क े ~ त ो ~ उ स क े ~ ल ि ए ~$ अच्छा गा प्रीर्षक सोग कर लिख टीजिए। पीर्षक को गाप जणनना नटीन अर रोचक जना सकते है; बनाने पा प्यतन ओीजिए।

ड्रॉइंग की सुूद्वा पर ध्यान देने की आावझ्यक्ता नहीं है 1 जित्र भले ही हैसT हो ; देखना तो यह है कि आपषा बनाया दुआ धित्र कितनT आनोखा है । इसालए नक्या करने से कोर्क्र ल़भ नहीं होगT ।

प्रत्येक गिच बनाने के लिए 5 मिनट का समय अतुण-आलण फ़्या जायेग ।


इस भाकृति को पहत रित्रि में भादबो को पगड़ो



 जिच्र बनाना है।

 पीर्षाक : पें़े के खोखले में अण्के पर बैठी हुई १चिड़यां


पीर्षाक :
$2 \cdot$


प्रीर्ष़ :

$$
\begin{aligned}
& -4- \\
& \text { कार्य - }
\end{aligned}
$$

निर्देश़ :-
इस पृष्ठ एवं अगले पृष्ठें पर दस अपूर्ण अTवृत्वियो टी गई है । प्रत्येक आTकीत को पूरा करने के लिए रेखाओी की सहाएता ते आाप नवीन तथा रोचक १िचत्र बनाइए जो आपके १िचार में कोई आौर न सोच सकता हो ।

चित्र को अधिएक से आधिए रोषक बनाने के लिए आाए जितनो भी रेखायें जोड़ेना चाहें जोड़े सकते है । जब आप शचत्र बना तुओे तब उसके लिए एकं अनोख़ा तथा रोंक पीर्ष नीचे लिख दीजिए। आप जितना नवीन और रोचक बना सके है बनाने का पयहन कीजिए।

सम्पृर्ण कार्य के लिए 15 पिनट ता तग़य है ।


पीर्षच : भारत की अपजादी मे तिरंगे छ्ञाण्डे



जीर्षां: हवा में पीर्षष : पड़ों पर फली उड़ती पतंग लगने वाबी पर्ताँ$\because$


पीर्षक :

$$
\text { कार्य - } 3
$$

निर्देश्या:-

 नर्वंन तथा रोषा वित्र बनाना है । वित्र हो रोच तनाे के लिए आप जितनी भी रेखाएँ अन्दर या बाहर बनानT वाहे बणा उतो है।



 जितना नवीन ओर रोचजंत्ना सकते है ⿴नाने का पुयत्न आंजिए। यह


 पूरे गर्य के ीिए 10 पिनट का समय है ।

1 .


2 .


पीर्षा:


| 1 •

पीर्षाक :
प्रीर्षाक :
13.

शीर्घक :


|  |
| :---: |
|  |  |
|  |  |

1

शीर्षाल :

| . Elaboration(N) | Elaboration (V) | Originsility ( N ) | Originality (V |
| :---: | :---: | :---: | :---: |
| Item 1. ........ | . ........ | ......... | ........ |
| Item $2 . .$. | . | ........ | . $\cdot$...... |
| Potal |  |  |  |
| Activity II |  |  |  |
| Elaboration(N) | Elaboration(V) | Originality (N) | Originality $V$ |
| Item 1. ........ | ........ | ...... | ....... |
| Item 2. ......... | ......... | . . . . | ........ |
| Item 3. ........ | ......... | . $\cdot$ 。 | .. |
| Item 4. .......... | ......... | ......... | ... |
| Item 5. ......... | .......... | .......... | ....... |
| Item 6. .......... | .......... | ....0.... | ......... |
| ttem 7. .......... | .......... | ........ | . |
| Item 8. .......... | .....0..... | ........... | . $\cdot$. |
| Item 9. ............ | . . . . . . | .......... |  |
| Item 10. ........... | ............. | . | ... |
| Total |  |  |  |
| - Activity III |  |  |  |
| _-_Elaboration(N) | Elaboration(V) | Originality (N) | Originality $V$ |
| Triangles ........ | ......... | ............ |  |
| Blilipes ......... | .......... | ........... |  |
| Total |  |  |  |
| Score Summary |  |  |  |
| Elaboration(N) | Slaboration(V) | Oricinality ( N ) | Originality (V) |
| (tivityI ........ | ......... | ......... | ........ |
| ActivityII <br> ActivityIII | . . . . . . . . . | ........ | . ......... |
| Total |  |  |  |
| Grand Total |  |  |  |
| STE BACK P AGT FOR FUR | Instructinis rag | ig orig inality some |  |

