

SAI KHELO INDIA FITNESS TEST



SAI Khelo India Fitness Test Battery has been designed to check the fundamental (important) Motor Fitness Components for school going students. This test battery has many test items which helps to evaluate the fundamental components of Motor Physical Fitness. This test is made for two age groups.

(A) Age group 5 to 8 years (1st to 3rd class students): It consists of three test items

(i) BMI test for body composition,

(ii) Flamingo Test for Balance

(iii) Plate Tapping Test for Speed and Limb Agility / Coordinative ability.

(B) Age group 9 to 18 years (4th to 12th class students): It consists of six test items

(i) BMI test for Body Composition,

(ii) 50 meters Sprint for Speed and Acceleration

(iii) 600 meters Run or Walk for Cardio-vascular Endurance

(iv) Sit and Reach Test for Flexibility of Lower Back

(v) Abdominal Partial Curl- up Test for Abdominal Strength

(vi) Push-ups (Boys) / Modified Push-ups (Girls) for Upper Body Strength

(i) BODY MASS INDEX TEST (BMI) : (FOR JUNIOR AND SENIOR (5 TO 18 YEARS) AGE GROUP)

BMI stands for Body Mass Index. This fitness testing is used to measure body composition on the basis of weight and height. This formula and index was formulated by Belgian mathematician and statistician Adolphe Quetelet. BMI helps a person to know whether he is underweight, normal or overweight. By knowing the body type, accordingly diet and workout can be set to gain or to reduce weight.

Purpose : To measure Body Composition

Objective : To measure the Height and Weight and evaluate the Body Composition and General Health of the individual after computing.

Infrastructure/Equipment Required: Flat, Clean surface, Weighing Machine, Stadiometer/Measuring Tape pasted on a wall.

Test Administration :

(i) Remove the participant's shoes, bulky clothing, and hair ornaments, and unbraid hair that interferes with the measurement.

(ii) Height Measurement : Take the height measurement on flooring against a flat surface such as a wall with no molding. Have the participant stand with feet flat, together, and back against the wall. Make sure legs are straight, arms are at sides, and shoulders are level. Make sure the participant is looking straight ahead and that the line of sight is parallel with the floor. Take the measurement while the participant stands with head, shoulders, buttocks, and heels touching the flat surface (wall). Use a metal tape to measure from the base on the floor to the marked measurement on the wall to get the height measurement. Accurately record the height to the nearest 0.1 centimeter.

(iii) Measuring Weight : Use a Digital Weighing Scale to measure the weight of the participant. (Avoid using bathroom scales that are spring loaded). Place the scale on firm flooring (such as tile or wood) rather than carpet. Have the participant remove shoes and heavy clothing, such as sweaters. Have the participant stand with both feet in the center of the scale. Record the weight to the nearest decimal fraction (for example, 28.1 kilograms).

(iv) Computing the Height and Weight : Here, height is considered in metres and centimetres; weight is considered in kilograms and grams.

(v) BMI can be calculated by taking person's weight (in kg and gm) and dividing it by height (mt and cm) square, i.e., **BMI = Weight ÷ (Height × Height)**

Example : For instance, if your height is 1.82 m, the square of height will be $(1.82 \times 1.82) = 3.3124$. If your weight is 70.5 kg then your BMI = $70.5 \div 3.31 = 21.3$.

Evaluation of Test : Higher the figure, the more overweight is the person. This is just a guide to know overweight content in the body. This test can be a preventive step towards obesity.

Scoring : Use table to determine your BMI rating.

Category	Men	Women
Underweight Range	Less than 20	Less than 19
Healthy Range	20 to 25	19 to 24
Overweight Range	26 to 30	25 to 30
Obese Range	More than 30	More than 30

(II) PLATE TAPPING TEST (FOR JUNIOR 5 -8 YEARS AGE GROUP)

Purpose : Plate Tapping Test helps to measure the Speed and Coordination/ Agility of Limb Movement

Objective : To do the tapping over the plate as fast as possible.

