APPENDIX
APPENDIX I
STATIONS, EXERCISES AND PACKAGES OF CIRCUIT TRAINING

1. STATIONS

Station XII → Station I → Station II → Station III → Station IV → Station V → Station VI → Station VII → Station VIII → Station IX → Station X → Station XI → Station XII
2. EXERCISES AT CIRCUIT STATIONS

The number of exercises performed in each training sessions were ranged from eight to twelve as given in the circuit training packages. The exercises performed in the circuit training stations are as follows:

1. Partner Hit Passing
2. Jumping Jacks
3. 15yard repeat dribbling
4. Treadmill
5. Deflect the pass
6. Running on the spot
7. Shooting the rebound
8. Rope skipping
9. W-runs
10. Continuous push
11. Hit at various targets
12. Burpee
13. Leg raise
14. Alternate toe touch

EXPLANATION ON EXERCISES

PARTNER HIT PASSING

Subjects were asked to position themselves 15yards away from their teammates facing each other. They start performing the forehand hit technique to pass a ball back and forth along the ground.
to their partner. The subject receiving the pass should not have to move more than 2 yards in any direction to collect the ball. They were asked to repeat the same as many times as possible.

**JUMPING JACKS**

On the first count, the subjects were made to jump and keep their feet apart, the arms extended overhead with elbows kept straight. On count two, the legs were brought together with their arms swung down to the side.

**15-YARD REPEAT Dribbling**

Two cones were set up 15 yards apart. Subjects were asked to perform the speed dribble and ball check from one cone, as fast as they could reach the other cone. They repeat it as many times as possible.

**TREADMILL**

Subjects were asked to assume a bent knee squat position at the start of exercises. Subjects were made to lean forward and place their hands flat on the ground in front of their shoulders. Extending left leg straight over behind them, they placed the toe of their left foot on the ground. The subjects were rocking slightly forward to place their weight temporarily on their arms and exchanged the positions of their legs.
DEFLEET THE PASS

Subjects were directed to take their position in the shooting circle and have a teammate pass a ball to every one from 15 yards away. They were asked to deflect the passed ball to the goal. They were asked to do this technique as many times as possible from right side, centre and left side of the shooting circle.

RUNNING ON THE SPOT

The subjects were instructed to stand with feet together and arms by the side of the body. Start running on the spot with low and high knee action. Arms should move alternately forward and backward with elbow bent.

SHOOTING THE REBOUND

A goal cage with 18-inch backboard was used, for performing this exercise. From a distance of 10 yards, the subjects were directed to apply a quick hit technique to shoot a stationary ball to the centre goal target. Asked them to return to ready position and use any shooting technique from the forehand reverse stick to shoot the rebound accurately to the target. They were asked to repeat it as many times as possible.
ROPE SKIPPING

The subjects were asked to perform ten forward skips, five backward skips and again ten skips forward. When they were performing the skips, they were asked to keep their feet together.

W - RUNS

Five cones were placed 7 yards apart in a "W" formation. The subjects carried the Hockey stick with their right hand. Subjects were asked to run at an end cone sprint in a diagonal forward direction to the outside of the second cone, breakdown their footwork, and immediately backpedal around the third cone. Sprint to the fourth cone of the "W" formation, breakdown, and backpedal back and around fifth cone. Sprint to start cone and repeat as many trips as they can.

CONTINUOUS PUSH

The subjects were asked to push the targets, which were kept at various angles 15 yards away from two stacks of 10 balls. They repeat the same as many times as possible.

HIT AT VARIOUS TARGETS

The subjects were asked to hit the targets, which were kept at various angles 15 yards away from two stacks of 10 balls. They repeat the same as many times as possible.
BURPEE

The subjects were asked to stand with feet together, arms at sides. They were made to go to full squat and place the hands on the ground. They were asked to thrust both legs back keeping arms extended, return to squat position and then come up to the starting position.

