JCR Motor Fitness Test

Programme: MPEd.
Course: Measurement and Evaluation
Faculty: S. Thirumalai Kumar
• Jumping
• Chinning
• Running
Motor Fitness

• The term Motor Fitness became popular during World War II.

• It may be defined as a limited phase of motor ability, emphasizing capacity for vigorous work.

General motor ability.

Immediate capacity of an individual to perform in many varied stunts or athletic events is refereed as general motor ability.
• More Specifically, Motor Fitness might be referred to as efficient performance in such basic requirements as running, jumping, dodging, falling, climbing, swimming, lifting weights, carrying loads and enduring under sustained effort in a variety of situations.
Vertical Jump

• **Purpose**: To measure the power of legs in jumping vertically upward.

• **Facilities / Equipment**:
  • A Jump board marked off in half inches, Chalk dust, Weight Scales.

• **Procedure**:
  
  Trials = 3

• **Scoring**: \( \frac{\text{Distance} \times \text{Body Weight}}{12} \)
Chinning Up

- **Purpose**: To measure the endurance of the hands in climbing in horizontal bar.
- **Facilities / Equipment**: Chinning bar, Stop watches, Chunnam, Uneven parallel bars, Mat, Score Sheet.
- **Procedure**:

- **Scoring**: no part scoring.
Shuttle Running

• **Purpose**: To measure the speed and agility
• **Facilities / Equipment**: Two lines drawn parallel- 10 yards apart, two bank boards (40 degree with floor) stop watch, Score Sheets.

• **Procedure**: 10 times, 180 degree turn
• Two lines drawn parallel- 10 yards apart
• **Scoring**: In Seconds
Oregon Motor Fitness Test

Separately for boys and girls

• **Boys batteries**
  - Upper Elementary School boys
    - Standing Broad Jump
    - Floor Push ups
    - Knee Touch Sit ups
  - Junior and Senior High School
    - Jump And Reach
    - Pull ups
    - 160 yards potato race

• **Girls Batteries**
  - Hanging Arm in Flexed Position,
  - Standing Broad Jump
  - Crossed Arm Curl Ups
Standing Broad Jump

• **Purpose**: To measure the leg power of the subjects

• **Facilities / Equipment**: Long Jump Pit, Or Marking on the ground, Measuring tape, Score Sheet, Chunnam or White Paint

• **Procedure**: Take with both feet- swing- crouch permitted

• **Scoring**: 3 Trials – If falls back retake the test.
Floor Push Ups

- **Purpose**: To measure the Strength and endurance

- **Facilities / Equipment**: A leveled Floor, Mat, Score Sheet, Supporters

- **Procedure**: UP – Down

- **Scoring**: Number of Correct push ups.
Knee Touch Sit Ups

- **Purpose**: To measure the Strength of the abdominal Muscles.
- **Facilities / Equipment**: A leveled Floor, Mat, Score Sheet, Supporters
- **Procedure**: Supine Position – Knee Straight- Feet 12 inches apart- Hands clasped behind the head- Scorer holds the feet- Raise- Rt elbow to Lt Knee- Lower the trunk to the floor- Raise- Lt elbow to Rt Knee. Not a pause during test.
- **Scoring**: Number of Correct Sit ups
Jump and Reach

• **Purpose**: To measure the power of legs in jumping vertically upward.

• **Facilities / Equipment**:  
  • A Jump board marked off in half inches, Chalk dust, Weight Scales.

• **Procedure**:  
  
• **Scoring**: Distance between two marks.
Pull Ups

- **Purpose**: To measure the Arm and Shoulder Strength and Muscular Endurance.

- **Facilities / Equipment:**
  - A Metal/Wooden bar Approximately 1.1/2 inches in Diameters at Convenient Ht. Mat, Score Sheet, Chair

- **Procedure**: Forward Grip- Chin over- Lower by hands straight- No Kick, Jerk and Hip movement. 4 half counts permitted

  **Scoring**: Number of pull-ups. 4 half counts permitted
160 yards potato race

• **Purpose**: To measure the Running Speed and Cardio Vascular Endurance.

• **Facilities / Equipment**:
  - A Leveled Hockey/football/ Track, Markings, Chunnam, Blocks or Erasers, Score sheet, Stop Watch.

• **Procedure**: Blocks placed in circle 2 and 3. Standing start run to circle 2 – return to circle 1 and place it. Then Run to C3 – return to circle 1 and place it. Then picks ups the first block carries to C2 – return – Pick up the second bloc – caries it to C3 and Place- Race back to starting line.

• Block must be place not to be dropped or thrown.

• **Scoring**: Elapsed time in seconds.
Circle 1 feet diameter
HANGING IN ARM FLEXED POSITION

• **Purpose**: To measure the Arm and Shoulder Strength and Muscular Endurance.
• **Facilities / Equipment**:  
  - Horizontal bar 1 inch dia, Chair, Sore sheet, Helpers
• **Procedure**: Chair stand- Hands Shoulder apart- Palm Outward- Flexed elbow – Chin above the bar. Support removed-
• **Scoring**: Number of Seconds- Chin should not rest on the horizontal bar.
SBJ
Crossed Arm Curl Ups

• **Purpose**: To measure the Abdominal Strength and Structure.

