

MANONMANIAM SUNDARANAR UNIVERSITY

TIRUNELVELI 627012, TAMIL NADU

MANDATORY COURSE (2 Credits) FOR All UG PROGRAMMES

SYOG3A - YOGA

(From the academic year 2018-19)

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UNIT - I

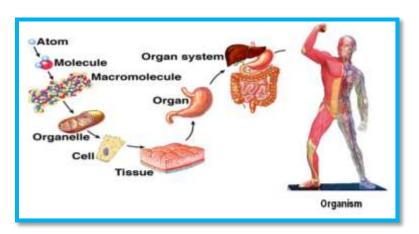
INTRODUCTION TO HUMAN BODY

BODY STRUCTURE

The **human body** is composed of many different types of cells that together create tissues and subsequently organ and systems. It comprises a head, neck, trunk (which includes the thorax and abdomen), arms and hands, legs and feet.

Anatomy is the study of the structure and relationship between body parts.

Physiology is the study of the function of body parts and the body as a whole.

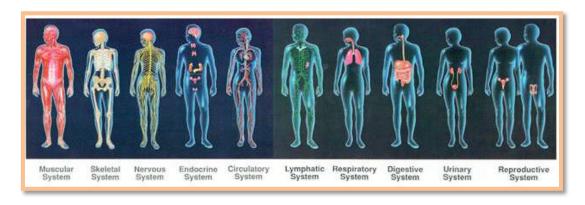


Atom---Molecules---Cell-- -Tissue---Organ---System---Organism

- At the chemical level, atoms, molecules (combinations of atoms), and the chemical bonds between atoms provide the framework upon which all living activity is based.
- The **cell** is the smallest unit of life. Organelles within the cell are specialized bodies performing specific cellular functions. Cells themselves may be specialized. Thus, there are nerve cells, bone cells, and muscle cells.
- A **tissue** is a group of similar cells performing a common function. Muscle tissue, for example, consists of muscle cells.
- An **organ** is a group of different kinds of tissues working together to perform a particular activity. The heart is an organ composed of muscle, nerve, connective, and epithelial tissues.
- An **organ system** is two or more organs working together to accomplish a particular task. The digestive system, for example, involves the coordinated activities of many organs, including the mouth, stomach, small and large intestines, pancreas, and liver.

An **organism** is a system possessing the characteristics of living things—the ability to obtain and process energy, the ability to respond to environmental changes, and the ability to reproduce.

SYSTEMS O F HUMAN BODY AND THEIR FUNCTIONS



(i) Circulatory system

The circulatory system comprises the heart and blood vessels (arteries, veins, capillaries). The heart propels the circulation of the blood, which serves as a "transportation system" to transfer oxygen, fuel, nutrients, waste products, immune cells and signaling molecules (i.e., hormones) from one part of the body to another. The blood consists of fluid that carries cells in the circulation, including some that move from tissue to blood vessels and back, as well as the spleen and bone marrow.

(ii) Digestive system

The digestive system consists of the mouth including the tongue and teeth, esophagus, stomach, (gastrointestinal tract, small and large intestines, and rectum), as well as the liver, pancreas, gallbladder, and salivary glands. It converts food into small, nutritional, non-toxic molecules for distribution and absorption into the body.

(iii) Endocrine system

The endocrine system consists of the principal endocrine glands the pituitary, thyroid, adrenals, pancreas, parathyroids, and gonads, but nearly all organs and tissues produce specific endocrine hormones as well. The endocrine hormones serve as signals from one body system to another regarding an enormous array of conditions, and resulting in variety of changes of function.

(iv) Immune system

The immune system consists of the white blood cells, the thymus, lymph nodes and lymph channels, which are also part of the lymphatic system. The immune system provides a mechanism for the body to distinguish its own cells and tissues from

outside cells and substances and to neutralize or destroy the latter by using specialized proteins such as antibodies, cytokines, and toll-like receptors, among many others.

(v) Integumentary system

The integumentary system consists of the covering of the body (the skin), including hair and nails as well as other functionally important structures such as the sweat glands and sebaceous glands. The skin provides containment, structure, and protection for other organs, and serves as a major sensory interface with the outside world.

