A STUDY OF PHYSICAL ABILITIES OF COLLEGE STUDENTS IN DAUND CITY AND ITS SURROUNDINGS

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Introduction:

A healthy body has a healthy mind. If the mind and heart are pure, good work is done by that person. A sense of playing is created while watching the game. Physical activity occurs through sports. Sports bring happiness, motivation, encouragement, fighting strength, willpower etc. College-aged youths experience physical changes during puberty. In addition to this, anxiety, irritability, anger, pain in the mind, changes between men and women, etc. appear in the stage of puberty. Physical education is very important and necessary for the college students. It is beneficial for the growth and development of the students. The effect of internal and external forces acting on the human body on the student depends on the growth and progress. Basic movements for student is his walking style, running style, sitting style, good or bad habits which should be imparted to the students. To create interest in sports among college students it is necessary to acquire skill in sports for that interest, convenience, need and importance, sports guide etc. things are necessary. The key of living is health,which requires well-planned efforts and consistency to grow.

Abstract:

Two colleges from daund city and vicinity were selected for the study of students physical ability in which total 240 students were selected from which was 77% students were from the age group of 17 to 20 years. In the physical ability tests, sit and reach test, bent knee sit ups test and hard ward steps test were conducted. When flexibility was measured, the flexibility of the students was good.It appeared that but 3%. The flexibility of the girl was found to be very low. In measurement of abdominal muscle strength, boys 38% and girls 76% of students need to train abdominal muscle strength. In Cardiovascular endurance measurement 16% boys and 24% of girls are found to have less cardiac capacity.

Key Word:

Physical Fitness, Physical Test, Flexibility, Muscular Strength, Cardiovascular Endurance

Objectives of the Research:

(1) To test the physical ability of a college student

(2) To assess the physical fitness of the college student.

(3) To analyze the physical capacity of the college student.

Research Methods:

Descriptive method survey and test was selected to study the physical ability of college students in Daund city and its surroundings.

Sample Selection:

Out of the total number of 1306 students in two colleges of Daund city and surrounding area, 240 students were selected as sample, out of which 126 boys and 114 girls were selected for various tests.

Selection Tests:

Test no. 1 – Sit and Reach Test Objective – To check the flexibility of the body

Test no. 2 – Bent Knee Sit Ups Test Objective– To test the strength of the abdominal muscles.

Test no. 3 – Hard Ward Step Test Objective- To check the strength of the heart.

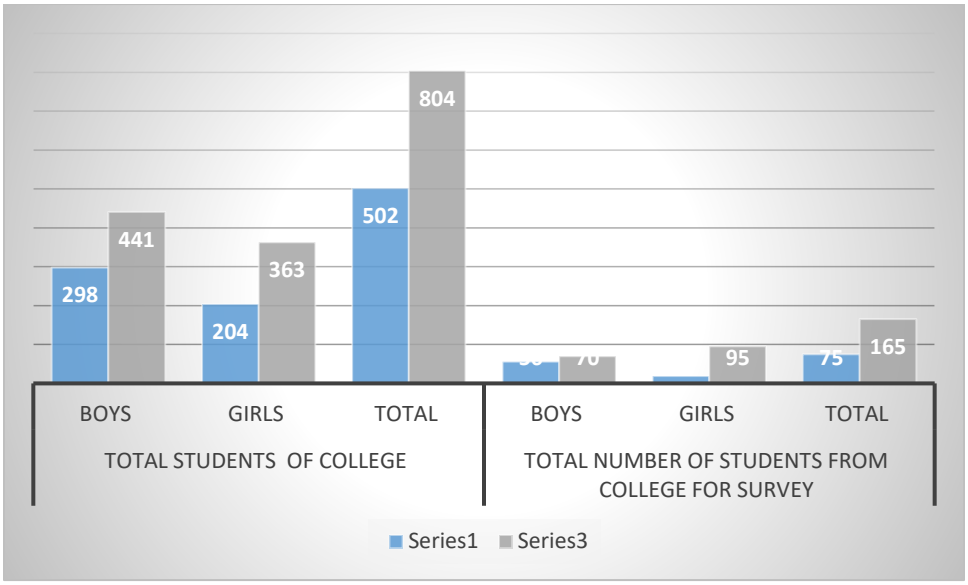
Data Analysis and Interpretation:

In the month of December 2022 DaundTaluka College of Arts and Commerce, Daund, and Late. KisandasGulabchandKataria College Daund, Out of total of 1306 students from these two colleges 240 students were selected out of which 126 boys and 114 girls were selected for the survey and test and the information obtained was analyzed and interpreted.

