



# UNIT III

## YOGA AS PREVENTIVE MEASURE FOR LIFESTYLE DISEASE

### Overview

Asanas as preventive measures for lifestyle disease :

- ◆ Obesity: Procedure, Benefits & contraindications for Tadasana, Katichakrasana, Pavanmuktasana, Matsayasana, Halasana, Paschimottasana, Ardh Matsyendrasana, Dhanurasana, Ushtrasana, Suryabedhan pranayama.
- ◆ Diabetes: Procedure, Benefits & contraindications for Ktichakrasana, Pavanmuktasana, Bhujangasana, Shalabhasana, Dhanurasana, Supta-vajarasana, Paschimottasana, Ardh Matsyendrasana, Mandukasana, Yogmudra, Gomukhasana, Ushtrasana, Kapalbhati
- ◆ Asthma: Procedure, Benefits & contraindications for Tadasana, Urdhwahastottasana, Uttan Mandukasana, Bhujangasana, Dhanurasana, Ushtrasana, Vakrasana, Kapalbhati, Gomukhasana, Mtsyaasana, Anulom-Vilom.
- ◆ Hypertension: Tadasana, Katichakrasana, Uttanpadasana, Ardha Halasana, Sarla Matyasana, Gomukhasana, Uttan Mandukasana, Vakrasana, Bhujangasana, Makarasana, Shavasana, Nadi-Shodhanapranayam, Sitlpranayam.
- ◆ Back Pain and Arthritis: Procedure, Benefits & Contraindications of Tadasan, Urdhawahastootansana, Ardh-Chakrasana, Ushtrasana, Vakrasana, Sarala Maysyendrsana, Bhujandgasana, Gomukhasana, Bhadrasana, Makarasana, Nadi-Shodhana pranayama.





### LEARNING OUTCOMES

*At the end of the chapter, children will be able to:*

- ◆ identify the asanas beneficial for different types of ailments and health problems.
- ◆ recognize importance of various asanas for preventive measures of obesity, diabetes, asthma, hypertension, back pain.
- ◆ describe the procedure for performing variety of asanas for maximal benefits.
- ◆ distinguish the contraindications associated with performing of different asanas.
- ◆ outline the role of yogic management for various health benefits and preventive measures.

### Discuss in a Group

- ◆ What are the factors that have led to an increase in sedentary behaviour in our modern lifestyle?
- ◆ What prompts individuals to develop a particular lifestyle or adopt a particular occupational culture?
- ◆ In what way do their different lifestyles and occupations impact the day to day life or health of individuals?
- ◆ What do you understand by the term lifestyle diseases?
- ◆ List some lifestyle diseases. What do these diseases lead to?
- ◆ What is the meaning of the term “premature mortality”?

### Do you know?

Difference between yoga and exercise?

When Yogasanas are performed, respiration and metabolic rates slow down. As a result, consumption of oxygen and body temperature drop. However, during exercise, breathing and metabolism speed up, oxygen consumption rises, and body gets hot. Yoga postures tend to arrest catabolism whereas exercise promotes it. Asanas are designed to have specific effects on the glands and internal organs, and to alter electrochemical activity in the nervous system. The asanas are classified in to three groups- beginners, intermediate, and advanced. Regular practice of a balanced programme, tailored to individual needs is recommended for maximum benefits.



## 3.1 Asanas to Prevent Obesity

### 3.1.1 TADASANA



This is a traditional posture. The final position of this asana resembles the palm tree. Palm trees are usually erect and straight. Therefore, one should be straight and erect in this asana

#### Technique

1. Stand with feet together or about 10 cm apart (for beginners), hands by the side of the thighs.
2. Distribute weight equally on both the feet to keep the body steady.
3. Raise arms over the head. Interlock the fingers and turn the palms upward.
4. Place hands on top of the head.
5. Fix eyes at a point on the wall slightly above the level of the head. The eyes should remain fixed on this point throughout the asana.
6. Inhale and stretch the arms, shoulders and chest upward.
7. Raise heels, coming up onto the toes.
8. Stretch whole body without losing balance or moving the feet.
9. Hold the breath and the position for a few seconds.
10. Lower the heels while breathing out and bring hands to the top of the head.  
This is one round.





## Breathing awareness

Breathing should be synchronized with the raising and lowering of the arms and balance should be maintained while stretching the whole body.

Things to remember while performing this Asana:

1. Do not move eyes from the point, it makes you lose balance.
2. While returning to starting position, first bring the heels on the floor slowly. Do not jerk as it can make you lose balance.

## Benefits

- Strengthens the legs, knees, ankles, arms, and chest.
- Stretches and opens the hips, groins, hamstrings, and calves; shoulders, chest, and spine
- Increases mental and physical equilibrium.
- Helps improve digestion.
- Reduce anxiety, stress, back pain and sciatica.

## Contraindications

Avoid doing this asana if you are suffering from

1. Migraine
2. Diarrhoea
3. low or high blood pressure
4. neck and back injuries

### 3.1.2 KATICHAKRASANA

The name of this yoga asana comes from *Kati* meaning waist and *chakra* meaning circle. Katichakrasana, literally means rotation of the waist. It gives a nice stretch to the waist and helps in making it more flexible and supple.





### Technique

1. Keep the legs 2-3 feet apart.
2. Raise both the arms up to shoulder level with palm facing each other and keep them parallel.
3. While exhaling, twist the body towards the left side so that the right palm touches the left shoulder, come back with inhalation.
4. While exhaling, twist the body towards the right side so that the left palm touches the right shoulder, come back with inhalation.
5. This is one round: repeat it two more times.
6. Relax in Samasthiti

### Breathing awareness

1. Inhale, come back to the centre.
2. Exhale, turn to your left and repeat the yoga posture on your left side.
3. Do the same on either side.

### Benefits

- Good for relieving constipation
- Strengthens and improves the flexibility of the spine and waist
- Good for arm and leg muscles





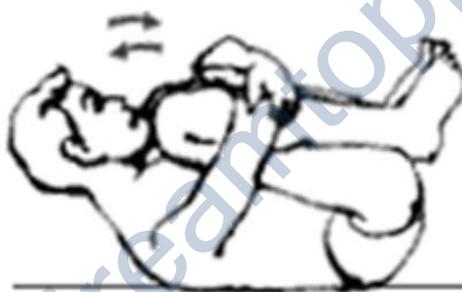
- Opens up the neck and shoulders and strengthens the abdominal muscles and lower back
- Beneficial for those with sedentary or deskbound jobs

### Contraindications

1. Avoid practicing Katichakrasana during pregnancy, or if you have hernia, slip disc, or have had an abdominal surgery recently.
2. Consult your doctor before practicing this yoga posture if you have chronic spinal disorders.

### 3.1.3 PAVANMUKTASANA

The name comes from the Sanskrit word pawan meaning wind and mukta meaning “free”. Thus, Pawanmuktasana is also known as the wind removing asana.



### Technique

1. Lie on back, stretching your legs straight.
2. Now bend your right knee and hold it with your hands, pressing it towards your abdomen. Breathe out, while lifting up your head and try to touch your knee with your chin.
3. Breathe in and stretch your legs straight.
4. After that press your abdomen with your left leg.
5. Then press your abdomen with both legs, placing your chin between your knees. From this position, swing your body back and forth 5 to 10 times, then swing your body left to right and vice versa 5 to 10 times.

### Breathing awareness

Breathe normally throughout the asana. Be aware of the coordination of the movement.





## Benefits

- Stretches the neck and back.
- The abdominal muscles are stretched and the internal organs are compressed which increases the blood circulation and stimulates the nerves, increasing the efficiency of the internal organs.
- The pressure on the abdomen releases any trapped gases in the large intestine.
- Digestive system is improved.
- Relieves constipation.
- Strengthens the lower back muscles and loosens the spinal vertebrae.
- It is beneficial for women too. Massages the pelvic muscles and reproductive organs and is beneficial for menstrual disorders.
- Reduces fats in the abdominal area, thighs and buttocks.