ORIG INGEITY SCORING FOR RES JNSES NOT NENTIONED IN THE RESPONSE LIST
For any novel response not mentioned in the response list given in the manual, first of all, briefly note it down in space provided below gitren " the number of the activity and the iten to which it belongs. Then, after you have scored all the test scripts, gibe it a. score according to the scheme given in the Manual and note the sonre in the appropriate column in the scoring sheet. In all probability, there will be very few such responses.


Prepaked by: S.D.Kapoor and K.K. Mehrotra Corigincel Test Authors are R.B. cottell and Holla Beloft निर्देश
इस प्रश्नावली से तुम्हारे व्यक्तित्व के बारे में पता लगगगा। इसमें तुम्हारी पसन्द एवं रूचियों के विष्य में प्रश्न दिये गये हैं। तुमको क्या करना है यह दो उदाहरणो हारा स्पष्ट्ट कर दिया जायेगा। प्रश्न तुमको इस पुस्स्तका में पदुने है और अपने उत्तर तुमको स्साथ में दिये गये उत्तर-पत्र पर लिखने है। ध्यान इहें, न तो तुम्हें इस पुस्त्तका पर कुछ लिखना है और न किसी प्रकार का कोई निशान लगाना है । |उदाहरण:-

1. खाली समय में तुम क्या करना चा होगे ?

2. किसी से झगड़ा होने पर क्या तुम आसानी से दुज़ारा मित्रता कर लेते हो?

ॠक हां,
प्रेंब अनिश्चित, हीग नहीं।
इन उदाहरणों से स्पष्ट है कि कोई भी उत्तर "सही "या "गलत"नहीं है। हर एक व्यक्ति की रुच्विया अलग-अलग होती है इसलिये तुम अपने बारे में जैसा सोचते या समझते 1 हो, केवल वही उत्तर सही और ठीक है 1 प्रन्येक प्रश्न के तीन उत्तरों में से एक उत्तर तुमको ऐसा मिलेगा जो औरों की अपेक्षा तुमको कुछ अधिक उपयुक्त लगोगा। अत: प्रत्येक 1 प्रश्न के दिये हुए तीन उत्तरों सें से किसी एक पर उत्तर-पत्र में बने हुए खाने \& के अन्दर एक सही का \& निशाने अक्शय लगाओ ।

जिस प्रकार के प्रश्न अपइ दिये गये है वेपे ही बहुत से प्रश्न इस पुर्तिका के भीतर तुमको मिलेंगे। जब तुमसे पन्ना पलटने को कहा जाए तो पहले प्रश्न से शु करो और अन्त 1 तक करते चले जाओ । प्रश्न का उत्तर देते सभय नीचे लिखी बातों पर ध्यान देना आवक्रयक है :-

Q18 प्रश्नों के उत्तर सच्चाई से तथा निस्संकोच भाव से दो, क्योंक गलत उत्तर देने से तुम्हागा कोई लाभ नहीं है । तुम जेने हो या जैसा करते हो वेसा हो उत्तर दो। यह मत सोचो कि केरी उत्तर देना उचित है।

2 24 यद्धाप इस प्रश्नावली के लिये कोई समय निश्चित नहीं है, फिर भी तुम प्रश्नों का उत्तर शीघता से दो । तुम अपना निर्णय सोच-किचाए कर देने की अपेक्षा तुर्त मन में आये हुयें विवारों के आधार पर दों। कुछ प्रश्न एक दूसरे से मिलते-जुलते मालुम पड़ते है परन्तु कोई भी दो प्रश्न बिलकुल एक से नहीं हैं। अत: तुम्हारे उत्तर भी अलग-अलग हो सकते हैं।