Table No 1

Sr. No.	College Name and Address	Total Students of College			Total Number of Students from College for Survey		
		Boys	Girls	Total	Boys	Girls	Total
1	DaundTaluka College of Arts and Commerce, Daund, Dist – Pune.(Maharashtra)	298	204	502	56	19	75
2	Late. KisandasGulabchandKataria College Daund, Daund, Dist – Pune.(Maharashtra)	441	363	804	70	95	165
	Total	**739**	**537**	**1306**	**126**	**114**	**240**

Chart : 1



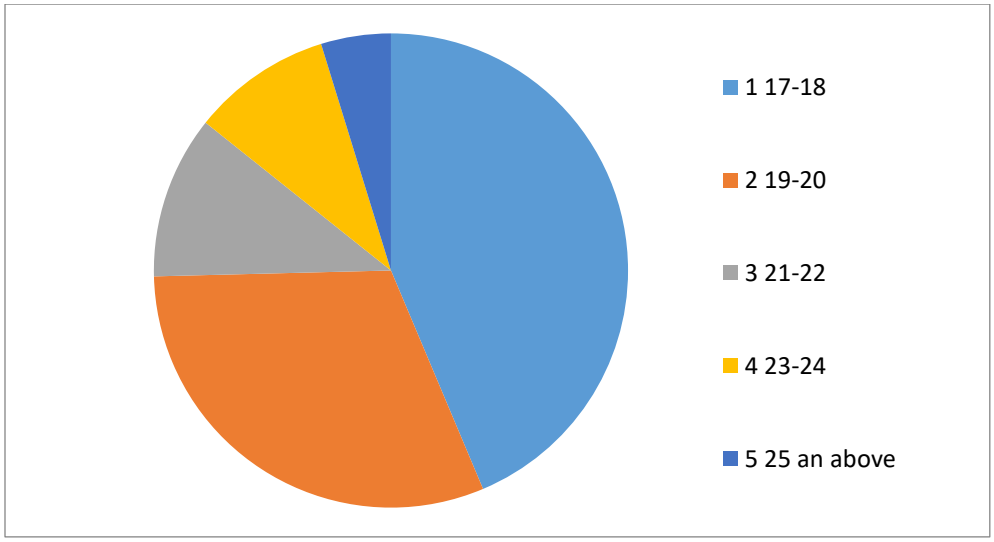
Analysis and Interpretation:

According toTable no.1 and graph no.1 240 students have been selected as a sample from two colleges in and around Daund city. A total of 1306 students are studying in the two colleges out of which 240 students were selected as a sample i.e. 18.37%. of total sample.

Table no.2

Sr. No.	**Age group**	Boys	Girls	Total	**Percentage**	**Grade**
1	17-18	55	50	105	44%	Best
2	19-20	39	40	79	33%	Better
3	21-22	14	12	26	11%	Good
4	23-24	12	10	22	9%	Poor
5	25 an above	06	02	08	3%	Very Poor
	Total	126	114	240	100 %	

Chart :2



Analysis and Interpretation:

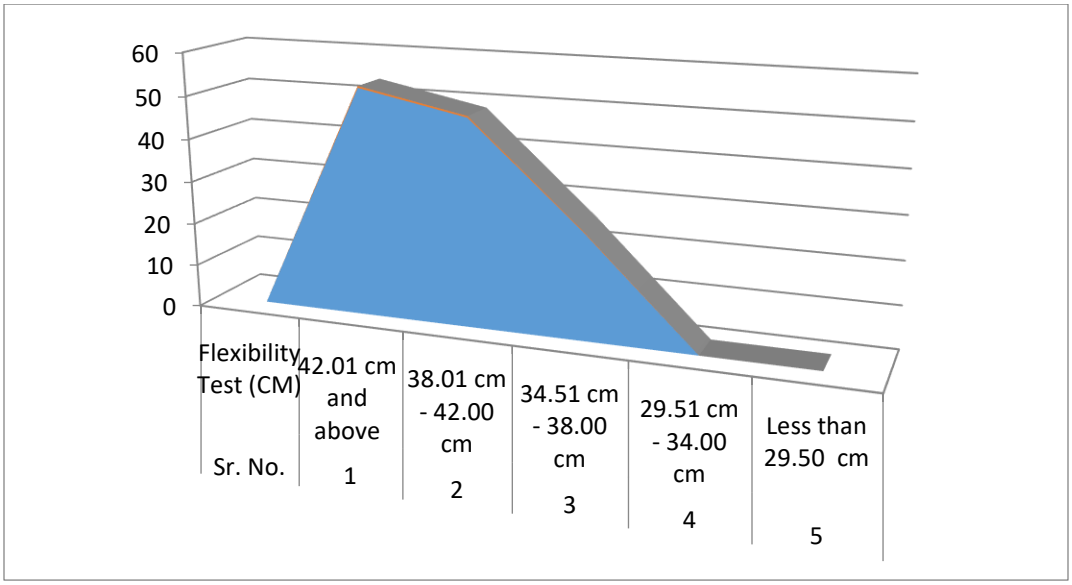
According to Table no.2 and Graph no. 2 the highest number of students is in the age group of 17 to 18. And the lowest age group is of above 25.