Infrastructure/Equipment Required: Table (adjustable height), 2 yellow discs (20cm diameter), rectangle (30 × 20 cm), stopwatch

Test Administration :

(i) If possible, the table height should be adjusted so that the subject is standing comfortably in front of the discs.

(ii) The two yellow discs are placed with their centers

60 cm apart on the table. The rectangle is placed equidistant between both discs. The non-preferred hand is placed on the rectangle.



(iii) The subject moves the preferred hand back and forth between the discs over the hand in the middle as quickly as possible.

(iv) This action is repeated for 25 full cycles (50 taps).

Administrative Suggestion: Participants should be encouraged to stand in a balanced posture, feet apart to shoulder width. Results are usually better if the participant can maintain constant pace during most of the run.

Scoring: The time taken to complete 25 cycles is recorded.

Evaluation : Evaluation can be compared. Teacher can also create own norms for evaluation like this

	Excellent	Good	Average	Fair	Poor	Bad
Boys Tapping (No)	50 +	49 to 40	39 to 30	29 to 20	19 to 10	10 below
Girls Tapping (No)	50 +	49 to 40	39 to 30	29 to 20	19 to 10	10 below

(iii) FLAMINGO TEST (FOR JUNIOR 5 - 8 YEARS AGE GROUP)

Purpose : To check the Balance and Strength ability of the individual on the single leg

Objective : To balance on a given box/block/brick in given time on one leg.

Infrastructure/Equipment Required: Non slippery even surface, Stopwatch, can be done on just standing on beam.

Test Administration :

(i) Stand on the beam. Keep balance by holding the instructor's hand (if required to start).

(ii) While balancing on the preferred leg, the free leg is flexed at the knee and the foot of this leg held close to the buttocks.

(iii) Start the watch as the instructor lets go of the participant/subject.

(iv) Pause the stopwatch each time the subject loses balance (either by falling off the beam or letting goes of the foot being held).

(v) Resume over, again timing until they lose balance. Count the number of falls in 60 seconds of balancing. If there are more than 15 falls in the first 30 seconds, the test is terminated.

Administrative Suggestion: Participants should be encouraged to eyes focused on stationary object straight ahead.

Scoring: The total number of falls or loss of balance in 60 seconds of balancing is recorded. If there are more than 15 falls in the first 30 seconds, the test is terminated.

Teacher can also create own norms for evaluation like this :



	Excellent	Good	Average	Fair	Poor	Bad
Boys Falls in 60 seconds (No)	No fall	1 to 2 falls	3 to 5 falls	6 to 9 falls	10 to 12 falls	13 above
Girls Falls in 60 seconds (No)	No fall	1 to 2 falls	3 to 5 falls	6 to 9 falls	10 to 12 falls	13 above

(iv) 50 M SPRINT TEST (STANDING START) (FOR 9 TO 18 YEARS AGE GROUP)

Purpose : To measure the Speed and Acceleration.

Objective : To cover the set distance as fast as possible.

Infrastructure/Equipment Requirement : Measuring tape or marked track or flat surface of at least 70 meters, stopwatch.

Test Administration : (i) After warm-up the participant stand behind the starting line in stationary position.

(ii) At the blow of whistle or "Go" the participant sprint or run fast up to finish line which is 50 meter away from starting line.

(iii) Time is recorded up to finish line in seconds and milli seconds.

Scoring : The best time is recorded to the nearest 2 decimal places. The timing starts from the first movement (using a stopwatch) and finishes when the chest crosses the finish line.

Evaluation : Timings for evaluation can be compared. Teacher can also create own norms for evaluation. like this for average sprint running timing :



	Excellent	Good	Average	Fair	Poor	Bad
Boys Timing (sec. & mili sec.)	6.5(sec.)	7.5(sec.)	8.5(sec.)	9:5(sec.)	10:5(sec.)	11:5(sec.)
Girls Timing (sec. & ili sec.)	8.0(sec.)	9.0(sec.)	10:0(sec.)	11:0(sec.)	12:0(sec.)	13:0(sec.)