ర3" बीच वाला उत्तर अर्थात् "अनिश्चित" ऐया "ख" $\ell$ केवल तभी प्रयोग में लाओ जबकि पहले या बाद वाले उत्तर का चुनाव बिनकुुल अनम्भव हो । उत: अधिकतर "हाॅ" हया "क" 8 "नहीं" र्या "ग" 8 के उत्तर ही प्रयोग में लाना चा हिये ।
'848ं किसी भी प्रश्न को मत छोड़ो। अगर कोई प्रश्न पूर्कस: तुम पर लागू नहीं हो या तुम्हारी होच के अनुकूल न हो, केवल तभी तुम "अनिश्चित" र्यया "खंखे के नीचे वाले खाने में निशान लगओ।

अगर तुम्हें दुछ पूछना है तो अभी पूछ सकते हो, और यदि बा़द में कोई कठिनाई समझनी हो तो स्वर्य आकर पूछ सकते हो । किन्तु बगल में बेठे साथी को परेश़न मत करो। संकेत मिलने पर पन्ना उलटो और प्रश्नों का उत्तर देना आएम्भ कर दो।

1．जिन निर्देशों को तुमने अभी पढ़ा है，क्या तुम उन्हें－ठीक से समझ गसें हो ？ फकर हां，

फ्री अनिश्रित，
प्रुग ₹ नहीं।
2．यदि अध्यापक अथ्वा अन्य लोग तुम्हारी व्यक्तिगत समस्या के बारे में पूछ－ताछ करते है तो क्या तुम ：
ऊकी अपनी समस्या व्यक्त ऊखी दोनों के बीच में， नहीं करते，

犺犮 अपनी समस्या
व्यक्त करके शान्ति पाते ही ？
3．गोपाल उमेश से लम्बा है । सुरेश इतना लम्बा नहीं है जितना गोपाल । सबसे लम्बा कौने है？ रक \＆गोपाल，

सेखार्ट सुंरेश，
旸反 रमेश ।
4．किसी कार्य का निश्चय करने के बाद，क्या तुम प्राय：
रक \＆कार्य आरम्न करने में रुख्र दोनों के बीच में， ＇कठिनाई अनुभव करते हो，
 करू देते हो ？
5．किसी कार्य की योजना बनाते समय क्या तुम्हें उसकी सफलता में आशा या विश्वास रहता है？ ठक ह हां

उखं／कभी－कभी，
भुण नहीं ।
6．जब लोग तुमको कठिन या नीरस बात समझाते है तो क्या ：
४क त तुम्हारा मन अन्य बातों ४घ $\ell$ दोनों के बीच में，
狗8 प्रतीक्षा करते हो जब तक बात समाप्त न हो $?$
7．क्या तुम्हारे विचार में स्कुल छोडने पर तुम्हारी कक्षा के काफी व्या़र्थी तुम से जीवन में आगे निकल जायेगे ？
र्रे．हां
\}खाई शायद.
रुग नहीं ।
8．क्या आनन्ददायक हहनाओं के विषम में तुम अपने साथियों से खूब बातें करते हो ？ रकठ हाँ，बहुत

दुख § कभी－कभी。 रुगई कभी नहीं।
9．क्या तुम ऐसे सहपाठियों को पसन्द करते हो ज़ो ：

रुक मुख्यत：शान्त और
मननशील होते हैं，

एणी दोनों के बीच में．

र्राठ फुर्तीले० मज़ा किये और हाजिर－जबा ब होते है ？

10．अपना आधा घंन्टा तुम किस प्रकार व्यतीत करोगे 2 ऐक रोचक बातों की पुस्तक खनिश्चित， पदुकर．

ठग८ हा स्यद्यद पुस्तक दढ़कर।
11．रात को अन्होरे में सोते प्पयद क्या तुमंको कभी－कभी ऐसा लगता है कि ज़से तुम्हें विसी का चेहरा दिखा हो या कोई चल रहा हो $?$
रकठ हां．
ठुखण कमी－कभी．
12 खातरा होते हुए भी क्या तुम शत्रु से संहार्ष करना पसन्द करोगे？$?$ रकर्र हां，