## Contraindications

1. Must be avoided if there is recent abdominal surgery as there is a lot of pressure on the abdomen.
2. Anyone suffering from hernia or piles should avoid this asana.
3. Pregnant women should not practice this asana.

### 3.1.4 MATSYASANA

The Sanskrit word Matsya means fish. Hence, Matsyasana refers to the fish pose. According to the ancient Yogic texts, Matsyasana can restore spinal strength and overall body balance, consequently leading to a better physical and emotional outlook.



## Technique

1. Begin Matsyasana by lying down in Savasana (Corpse Pose). Stretch arms and legs out, relax the body and take a few deep breaths.





2. Place your palms under your hips in a way that the palms are facing the ground. Now, bring the elbows closer to each other, placing them close to your waist.
3. Cross your legs so that your feet cross each other at your middle, and your thighs and knees are placed flat on the floor.
4. Breathe in and lift your chest up in a way that your head is also lifted, and your crown touches the floor.
5. Make sure the weight of your body is on your elbows and not on your head. As your chest is lifted, lightly pressurize your shoulder blades.
6. Hold the position only until you are comfortable. Breathe normally.
7. To release from Matsyasana gently raise the head up, lowering the chest and head to the floor and bring the hands back along the sides of the body.
8. Ensure the head is at complete rest and the lower spine is close to the floor. Relax in Savasana and take few breaths. When ready, go back into the asana again and hold it for longer time and take the asana deeper with every exhalation.

### Breath awareness

1. Begin slow inhalation and exhalation and as you exhale throw the chest out and bring the head deeper down.
2. Slowly inhale and bring the head up and release the head and shoulders.
3. Relax the body as you exhale and stretch the entire back down to the floor or mat and take few breaths.

### Benefits

- Matsyasana opens and stretches the neck muscles and shoulders.
- Helps in opening the chest and corrects round shoulders too.
- Gives relief from respiratory disorders by encouraging deep breathing.
- Strengthens the back muscles with the formation of the arch.
- Helps tone the parathyroid, pituitary and pineal glands.
- This posture helps to regulate emotions and stress.

### Contraindications

Matsyasana should not be practised by someone suffering from

1. high or low blood pressure





2. neck injuries or injury to any part of the lower or middle back.
3. migraine.
4. spondylitis
5. heart ailments
6. Women who are pregnant should not attempt this yoga asana.

### 3.1.5 HALASANA

Hala means plough. This posture is known as Halasana because in its final position the shape of the body resembles the Indian plough.



#### Technique

1. Take supine position, hands straight by the side of thighs, palm resting on the ground.
2. Slowly raise your legs together at an angle of 30 degree without bending at the knees by pressing your hands.
3. After a few seconds raise your legs further upto 60 degrees angle and maintain the position for a few seconds.
4. Now slowly bring the legs to a 90 degrees angle.
5. Pressing both hands bring the legs slowly towards the head.
6. Continue bending of legs till toes touch the ground and then stretch your legs backward as far as possible.
7. Now place both the palms on the head making finger lock. Bring the elbows on the ground.
8. While returning back to original position first release the finger lock. Stretch the hands straight and place them on the ground by the side of the body.





9. Lower the waist and raise the legs from the ground Slowly let the waist rest on the ground and stop bringing the legs at 90 degree angle.
10. Slowly come back to the original position.

### Breath Awareness

1. Keep the breath under control and ensure it is not irregular and erratic.
2. With a deep inhalation raise the legs to 90 degrees and exhale completely.
3. Remain in this position for a few breaths and allow the flow of blood to happen.

### Benefits

1. Due to the disturbance of abdominal muscles if there is a complaint of Dyspepsia or constipation, it can be corrected by practice of this asana.
2. The practice of this asana is helpful in certain types of Diabetes.
3. Maximum benefits of Halsana can be derives when Bhujangasana is practised immediately after Halasana.

### Contraindication

Halsana should not be practiced

1. by the ones suffering from cervical spondylitis or stiffness in spine.
2. By a person suffering from abdominal injuries or Hernia.

### 3.1.6 PASCHIMOTTANASANA

The word paschimottasana comes from the Sanskrit words paschima meaning west or back of the body and uttana meaning intense stretch or extended. In this asana one has to sit and intensely stretch the back forward.



### Technique

1. Sit, stretching both the legs together in front, hands by the side, palms resting on the ground. Fingers should remain together pointing forward.





2. Loosen your back muscles and bend the body forward as far as it is possible.
3. Maintain this position and loosen your hands and place them where they are comfortable. It would be better if they are put on the thighs.
4. Practice it daily and keep bending forward a little more. Finally hold the big toes with forefingers of respective hands and place the forehead on the knees.
5. After a few seconds raise the head, release the toes and come to the original position.

### Breathing awareness

- Breathe slowly and deeply during the final position or release breath out if holding for a short duration.
- Inhale while returning to the starting position.

### Benefits

1. It stretches the muscles of the back from head to the ankles. It contracts the muscles of the anterior part of the body.
2. Improves the process of respiration and the functions of the intra-abdominal glands, especially the secretions.
3. Improves flexibility of the lumbar region, the hips and thighs (back side of thighs and calves).
4. Massages and tones the abdominal and pelvic region including all organs such as the liver, pancreas, kidneys, adrenals, spleen and intestines.
5. Improves blood circulation in the back region and tones the spinal nerves.
6. Improves alignment of the vertebral column.

### Contraindications

In case of a painful and enlarged liver or spleen, herniated discs or acute appendicitis you should not do paschimottanasana until you are relieved of the symptoms.

### 3.1.7 ARDHA MATSYENDRASANA

The name comes from the Sanskrit words *ardha* meaning half, *matsya* meaning fish, and *eendra* meaning king. The final position of this asana is just like Half Lord of the Fish that is why it is called "ardhamatsyendrasana". This asana is also known as "Half Spinal Twist Pose".





### Technique

1. Sit extending both the legs together in front, hands by the side, palm resting on the ground. Fingers should remain together pointing forward.
2. Fold the right leg at knee. Slowly set the right heel at the perineum.
3. Now folding the left leg, bringing it from above the right knee, place it by the side on the ground. The knee of the left leg should remain towards sky.
4. Bring the right hand on the left side of the left knee. The left knee should remain at the left side of the right armpit.
5. Now straighten the right hand and hold the toe or ankle of the left leg.
6. Twisting the body to the left side look backwards, place the left hand bringing it from the back on the right thigh. Gaze should be towards back.
7. While returning to the original position first release the hand from the thigh and turn head forward.
8. Now bring the back to normal position after loosening the right hand.
9. Bring the left leg in original position.
10. Now bring the right leg also in original position.
11. Repeat it similarly from the other side by folding the left leg first.

### Breathing awareness

1. Inhale in forward position.
2. Exhale while twisting the trunk. Breathe deeply and slowly without strain in the final position.
3. Inhale while returning to the starting position.





## Benefits

1. It is very useful in constipation and dyspepsia.
2. This asana improves liver efficiency and removes debility of kidney.
3. It is very useful in diabetes.
4. It is very beneficial for the muscles of shoulder and back.

## Contraindications

1. Should be avoided during pregnancy and menstruation due to the strong twist in the abdomen.
2. People who have undergone heart, abdominal or brain surgeries should not practice this asana.
3. Care should be taken by those suffering from peptic ulcers or hernia.
4. Those with severe spinal problems should avoid the asana. While those suffering from mild slipped disc can benefit from this asana but in severe cases it should be avoided.

### 3.1.8 DHANURASANA

The name Dhanurasana comes from the Sanskrit words *Dhanura* meaning bow. The final position of this asana is like a bow that is why this asana is called dhanurasana.



## Technique

1. Take prone position, legs together, and hands straight by the side of the thighs, chin resting on the ground.
2. Fold the legs at the knee and bring them to the thighs. Knees must remain together.





3. Bring your hands backward and hold the toes of respective legs with the thumb and forefinger of the respective hands.
4. Raise your legs up a bit and simultaneously raise your head and chest.
5. Holding the toes, pull the legs towards your ears and bring the toes near the ear. Gaze in front.
6. While returning to the original position loosen your hands, take legs backward, let the thighs touch the ground, leave the toes and ultimately bring the legs and hand to the first position.

