Please start with the general warm – up, as it should be done before beginning all exercise sessions.

Please refer to the handout for Physiotherapy session 1 or Physiotherapy session 2 for the same.

Now that your body is ready for exercise, start with some trunk exercises:

**TRUNK EXERCISES**

Trunk exercises help in the following ways:

- Improve the strength in your trunk muscles.
- Help you while turning in bed.
- Improve your posture.
- Will help you when you need to twist, turn and bend while performing your daily activities.

Caution:

If you have had any back surgery, then please consult a physiotherapist before starting these trunk exercises.

If you are only experiencing back pain, then you may perform these exercises, but within your own pain-free range.

a. **Trunk Rotations**

1. Sit up straight.
2. Come forward in your chair such that your feet are firmly on the floor, a few feet apart. While coming forward, do not come to the edge of your chair, just the middle. *If you come to the edge of the chair, the chair could topple over.*
3. Clasp your palms together *(as shown in the figure)* and hold your hands out straight infront of you at stomach level.
4. Now turn your body as far to the right as you can along with your head and arms. Do not move your feet.
5. Maintain this position till the count of five *(1..2..3..4..5).*
6. Now come back to the original position.
7. Next turn to your left side and repeat in the same way.
8. Repeat this exercise 5 times on each side. *(Note: Alternately)*
b. Side bending

1. Sit straight in your chair with your feet firmly on the ground.
2. Take one arm up, near your ear, and slightly bend it at the elbow.
3. Keep the other hand straight at the elbow. Place this arm by your side.
4. Now bend your upper body towards the hand which is by your side.
   Note: Do not bend forward. Keep your raised hand close to your ear.
5. Maintain this position till the count of five.
   Note: You should feel a stretch in your trunk on the side of the hand which is raised.
6. Now come back to the erect position.
7. Repeat the same on the other side.
8. Do 5 repetitions on both sides (Note: Alternately.)

c. Forward Bending

1. Sit straight back in your chair with your legs apart and feet firmly on the ground.
2. Take both your hands straight up.
3. Now arch your back (bend backwards) and take your head and arms back as well, as much as you can.
4. Hold this position for 5 counts.
5. Now, slowly bend forwards and touch the ground.
   Note: Do not force the movement. Slowly try and place your palms on the floor.
6. Hold this position for 5 counts.
7. Repeat 5 times

d. Diagonal trunk movements

1. Sit straight in your chair with your feet firmly on the floor.
2. Now clasp your palms together and raise your arms to the upper right corner as far back as you can. Feeling your body twisting.
3. Turn your head, sideways & up, to look at your hand.
4. Maintain this position for 5 counts.
5. Next bring your hands diagonally across your body to the left lower corner near your feet. (Note: You must bend down from the waist as well.)
6. Hold this position for 5 counts.
7. Repeat 5 times.
8. Do the same from your left upper corner to your right lower corner.
STRETCHING AND STRENGTHENING EXERCISES

In Parkinson’s Disease certain muscles get tight and weak so it is important to stretch and strengthen them.

a) Chin Tucks
   This exercise is important for improving your posture and straightening your neck.
   
   1. Sit straight in your chair, with your hands on your laps.
   2. Push your chin out as far as you can – like pulling out a drawer.
   3. Now tuck your chin in – like pushing the drawer back i.e take your chin close to your neck such that you get a double chin.
      Note: Keep your gaze straight ahead and do not bend your neck.
   4. Hold this position for 10 counts.
   5. Repeat 5 times

b) Chest Muscle Stretch
   It is important to stretch the muscles of the chest, as in PD, you tend to have a bent posture. This is because the muscles in the chest become tight because of which there is difficulty in straightening up.

   1. Sit straight in your chair.
   2. Place both your hands at the back of your head (as shown in the picture).
   3. Now bring your elbows in front of your face such that both the elbows are touching.
   4. Hold this position for 5 counts.
   5. Next move both your elbows out, as far back as possible and stick your chest out. You may feel a stretch over your shoulder and upper chest when you do this.
   6. Hold this position for 10 counts.
   7. Then take your elbows forwards again and repeat 5 times.
c) **Elbow, wrist and finger stretch** If one of your arms is bent at the elbow or you find it difficult to straighten your fingers then you must stretch the muscles of your arm with the next exercise.