(vi) Lymphatic system

The lymphatic system extracts, transports and metabolizes lymph, the fluid found in between cells. The lymphatic system is similar to the circulatory system in terms of both its structure and its most basic function, to carry a body fluid.

(vii) Musculoskeletal system

The musculoskeletal system consists of the human skeleton (which includes bones, ligaments, tendons, and cartilage) and attached muscles. It gives the body basic structure and the ability for movement. In addition to their structural role, the larger bones in the body contain bone marrow, the site of production of blood cells. Also, all bones are major storage sites for calcium and phosphate. This system can be split up into the muscular system and the skeletal system.

(viii) Nervous system

The nervous system consists of the central nervous system (the brain and spinal cord) and the peripheral nervous system consists of the nerves and ganglia outside the brain and spinal cord. The brain is the organ of thought, emotion, memory, and sensory processing, and serves many aspects of communication and controls various systems and functions. The special senses consist of vision, hearing, taste, and smell. The eyes, ears, tongue, and nose gather information about the body's environment.

(ix) Reproductive system

The reproductive system consists of the gonads and the internal and external sex organs. The reproductive system produces gametes in each sex, a mechanism for their combination, and in the female a nurturing environment for the first 9 months of development of the infant.

(x) Respiratory system

The respiratory system consists of the nose, nasopharynx, trachea, and lungs. It brings oxygen from the air and excretes carbon dioxideand water back into the air.

(xi) Urinary system

The urinary system consists of the kidneys, ureters, bladder, and urethra. It removes toxic materials from the blood to produce urine, which carries a variety of waste molecules and excess ions and water out of the body.

PHYSICAL HEALTH

Physical health can be defined as a state of well-being when all internal and external body parts, organs, tissues and cells can function properly as they are supposed to function.

This physical health definition also includes physical health as a state of physical well-being in which a person is physically fit to perform their daily activities without restrictions.

PHYSICAL FITNESS

The ability to perform daily tasks with vigor and without undue fatigue, and with sufficient energy to engage in leisure-time pursuits, to meet unforeseen emergencies, and the vitality to perform at one's fullest capacity.

MEANING OF WHOLESOME DEVELOPMENT

In India, around 66% of population below 35 years of age, India boasts of being the youngest country in the world. India is fortunate to have this demographic which is thought of as the single most important factor in leading the country to a bright future. However, there exists a crucial difference between 'potential' and 'actualization'. Mere potential can boost our pride but substantive gain is only possible when potential gets translated into reality. And for making it a reality, several steps need to be taken.

1. Organic growth and development

Proper functioning of the body systems so that the individual may adequately meet the demands placed upon him by his environment. A foundation for skill development. Through a systematic programme of physical Education Muscle strength, Muscle endurance, cardiovascular endurance, Flexibility, normal relative weight and improved posture will be developed.

2. Neuro Muscular Coordination

A harmonious functioning of the nervous and muscular systems to produce desired movements. Through a systematic physical education programme locomotor skills (walking, running, pulling, pushing etc), Fundamental skills of games (dribbling in Football, basketball and passing in hockey and volleyball etc), Motor factors (Accuracy, Rhythm, balance, agility, etc), Recreational skills (Hiking, Boating etc) shall be developed.

3. Interpretive and Intellectual Development

The ability to explore, to discover, to understand to acquire knowledge and to make value judgments. A knowledge of game rules, safety measures, The use of strategies and techniques involved in organized activities – Body functions and its relationship to physical activity – A development of appreciation for personal performance, use of judgment related to distance, time, space, force, speed, direction etc. Shall be developed through participation in various sports and games.

4. Social development

An adjustment to both self and others by integration of the individual to society and his environment.

- > The ability to make judgments in a group situation
- Learning to communicate with others
- > The ability to exchange and evaluate ideas within a group.
- ➤ The development of the social phases of personality, attitudes, and values in order to become a functioning member of society.
- > The development of a sense of belonging and acceptance by society.
- > The development of positive personality traits
- > Learning for constructive use of leisure time
- ➤ A development of attitude that reflects good moral character.
- The above factors will be developed through physical educational activities.