### Breathing awareness

Inhale deeply in the starting position. Retain breath inside while coming into the final position; Breathe slowly and deeply. Exhale while returning to the starting position.

### Benefits

- It makes the spine and back muscles flexible, removes nervous weakness.
- It cures constipation and removes excess fat.
- It acts as a cure for dyspepsia, rheumatism and gastrointestinal disorders.
- It improves digestion and appetite.

### Contraindications

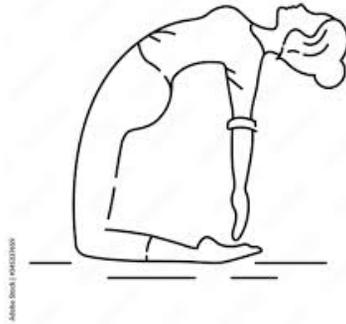
1. A person suffering from high blood pressure, back pain, hernia, headache, migraine or abdomen surgery should not practice dhanurasana.
2. Ladies should not practice this asana during pregnancy and during periods.

#### 3.1.9 USHTRASANA

*Ustra* means Camel. So Ushtrasana refers to the camel pose.

Ushtrasana is an intermediate level back-bending yoga posture known to open Anahata (Heart chakra). This yoga posture adds flexibility and strength to the body and also helps in improving digestion.





### Technique

1. Sit in Vajrasana
2. Stand on the knees, and raise the arms beside the body on the shoulder level.
3. Keep the knees and feet together or can be separated if needed.
4. While exhaling twist to the right side and place the right palm on the right heel.
5. Bending a little bit more to back place the left palm on the left heel.
6. In the final position push the abdomen and hips forward, with the thighs vertical to the floor, and bend the head and spine backward according to the flexibility.
7. Try to relax the whole body, especially the back muscles, in the final position.
8. Weight of the body should be evenly supported by the legs and arms. The arms should anchor the shoulders to maintain the arch of the back.
9. Exhale and bring back the abdomen and the thighs from the vertical position.
10. Return to the standing position by inhaling and slowly raising the left hand from the heels. Bring left arm to the shoulder level and then the right arm in the same way.
11. Exhale lowering the arms and come back to vajrasana.

### Breathing awareness

- Slow inhalation and exhalation while taking position and bringing the body to proper position and alignment.
- With every inhalation raise the chest up and spine in, and relax the body with exhalation.
- Inhale and release the neck first, slowly bring the body back to the initial position and here exhale completely.





### Benefits

- It promotes stretching of anterior muscles and contraction of the posterior muscles.
- Generates favourable influence on ovaries, thyroid and other endocrine glands.
- Develops strength and confidence.
- Beneficial for digestive and reproductive organs.
- It loosens up the vertebra and stimulates the spinal nerves, relieving backache, rounded back and drooping shoulders.
- It is helpful for asthmatic people.

### Contraindication

Avoid this asana in case of

- hernia
- abdominal injuries
- back problems
- severe arthritis
- vertigo
- pregnancy.

#### 3.1.10 SURYA BHEDHANA PRANAYAMA

*Surya* is the sun and *bhedhana* means to get through. In Surya bhedhana Pranayama all inhalations are done through the right nostril and all exhalations through the left.





## Technique

1. Sit in any meditation posture e.g. Padasana, Sukhasana etc. Close your eyes.
2. Keep the left nostril closed with the middle and ring finger of the right hand.
3. Slowly inhale without making any sound through the right nostril as long as you can do it comfortably.
4. Then bring your hand down and place it on the knees and retain the breath by firmly pressing the chin against the chest. Simultaneously contract your rectum muscles.
5. This point cannot be reached at the very outset. You will have to increase the period of retaining breath gradually. This is the limit of the sphere of practice of Surya Bhedhana Pranayama.
6. Exhale very slowly, without making any sound through the left nostril by closing the right nostril followed by releasing the rectum muscles (anal lock), chest from the chin lock.
7. Relax and come back to original position. Do this 3 to 5 times.

## Benefits

- This Pranayama should be performed again and again, as it purifies the brain and destroys the intestinal worms and diseases arising from excess of wind (Vayu).
- It helps to manage rhinitis and various sorts of neuralgia.
- The worms that are found in the frontal sinuses are removed.
- It is good for persons suffering from low blood pressure.

## Contraindications

1. In case of any shoulder, wrist, fingers and hand injuries and surgery avoid this asana.
2. If there is acidity, stomach and mouth, avoid this practice due to the heat created by it.

### I. Tick the correct option

1. What causes Obesity?
  - a. Non-Activity
  - b. Smoking





- c. Over indulgence in food
  - d. All of the above
2. Ushtrasana pose refers to :
- a. Camel pose
  - b. Cow pose
  - c. Fish pose
  - d. Cobra pose
3. Which asana is of side twist pose ?
- a. Shavasana
  - b. Chakrasana
  - c. Ardha Mastendrasana
  - d. Parvatasana

**II. Answer the following questions**

1. Draw and label the diagram of Dhanurasana correctly and discuss the technique for the asana,
2. Explain the correct breathing pattern while performing Suryabhedan pranayama.
3. Write in detail the benefits of Paschimottanasana.

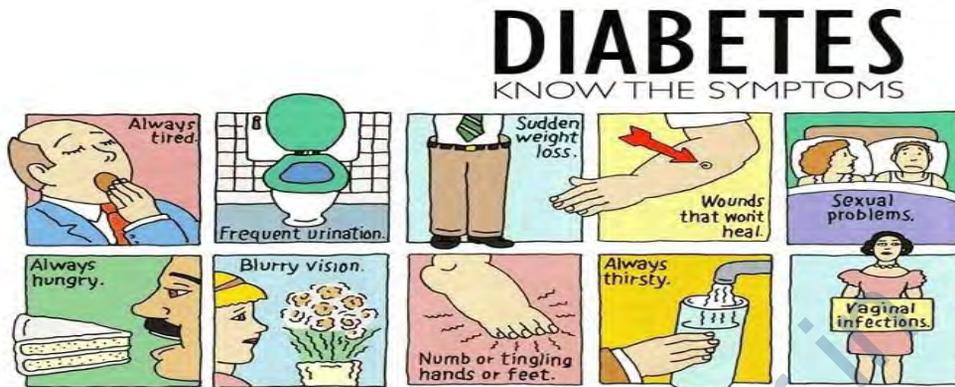
**III. Answer the following questions in 150-200 words.**

1. Discuss the asanas helpful for prevention of obesity.
2. Write down the procedure and contraindications of Pavanmuktasana in detail.
3. Explain Katichakrasana and its benefits





## 3.2 Asanas to Prevent Diabetes Mellitus



### 3.2.1 KATICHAKRASANA

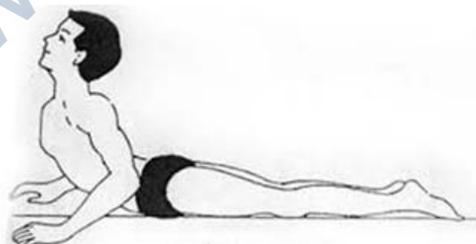
See 3.1.2

### 3.2.2 Pavanmuktasana

See 3.1.3

### 3.2.3 BHUJANGASANA

In Sanskrit the word Bhujanga means Cobra. Since the final position of this asana resembles the 'Hooded Snake' therefore it is called Bhujangasana.



### Techniques

1. Take prone lying position, legs together, toes together, pointing outwards, hands by the side of the body, fingers together, palm facing upward and forehead resting on the ground.
2. Fold hands at the elbows, place palms on the ground near each side of the shoulders, thumb should be under the armpit.
3. Bring chin forward and place it on the ground. Gaze in front.





4. Raise chin and turn head backward as much as possible. Raise the thorax turning the spine backwards up to the navel. Do not raise navel.
5. Maintain the posture for some time. Then slowly bring your body back on the ground, starting from the upper part of the navel, thorax shoulder, the chin, and lastly place your forehead on the ground.
6. Now, relax your hands and place them on either side of your thighs.

