INTRODUCTION
1.1 The Problem:

Creativity is recognised as one of the greatest assets of the man. Almost every era witnessed a host of enlightened minds striving to expedite the man's progress towards a complete mastery over himself and his environment, but only a few of them did so. Infact, it is always the ideas of these few creative minds of each era that have led to tremendous changes in the history of man's culture and reshaping of his own fate. It is only the original contributions of these individuals that form the foundation of human civilization. Had these great minds not worked, humanity would have faced stagnation in all walks of life.

Currently there is competition between nations and among the individuals (all over the globe), in relation to those factors which will determine the ultimate superiority of one over the other. Creative acts influence enormously not only scientific progress but society in general, hence those nations which learn best how to identify, develop and encourage the
creative potential in their people, find themselves
in very advantageous positions. Many of our present
means of travel, communication and production can
be traced back to the creative thinking of relatively
small number of people. Creativity at its highest
level has probably been as important as any human
quality in changing history and in reshaping the world
(Taylor, 1964).

It has generally been realised by all the
nations, whether big or small, developed or developing,
that their survival depends upon how effectively they
can conserve and utilize their most precious human
resources - their gifted children. The greatness of
a nation varies with the number of geniuses it produces
and the honour in which it holds them. Toynbee (1964)
in his famous paper, entitled, "is America neglecting
her creative minority?" observed: "to give fair chance
to potential, creativity is a matter of life and death
for any society". This is all important because the
outstanding creative ability of a fairly small percentage
of the population is mankind's ultimate capital asset.

The eternal dynamism of human race whereby man
has not only managed to survive on the surface of the earth but has also made astounding progress in all fields is nothing but a rich tribute to one of his unique abilities - his ability to "create". It is this characteristic in man, which has differentiated him from other creatures of the world and has, enlightened him with the spark of exploration. Further, man has felt an unsatiated thirst to explore the unknown world.

The gravity and the complexity of the challenges facing men in the 20th century appear to exceed greatly those of preceding times. Each country has made this claim, and in each country, this assertion has been correct. But today the importance of investigating the nature of the creative men has been accentuated by the rapid growth of technological knowledge, the increased emphasis upon the exploration of space and the idealogical and economic competition with the outside world. To quote Torrance (1962), "The world is changing so fast that past 'truths' often mislead instead of help and no longer is it easy to apply past truths to the problems of the present and the future". In the present times when knowledge, constructive, dispensible or indispenible, genuine or not, is proceeding by the most incredible leaps and bounds into ambiguous and
fantastic age, genuinely creative adaptation seems to represent the only possibility that man can keep abreast of the continuous change in his world. An investigation into the nature of creativity deserves special consideration in a world of stepped up cultural change, explosion of knowledge and population, food problem and the like.

India being one of the developing nations needs more scientists, technicians, educators, administrators, etc., she cannot, therefore, neglect its creative minority any longer. Further, in a country which is wedded to democracy every individual has the right to develop to its fullest because otherwise democracy and the equalization of opportunities become a meaningless concept (Cropley, 1966). The importance of creative education and its nurturance has also been stressed by the Indian Education Commission (1964-66). The Commission has reported that, "even the talent that enters schools and succeeds in climbing the educational ladder, does not flower fully because it is not discovered sufficiently early and is often studying in poor schools". In the same vein, Raina (1971) has also expressed his concern that Indian system of education has emphasised the development of abilities in the area of convergent
thinking whereas divergent thinking has not been rightly emphasised and encouraged. A critical review with regard to prevailing pattern of education has been made by Rugg (1963). The author argues that a total revolution in education and a restudy of the foundation of a new theory of curriculum teaching and administration is the need of the day. He further states that educational theory should be appropriate so as to suit the changing culture. Finally, Rugg suggests that creativity should be the basis of a new teaching pattern and for the exploration of knowledge.

While reviewing the concern of Raina (1971) and Rugg (1963) it is observed that there is an appreciable change among researchers who have taken to such studies as are directly related to the exploration of creative talent at various school levels. These include (Zargar and Dhar, 1988; Chadha and Mehta, 1982; Tripathi, 1979; Jha, 1978; Kumar, 1978; Patel, 1977; Rawat and Agarwal, 1977; Srivastava, 1977; Gakhar, 1975; Bedi, 1974; Joshi, 1974; Mehdi, 1974; Sharma, 1974; Bagga, 1973; Dutt, et al. 1973; Goyal, 1973; Lalithamma, 1973; Paramesh, 1973; Passi, 1972; Singh, 1972; Khiri, 1971; Ahmad, 1969; Raina, 1968; Chandraker, 1964; Pathak, 1962). These studies have encompassed a variety of factors which
are directly or indirectly related with creative expression of children at different grade levels. These authors have invariably taken into consideration creativity and its bearing on physical, mental and social development of children at different grade levels.