LEG RAISE

The subjects were asked to lie in prone position with legs straight and arms by the side of the body. From this position, they started to raise legs keeping knees extended and held for 5 to 10 seconds and then returned to starting position. This procedure was repeated for 60 seconds.

ALTERNATE TOE TOUCHING

Subjects were asked to stand with feet wide apart, arms sideward raised at shoulder level to twist the trunk to the left and touch the left toe with the right hand, keeping knees straight and to return to the starting position by repeating the same on the right side.
## 3. CIRCUIT TRAINING PACKAGES

### CIRCUIT TRAINING PACKAGE - A

#### INTERVAL METHOD

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Components</th>
<th>Phase I 1-3 Weeks</th>
<th>Phase II 4th-6th Weeks</th>
<th>Phase III 7th-9th Weeks</th>
<th>Phase IV 10th-12th Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>No. of Weeks</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>2.</td>
<td>No. of sessions perweek (Frequency)</td>
<td>2 days for Gr.I 3 days for Gr.II</td>
<td>2 days for Gr.I 3 days for Gr.II</td>
<td>2 days for Gr.I 3 days for Gr.II</td>
<td>2 days for Gr.I 3 days for Gr.II</td>
</tr>
<tr>
<td>3.</td>
<td>Duration of each session</td>
<td>60-90mints</td>
<td>60-90mints</td>
<td>60-90mints</td>
<td>60-90mints</td>
</tr>
<tr>
<td>4.</td>
<td>Number of sets</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>Load (intensity) (speed of movement)</td>
<td>Low</td>
<td>Intermediate</td>
<td>Medium</td>
<td>Sub-maximum</td>
</tr>
<tr>
<td>6.</td>
<td>Number of Stations</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>7.</td>
<td>Duration of each exercise (Repetition)</td>
<td>12</td>
<td>12</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>8.</td>
<td>Rest internal between exercises</td>
<td>60-90sec</td>
<td>60-90sec</td>
<td>60-90sec</td>
<td>60-90sec</td>
</tr>
<tr>
<td>9.</td>
<td>Rest interval between circuits</td>
<td>3-5mts</td>
<td>3-5mts</td>
<td>4-6mts</td>
<td>5-8mts</td>
</tr>
</tbody>
</table>

The Percentage of Intensity was Fixed according to **Tudor O. Bomba** (1994).

- **Low**: 30-50 percentate; **Intermediate**: 50-70 percentage
- **Medium**: 70-80 percentage; **Sub-maximum**: 80-90 percentage
# CIRCUIT TRAINING PACKAGE - B

## CONTINUOUS METHOD

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Components</th>
<th>Phase I 1-3 Weeks</th>
<th>Phase II 4th-6th Weeks</th>
<th>Phase III 7th-9th Weeks</th>
<th>Phase IV 10th-12th Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>No. of Weeks</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<td>2.</td>
<td>No. of sessions per week (Frequency)</td>
<td>2 days for Gr.III</td>
<td>2 days for Gr.III</td>
<td>2 days for Gr.III</td>
<td>2 days for Gr.III</td>
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<td>3.</td>
<td>Duration of each session</td>
<td>60-90 mins</td>
<td>60-90 mins</td>
<td>60-90 mins</td>
<td>60-90 mins</td>
</tr>
<tr>
<td>4.</td>
<td>Number of sets</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>Load (intensity) (speed of movement)</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Maximum</td>
</tr>
<tr>
<td>6.</td>
<td>Number of Stations</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>7.</td>
<td>Duration of each exercise</td>
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<td>25 sec</td>
<td>30 sec</td>
<td>40 sec</td>
</tr>
<tr>
<td>8.</td>
<td>Rest interval between exercises</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Rest interval between circuits</td>
<td>3-5 mts</td>
<td>3-5 mts</td>
<td>4-6 mts</td>
<td>5-8 mts</td>
</tr>
</tbody>
</table>

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