5. Emotional Development

- A healthy response to physical activity through a fulfillment of basic needs.
- > The development of positive reactions in spectatorship and participation through either success or failure.
- The release of tension through suitable physical activities.
- An outlet for self-expression and creativity
- An appreciation of the aesthetic experiences derived from correlated activities.
- > The ability to have fun.

YOGA

ORIGIN AND DEVELOPMENT OF YOGA

A Brief History and Development of Yoga

Pre-Classical Yoga

The beginnings of Yoga were developed by the Indus-Sarasvati civilization in Northern India over 5,000 years ago. The word yoga was first mentioned in the oldest sacred texts, the Rig Veda. The Vedas were a collection of texts containing songs, mantras and rituals to be used by Brahmans, the Vedic priests. Yoga was slowly refined and developed by the Brahmans and Rishis (mystic seers) who documented their practices and beliefs in the Upanishads, a huge work containing over 200 scriptures. The most renowned of the Yogic scriptures is the Bhagavad-Gîtâ, composed around 500 B.C.E. The Upanishads took the idea of ritual sacrifice from the Vedas and internalized it, teaching the sacrifice of the ego through self-knowledge, action (karma yoga) and wisdom (jnana yoga).

Classical Yoga

In the pre-classical stage, yoga was a mishmash of various ideas, beliefs and techniques that often conflicted and contradicted each other. The Classical period is defined by Patanjali's Yoga-Sûtras, the first systematic presentation of yoga. Written sometime in the second century, this text describes the path of Raja Yoga, often called "classical yoga". Patanjali organized the practice of yoga into an "eight limbed path" containing the steps and stages towards obtaining Samadhi or enlightenment. Patanjali is often considered the father of yoga and his Yoga-Sûtras still strongly influence most styles of modern yoga.

Post-Classical Yoga

A few centuries after Patanjali, yoga masters created a system of practices designed to rejuvenate the body and prolong life. They rejected the teachings of the ancient Vedas and embraced the physical body as the means to achieve enlightenment. They developed Tantra Yoga, with radical techniques to cleanse the body and mind to break the knots that bind us to our physical existence. This exploration of these physical-spiritual connections and body centered practices led to the creation of what we primarily think of yoga in the West: Hatha Yoga.

Modern Period

In the late 1800s and early 1900s, yoga masters began to travel to the West, attracting attention and followers. This began at the 1893 Parliament of Religions in Chicago, when Swami Vivekananda wowed the attendees with his lectures on yoga and the universality of the world's religions. In the 1920s and 30s, Hatha Yoga was strongly promoted in India with the work of T. Krishnamacharya, Swami Sivananda and other yogis practicing Hatha Yoga. Krishnamacharya opened the first Hatha Yoga school in Mysore in 1924 and in 1936 Sivananda founded the Divine Life Society on the banks of the holy Ganges River. Krishnamacharya produced three students that would continue his legacy and increase the popularity of Hatha Yoga: B.K.S. Iyengar, T.K.V. Desikachar and Pattabhi Jois. Sivananda

MEANING OF YOGA

Yoga is essentially a spiritual discipline based on an extremely subtle science, which focuses on bringing harmony between mind and body. It is an art and science of healthy living. The word 'Yoga' is derived from the Sanskrit root 'Yuj', meaning 'to join' or 'to yoke' or 'to unite'. As per Yogic scriptures the practice of Yoga leads to the union of individual consciousness with that of the Universal Consciousness, indicating a perfect harmony between the mind and body, Man & Nature. According to modern scientists, everything in the universe is just a manifestation of the same quantum firmament. One who experiences this oneness of existence is said to be in yoga, and is termed as a yogi, having attained to a state of freedom referred to as mukti, nirvana or moksha. Thus the aim of Yoga is Self-realization, to overcome all kinds of sufferings leading to 'the state of liberation' (Moksha) or 'freedom' (Kaivalya). Living with freedom in all walks of life, health and harmony shall be the main objectives of Yoga practice."Yoga" also refers to an inner science comprising of a variety of methods through which human beings can realize this union and achieve mastery over their destiny.