With the physical growth of a child, his cognitive development also takes shape and around adolescence, a boy or a girl is at the peak of her cognitive understanding and abstract thinking. It is, therefore, desirable that the talented children at school level be encouraged through special instructions so that their thinking is stimulated for a better and constructive reactions. It is pertinent to accept the suggestions made by Raina, (1971) and Rugg (1963) that creative talent needs to be spotted at an early age, so that these children, with the divergent capability, are encouraged to grow with their spontaneous responses and reactions.

A nation's progress and prosperity rests in the care it takes for its children. India has the largest population of children in the age group of 6-18 years. But it is unfortunate that most of the
children have never got enrolled in any formal school. This is more true about rural India. Even at the school level much efforts have not been made in understanding the merits and problems of the students who represent a variety of characteristics which they do not share with their friends. Adjustment at school and home, a positive aspiration for high achievement in academics and the nurturance of children with special abilities are some of the important issues which merit attention in our schools. It has been rightly stated that only twenty percent of the population apply their mind to invent and discover new vistas of knowledge in all fields and the remaining 80% are only consumers.

Creativity, as an asset, does not seem to have been rightly recognised or cultivated either in our conventional school system or in the public schools. But because of an explosion in research it is only for the past two decades that Indian Psychologists, parents, and the educationists have become concerned about creative individuals in the society. School represents the right place for the discovery of such
talented children who merit special attention for the excellence of their talent. Although a few attempts have been made in this direction by some of the researchers in the country but the concept of awareness among parents and teachers with regard to creative talent is yet to be accepted and appreciated.

Creativity does not function in the absence of a proper nurturance of its accompanying characteristics, which include level of intelligence and a favourable atmosphere at home and school for the nurturance of the talent. It is, therefore, imperative that the children with a creative thinking should be provided with a stimulating environment in school and at home. Any interference due to unfavourable conditions in the family or in the school, will deprive such gifted children from making a genuine contribution towards the society.

The interests of creative subjects are obviously different as compared to the interests of common people. Vocational interest is one of the areas in which Strong (1943) found that eighteen years follow up of creative subjects, from their 9th class to the stage where they had established themselves on
different vocational positions, had proven that proper nurturance with the positive academic climate helps the creative people to contribute to the society which others cannot. This has also been established by Roe (1951) while working on her project on eminent biologists. Along with the vocational interests, the resilience in the scholastic performance is an essential requisite for the nurturance of creative ability. The interfering factors like poor adjustment in school and family and non-stimulating school climate are some of the factors which disrupt the promotion of creative talent among the students.

While keeping in view the factors which go with the promotion of creative talent and the factors which interfere with the promotion of such a talent, the present investigator looks into the problem of creativity and its promotion in the light of adjustment, sex differences, vocational interests and scholastic achievement.

The review of literature, based on the Indian and Foreign studies has drawn the attention of the present investigator towards the factors already
established with creativity as a characteristic. In this regard, various studies (Pathak, 1989; Bal, 1988; Vasesi, 1985; Joshi, 1981; Kumar, 1981; Singh and Mehra, 1981; Asha, 1980; Bharadwaj, 1978; Babu, 1977; Saxena, 1977; Singh, 1977; Hocevar, 1976; Paramesh and Narayan, 1976; Tanprabhat, 1976; Bhan, 1972; Gilchrist, 1972; Sharma, 1971; Torrance, 1971; Schaefer, 1970; Tripathi, 1969; Heist, 1968; Windholz, 1968; Dauw, 1966; Raychaudhury, 1966; MacKinnon, 1965; Chamber, 1964; Getzels and Jackson, 1962; Ziller, 1957) reveal that creative students are more inclined towards subjects which demand attention, intuition and understanding. These subjects include physical sciences, biological sciences, art and poetry. On the other hand, some researchers have revealed that creative subjects have poor adjustment viz.: social, emotional, home and school, (Pathak, 1989; Zargar and Dhar, 1988; Mohan, 1981; Kour, 1980; Singh, 1980; Sansanwal and Jarial, 1979; Verma, 1979; Asha, 1978; Jha, 1978; Dasgupta, 1976; Gupta, 1976; Nair, 1976; Joshi, 1974; Komarik, 1972; Barron, 1965). It needs to be mentioned that creative subjects have a better level of intelligence but it is not necessary that subjects with creative talent will also be high in intelligence. While studying the missing links in the studies the present
investigator felt, that there is a need to look into the creativity as a factor in relation to vocational interests, scholastic achievement and adjustment problems. Accordingly, on the basis of a review of the literature, the present investigator considered to conduct a study on the boys and girls of district Anantnag (J & K). The problem was formulated as under:

2 Statement of the Problem:

"Vocational Interests, Adjustment Problems and Scholastic "Achievement of High and Low Creative Students".