### Breathing awareness

- Inhale while raising the torso
- Breathe normally in the final position
- Exhale while lowering the torso.
- Breathing and movement should be synchronized and smooth.

### Benefits

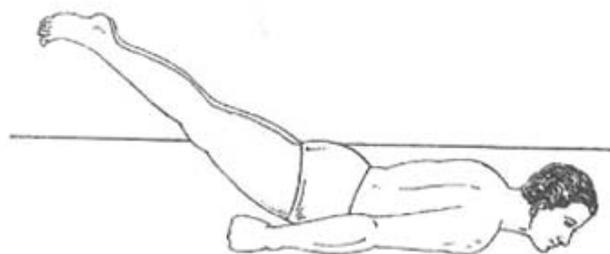
- Strengthens and increases the flexibility of the spine and vertebral column.
- Opens the chest, shoulders, heart and ribcage.
- Tones and strengthens the entire spinal extensor group of back muscles.
- Stimulates the endocrine system and digestive organs.
- Good for kyphosis

### Contraindications

1. Women during pregnancy should avoid this asana.
2. Avoid the asana if suffering from Spondylitis.
3. People with spinal injuries and/or weak back muscles should avoid this asana.

### 3.2.4 SHALBHASANA

The name Shalabhasana comes from the Sanskrit shalabh which means grasshopper or locust.





## Techniques

1. Take prone lying position, legs together, toes backward, sole towards the sky. Hands by the side, palms upward, fingers together, forehead touching the ground.
2. Folding both hands at the elbow, bring them under the shoulder like Bhujangasana, fingers together pointing forward.
3. Now slowly bring both the legs upwards, without bending them at knees, and maintain the position.
4. Then bring the legs down slowly.
5. Come back to the original position bringing hands back to their place.

## Breathing awareness

- Inhale deeply in the starting position.
- Retain breath inside while raising both legs and hold the position.
- Exhale while lowering the legs.
- Maintain this synchronization of breath and movement.

## Benefits

1. It helps to reduce the abdominal fat and tones the abdomen.
2. It strengthens back and neck muscles.
3. It helps in repairing your entire spinal cord and replenishes it.
4. It helps to rectify your neck pain, and repair defects in the neck joints.
5. It encourages digestion by improving activity of the intestines by stretching them.
6. It helps in rectifying urinary disorders.
7. It strengthens the uterus and reproductive system.
8. It helps in correcting the menstrual problems.
9. It strengthens the hip bones and reduces any excessive thigh muscles.
10. It helps to decrease constipation.

## Contraindications

1. Those who are suffering with acute back pain or slip disc should avoid this asana.





2. Those with severe sciatica should avoid this asana as it tightens the entire body from the hip to the feet.
3. Those who have major problems with menstruation or with a prolapsed uterus should avoid this asana.
4. Women in their pregnancy should avoid this asana.
5. Those who have blood pressure problems should avoid this asana as it may lead to suffocation.

### 3.2.5 Dhanurasana

See 3.2.8

### 3.2.6 SUPTA - VAJRASANA

In Sanskrit, supta means reclined, and Vajra means thunderbolt. This is mainly useful in improving the digestive system and boosting our stamina.



#### Technique

1. Sit in Vajrasana.
2. Slowly place your elbows on the ground near your hips.
3. Slowly straighten your hands and completely lie on your back
4. Shoulders should rest on the floor and knees should remain together
5. After practicing this position well, making the shape of a scissor with both hands bring them under the shoulders. Right hand should be under the left shoulder and left hand should be under the right shoulder and the head should be in the middle.
6. When returning to the original position, first take out the hands and place them by the side of the body.
7. Now with the help of the elbow sit as in the first position.



### Breathing awareness

- Breathe deeply and slowly in the final position.
- While returning to the starting position, breathe in the reverse order.

### Benefits

1. It massages the abdominal organs improving digestive ailments and constipation.
2. It tones the spinal nerves, makes the back flexible, and realigns rounded shoulders.
3. helps to fill the lungs to its maximum capacity and bringing more oxygen into the system.
4. It is beneficial for those suffering from asthma, bronchitis and other lung ailments.
5. It increases the circulation in the brain.
6. It regulates the functioning of the adrenal glands.
7. It tones the pelvic muscles
8. It helps to improve disorders of both the male and female reproductive organs.

### Contraindications

1. Should not practice in case suffering from very high blood pressure, slipped disc.
2. Those who suffer from vertigo should avoid the asana.
3. Pregnant women or those undergoing irregularities in menstruation cycle or having knee injuries or surgery, should avoid supta vajrasana.

#### 3.2.7 PASCHIMOTTANASANA

See 3.2.6

#### 3.2.8 ARDHA MATSYENDRASANA

See 3.2.7

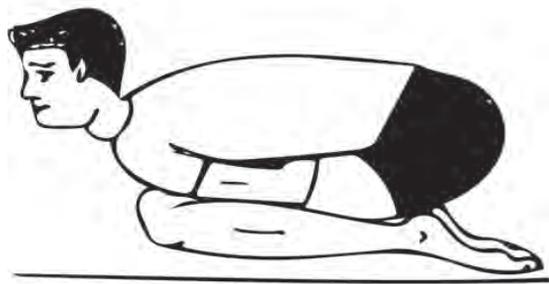
#### 3.2.9 MANDUKASANA

Mandukasana comes from the Sanskrit manduk which means frog. This yoga asana is aptly named frog pose as your body resembles a frog when you practise it.





This yoga asana is fairly straightforward and can be practised by almost all age groups.



### Technique

1. Sit in Vajrasana and make fists with both hands, the thumbs inside.
2. Place your fists on your belly next to the belly button.
3. Bend forward with exhalation.
4. Keep looking straight.
5. Hold your breath in the yoga posture for a few seconds and come up with inhalation.
6. Repeat this asana 3-4 times.

### Breath awareness

- Inhale deeply.
- Exhale slowly and completely once you touch the floor with the forehead.
- Slowly inhale as you look up to release from the position and expand the neck forward and then backwards along with the entire back.
- Come back completely exhaling and sit in Vajrasana again.

### Benefits

- This asana is beneficial to all organs of the body.
- Mandukasana gives you relief from diabetes, digestive disorders and constipation.
- This asana improves the flexibility and mobility of the knee and ankle joints.
- It helps tone muscles of the shoulder and abdomen.



- Regular practice of this asana increases your lung capacity.
- This yoga asana is beneficial for people suffering from problems of the pancreas and the heart.
- This asana helps reduce fat from thighs, belly and hips.

### Contraindications

1. People suffering from severe back pain must avoid practising this yoga asana.
2. If you have recently undergone abdominal surgery, abstain from attempting to perform Mandukasana.
3. Pregnant women are not advised this yoga technique.
4. If you have injured your ankle, have high blood pressure, suffer from insomnia, or are prone to migraines, you should not practise this yoga asana.

### 3.2.10 GOMUKHASANA

The name Gomukhasana comes from the Sanskrit words Go, meaning cow and Mukha, meaning face or mouth.

This yoga asana gets its name because the thighs and calves of the person performing it resemble a cow's face, wide at one end and tapering towards the other.



### Technique

1. Sit on the floor, with legs extended and spine straight.
2. Place the palms on the floor and bring the left leg bent at the knee and place the left foot below the right hip, raising the body a bit. Sit on the left foot taking the ankle and the toes deep inside.