• **Facilities / Equipment**:
  - Leveled floor, Mat, Sore sheet, Helpers

• **Procedure**: Supine Lying position- Knees bent- Approximately right angle- Soles of the feet flat on the ground. Arms are folded and held against the chest. Feet kept by helper-Up and Down- Feet must remain throughout the test.

• **Not permitted**: Bouncing resting during any phase

• **Scoring** Number of times subject raises up.
Indiana Motor Fitness Test
Indiana Motor Fitness Test

For elementary and high school boys and girls

1. Straddle Chins
2. Floor Pushups
3. Vertical Jump
4. Squat Thrusts for 20 seconds (Burpee best)

For College Men

1. Pull ups or Straddle Chins
2. Floor Pushups
3. Vertical Jump or Standing Broad Jump
Chins (Pull Ups)

• **Purpose**: Arm & Shoulder Muscular Endurance

• **Facilities**: Horizontal Bar, Mat, Score Sheet, Chairs

**Procedure:**

• Palms forward or backward grip.

• if possible use adjustable rings- (rings permits the wrist to rotate naturally)

• Swinging or kicking and half credits are not permitted

• **Scoring**: Number of Pull ups
Straddle Chinning

- **Purpose**: To Measure Endurance, Agility, Speed.
- **Facilities / Equipment**: A leveled Floor, Mat, Score Sheet, Supporters
- **Procedure**:
  - The Class members should be first paired according to size then counted off by twos.
  - Number one lie on their backs, arms sideward with shoulders level on the floor.
  - Upper arms are bent to vertical. Number twos stand astride and facing number ones.
  - Partners clasp hands, bent-finger hold, and number ones chin upwards as often as possible.
  - The Chest should meet firm resistance with partner’s thighs each time.
  - Both Partners should kept legs and back straight.
  - Arms of supporting partner are straight throughout.
  - Partners may change place and repeat as before.
Push Ups

• Executed from the floor
• The chest must touch the floor each time and arms are be fully extended on return.
• The back must be kept straight.
• No partial credits allowed and these exercise must be done continuously.
Vertical Jump

• **Facilities**

• A blackened ¼ inch plywood board, 5 feet long and 1 feet wide may be used.

• The board is marked off in half inches and should be mounted on a basketball backstop or if mounted on a wall it should be at least 6 inches from the wall so that the subject will not scrape himself while executing the jump.

• A line, one foot in front

• Assistants, Chalk Powder, Damp Cloth, Table for Assistants,
Vertical Jump (cont)

- The jumper toes a line, one foot in front of the line. The index finger on both the hands are chalked with magnesium.
- The Subject reaches as far as possible with heels kept on the floor makes a mark on the board with chalked finger.
- He next executes three jumps from a crouched position, making a mark each time on the board.
- The distance from the top of the reach mark to the top of the highest jump mark is recorded as his score. Measurement is taken nearest half inch.
Standing Broad Jump

- Pit or Mat (well secured mat), Lines in 6 inches interval.
- The contestant toes a line- 4 feet from the pit or first 6 inch mark on a mat.
- Springs forward from both feet.
- Nearest point.
• **Squat thrust (Burpee)**

• Position: attention

• Bend knees and place hands in front of the feet in squat position (arms may be between, outside, or in front of bent knees)

• Thrust legs back for enough so that the body is perfectly straight from shoulders to feet, keeping arms straight.

• Return to squat position

• Return to position of attention

• For 20 seconds
Motor Fitness Indices

• Motor Fitness Index I =
  \( (\text{Chins} + \text{Push Ups}) \times (\text{Vertical Jump}) \)

• Motor Fitness Index II =
  \( (\text{Chins} + \text{Push Ups}) \times (\text{Standing Broad Jump}) \)

• Motor Fitness Index III =
  \( (\text{Straddle Chins} + \text{Push Ups}) \times (\text{Vertical Jump}) \)

• Motor Fitness Index IV =
  \( (\text{Straddle Chins} + \text{Push Ups}) \times (\text{Standing Broad Jump}) \)
• Example

<table>
<thead>
<tr>
<th></th>
<th>Raw Score</th>
<th>Scale Score</th>
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<tbody>
<tr>
<td>Chins</td>
<td>6</td>
<td>44</td>
</tr>
<tr>
<td>Push Ups</td>
<td>18</td>
<td>55</td>
</tr>
<tr>
<td>Vertical Jump</td>
<td>18.5</td>
<td>37</td>
</tr>
</tbody>
</table>

• **Motor Fitness Index I** =

  \[( \text{Chins} + \text{Push Ups}) \times (\text{Vertical Jump})\]

  \[= (44 + 55) \times (37) = 3663\]

  This is divided by 100 = 36.63 or 37, the motor Fitness Index.