It needs to be mentioned that so far no such study has been conducted in the Kashmir Valley and more so in the district Anantnag. Further, it is interesting to observe that during the past two decades the school enrolment has gone up phenomenally. Therefore, it is possible to study creativity in relation to vocational interests, adjustment problems and scholastic achievement among the school boys and girls at the high school level. This study will lead towards the development of a profile of such students as are creative and can contribute towards the society.
1.3 **Objective of the Study:**

The following objectives were formulated for the present investigation:

1. To identify high and low creative students.
2. To compare high and low creative students on their vocational interests.
3. To compare high and low creative students on their level of adjustment.
4. To compare high and low creative students on their scholastic achievement.
5. To find out the sex variation on vocational interests, adjustment problems, and scholastic achievement of high creative group of subjects.
6. To find out the dominant factors of interest and adjustment of high and low creative students.

1.4 **Hypotheses:**

Keeping in view the objectives of the study, the following hypotheses were formulated:

1. High and low creative students differ significantly in their vocational interests.
2. High and low creative students differ significantly in their adjustment problems.

3. High and low creative students differ significantly in their scholastic achievement.

4. There is no sex variation in the vocational interests of high creative group of subjects.

5. There is no sex variation in the adjustment problems of high creative group of subjects.

6. There is no sex variation in the scholastic achievement of high creative group of subjects.

7. The dominant factors of high and low creative students on vocational interests and adjustment bear no similarity.

1.5 Delimitations:

Normally a researcher takes into consideration the limitations which interfere in his pursuit for research. This is, of course, a positive and an objective attitude on the basis of which an investigator lays the canvas of his study. This ultimately takes care of the factors which he can explore and the ones which he cannot fathom. In the present study the
The investigator has made a modest attempt is surveying the high and low creative subjects and then to find their vocational interests, adjustment problems and scholastic achievement. Accordingly, the following delimitations were considered:-

(1) The study has been confined to the boys and girls of class 10th in the District Anantnag Kashmir. This district was considered in view of the personal acquaintance of the investigator with the teachers and students of this area.

(2) Finally, it needs to be mentioned, that out of total population of boys and girls studying in class 10th of district Anantnag, it was decided that a representative sample of one thousand students (700 boys and 300 girls) randomly drawn be included in the study.

(3) Only Govt. Schools, which represent subjects from all sections of society, were included in the sample selection.
1.6 Definitions of the Variables:

The variables under investigation are:

(1) Creativity;
(2) Vocational Interest;
(3) Adjustment Problems;
(4) Scholastic Achievement.

1. Creativity

Although creative thinking ability has been acknowledged as the highest mental function, yet it has become a central concern in educational research only recently. There is no universally accepted definition of the creativity, although there are as many definitions as the number of researchers in the field. However, there is an agreement among the researchers that creativity is a divergent expression of one's ability. The creative act results in a production that is new or original. It is the capacity to devise new forms, come up with fresh ideas, and see deeper meaning in objects, events, interpersonal relationships and symbolic materials (Dewey, 1910; Simpson, 1922; Anderson, 1959; Guilford, 1959; Mednick, 1962; Stein, 1962; Parker, 1963). It is a
process by which original patterns are formed and expressed (Murray, 1938; Haefele, 1962; Kneller 1965). Creativity has been considered as problem solving activity characterised by novelty (Simpson, 1922; Getzels and Jackson 1962). Some of the definitions which are precise and compact are reproduced here:

Torrance (1962) has defined creativity in an operational form:

"Creativity is a process of becoming sensitive to problems, difficulties, gaps in knowledge, missing elements, disharmonies and so on, identifying the difficulty, searching for solution; making guesses or formulating hypotheses about the deficiencies, testing and retesting of these... and finally communicating the results".

Kneller (1965) has defined the term creativity in the following words:

"Creative thought is innovative, explorative, venturesome, impatient of convention, attracted to the unknown and undetermined".

Wallach and Kogan (1965) defined creativity as:

"the ability to generate or produce, with same
criterion of relevance, many cognitive associations".

"Creativity in the present study refers to a composed score as measured through Mehdi's verbal test of creativity on fluency, flexibility and originality".

As the present study is concerned with high and low creative subjects. The following procedure has been employed for classifying subjects as high and low creatives.

**High Creatives:**

High creatives in the present investigation shall refer to those subjects whose scores fall on and above the 3rd quartile on the Baquer Mehdi's Verbal Test of Creative Thinking.