छखष शायद，
弯》 नहीं

13．किस पतिस्थ्थति में नुम अधिक परेशानी अनुभव करतें：हो ？ त्री समूह में अत्यधिक क्रियाशील 廹ः अनिश्चित， शु समूह की क्रियाओ
में भाग न लेने में । हो जाने पर，
$14 \cdot$ क्या तुमको नये मित्र जनाने में आसानी होती है？
र्ठ हॉ．
र्तु अनिश्चित，
रोग नें

15．क्या तुम्हें खेन के मैदान में लोगो को देखेने की अपेक्षा टी़ का उत्पाह बढाने के लिए शोर मचाने में अधिक जानन्दं आता हैं？
ठकठ हां
对逶 शायद。
र्रोग नहीं।
$16 \cdot$ क्या तुम अपने दोसो के साथ हूमते समय अधिकितए पुप रहते हो ？女क हों

रगं नहीं।
17．कक्षा में पूछे गये प्रश्न का उत्तर देने की तीब इच्छा होने पर क्या तुम कभी－कभी अंगुलियां चटकाने लगते हो ？ र्रक हां，

रेंण शायद
रुग नेंो
$18 \cdot$ हार के काप के लियें जितना तमय लगाने को कहा जाता है क्या उससे अधिक समय लगाने में तुम विवास करते हो ？
कर हा。
资图 शायद．
狄名 नहों।
$1.9 \cdot$ जब कोई तुक्डारे कार्य में बाधा डालता है तो क्या कभी इतना गुस्सा आता है कि उसे मार बैठे ？

20 जबं तुम दक्षा में किली विष्य पर चर्वा करते हो तो क्या नुम्हारे साथी उसमें तुम्हारे समान उत्लाह नहीं दिखा पाते 2

$21 \cdot$ जब तुम्हारे सहपाठी तुमसे बिना पूछे तुम्हांदी वस्तुओ से खेले लगते है．तो क्या तुम：


22．＂अनुतीर्ण＂का उल्टा होता हह ：
रकृ रेना．
प्रंश सफल होना।
23．जब शान्त रहना उचित हो तो क्या उत्तेजनापूर्ण हटनाओं के खहते हुए भी तुम शान्त रह पाते हो ？

24 यदि तुम पर कोई，कोध करता है तथा चिल्लाता है，तो व्या तुम ：
 रहते हो，

जाते हो और तुम भीं चिलाने लगते हो？

25．परीक्षा से पहले क्या तुम ：
 इस बात से चिच्तित हो जाते

रहते हो．？
हो कि जाने कौन से प्रश्न पूहे जायें．
26．जब कोई तुम्हें उपदेश देता है अंख्यापद या गुरू की तरही कि तुम्हें क्या करना चाहिये तो क्या तुम्हें उस पर हसने की इच्छा होती है ？ रक्री हां

हैंखर्ट शायद，
奵竟 नहीं।
27．जब तुप शहर से．कहीं दूर निकल जाते हो，तो क्या तुम
 गाना पसन्द करते हो．

दृश्यों का
आनन्द लेते हो ？

28．स्कूल में किसी नये अध्यापके या छात्र के आने पर क्या तुम उनले ख्वयं जावर परिवय करते हो ？

20．क्या तुम स्कूल में अच्छे कामों को करने के लिये अपने माता－पिता से सलाह लेते हों？

30．क्या तुम्डाइए जीवन अपने परिवाइ के लोगों एवं मित्रों की अपेक्षा अधिदि सुखसय रहा है ？

31．दिन में जो बाते हो जाती है क्या उनको याद करके तुम कभी－कर्भी बहुत चिन्तित हो जाते हो ？
र्रेक हा＂，

हुग नहीं ।

32．क्या तुम सन्धया के समय एक झील के फिनाऐे ：

हूमना पसन्द करोगे
करोगे 2
33．जब लोग मजाक कर रहे होते हैं，तो क्या तुम ：

$$
\begin{aligned}
& \text { त्रकर सोचते हो कि यह सब } \\
& \text { बचपना है और गलत है. } \\
& \text { मज़ाक का में } \\
& \text { आनन्द नेते हो } 2
\end{aligned}
$$