3. Raise the right leg bent at the knee and place the right thigh over the left thigh by bringing the right foot close to the left hip on the floor.
4. Bring your left arm and stretch it above your shoulder and head. Bending it, take the left palm and place it on your back, close to the shoulder blade.
5. Now raise the right arm and from below take it behind you bending at the elbow and with the right palm try to reach for the left palm. Once comfortable, clasp the left palm and maintain the position feeling the stretch at the shoulders and the elbows.
6. Gradually, pull the palms closer and bring the chest out raising the upper body upwards. Ensure the neck does not bend forward, but remains in line with the shoulders and chest.
7. Feel the stretch at the thighs, knees, chest, abdomen, shoulders, arms, neck and the elbows.
8. Maintain this position for a few breaths and slowly release. Relax by stretching the legs out in front of you and bring the arms down beside you.
9. After taking a few breaths in the relaxed position, bring the right leg bent at the knee and place the right foot close to the left hip and cross the left thigh over the right thigh and bring the left foot close to the right hip on the floor.
10. Raise the right arm and bring the right palm from up and behind your head and place it close to the shoulder blade behind you.
11. Stretch the left arm and take it from down and place the left palm close to the shoulder blade behind you and try to clasp the right palm. Interlock the fingers and pull the chest out and the shoulder blades closer expanding the spine upwards.
12. Remain in this posture for a few breaths, then release the arms and stretch the leg out in front of you and relax.

### Breath Awareness

- In Gomukhasana, inhale and cross the legs taking the feet deep into the asana completely exhale expanding the spine
- Inhale again and bring the arms behind you
- Exhale taking the other arm from below holding on to the palms.
- With every exhalation stretch deeper into the asana and loosen the body with inhalation.





## Benefits

1. The stretch at the hamstrings helps in gaining flexibility
2. Gomukhasana enables greater flexibility of the hip joint.
3. It stretches and tones the muscles of the chest.
4. This asana increases blood supply to the legs and arms.
5. The flexion of the knee joint can be useful to heal certain kinds of weakness in the knees (provided there is no ligament tear).
6. Improves the functioning of the abdominal organs and digestion.
7. Stretching the abdominal area also burns the unnecessary fat at the tummy area and tones the entire torso.
8. Biceps and triceps muscles are strengthened and there's increased flexibility of the shoulder and the upper arms.

## Contraindications

1. Gomukhasana should not be practised by those suffering from shoulder pain, back ache, hip or knee pain or stiffness in the shoulders.
2. This asana must be avoided when pregnant.

### 3.2.11 YOGAMUDRA

Yogamudra is not asana rather it is a mudra but it can be performed as a remedy for Diabetes.

Yogamudra recreates the human form in its role of being a part of the Divine. It is the sign of great understanding and wisdom which knows the weakness of human nature and has endless potentiality.



## Technique

1. Sit in padmasana and close the eyes.





2. Hold one wrist behind the back with the other hand.
3. Inhale deeply
4. While exhaling, bend forward, keep the spine straight.
5. Bring the forehead to the floor.
6. Stay in that final position for as long as it is comfortable.
7. Slowly return to the starting position.

### Breathing awareness

- Inhale slowly and deeply in the starting position.
- Exhale while bending forward. Breathe deeply and slowly in the final position.
- Inhale while returning to the starting position.

### Benefits

1. It helps to stretch the posterior muscles of the trunk and the neck.
2. Improves muscle toning and venous circulation of the spinal column.

### Contraindications

1. Should be avoided during pregnancy.
2. People who have undergone heart, abdominal or brain surgeries should not practice this asana.
3. Care should be taken by those suffering from peptic ulcer or hernia.
4. Those with severe spinal problems should avoid asana. While the asana can benefit those with mild slipped disc, but in severe cases it should be avoided.

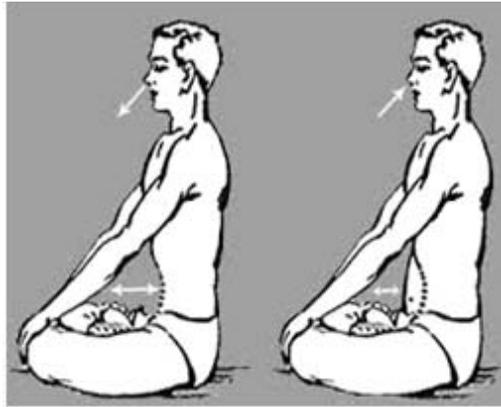
## 3.2.12 USHTRASANA

See 3.2.9

## 3.2.13 KAPALABHATI

This involves forceful and fast diaphragmatic breathing. In a comfortable sitting position, one exhales forcefully by contracting the abdomen and inhales. The exhalations and inhalations are accompanied with the abdominal movements which take place in quick successions for a number of times depending on one's capacity.





### Benefits

- This is a great cleanser for the respiratory passages including the sinuses.
- It improves respiratory function and promotes circulation.
- Improves balance.
- It removes acidity and gas related problems.
- It cures sinusitis, asthma, and hair loss.

### Precautions

- Pregnant women, slipped disc patients, and asthma patients should avoid it.
- It should not be performed during menstruation

### I. Tick the correct option

1. Which gland secretes the hormone insulin, the lack of which is associated with Diabetes?
  - a. Endocrine glands
  - b. Pituitary
  - c. Pancreas
  - d. Hypothalamus
2. Kati Chakrasana is a
  - a. standing asana
  - b. Sitting asana
  - c. Lying asana
  - d. Balancing asana





3. Bhujangasana is also known as
  - a. Dog posture
  - b. Child posture
  - c. Cobra posture
  - d. Reverse Boat posture
4. Which asana can be suggested as preparatory asana for Pawanmuktasana
  - a. Vajarasana
  - b. Bhujangasana
  - c. Matsyendrasana
  - d. Naukasana

**II. Answer the following questions**

1. Draw and label the diagram of Supta Vajarasana correctly.
2. Explain the correct breathing pattern while performing Paschimotasana.
3. Write in detail the benefits of Shalabhasana.

**III. Answer the following questions in 150-200 words.**

1. Discuss the technique and benefits of Bhujangasana.
2. Explain how yoga can prevent Diabetes?

### 3.3. Asanas to Prevent Bronchial Asthma

#### 3.3.1 TADASANA

See 3.1.1

#### 3.3.2 Urdhvahastottansana

The name for this asana comes from the Sanskrit *urdhva*, meaning upward, and *hasta*, meaning hands. Urdhvahastasana is called upward salute or upward hands pose in English.





### Technique

- Stand upright in the overhead-stretch pose with fingers interlocked.
- Breathing in, stretch the hands high, but keep the feet flat on the floor.
- Breathing out, slowly bend to the left/right. Pause for few seconds at the limit of the bend;
- Strengthen up slowly, breathing in.
- Slowly bend to the opposite side (left/right), breath out, hold for few seconds;
- Straighten up slowly, inhaling.

### Breath awareness

Inhale when stretching up.

Exhale out when side stretch and return position.

### Benefits

1. **Back pain:** It gives appropriate stretch to the muscles, especially the finer muscles of the back. The regular practice of this yogasana is helpful in overcoming back pain.
2. **Spinal health:** It is beneficial for spinal health. After focusing on the alignment of the body and spine, it helps to improve the curvature of the spine.
3. **Weight loss:** It is known as yoga for waist slim, yoga to remove fat from hips due to adequate stretch in this region.





4. **Asthma control:** It provides stretch to the chest region, thus, helps to increase the intake capacity of the lungs. All these ensure the betterment of lung health and gives relief from asthma too.
5. **Constipation relief:** It ensures proper movement to the alimentary canal, especially the stomach, intestine, and large intestines, which result in relieving constipation.
6. **Abdominal sides' fat:** This is one of the best yoga poses to burn the fats from abdominal sides because of experiencing extra stretching in these areas.
7. **Nerve health:** Practicing the yoga asana on regular basis will facilitate stretching from toes to fingers. If it is maintained with breathing, it can show its impact upon the efficiency of nerves.
8. **Strengthening of legs:** The asana is good for the health of toes, feet, ankles, knees, buttocks, etc.
9. **Sciatica:** If it is practiced under the supervision of a yoga expert, sciatica pain can be reduced drastically.

### Contraindications

- **Pregnancy:** The asana should be avoided during pregnancy.
- **Varicose vein:** A person suffering from varicose veins should take the help of a yoga expert.
- **Headache:** Don't perform during headache.
- **Insomnia:** During insomnia, a yoga therapist should be consulted before practicing the yoga pose

### 3.3.3 UTTANMANDUKASANA

When in Mandukasaana, hold the head in the elbows. This is Uttanaamandukasana which resembles an upright frog.