To check the student's physical ability flexibility

Table: 3 (Boys)

Sr. No.	Flexibility Test (CM)	No of Students (Boys)	Percentage	Grade
1	42.01 cm and above	53	42%	Best
2	38.01 cm - 42.00 cm	48	38%	Better
3	34.51 cm - 38.00 cm	25	20 %	Good
4	29.51 cm - 34.00 cm	00	00 %	Poor
5	Less than 29.50 cm	00	00%	Very Poor
	Total	126	100%	

Chart :3



Analysis and Interpretation:

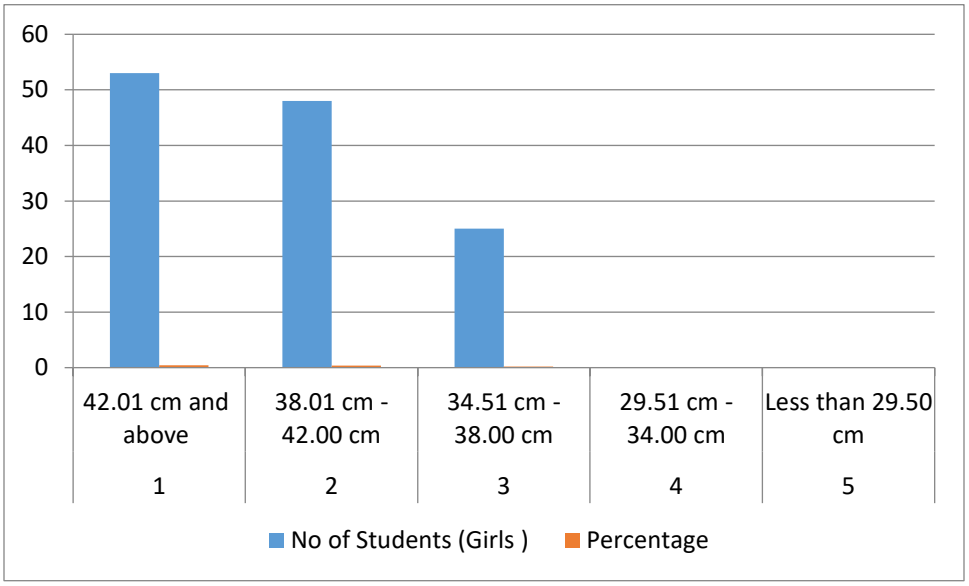
According to table no.3 and graph no.3 we can say that the body flexibility of total of 53 students (boys) are seen more than 42.01 c.m. which is 42%. Similarly 48 students were between 38.01 c.m. to 42.00 c.m. i.e. 38%. From this it can be seen that physical flexibility comes in the category of good. This is because all the students fall between the age group of 17 to 25 years.