(V) 600 M RUN OR WALK TEST (FOR 9 TO 18 YEARS AGE GROUP)

Purpose : To measure Cardiovascular Endurance.

Objective : To cover the set distance as fast as possible.

Infrastructure/Equipment Required : Oval or running track, marking cones, recording sheets, stopwatch.

Test Administration : In this student has to run or walk covering 600 meters in shortest time.

Scoring : Time is noted in minutes and seconds as a score.

Evaluation : Timings for evaluation can be compared. Teacher can also create own norms for evaluation. Like this for average running timing.



	Excellent	Good	Average	Fair	Poor	Bad
Boys Timing (min & sec.)	1:45 m/s	2:00 m/s	2:15 m/s	2:30 m/s	2:45 m/s	3:00 m/s
Girls Timing (min & sec.)	2:00 m/s	2:15 m/s	2:30 m/s	2:45 m/s	3:00 m/s	3:15 m/s

(VI) SIT AND REACH TEST (FOR 9 TO 18 YEARS AGE GROUP)

Purpose : To measure the Flexibility of Lower Back.

Objective : To stretch trunk forward as far as possible.

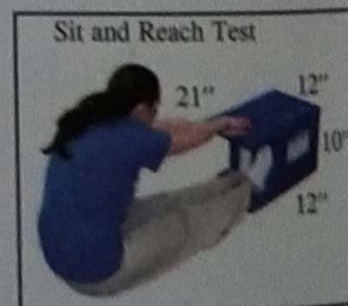
Infrastructure/Equipments Required : Sit and Reach box or wooden box with ruler / length scale in centimeter on top. Box dimensions are : Sides of box 12" × 12" (in inches); Front and back of box 12" × 10" (in inches); Top of box 12" × 21" (in inches).

Test Administration : (i) After warming-up this test is performed.

(ii) This test involves sitting on the floor with legs stretched out straight ahead.

(iii) The soles of the feet are placed flat against the box whereas both knees should be locked and pressed flat to the floor (assistant may hold them down).

(iv) Now stretch both hands forward and reaches towards the box whereas hands together to reach maximum towards box measuring tape.



(v) Hold the position for two seconds at top penal of box and measure the distance in centimeters by ruler or length scale. Ensure that no jerky action or quick movement is done during test.

Scoring : The score is recorded to the nearest centimeter that is the distance between the initial position and final position. If hand touches the toe then the score is zero. If it crosses beyond toe level then score is positive. If it does not reach at toe level then the score is negative.

Evaluation : Evaluation can be compared. Teacher can also create own norms for evaluation like this for average.

	Excellent	Good	Average	Fair	Poor	Bad
Boys Sit and Reach (Centimeters)	+20 cm	+15 cm	+10 cm	0 cm	-10 cm	-15 cm
Girls Sit and Reach (Centimeters)	+20 cm	+15 cm	+10 cm	0 cm	-10 cm	-15 cm

(VII) PARTIAL CURL-UP TEST (FOR 9 TO 18 YEARS AGE GROUP)

Purpose : To test Abdominal Strength and Endurance.

Objective : To perform partial curl-ups as many as possible in the given time (30 sec.).

Infrastructure/Equipments Required : A flat, clean, cushioned surface or gym mat, recording sheets, pen, and a metronome (or audio tape, drums).

Test Administration : (i) The participant lies on cushioned, flat, clean surface with knees bent at about 90 degree, arms are placed at the sides with palm facing downward.

(ii) The participant curls up keeping the hands on the floor and then returns to the original position.

(iii) Hands should cross the marked line 6 inches away from starting point.

Administrative Suggestion : Breathing and pace of doing the activity should be constant.



Scoring : The score is the maximum number of correct Partial Curl up in 30 second duration.