### Technique

1. Sit in Vajrasana
2. Spread out both the knees but toes should remain together.
3. Fold your right hand backward from above the right shoulder and place the palm below the left shoulder.
4. Now folding the left hand similarly place the palm on the right shoulder. One elbow should be on the other.
5. While coming back to the original position slowly remove left hand. Bring knees together as in first position.

### Benefits

1. Uttanmandukasana is helpful in
2. Diaphragmatic movements.
3. Improving posture
4. Removes back pain and pain in lumbar region.
5. Increases elasticity of thigh joint and shoulder.

### Contraindications

- Individuals suffering from arthritis, hernia, chronic and severe back problems, elbow pain, shoulder pain, spinal deformities should not perform this asana.

#### 3.3.4 BHUJANGASANA

See 3.2.3

#### 3.3.5 DHANURASANA

See 3.1.8

#### 3.3.6 USHTRASANA

See 3.1.9





### 3.3.7 VAKRASANA

Vakra means twist in Sanskrit. Thus the Sanskrit name of Vakrasana means Twisted Pose because the spine is twisted in practicing this asana. Vakrasana comes under the category of seated asanas. The lower back, middle back, hips, neck are involved in practicing Vakrasana.



#### Technique

1. Seated in Dandasana, take a few breaths and expand the spine upwards. Connect the breath with the movement of the spine and relax the entire body.
2. Bring the left knee close to your chest and take a few breaths, then pick up the left foot and place it outside of the right knee.
3. Twist your upper body towards the left while the right elbow is placed at the outside of the left knee and place the hand on the floor close to your right knee. Remember the body is twisted to the same side as the knee is bent and, in this case, because the left knee is bent, the body is twisted to the left.
4. Take a deep breath and, with the support of the right elbow, twist the upper body to the left as far as possible and face the wall behind you.
5. Place the left hand behind you as close as possible to your lower back. This should help you raise your spine up and also to balance your body.
6. With every exhalation raise the spine and twist as much as possible trying to turn your neck and shoulders to bring it parallel to the wall to your left.
7. Release the asana and take a few breaths and relax in Dandasana.
8. Continue the stretch with the same position of the left knee, but twist your body now to the right by placing both the palms on to the floor on the right close to your lower back and try to look behind you as much as possible.
9. Repeat the same now with the right knee and start with turning to the right and then release. Continue the asana with the upper body twisted to the Left.



### Breath Awareness

- Inhale as you twist the body
- Exhale while coming back to the initial position.
- Repeat on either sides.

### Benefits

1. This asana helps straighten the upper back.
2. It strengthens the neck muscles.
3. This asana tones the internal organs like the digestive system, intestines, uterus and kidneys.
4. As this asana puts neck muscles to work, it activates thyroid gland. This ensures a balanced hormone level in the body.

### Contraindications

1. It may not be a good idea to practice this yoga asana if there is a back injury.
2. Pregnant women should avoid this yoga asana as it will bring discomfort to the uterus and hence this asana is not good for them.
3. Persons suffering from weak neck muscles or upper spine may get sore neck muscles.

#### 3.3.8 KAPALBHATI

See 3.2.13

#### 3.3.9 GOMUKHASANA

See 3.2.10

#### 3.3.10 MATSYAASANA

See 3.1.4

#### 3.3.11 ANULOM-VILOM

This is one of the fundamental types of Pranayams. This practice is also known as Anuloma-viloma as Viloma means 'produced in the reverse order'. This practice gets the name from the fact that the order of using the nostrils for inhalation and exhalation is reversed every time.





### Technique

1. Sit in any comfortable meditation asana. Keep the head and spine straight. The eyes should be closed.
2. Place right hand in jnana mudra. Close the right nostril with the right thumb. Inhale through the left nostril for 5 counts.
3. After 5 counts of breath, release the pressure of thumb from the right nostril and close the left nostril with the ring finger.
4. Exhale through the right nostril for 10 counts, keeping the respiration rate slow, deep and silent. Then, inhale through the right nostril for 5 counts.
5. Exhale 5 rounds of practice or for 3 to 5 minutes, making sure that no sound is produced as the air passes through the nostrils.

### Benefits

1. Calms and steadies the mind, improves focus and concentration. Balances left and right hemispheres.
2. Strengthens the immune system.
3. Manages hypertension.
4. Provides sufficient oxygen for the functioning of every cell in our body.
5. Removes waste products such as carbon dioxide and other toxic gases from the body, so that they do not remain in the blood stream.

#### I. Tick the correct option

1. What causes an Asthma Attack?
  - a. Allergy
  - b. Smoke



- c. Exercise
  - d. All of the above
2. Poor exchange of oxygen and carbon dioxide in an individual is the result of
    - a. exercise induced Asthma
    - b. allergy induced Asthma
    - c. Pulmonary Hypertension
    - d. Respiratory Failure
  3. Which asana is base asana for curing Asthma?
    - a. Sukhasana
    - b. Chakrasana
    - c. Matsyasana
    - d. Parvatasana

## II. Answer the following questions

1. Draw and label the diagram of Parvatasana correctly and discuss the technique for the asana,
2. Explain the correct breathing pattern while performing Chakrasana.
3. Write in detail the benefits of Gomukhanasana.

## III. Answer the following questions in 150-200 words.

1. Discuss the asanas helpful for a person suffering from asthma.
2. Write down the procedure and contraindications of Matsyasana in detail.
3. Explain role of yoga in Asthma management

### 3.4 Asanas to Prevent Hypertension

#### 3.4.1 TADASANA

See 3.1.1

#### 3.4.2 KATICHAKRASANA

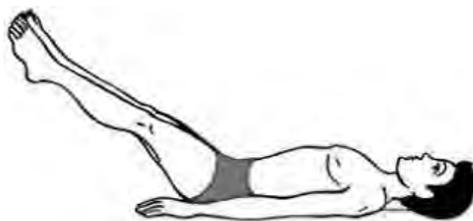
See 3.1.2





### 3.4.3 UTTANPADASAN

The asana gets its name from the Sanskrit terms Uttana meaning raise-upward, and pada meaning feet or legs. Uttanpadasana is one of the most important asanas in yoga with lots of health benefits. It is also known as The Raised Leg Pose as the legs are raised upwards in supine position.



#### Technique

1. Take supine position with legs together, hands together by the side of the body. Palm resting on the ground.
2. Raise both the legs together slowly upto 30 degree angle.
3. Another few seconds, raise further upto 45 degree angle.
4. After few second, raise upto 60 degree angle and maintain it there for few seconds.
5. While returning, stop at 45 degree or 30 degree angle.
6. Finally, bring both the legs on the ground.

#### Benefits

1. This asana is very beneficial for those suffereing from diabetes, constipation, indigestion and nervous weakness.
2. It balances the naval cetre " Nabhimanipurachakra"
3. It builds up the abdominal muscles.
4. Helps to improve breathing and lung capacity.

#### Contraindications

- Avoid this posture in case there is any injury in the neck, back, pelvis, or leg muscles.
- Pregnant women should not perform this asana.
- People suffering from severe spondylitis, cardiac disease or abnormal blood pressure must refrain from uttanapadasana.



- If an individual has undergone hernia-repair surgery, wait at least two weeks before practicing this asana.
- If you have a migraine, then do not practice it.

### 3.4.4 ARDHA -HALASANA

Ardha means half and Hala means plough so this asana is called Ardha-halasan because in its final position, the body resembles half the shape of an Indian plough.



#### Technique

1. Take supine position, hands straight by the side of thighs and palm resting on the ground.
2. Slowly raise your legs together without bending them at the knees and pressing your hands till you stop at an angle of 30°.
3. After few seconds, raise your legs further towards your head up to an angle of 60° and hold position.
4. Now slowly bring your legs up to an angle of 90° and maintain position for 15 -30 seconds.

#### Breathing awareness

- Inhale while in the lying position. Retain breath inside while assuming the final asana.
- Breathe slowly and deeply in the final position. Retain breath inside while returning to the starting position.
- It is the preparatory asana for halasana.