34－लोगों के तुंमको गन्दा लापरवा है या चंचल कहने पर क्या तुम कभी－कभी परेशान हो गये हो ？

35．क्या तुम गम्भीर बातें करने वालों की अपेक्षा उन लोगों को अधिक पसन्द करते हों जोमन बहलाने वाली विनोदी बाते करते हैं ？ र्यें हां．

ख़्ज（？की－कमी．

36．क्या तुमको खेल देखने में ऊैसे क्क्ती०फुटबाल आदिध अधिक आनन्द आयेगा，याए ：
 कौने जी़तेया． लगी हो 2
37．तुम्होरे पेट में प्राय：कितनी बार दर्द होता है ？
 से आधिक ।
38．जब बुज़र्ग लोग तुम्हारी किसी बात में सुधार करते है तो क्या तम विना जबाब दिये उनके सुझाव सुन लेते हो ？
का हां
प्रंज ${ }^{8}$ शायद。
अंगु नहीं 1
39．मित्रों से वाद－विताद के समय क्या तुप जैसा चा हते हो नि：संकोच वैसा हरएक को बतला देते हो ？
新反 हां，
ऐख शायद，हुष नही।
40. क्या तुम प्राय：एकान्त में，अपने विचारों में खोंे रहना पसन्द करते हो ？ ठक 8 हाँ。

哭夏 नहीं
$41^{\circ}$ इन पंच शब्दो को देडो ：यंकीन，मरोसा० सीखना，आशा और विवासे। वह शब्द जों अन्ध शब्दों से मेल नहीं खाता，वह है ：
कठ आशा
उंब यंकीन，हुग सीखना ।

42．－क्या तुम्हारी कभी－कभी यह इच्छा होती है कि जसे व्यक्ति तुम आजे हो，क्से न होकर तुम कुछ और होते ？
हुक्र हां，
हुखे शायद．करी।

43．जब लोय नुम्हारी उपेक्षा करते है तो क्या तुम्हें उनसे जलन होती है और उन प़र क्रोध आता हैं，चा हे तुमो पतो हो कि से वह लोग जानब्नक कर नहीं कर रहे है हैं ？


फ्रुच
44．क्या तुम कभी－ऊभी अपने माता－पिता हया जिन पर तुम आधश्रित हो है की मृत्यु के भ्यानक स्वप्न देखते हों ？
$\chi_{0} \overline{0} /{ }^{2}$ हाँ？
खंख्र शायद，
女े नहीं।

45．साल में एक या दो बार के अतिरिक्त क्या तुम इस बात का ध्यान रखे हो कि स्रूल का अनुशासन फ्रंग न हो ？
部 C हां，
हुवक्र कायद，
奵夏नहीं।

46．माय：तुम शाम का समय किस प्रकार गुजारोगे ？
 कार्य गएा ।
47．व्या तुम यह अच्छा समझते हो कि लोगों की खूल छोडने की उम्न न होने पर भी उन्हें अपनी इचंणनुसार सूूल छोइने की सुविधा प्राप्त हो ？

48．क्या तुम हिन्दी के उह्हयन में कीविता सुनना पसन्द करोगे？
烸 हां
रुखं शु शयद．
भुग女े नहीं।

49．क्या तुम ऐसा अनुभव करते हो कि तुम दोई चीज तलाश कर रहे हो जिसे कोई भी नहीं समझ्ताता या उसकी चिन्ता ही नहीं करता है ？

気这 शायद。
रंगई नहीं।
50．तुम किसकी अधिक तारीफ करते हो ？
 खतरनाक उड़ाने अरता है． नाटदक्वार की।
51．कोई पुस्तक पढ़ना शुरू करने पेर यदि पुस्तक नीरस ल़ती हैं तो वया तुम ： प्रकर शायद ही पूरी पुस्तक
पढ़ते हो समा प्त करे ही ल्लेते
52．गर्सियों की हुटटी में दस－पन्द्रह दिन के लिये तुम क्या करना पस्ने करोगे？
 गांव में सेर－सपाटT बैरना एवं के रूप में कार्य पक्षियों को देखना．