IMPORTANCE AND BENEFITS OF YOGA

Man is a physical, mental and spiritual being; yoga helps promote a balanced development of all the three. Other forms of physical exercises, like aerobics, assure only physical well-being. They have little to do with the development of the spiritual or astral body. Yogic exercises recharge the body with cosmic energy and facilitates:

- > Attainment of perfect equilibrium and harmony
- Promotes self- healing.
- > Removes negative blocks from the mind and toxins from the body

- Enhances personal power
- Increases self-awareness
- ➤ Helps in attention, focus and concentration, especially important for children
- > Reduces stress and tension in the physical body by activating the parasympathetic nervous system
- ➤ The aspirant feels rejuvenated and energized. Thus, yoga bestows upon every aspirant the powers to control body and mind.

The art of practicing yoga helps in controlling an individual's mind, body and soul. It brings together physical and mental disciplines to achieve a peaceful body and mind; it helps manage stress and anxiety and keeps you relaxing. It also helps in increasing flexibility, muscle strength and body tone. It improves respiration, energy and vitality. Practicing yoga might seem like just stretching, but it can do much more for your body from the way you feel, look and move.

Yoga asanas build strength, flexibility and confidence. Regular practice of yoga can help lose weight, relieve stress, improve immunity and maintain a healthier lifestyle.

YOGA AS A SCIENCE

Yoga, an ancient but perfect science, deals with the evolution of humanity. This evolution includes all aspects of one's being, from bodily health to self realization. – B.K.S. lyengar

Science has proven the health benefits of yoga

Yoga is a science, and not a vague dreamy drifting or imagining. It is an applied science, a systematised collection of laws applied to bring about a definite end. It takes up the laws of psychology, applicable to the unfolding of the whole consciousness of man on every plane, in every world, and applies those rationally in a particular case. This rational application of the laws of unfolding consciousness acts exactly on the same principles that you see applied around you every day in other departments of science." – Annie Wood Besant

The Science behind Yoga and Stress

The neuroscience behind Yoga can help explain why regular Yoga is so effective in reducing stress and creating balance in the body. It can also help you deepen your Yoga practice and increase focus on elements that you might otherwise overlook. Dr. Mithu Storoni, a medical doctor, neuroscientist, and yoga teacher, explains the fundamental principles of the Science behind Yoga and Stress.

Yoga alters the chemical structure of your brain

Yoga involves the mindful and controlled entry into a pose- or asana- holding the pose in stillness, and then a controlled release. "As you hold a posture, your prefrontal cortex is countering the raised sympathetic signal as it keeps you focused. This is how you train your mind to keep your stress signal under control.

Yoga boosts brain chemicals that promote a sense of wellbeing. It increases the levels of the brain chemicals like GABA, serotonin, and dopamine, the happy chemicals responsible for feelings of relaxation and contentment. These neurotransmitters are targeted by the drugs for medicating mood, such as anti-depressants and anti-anxiety drugs. Yet yoga has long been shown to successfully reduce and heal anxiety and depression.

Yoga balances the Emotions

Yoga stimulates the parasympathetic nervous system, which is responsible for calming us down. Activating the parasympathetic nervous system, starts the process of restoration and healing in the body. Blood is directed toward endocrine glands, digestive organs, and lymphatic circulation. Blood pressure and the heart rate are lowered, nutrients in food can be absorbed more easily and toxins are released from the body due to enhanced circulation.

Yoga as a tool for healing trauma

Yoga is increasingly being used as a tool to heal trauma and has successfully been used with post-traumatic stress disorder (PTSD) and traumatic brain injury (TBI). "These are severely injured and often profoundly depressed veterans who are receiving treatment as inpatients for six to nine months or more. During Yoga Nidra, these folks start to feel reconnected to themselves and the world around them and experience the feeling of finally coming home from the war, to themselves, their families, and daily life."