To check the student's physical ability flexibility

Table: 4 (Girls)

Sr. No.	Flexibility Test (CM)	No of Students (Girls)	Percentage	Grade
1	42.01 cm and above	53	42%	Best
2	38.01 cm - 42.00 cm	48	38%	Better
3	34.51 cm - 38.00 cm	25	20%	Good
4	29.51 cm - 34.00 cm	00	00 %	Poor
5	Less than 29.50 cm	00	00%	Very Poor
	Total	126	100%	

Chart : 4



Analysis and Interpretation:

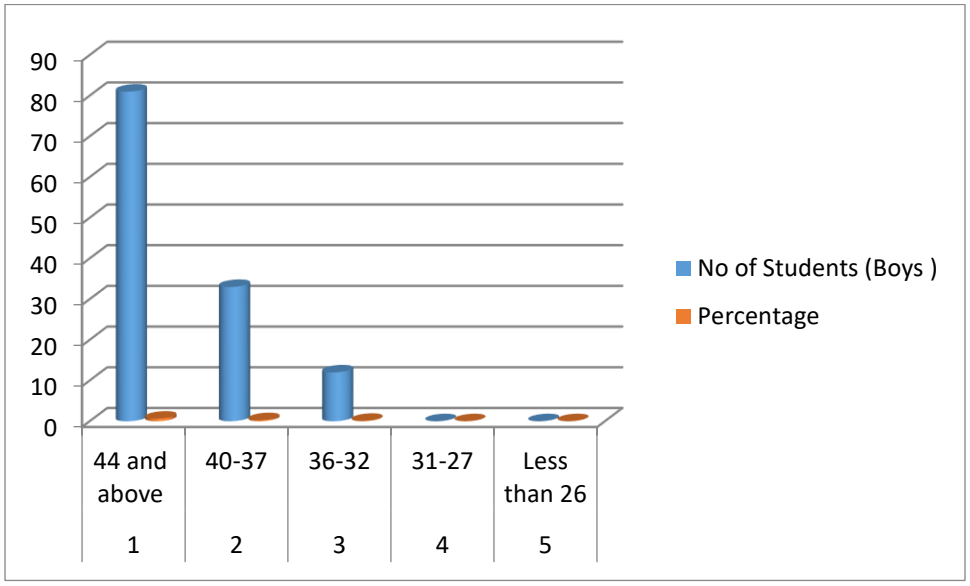
According to table no.4 and graph no.4 when body flexibility was measured, total 29 students (girls) are seen above 42.51 cm which is 26%. Similarly there are 50 students (girls) between 40.01 cm to 42.50 cm which is 45%. Similarly there are 29 students (girls) between 36.51 cm to 40.00 cm i.e. 26% proportion similarly between 32.51 cm to 36.50 cmMeanwhile, there are 06 students (girls) i.e. 03%, it can be seen that when physical flexibility is measured, the category of excellent, good, fair and poor is obtained. From this it can be said that 03% of the students (girls) have problems with flexibility and 26.00% of the girls are classified as good in terms of physical flexibility and they are in great need of physical activity.

To check the student's Abdominal Muscle Strength

Table: 5 (Boys)

Sr. No.	Abdominal Muscle Strength	No of Students (Boys)	Percentage	Grade
1	44 and above	81	64%	Best
2	40-37	33	26%	Better
3	36-32	12	10%	Good
4	31-27	00	00 %	Poor
5	Less than 26	00	00%	Very Poor
	Total	126	100%	

Chart : 5



Analysis and Interpretation:

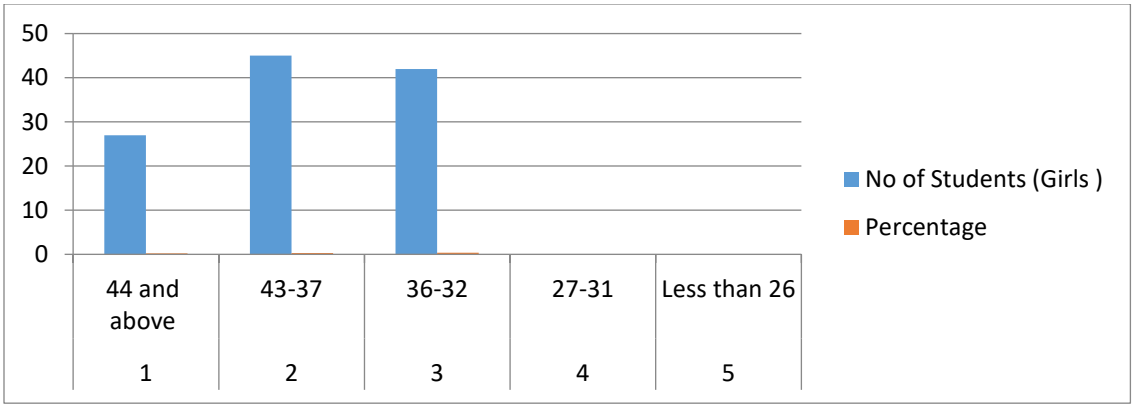
According to Table No.5 and Graph No.5, when the abdominal muscle strength of the students (boys) is measured, it can be seen that maximum 81 boys have done more than 44 sit-ups in one minute. From this it can be said that 64.00% of children have good abdominal muscle strengthSimilarly 33 children have hit sit-ups between 40-37 in a minute. From this it can be said that 26.00% of children have good abdominal muscle strength. Similarly, 12 boys hit between 36-32 sit-ups in a minute. From this it can be said that 10.00% of children fall into the category of good abdominal muscle strength. From this it can be said that 38% of the students (boys) need to train abdominal muscle strength.