करना।
53．प्रति दिन नुम लगभा Pकतनी बार किसी कार्य को चाहते हुए भी करने से सक जाते हो $?$如 लनाम एक बार。

54．क्या तुम्हें अपने मित्रों के साध गली में खड्डे होकरू गप्पें मारना अच्छा लगता है 2

55．तुम क्या पदना पसन्द करोगे ？
§क मुनव शारीर कंसे कार्य
ऐखण अंनिंश्चित
挕婴 पार्टी में ऐलोगे का
प्रबन्ध केसे किया करता है，

56．प्रायं：तु क्या सुनना पसन्द करते ोे ？ रुक संगीत．
$\ddots$
57．यदि तुम्हारे आसास－पास के लोग तुमसे खिते－खिचे रहते है，फिर भी क्या तुस प्रसन्नचित् रह लेते हो 2

58．जब कोई नथा त्विकर्थी तुम्हारी क़़्ा में प्रवेश लेता है तो क्या वह तुमको भी उतनी ही जन्दी जान लेता है जितनी जल्दी अन्य व्वारिर्धियों को ？ रकं हों，

रुखाँ शायद，扣 नहीं।
59．＂पहनने＂का जो सम्बन्ध＂कपड़े＂से है वही सम्बन्ध＂खने＂का ：

60 －जो सम्बन्ध＂मूब＂का＂खाना＂से है，वही सम्बन्धा＂प्यास＂＂का ：
र्रकंध नल से हैं
61 ．क्या तुम्हारे मेन में कभी ऐेल विचार आये हैं कि तुम्हारा पैदा न होना ही अच्छा था

62. अपनी कक्षा में किसी भी पद के लिये न चुने जाने पर भी क्या तुस्हें सन्तोष रहेगा ?
रेकठ हां

> हुख शायद:

65. क्या प्राय: तुम अपने जेब-खर्व के बचे हुऐ पैसे से : §कई अपने स्पोर्टस के अद्यापक को अनिश्चित。 उनकी सफलता पर एक सुन्दर
शुगु किसी धर्मार्थ कार्य में लगाओगे ? सा उपहार होगे.
64 . लोगों के ऐसे प्रश्न पूछने पर जो कि उनको नहीं पूछने चाहिए पिर भी क्या तुम उनको नमूता से उत्तर दे देंते हो ?

建 श शयद नहीं।
65. क्या तुम लोगों के मनोरंजन के लिये सा हसिक कार्य करना पसन्द करते हो? ४क हाँ
66. व्युप निश्चय कर लेते हो कि तुम जो कार्य कर रहे हो वह एक अच्छा कार्य है ?

67. क्या तुम अपने वियारों को शब्दों पारा आसानी से व्यक्त कर लेते हो? प्र्वी अध्कितर
68. जब तुमसे अपने विचाइों की पुष्ट्ट के लिए कहां जाता है, तो क्या तुम :
 असमर्थ पाते हो,

रहता है ?
69. प्राय: कितनी बार तुम किसी बात पर इतने उत्तिजित हो जाते हो कि उस बात को दूसटों को बताये बिना तुम्हें चेन नहीं पझ़ती?
कार शायदंद ही की०
70. तुमको यदि निश्चय हो जाये कि जिती ने तुम्हारे पाथ अन्याय क्या है फिर भी क्या तुम उसे आसानी से भुला देते हो ? रक है हा.