PRINCIPLES OF YOGIC PRACTICES

- Yogic practices are not 'exercises' as we understand the word 'exercise'. The word exercise is generally applied to vigorous physical movements. Since Yogic practices do not involve vigorous movements any kind of violent action be avoided during Yoga practices.
- ➤ The nature of yogic practices is varied and involves different mechanisms through which the results of particular yogic practices are obtained. The asana, pranayama, bandha, kriya, dhyana do not use the same channels for bringing the result of the practices.
- Asana one of the most important and best known of the yogic practices are "static stretching procedures". They should be performed slowly and smoothly in order to

- influence the tonic system rather than the phasic one. *Slackening* of effort is required in the practice.
- All yoga practices utilize one of the three faculties of *intellect, emotion* and *will-power* of man. These three faculties are the expression of functional mind in the form of *reasoning, feeling* and *willing*.
- ➤ Practice of Yoga as functions of mind provides it a *universal* basis for its understanding and acceptance beyond religion, race, creed, caste or gender; since these functions of mind are common to all.
- ➤ Yogic practices should not lead to undue fatigue. If there is fatigue it should be overcome by the practice of relaxation in *shavasana*.
- All yogic learning is neural basis. Unless proper neuromuscular co-ordination is formed one cannot expect further developments in any motor skills.
- Minimum expenditure of energy is the criterion of simplicity and efficiency in any yogic activity. Vigorous movements consume more energy, while static activities consume less energy.
- > Early morning is the ideal time for yoga practice but it can also be practiced in the evening.
- ➤ Bathing before the practice is good. Use cold or warm water as per the requirement of the individual and season.

YOGA THERAPY

More and more mainstream medical practices are using yoga therapy, as growing research shows how it aids recovery, especially from stress-induced conditions, and improves overall health and vitality. The field of Yoga Therapy is rapidly growing and hospitals are beginning to open integrated health care departments, adding yoga therapeutics as part of their complementary approaches to health care. In recent years it has made news for the huge benefits that children with autism and special needs are experiencing, through yoga therapy. It is being used to treat a broad range of physical ailments, with great success and is quickly growing as a complementary modality alongside other treatments.

MODERN CONCEPT OF YOGA

Hatha Yoga is a particular system of yoga that focuses on the purification of the physical body as leading to the purification of the mind and vital energy. In its many modern variations, Hatha Yoga is the style that many people associate with the word 'Yoga' today. Most people think of yoga as 'the twisting of ones body into pretzel form'. The true definition of yoga is the union of ones mind, body, and spirit.

Positive Thinking and Meditation

According to history, Yoga was first referenced as a form of meditation. Meditation has been defined as the self-regulation of attention, in the service of self-inquiry, in the here and now. The various techniques encompass a wide range of disciplines that may emphasize different goals such as a higher state of consciousness, greater focus, creativity or self-awareness, or simply a more relaxed and peaceful frame of mind.

Proper Relaxation

One of the definitions of relaxation is 'the freedom from activity', which, for some people in today's world who are trying to balance home, family, and work, is the equivalence to sleep. Another definition of relaxation is 'a feeling of refreshing tranquility and an absence of tension or worry'.

Proper Exercise

Yoga involves creating a balance in the body through developing both strength and flexibility through the performance of poses and postures. In simpler terms: strengthening through stretching. The more you practice, the more flexible you become and the more body strength you develop.

Proper Breathing

Yoga will help us to learn breathing process that slow, deep breathing allows the abdomen to expand bringing into the lungs the amount of oxygen needed to nourish all the cells of the body. It also slows down the heart rate, relaxes muscles and calms the mind.

Proper Diet

Along with breathing, eating is another reflexive action. And, just like breathing, over time we begin to develop an improper means of mollifying our hunger pangs by indulging in junk foods and fast foods. An improper diet has many adverse effects on the human body. Overall, it's an auto-intoxication, which means self-poisoning. All of the body organs are affected by this auto-intoxication.

BALANCED DIET

A diet consisting of a variety of different types of food and providing adequate amounts of the nutrients necessary for good health.

UNIT III

MENTAL HEALTH

MIND

The element of a person that enables them to be aware of the world and their experiences, to think, and to feel; the faculty of consciousness and thought.

The mind is defined as the sum of the cognitive abilities that enable consciousness, perception, memory, thinking, imagination and judgment. It may also be defined as the conscious and unconscious mental activity of a person.

MENTAL HEALTH

Mental health refers to our cognitive, behavioral, and emotional wellbeing - it is all about how we think, feel, and behave. The term 'mental health' is sometimes used to mean an absence of a mental disorder.

Mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community -WHO

STAGES OF MIND

Human mind is a very complex entity. Sometimes we think about one thing, while doing something completely different. Sometimes we do something, without thinking. This lack of alignment within personality is caused by the fact that human mind is working in different levels that are related, but they are sometimes in conflict. There are three levels of the human mind: **Unconscious mind**, **Subconscious mind and Conscious mind**.