To check the student's Abdominal Muscle Strength

Table: 6 (Girls)

Sr. No.	Abdominal Muscle Strength	No of Students (Girls)	Percentage	Grade
1	44 and above	27	24%	Best
2	43-37	45	29%	Better
3	36-32	42	37%	Good
4	27-31	00	00 %	Poor
5	Less than 26	00	00%	Very Poor
	Total	114	100%	

Chart :6



Analysis and Interpretation:

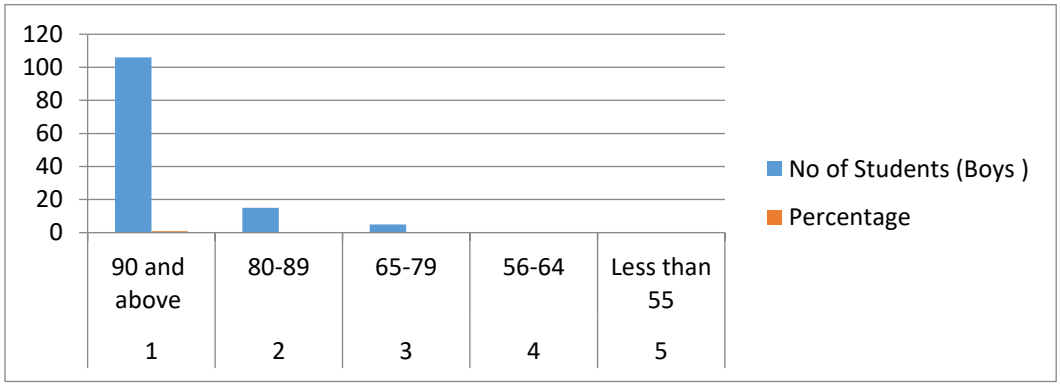
According to table no.6 and graph no.6 when measuring the strength of the student's (girl) abdominal muscle, it is seen that maximum 27 girls have done more than 44 sit-ups in one minute. From this it can be said that 24.00% of the girls have good abdominal muscle strengthSimilarly, 45 children hit between 43-37 sit-ups in one minute. From this it can be said that 39.00% of girls have good abdominal muscle strength. Similarly, 42 children hit between 36-32 sit-ups in one minute. From this it can be said that 37.00% of the girls are in the category of good abdominal muscle strength. From this it can be said that 76.00% of the students (girls) need to train abdominal muscle strength.

To check the student's Cardiovascular FitnessTest

Table:7 (Boys)

Sr. No.	Cardiovascular FitnessTest (5 min Step Test)	No of Students (Boys)	Percentage	Grade
1	90 and above	106	84%	Best
2	80-89	15	12%	Better
3	65-79	5	4%	Good
4	56-64	00	00%	Poor
5	Less than 55	00	00%	Very Poor
	Total	126	100%	

Chart : 7



Analysis and Interpretation:

Table No. 7 and Graph No. 7 show that 106 students who performed this activity more than 90 times for five minutes on a 20-inch-high stair climb show that 84 percent of the students had good cardiorespiratory fitness. It appears that all the students are between the ages of 18 and 25, so the cardiovascular fitness is good at a young age