क्रें श शायद,
ठुगष नहीं।
71. तुम किस काम का अधिक विरोध करते हो ?
 दरना. पालन करना जिनको वस्तुओं के बारे में तुमसे कम ज्ञान है ।
72. क्या तुम पसन्द करोगे $P$ कि स्क्लन की नुमाइश में तुम्हारा कार्य :
 अध्यापक्र सारा दिखाया जाये.
73. अगर तुम मनुष्य न होते तो क्या बनना पसन्द करते $?$

रक $\$$ समुद्र पर उड़ने वाली चिडिया: अणन अनिश्चित,
रुग हुडदोड़ का एक घोड़ा ।
74. किसी वस्तु को खरीदने की तीत्र इच्छा होने परर क्या तुम यह समझ सकते हो कि:
 लो कि वा स्तव में तुम्हे उसकी आक्यकता भी है,

75．किसी बात का निर्ण्य करने के पहले क्या तुम छोटर से छोटी बरतों पर भी ध्यान देते हो ？


76．अगर तुम ःमुद्री जहाज पर हो तो ुु क्या पसन्द करोगे？
 वहां के निता सियों से बातें करना．
77．आगर पिक्सी नाटक में तुपको वह पार्ट नहीं मित्रा जिंको नुम अच्छे और त्वाभाकिक रूप से कर सकते हों तो क्या तुप चाहोगे कि ：

78．＂पढाने＂का अर्थ होता है ：

79．एक व्याक्त ने एक चित्र की ओर इशारा करते हुए कहा कि＂मेटे कोई भाई－बी़़न नहीं है。 लेकिन उस व्यक्ति का पिता मेरे पिता का पुत्र है，जिस व़क्त के चित्र को वह देड़े रहा था वह ：
§ुक्रे उसका पुत्र था．

80．अन्य बहुत से लोगों की अपेक्षा क्या तुसकों अंमेलेपन से कम परेशानी होती है ？
新复 हां。
福 ${ }^{8}$ शायद，
财坒 नहीं।
81．घर वालों के विचार में स्या तुम अक्षश ：
 या नींद में बडबड़ाते हो？
82．क्या तुम क्षा में मश्न पूछेते रहना चित समझते हो जब तक कि बात समझ में न आ जाये और स्वयं को सन्तोष न हो जाये ？

83．तुम किस प्रकार विससे कठिन समस्या का हल अच्छी तरह से निकाल सकते हो 9
 उंद्यापक से बांतचीत
84．क्या तुम अच्छे मंसम में सोना पसन्द करते हो，जबकि ：


हों जिस्से बाहर का
शोरगुल इत्यादि न सुनाईं दें？
85．गली में लावारिस यर भूरे कुत्ते के पि ले को देखने पर क्या तुप：
 पर छेड देते हो जो ओवारा कुत्तों को पक्डते है ।

सोचते हो कि क्या किया जायें？

86．दूसरों की अपेक्षा का तुम किसी बात का न्रिश्चय ；


87．किसी पार्टी में अम्नन्त्रत किये जाने पर क्या तुम हमशा प्रसन्नता से जाते हो और निद्रिचत रहते हो कि तुम सब ठीक करोगे ？

88．क्या तुममें कोई ऐेपी क्शेष्ताए या हुनर है जिनकों तुमने अभी तक लोगों के सामने प्रगट नहों किया है ？
र्रक हां．
89．अगर कोई अद्यापक तुम्हारे अच्छे दो स्त की आव्रयकता से अधिक यालोचना करता है तो क्या तुम अपने मिन्र के पक्ष में बोलो लगोगे ？

90．क्या तुम अपने अहटापकों से उन विष्यों पर आसानी से बातें कर लेते हो जिनके बारे। में तुम स्वूल में चिन्तित रहते हो ？

91．क्या तुम कभी－कभी मानसिक संधर्ष के कारण ध्राता हुआ अनुभव करते हो ？

92．क्या तुम्हारी महत्वपूर्ण विष्यों पर बनी योजनाएं केलल उन निकम्मे लोगों के कारण बिगड जाती．है जो अपना स्वयं का काम नहीं देखेते？

93．जब तुमंको एक नेया ऐोल दिखाया जाता है，तो क्यत तुम्म ：
敬 खेले हैं，

गुगठ एकदम स्वर्य खेलने की कोशिए करते हों ？
94．क्या तुम कक्षा में प्रथम आने की अपेक्षा फिल्म में काम करना अधिक पसन्द करोगे ？知 हां，