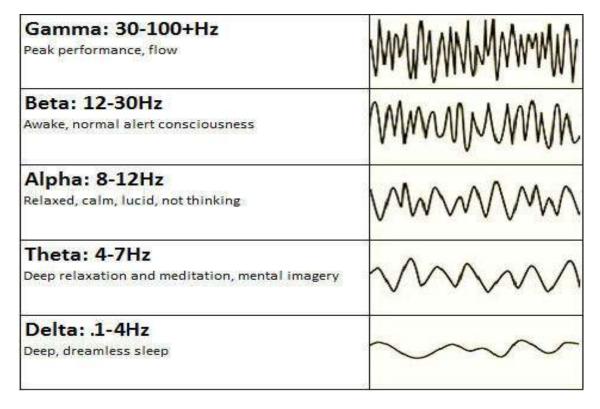
First level is the **Unconscious mind**. This level of human mind holds the control of the basic functions of the human body, breathing, heart beating, digestion, reflexes, etc. Basically, it controls all automatic functions, without need to think about it. Though, by conscious will we can influence some of these functions.

Second level is **Subconscious mind**. This level contains all knowledge, experience, habits, beliefs and attitudes toward life. Whatever we met and learned in our life is placed in this level, in our personal library. Every second of your life is recorded in this segment of mind. Your subconscious mind is enabler or prohibitor, depending what you adopted as your attitude toward something. If you placed belief that you cannot drive a bicycle, than you will not be able to drive it, since your subconscious mind tells you that you cannot do it.

Third level of human mind is the **Conscious mind**. This is analytical part of the mind that analysis all data that comes in. Also this part of mind is filtering information that comes to the subconscious mind. Actually, the Conscious mind is aligned with what is already formed as attitude or belief in Subconscious mind. If the new information is in conflict with information that is already stored in Subconscious mind, the Conscious mind tends to block that information. This is why people seem to be difficult to change. More information already stored in Subconscious mind makes new information that is in conflict with current information to be rejected.

MENTAL FREQUENCY

Our brain's ability to become flexible and/or transition through various brain wave frequencies plays a large role in how successful we are at managing stress, focusing on tasks, and getting a good night's sleep. Each serves a purpose to help us cope with various situations – whether it is to help us process and learn new information or help us calm down after a long stressful day. The five brain waves in order of highest frequency to lowest are as follows: gamma, beta, alpha, theta, and delta.



MIND TRAINING PROCESS

The brain is complex. In order to change habitual patterns of thinking and behavior, different parts of the brain have to be trained. The three mindfulness trainings – attention, insight, and skillful actions – work in conjunction to develop different parts of the brain involved with change – executive decision-making, motivation, and motor cortex.

Attention Training (traditionally known as meditation)

This training develops the mind and its ability to direct attention where you want it to go. It involves:

- > Ability to give attention to what is important in the present moment.
- ➤ Maintaining attention with an attitude that is non-judgmental, relaxed, and free from attachments to particular outcomes
- ➤ Attention can be narrow on a single object or broadly scanning the inner and outer landscape

Insight Training (traditionally known as Panna or wisdom)

This training develops the ability to gain a broader and deeper perspective about the situation you are looking at. It involves:

- Clear seeing of what is going on beyond concepts and habitual responses.
- Clarity of causes and conditions leading to desirable outcomes.
- Clarity of intentions.

Skillful Actions (traditionally known as Sila or discipline)

This training develops skillful habits that create the right conditions for you to thrive and reach your goals. It involves:

- Cultivating thoughts and thinking processes that support your goals
- ➤ Cultivating the ability to listen deeply and speak in a manner that is timely, honest, kind, beneficial for all involved, and aligned with your intentions.
- Cultivating habits of taking action in a way that is consistent with your goals.

METHODS OF CONCENTRATION

A concentration technique is an exercise used to improve focus, awareness and mental discipline. They are closely associated with meditation and mindfulness practices. The path of yoga emphasizes the importance of developing concentration.

Concentration is purely a mental process.26 It needs an inward turning of the mind. It is not a muscular exercise. There should be no undue strain on the brain. You should not fight and wrestle with the mind violently.