1. Sit straight in your chair.
2. Hold your arm out straight in front of you with your palm facing away from you and your fingers pointing upwards *as shown in the figure*.
3. Now with your other hand, pull your fingers back towards your body. Note: Make sure your elbow is straight and not bent.
4. Hold this for 10 counts
5. Repeat 5 times on each side, first left side and then right side.

**Leg Muscle Stretching Exercise:**
Sometimes in PD, one experiences cramps, “catches” & tightness in the muscles. The following exercise stretches the muscle at the back of your thigh & thus helps you to reduce cramps, “catches” and tightness in that muscle & helps to straighten the knees.

1. Move ahead slightly in your chair such that one of your legs is bent at about 90 degrees and the other knee is straight *as shown in the figure*.
   *Caution: Do not sit at the edge of the chair.*
2. Now maintaining this position, bend forwards until you feel a stretch at the back of your thigh.
   Note: Make sure that your knee is straight and your toes are pointing towards you.
3. Hold this position for 10 counts.
4. Repeat with the other leg.
5. Repeat 5 times for each leg, alternately.
e) **Calf stretch**

This exercise will help to reduce cramps, “catches” and tightness in the calf muscle.

1. Stand facing the wall. Place your hands on the wall.
2. Take one leg as far back as you can, keeping it straight.
3. Next slowly bend the knee of the leg which is closer to the wall and move that knee and chest towards the wall *(as shown in the figure).*
4. Whilst doing this make sure the heel of the leg which is away from the wall is flat on the floor and the knee is straight. *(You should feel a stretch at the back of this leg)*
5. Hold this position for 10 counts. Repeat on the other leg.
FACIAL EXERCISES

Particularly in PD, one must exercise facial muscles to improve facial expressions, which are affected due to rigidity. Furthermore, facial exercises also improve your speech and also help in the action of eating. You should perform these exercises in front of a mirror.

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Raise your eyebrows, such that your forehead is wrinkled. [Note to Facilitator: If the PwP is unable to do this, then lightly tap on their forehead above their eyebrows or with your fingers assist the patient in doing the movement.] Hold this position for 5 counts (1..2..3..4..5) Repeat 5 times</td>
</tr>
<tr>
<td>b</td>
<td>Bring your eyebrows together, like when you frown. Hold this position for 5 counts (1..2..3..4..5) Repeat 5 times</td>
</tr>
<tr>
<td>c</td>
<td>Close your eyes <strong>tightly</strong>. Hold this position for 5 counts (1..2..3..4..5) Repeat 5 times</td>
</tr>
<tr>
<td>d</td>
<td>Open your eyes wide and big Hold this position for 5 counts (1..2..3..4..5) Repeat 5 times</td>
</tr>
<tr>
<td>e</td>
<td>Fill your cheeks with air such that you feel a stretch in your cheeks, or your cheeks look like a balloon. Hold this position for 5 counts (1..2..3..4..5) Repeat 5 times</td>
</tr>
<tr>
<td>f</td>
<td>Open your mouth as wide as possible. You should be able to open your mouth to at least 3 finger space. Hold this position for 5 counts (1..2..3..4..5) Repeat 5 times</td>
</tr>
<tr>
<td>g</td>
<td>Smile wide and show your teeth Hold this position for 5 counts (1..2..3..4..5) Repeat 5 times</td>
</tr>
<tr>
<td>h</td>
<td>Take your tongue out as far as possible Hold this position for 5 counts (1..2..3..4..5) Repeat 5 times</td>
</tr>
<tr>
<td>i</td>
<td>Take your tongue out and move it to the right corner of your mouth. Hold for 5 counts. Now move your tongue to the left corner of your mouth. Hold again for 5 counts. Repeat 5 times on each side.</td>
</tr>
<tr>
<td>j</td>
<td>Rotate your tongue, inside your mouth, in a “clockwise” direction. Do this 5 times. Now rotate your tongue in an “anti clockwise” direction, inside your mouth. Repeat 5 times</td>
</tr>
</tbody>
</table>