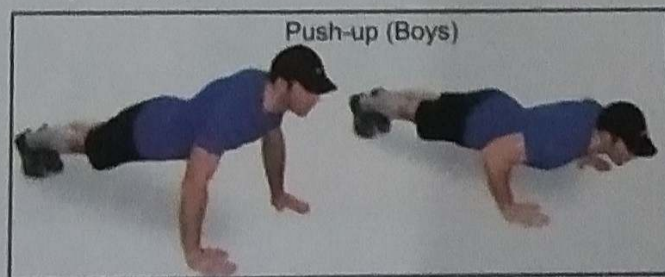
Evaluation : Evaluation can be compared. Teacher can also create own norms for evaluation, like this

	Excellent	Good	Average	Fair	Poor	Bad
Boys Partial Curl-ups (No.)	25	20	15	10	5	0
Girls Partial Curl-ups (No.)	20	15	10	5	3	0

(VIII) PUSH-UPS (BOYS) MODIFIED PUSH-UPS (GIRLS) TEST (FOR 9 TO 18 YEARS AGE GROUP)

Purpose : To test and measures Upper Body Strength and Endurance.

Objective : To perform Push-ups (Boys), Modified Push-ups (Girls) as many as possible in the given time (30 sec.).



Infrastructure/Equipments Required : A flat, clean, cushioned surface or floor mat, recording sheets, pen.

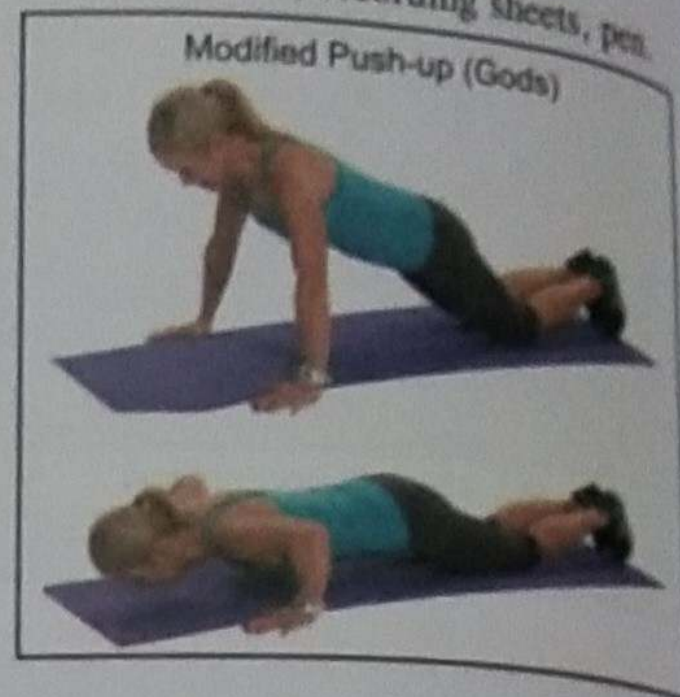
Test Administration : (i) After warming-up this test is performed. (ii) A standard push-up for boys begins with the hands and toes touching the floor, the body and legs in a straight line, feet slightly apart, the arms at shoulder width apart, on the floor. (iii) The subject lowers the body so that chest should touch floor, or until there is a 90-degree angle at the elbows. (iv) Then returns back to the starting position with the arms extended. (v) In modified Push-up for girls, the knees touch the floor. (vi) This action is repeated, and the test continues until exhaustion, or until they can do no more in rhythm or have reached the target number of push-ups.

Administrative Suggestion : Breathing and pace of doing the activity should be constant.

Scoring : Record the total number of correctly completed push-up.

Evaluation : Evaluation can be compared. Teacher can also create own norms for evaluation.

Like this



	Excellent	Good	Average	Fair	Poor	Bad
Boys Push-ups (No)	50	40	30	20	10	0
Girls Push-ups (No)	40	30	20	10	5	0