**Low Creatives:**

Low creatives in the present investigation shall refer to those subjects whose scores fall on and below the first quartile on the Baquer Mehdi's Verbal Test of Creative Thinking.

2. **Vocational Interests**

Vocational interests have often been defined as what the individual prefers to do. Out of a number of vocational alternatives he expresses his preference
or interest for one or another and this forms his choice. There are several studies in the literature of vocational psychology wherein interest is defined as preference. According to this approach the individual gives expression to his best liked occupation (Fryer, 1931; Trow, 1941; Gilger, 1942; Ginzberg, 1951; Hamburger, 1958; Crites, 1969).

Bingham (1937) has defined interests in the following words:

"An interest is a tendency to become absorbed in an experience and to continue it".

Strong (1943) defined vocational interests as:

"The sum total of likes and dislikes for a wide range of stimulus objects and activities".

In the words of Crow and Crow (1963) vocational interests mean:

"...the motivating force that impels us to attend a person, thing or an activity or it may be affective experience that has been stimulated by the activity itself".
Crites (1969) has defined vocational interests/choices operationally as:

"An individual 'x' makes a vocational choice if he expresses an attention to enter a particular occupation".

In the same direction William James (1969) speaks about vocational interests as:

"a form of selective awareness or attention that produces meaning to one's experience".

Interests are being expressed through a number of ways e.g. expressed interests and the inventoried interests. In the present study, operational definition of vocational interest has been taken on the basis of interests expressed by subjects through Chatterji's Non-Language Preference Record and the definition reads as:

"Interest as measured by the scores on the Chatterji's Non-Language Preference Record".

Adjustment

Adjustment is the process in which an individual learns certain ways of behaviour through which he enters into a relationship of harmony with its
environment. Thus, he tries to lead a life acceptable to society. In its simplest form, the term adjustment means that we should accommodate ourselves in order to fit certain demands of our environment. It also deals with how we make such accommodations and how successful we will be in finding solutions of our problems. Adjustment as a concept has been defined and interpreted by various thinkers. Some of the definitions are as under:

In the words of Lehner and Kube (1955):

"Adjustment is the continuous process of interaction between ourselves and our environment and it is the effectiveness of an individual's efforts to meet his needs".

According to Shaffer and Shoben (1956):

"Adjustment is the process by which a living organism maintains the balance between his needs and circumstances that influence the satisfaction of his needs".

Crow and Crow (1974) defines adjustment in the following words:

"Adjustment refers to an individual's characteristics of habitual understanding"
of reactions to and manners of solving problems, situations which he experiences".

Encyclopaedia Britannica (1974) interprets the term adjustment as:

"The process of behaviour by which men and animals as well, maintain an equilibrium between their needs and the demands and obstacles of their environment".

In the Eysenck's Encyclopedia of Psychology (1975) adjustment refers to:

"A state in which the needs of the individual on one hand and claims of the society on the other are fully satisfied".

Lazarus (1976) defines adjustment in the following words:

"Adjustment consists of the psychological process by means of which the individual manages to cope with various demands and process of life".

The above definitions were taken into consideration before an operational definition for the present study was framed.
In the present study the operational definition of adjustment shall refer to:

"The scores obtained by the students on Bell's adjustment inventory translated by Qadiri (1964)."

4. **Scholastic Achievement**

Scholastic achievement of pupil refers to the knowledge attained and skills developed in the school subjects. So scholastic achievement means the achievement of pupils in the academic subjects.

Trow (1956) defined scholastic achievement as:

"Knowledge attained ability or degree of competence in school tasks usually measured by standardised tests and expressed in grade or unit based... of pupil performance".

Good (1959) refers to scholastic achievement as:

"the knowledge attained or skills developed in the school subjects usually designed by test scores or marks assigned by the teacher".

According to Sinha (1970) scholastic achievement means:
"...students whose academic performance had been of superior character in the form of high percentage of marks were taken as successful candidates. On the other hand, students who had failed in the previous examinations, and had obtained low divisions in their examinations were considered as individuals who had failed in their attainments". (p. 31)

Scholastic achievement in the present study has been assessed on the basis of aggregate marks in all the subjects as secured by the students in their school examinations. This method of assessing scholastic achievement has also been used by many researchers (Savage, 1962; Child, 1964; Sinha, 1970; Passi, 1971; Upmanyu, 1974; Paramesh, 1976 (a); Contractor, 1977; Mehdi, 1977; Panda and Panda, 1978; Mehta, 1980; Singh, 1980; Zargar, 1980; Chada, 1984).

In the present investigation the scholastic achievement has been considered as:

"Aggregate mean percentage of school examination marks in two consecutive examinations".