#### Benefits

1. Improves digestion and appetite.





2. Improves blood circulation.
3. Strengthens the thigh and calf muscles.
4. Helps to reduce abdomen fat and lose weight
5. Stimulates the abdominal organs.

### Contraindications

1. People suffering from any cardiac problems, back pain, high blood pressure should avoid this practice.
2. Not to be practised by women who are pregnant, as the pressure is immense at the lower abdomen causing tightening around the pelvic area.
3. Anyone suffering from acute lower back pain needs to take precaution during this practice.
4. Anyone recovering from any kind of stomach infection or surgery around the abdominal area should take proper precautions and guidance.

### 3.4.5 SARALA MATYASANA

The word Saral means easy and Matsya means fish.



### Technique

Lie flat on the back.

1. With the support of your hands keep the top of your head on the mat.
2. Neck, upper back and shoulders will be lifted from the ground.
3. Relax your hands at the side of your body.
4. Breathe normally and keep your toes stretched out.
5. Hold the position for 30 seconds, then relax.

### Breath Awareness

1. Inhale as you lift the chest and tuck the head.



2. Exhale while relaxing the body and bring it to the initial position.
3. And get back to normal breathing.

### Benefits

- It improves digestive system.
- Helps to cure irritable bowel syndrome.
- Helps to get rid of abdominal-related issues

### Contraindications

People with cervical spondylitis and frozen shoulder should avoid practicing this asana.

#### 3.4.6 GOMUKHASANA

See 3.2.10

#### 3.4.7 UTTAN MANDUKASANA

See 3.3.3

#### 3.4.8 VAKRASANA

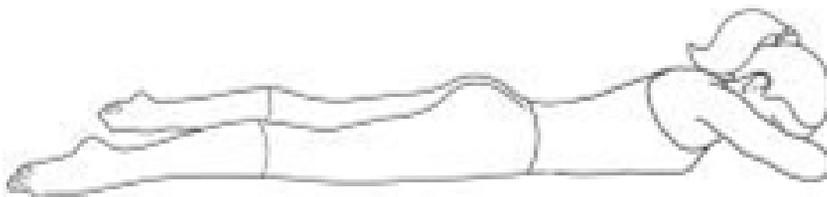
See 3.3.7

#### 3.4.9 BHUJANGASANA

See 3.2.3

#### 3.4.10 MAKARASANA

Makar means crocodile. While doing this asana the body resembles the shape of a crocodile, hence it is known as Makarasana. It is also considered a relaxing asana like Shavasana.





### Technique

1. Take prone lying position, hands by the side of the thighs.
2. Slowly spread out both the legs. The toes should point out and heels inward.
3. Slowly fold the left hand at elbow bringing it from below the armpit. Place it on the right shoulder. Fold the hand at the elbow and place it on the left shoulder.
4. Place your head on the triangle made by both the elbows.

### Breath Awareness

- Inhale as you lift the torso up.
- Exhale while resting the elbows on the floor.
- Inhale by pushing the chest out and taking the shoulders back.
- Exhale gently lift the chin up and push the belly into the floor. Inhale and feel the expansion of the chest and belly.
- Inhale and Exhale as you continue to remain in this posture.

### Benefits

1. This is beneficial in Asthma
2. For those who have acquired wrong process of respiration this asana is quite useful.
3. Abdominal muscles get automatic massage.

### Contraindication

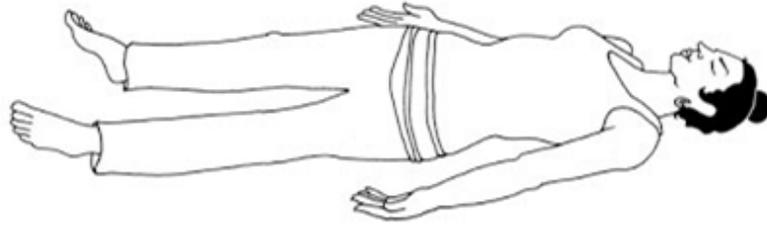
This asana should not be performed by those suffering from

1. Heart problem
2. Obesity
3. Gas or high blood pressure

#### 3.4.11 SHAVASANA

Lying supine on the ground like a corpse is Shavasana. Shavasana wards off fatigue and brings mental repose. This asana is supposed to be a relaxing asana. It is very useful in removing fatigue created due to the practice of other asanas.





### Technique

1. Lie straight on your back with ease.
2. Keep distance of about one and half feet between the legs.
3. Place hands straight on the ground at the distance of six inches from your body, palms facing upward, fingers will remain slightly curled and eyes closed.
4. After maintaining it for sometime, return to first position.

### Benefits

1. This asana is practised soon after the practice of other asanas, through this fatigue is removed.
2. This very beneficial in high blood pressure, and cardiac diseases.
3. It is also beneficial for people suffering from neurosis and fear complexes.

### Contraindications

Those who have been forbidden for supine position by doctors due to some reasons, should not practice it.

#### 3.4.12 NADI- SHODHANA PRANAYAM

Nadi means “channel” and Shodhana means “purification”, therefore it is known as channel for purification. Nadi Shodhana, also known as Anulom Vilom or Alternate Nostril Breathing.





### Technique

1. Sit in any comfortable meditation asana. Keep the head and spine straight. The eyes should be closed.
2. Place right hand in jnana mudra. Close the right nostril with the right thumb. Inhale through the left nostril for 5 counts.
3. After 5 counts of breath, release the pressure of thumb from the right nostril and close the left nostril with the ring finger.
4. Exhale through the right nostril for 10 counts, keeping the respiration rate slow, deep and silent. Then, inhale through the right nostril for 5 counts.
5. Exhale 5 rounds of practice or for 3 to 5 minutes, making sure that no sound is produced as the air passes through the nostrils.

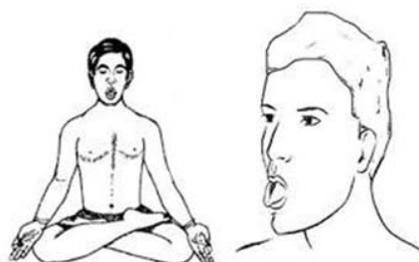
### Benefits

1. Calms and steadies the mind, improves focus and concentration. Balances left and right hemispheres.
2. Strengthens the immune system.
3. Manages hypertension.
4. Provides sufficient oxygen for the functioning of every cell in our body.
5. Removes waste products such as carbon dioxide and other toxic gases from the body, so that they do not remain in the blood stream.

### 3.4.13 SHEETALI PRANAYAMA

As the name indicates, this Pranayama cools the system.

It helps to keep the body's temperature down.



### Technique

1. Sit in Padmasana or in any comfortable position. Place your hands on the knees in jnana mudra. Close your eyes gently.





2. Open your mouth, bring the tongue outside the mouth and form a cylindrical shape by bending the sides of the tongue longitudinally and inhale.
3. While inhaling, the air should pass through the tongue.
4. Close your mouth.
4. Retain breath for as long as you can while pressing the chin against the chest (chin lock), simultaneously pulling your rectum muscles (anal lock).
5. Then release chin lock and anal lock and exhale slowly through the nostrils.

### Benefits

1. Beneficial in diseases pertaining to throat and spleen etc.
2. Cures indigestion.
3. Helps in controlling thirst and hunger. Lowers blood pressure.
4. Beneficial for diseases caused by imbalance of pitta dosha (heat).
5. Purifies blood.

#### Extension Activity Find out

- ◆ Three factors that may increase blood pressure.
- ◆ Relationship between having high blood pressure and the circulatory system.
- ◆ The reason high blood pressure is called the "silent killer".
- ◆ Five symptoms of high blood pressure?
- ◆ Three factors that could cause a decrease in blood pressure.

#### I. Tick the correct options

1. What causes Hypertension?
  - a. Excessive insulin secretion
  - b. Smoke
  - c. Food
  - d. All of the above
2. In Uttanpadasana which is the correct pose:
  - a. Legs raised in supine position
  - b. Legs raised in prone position
  - c. Head raised in supine position
  - d. Head and led raised in prone position





3. Which asana is base asana for relaxation and mental repose?
  - a. Shavasana
  - b. Chakrasana
  - c. Halasan
  - d. Parvatasana

II. Answer the following questions

1. Draw and label the diagram of Saral Matsayasana correctly and discuss the technique for the asana,
2. Explain the correct breathing pattern while performing nadi-shodhan pranayama.
3. Write in detail the benefits of Ardha halasana.