95．किसी के गरज कर बोलने पर क्या तुम्हारी इच्डा होती है कि उसके विस्द बोलो 2

96．बड़े हो जाने पर तुम कौन जा कार्य करना पसनन्द－करोगे ？
 नहीं किया है，बनने का कार्यं।
97．इन पांच शब्दों को देगो ：आरे，किन्तु，यदि．य्स पि，अभी । जो शब्द सन्य शब्दों से मेल नहों खाता वह है ：

犯
98．जब नुम प्रसन्नचित होते हो तो क्या अनानक छोटी सी बात तुन्हें दुःखी बना सक्ती है ？ र्रकर्य हां。

हुग \％नहीं
99．क्या तुम ऐसे मूड में आते हो जब तुम जरा भी परवाह नहीं करते कि नुम्हारे मित्र तुम्हारे बारे सें क्या सोचते है ？ ॠक्री कभी नहीं．

そखई बहुत कम．
कुग कभी－कभी ।

100．क्या तुमको कभी भी इतना अधिक असन्तोष हुआ है कि तुमने इव्यं से कहा है कि \％शर्त लमाता हैं कि अध्यापकों की अपेक्षा स्टूल को में अच्छी तऱह चला सकता हू $?^{\circ}$ पूकर हां，
101．यदि तुम किसी पत्र के संवाददाता होते तो किस क्षेत्र की ख़ररें देते ？ उंक फिल्मी समाधार．

खुख सनिशिचत
रुपर्य राजनतिक समाचार।
102．तुम विल म्रकार की नोकरी वाहोगे？
र्रेकरी जो स्थाई और सुरक्षित हो अविश्वित，
प्री\％जिसमे दोडदूप करने जा हे उसमे कणिन पस्थिभ क्यों न करना पड़े，
103．क्या तुमको थोड़े से मित्र रबना अधिक फसन्द है बजाय बहुत से मित्रों के जसे कि अधिकतर लोगों के होते हैं ？
₹क हां

104．क्या तुप्हारे विचार में ऐसे ऐेल अच्छे होते हैः जो ：

105．कक्षा में बोलने के अवसर पर क्या कंभी－कभी उत्तेजना के कारण तुज्हारे हाथ कापने लाो है और दिल की धडकन वदु जाती है ？

106．प्राय：तुभ वथा पसन्द करोगे？
वुकर्ण संगीत सम्मेलन का कार्यक्यम घुनना．
रुण संड़ों की लडाई देखना ।

107．अगार तुमदो हूमने का मोका P．कले तो क्या तुम ：
एकं नये－नये लोगों को व उनके ऐंख ंनिश्चित。 रहन－जहन के विभिन्न तरीकों को देखोये．

$$
\begin{aligned}
& \text { पुग मरीनों एTरा, बडे-दडे } \\
& \text { कार्य एवं मनोतम दृश्य } \\
& \text { देखोगो ? }
\end{aligned}
$$

108．क्या तुमने आज़ल या जब बहुल छोटे थे，करी यह सोजा है कि अगर तुम कहीं सफर में खो जाओ तो क्या करोगो ？新新 हा＂。
109．क्या दैनिक जीवन में तुम ： फ्रेकर्ट एक से मूट में रहते हो，

र्रंघ शायद，领 नहीं ।
 पाक्त और सूर्ति से युक्त तथा की़－कमी एकंदम थ्के हुए महसूस करते हो $?$

110．क्या तुस कीी－केभी बेकार की बातों से इतने चिन्तित हों जाते हो कि उन बातो से तुमको छुटकारा नहीं मिल पाता ？


पखंश शायद．नहीं।
111. क्या तुम अपने लिए उन कपड़ों इत्यादि को अधिक पसन्द करते हो :
 धावहात्कि हों ?
112. जब तुम महान कार्यों के बारे में पढ़ते हो तो क्सा तुम पोचते हो कि :
 सन्य लोग है ?
113. क्या तुमको कभी-कभी दतनी हल़ाहंट होती है कि कहों अचंजक आवाज होने पर तुम बहुत जोर से चौक जाते हो ?

114. क्या तुप निश्चित हो कि तुमने प्रत्येक प्रश्न का उत्तर दे दिया है? वेकरी हां,

र्रिण नहीं।


[^0]:    प्रहन संख्या