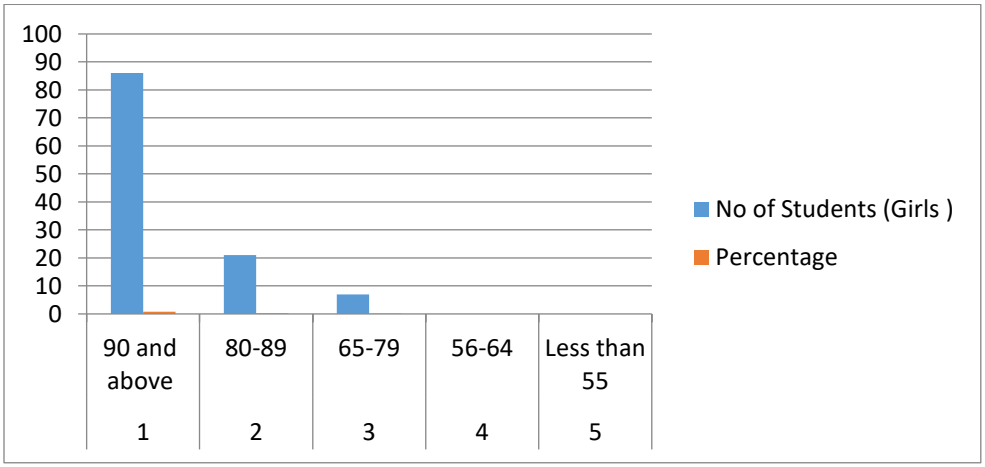
Similarly between 80-89 there are 15 students and 12% students fall in the good category. Also 5 students come between 65 to 89. From this their percentage is 04. From this it can be said that 16% of the students need special efforts to improve their cardiovascular fitness. Otherwise physical problems may arise.

To check the student's Cardiovascular FitnessTest

Table:8 (Girls)

Sr. No.	Cardiovascular FitnessTest (5 min Step Test)	No of Students (Girls)	Percentage	Grade
1	90 and above	86	76%	Best
2	80-89	21	18%	Better
3	65-79	7	6%	Good
4	56-64	00	0%	Poor
5	Less than 55	00	0%	Very Poor
	Total	114	100%	

Chart : 8



Analysis and Interpretation:

Table No. 8 and Graph No. 8 show that 86 students performed this activity more than 90 times for 5 minutes on a 20-inch-high stair and this shows that 76 percent of the students fall into the category of good cardiorespiratory fitness. It also shows that 21 students performed 80 – 89 times and this shows that 18 percent of the students fall in the category of good heart fitness. Also, 07 students performed 65-89 times which shows that 6 percent of the students fall in the category of good heart strength. This shows that 24 percent of the students have weak physical ability as measured by heart rate and for that, students need to run or climb hills and do physical exercise otherwise it will be dangerous for their health.

Conclusion:

(1) 77% of students in the age group of 17-20 years in the physical ability test of college students. Similarly it is seen that 23% students were in the age group of 21-25 years.
(2) 42% of the students (boys) have good flexibility when measuring physical ability test flexibility. Also in the flexibility measurement test it is seen that 38% of the students come in good category. Also in the flexibility measurement test it is seen that 20% of the students fall in the category of good, it can be said that 58% of the students' physical ability is found to be correct when the flexibility is measured and it is necessary to receive training for flexibility.
(3) 26% of the students (girls) have good flexibility when measured in physical ability test flexibility. Also, 45% of the students are in the good category in the flexibility measurement test. Also in flexibility measurement test 26% of students fall in good category and in flexibility measurement test 03% of students fall in poor category it can be said that 74% of students have adequate physical ability when flexibility is measured No training for flexibility must be received.
(4) 4) When the abdominal muscle strength of the students (children) is measured, 64.00% of the children have good abdominal muscle strength. Similarly, 26.00% of the children have good abdominal muscle strength. Similarly, 10.00% of children fall in the category of good abdominal muscle strength, it can be said that 36% of the students have poor abdominal muscle strength and need training for abdominal muscle strength.
(5) When measuring the abdominal muscle strength of the student (girls), 24.00% of the boys have good abdominal muscle strength. Similarly, 39.00% of the boys have good abdominal muscle strength. Similarly, 37.00% of children's abdominal muscle strength falls in the category of good, it can be said that 86% of the students have weak abdominal muscle strength, training for abdominal muscle strength is necessary.
(6) Cardiovascular fitness measurement shows that 84% of the students fall in the good category and 12% of the students fall into the good category. Also 4 percent of students fall in this category. From this it can be said that 16% of the students need special efforts to improve their cardiovascular fitness. Otherwise physical problems may arise.
(7) Cardiovascular fitness measurement shows that 76% of the students fall in the good category of cardiogenic fitness and 18% of the students fall into the good category. Also

06 percent of students fall in this category. From this it can be said that 24% of the students need special efforts to improve their cardiorespiratory fitness. Otherwise physical problems may arise.

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