III. Answer the following questions in 150-200 words.

1. Discuss the asanas helpful for a person suffering from Hypertension.
2. Write down the procedure and contraindications of Matsyasana in detail.
3. Explain sitli pranayama and its benefits

### 3.5. Asanas to Prevent Back Pain and Arthritis

#### 3.5.1 TADASANA

See 3.1.1

#### 3.5.2 URDHWAHASTOTTANSANA

See 3.3.2

#### 3.5.3 ARDHA-CHAKRASANA

In Sanskrit, *Ardha* means half, *Chakra* means wheel and *Asana* means a pose. Therefore, Ardha-chakrasana means half-wheel postures. It is a simpler version of chakrasana.





### Technique

1. Stand straight and bring your hands together in a clasped position.
2. Raise and rotate your hands above the shoulders.
3. Slowly bend the upper part of your body along with the hands, as far as possible.
4. Remain in this position for some time according to your capacity.
5. To release the pose, bring back slowly to the standing position with hands on your side.
6. There is a variation of Ardha Chakrasana, where the hands are placed behind the hips and then the back bending is attempted

### Benefits

1. Strengthens the back and abdominal muscles.
2. Tones the organs in the abdomen including the digestive, excretory and reproductive organs.
3. Relief from back problems and postural defects.
4. Opens the chest and strengthens the arms and shoulder muscles.
5. Posture prepares beginners for the more difficult full wheel pose or Chakrasana.

### Contraindications

1. Ardha Chakrasana should not be done by those suffering from any neck, hip or spinal injury.
2. Those suffering from high blood pressure should avoid this pose.
3. Pregnant women should avoid all poses that puts any strain on the foetus.

### 3.5.4 USHTRASANA

See 3.2.12

### 3.5.5 VAKRASANA

See 3.4.8

### 3.5.6 SARALA MATSYENDRASANA

See 3.4.5





### 3.5.7 BHUJANGASANA

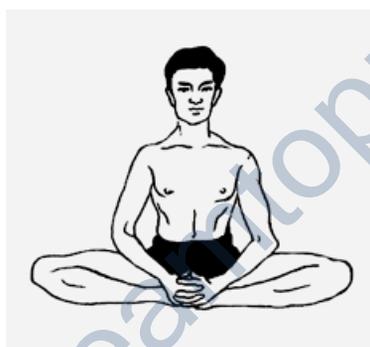
See 3.2.3

### 3.5.8 GOMUKHASANA

See 3.2.10

### 3.5.9 BHADRASANA

Bhadrasana means Gracious Yoga, it consists of two words -Bhadra and Asana. Bhadra is a Sanskrit word, which means Auspicious or Gracious, while asana indicates Yoga pose.



1. Sit on the mat with legs fully stretched forward.
2. Bring the feet, with the toes pointing outward, close to the generative organ, the heels touching the perineum very closely.
3. If required, clasp the feet to bring the heels as close to the body as possible
4. Once this position is secured, place the hands on the respective knees pressing them down.
5. Keep the neck straight , upper body (chest) forward, stomach held in normal contour, focus eyes at one point straight ahead.

#### Benefits

1. Helps to loosen the joints by flexing and stretching the tendons. The muscles of the pelvis, knees and ankles become more supple.
2. Relieves tension from the spinal region.
3. Provides relief in cases of sciatic, varicose vein and menstrual disorders.
4. Prevents Arthritis
5. Improves posture



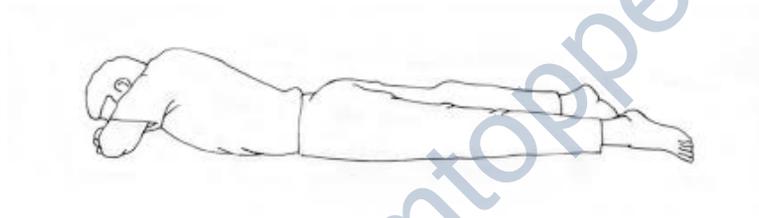
6. Promotes concentration
7. Bhadrasana is a good for those who find it difficult to sit in more classical posture like Padmasana and Vajrasana.

### Contraindications

Although beneficial for prevention from arthritis, practitioners with serious arthritis should consult yoga expert before practising this asana.

### 3.5.10 Makarasana

In Sanskrit “Makar” means “Crocodile, and “Asana” means “posture”. The English name is “Crocodile pose”.



### Technique

1. Lie down on the floor on your stomach with your hands folded under the head.
2. Place the right palm over the left palm on the ground and place the head over the right palm in a relaxed way and close your eyes.
3. Stretch the legs as far as possible. The toes should point outwards.
4. Relax the whole body. Breathe normally and slowly. Feel the whole body touching the ground and the deep relaxation in all your muscles.
5. Relax in this posture for few minutes.
6. While returning from the posture, slowly bring the feet together. Unfold the arms and come to the Prone Position.

### Benefits

1. Deep relaxation to the shoulders and the spine.
2. Reduce Waist pain.
3. Helps in Slipped disc.
4. Asthmatic and patients with lung disorders.
5. Relief for arthritis patients.





## Contraindications

Practitioners in their second or third trimesters of pregnancy should avoid practice of makarasana in prone posture.

### 3.5.11 NADI-SHODHANA PRANAYAM

See 3.4.12

#### Extension Activity Find out

- ◆ What structures make up the back?
- ◆ What causes lower back pain?
- ◆ What are the risk factors for developing low back pain?
- ◆ How is low back pain diagnosed?
- ◆ How is back pain treated?
- ◆ Can back pain be prevented?

Share your answer in the form of a poster.

#### I. Tick the correct options

1. Which of the asana is for relaxation?
  - a. Makarasana
  - b. Bhadrasana
  - c. Ardh-Chakrasana
  - d. All of the above
2. In Ardh Chakrasana which is the correct pose:
  - a. Back bend in standing position
  - b. Forward bend in standing position
  - c. Leg raised in sitting position
  - d. Head and led raised in lying position
3. Which asana is base asana is not having back bend?
  - a. Tadasasana
  - b. Chakrasana
  - c. Bhujangasana
  - d. Ushtrasana



## II. Answer the following questions

1. Draw and label the diagram of Bhadrasana correctly and discuss the technique for the asana,
2. Explain the correct breathing pattern while performing nadi-shodhan pranayama.
3. Write in detail the benefits of Ardha Chakrasana.

## III. Answer the following questions in 150-200 words.

1. Discuss the asanas helpful for a person suffering from arthritis?
2. Write down the procedure and contraindications of Makarasana in detail.

## IV. Complete the table given below.

Name of disease	Name of asanas	Benefits
Obesity		
Hypertension		
Diabetes		
Asthma		

## V. Case Study Question





1. Yoga as preventive measure for lifestyle diseases
  - a. Based on the picture above, write down the name of lifestyle disease for which these asanas are used as preventive measures?
  - b. Which pranayama can also be used to help with this lifestyle disease?
  - c. What could be the possible cause for this lifestyle disease?
2. Raman, a student of class X has Asthma due to which he is unable to participate in sports activities. He has requested his yoga teacher at school for assistance. The Yoga teacher has advised him to practice certain asanas.
  - a. Write down the name of any four asanas which could be done for asthma?
  - b. Which pranayama is most effective in this disease?
  - c. Draw a stick diagram of any two asanas for preventing asthma.

### Sports Integration Activity

Talk to few people doing yoga at park, ask them the asanas, kriya and pranayama they do in their yoga routine and make a list of it.

Try to find the Sanskrit meaning of poses, asanas, kriya or pranayama they perform and convert them to your local or official language to understand how the names have been derived.

Classify the names as type of nouns (eg. Parvatasana - mountain : Object; Ushtraasana- Camel: animal)