Sit in a comfortable pose. Relax all the muscles of the body. There should neither be muscular nor emotional nor nervous nor mental strain. Keep a tight hold on the mental faculties. Still the mind. Silence the bubbling thoughts. Calm the emotions. Put a brake on the thought-process. Do not pay any attention to the intruding thoughts. Give the suggestion to the mind: "I do not care whether they are there or not."

This is the secret of mental discipline. Improvement in concentration will be visible only little by little. Do not be discouraged on any account. Be regular in your practice. Stop not the practice even for a single day. Lord Jesus says: "Empty thyself; I will fill thee." This process of emptying all thoughts should be attempted after you have attained some power of concentration. Keep yourself in a positive state always. When you wish to concentrate on a piece of work to be done with care, you can use all your will and imagination also. Imagination helps even concentration.

If you find it difficult to concentrate on the heart, on the tip of the nose, on the space between the eyebrows, or on the crown of the head, you can select any external object for the purpose. You can, for instance, concentrate on the blue sky, the light of the sun, the all-pervading air, ether, sun, moon, stars. If you experience any headache or pain in the skull or any part of the body due to the strain of concentration on a particular place or object, shift the centre of concentration or change the object.

BRAIN AND MEMORY POWER

Memory is our ability to encode, store, retain and subsequently recall information and past experiences in the human **brain**. ... It is the ability to remember past experiences, and the **power** or process of recalling to **mind** previously learned facts, experiences, impressions, skills and habits.

UNIT IV

ASANAS AND KAPALABHATI

Importance of Preparatory Exercise

Circulation and Muscular Systems

- ➤ Warming up increases circulation. Starting a workout without warming up puts unnecessary stress on the heart. With exercise, the blood vessels dilate, stress to the heart decreases and the exchange of oxygen and carbon dioxide is optimized. Increased circulation helps oxygenate the muscles, aiding performance.
- ➤ Gradually increasing the body's temperature enhances muscle elasticity. As the temperature rises, the muscle fibers stretch and lengthen, increasing flexibility and range of motion.
- ➤ The efficiency of the body's cooling system is raised to a more optimal level.
- The range of motion in the joints is improved (shoulders-hips-knees-ankles)

Neural Preparation

- Focusing on your upcoming workout (speed, form, course, etc.) with positive imagery during a sport specific warm-up results in increased concentration and relaxation during that workout. This mental exercise programs neural reflexes in the brain.
- ➤ Consistent rehearsals as described above, program a correct pattern of neural reflexes. This allows the athlete to become more efficient and improves proper walking technique and ultimately their performance.

Psychological Demands

A structured warm-up prepares the athlete to achieve a "flow state." This increases mental focus and achieves a state of relaxation and total concentration.

ASANAS - MEANING

The term asana means sitting in a particular posture, which is comfortable and which could be maintained steadily for long time. Asana gives stability and comfort, both at physical and mental level.

The term Asana is derived from the Sanskrit term Asi – 'to be' or 'to sit'. Asanas are certain special patterns of postures that stabilize the body and mind. They aim at establishing a proper rhythm in the neuromuscular tonic impulses and improving the general muscle tone.

Asanas help in the healthy functioning of the organism and also leads to suppleness and ease of movement. Asana benefits the physical body and brings in emotional stability in the human being.

TYPES OF ASANAS

Asana can be classified in a number of ways. One of the most useful classifications is based on the physiological effects of different groups of Asana on the body. Accordingly the asana are classified into three types. They are

Meditative Asanas

Meditative Asana are the sitting postures, with a broad base, erect spine and symmetrical arrangement of the body. Asana like Padmasana, Siddhasana, Vajrasana, etc., comes under this group. They are primarily used for the practice of Pranayama, Meditation and similar higher practices of Yoga.

Cultural or Corrective Asanas

These are various positions of the body which bends and holds the spine stretch various limbs, twists and bends different joints of the body etc. In general Cultural Asana revolve around the spinal column like bending it forward or backward or side wards, twist it to either side, stretch it fully or hold it in inverted position etc., Further they may increase or decrease the internal pressures in the various organs like the liver, pancreas, bladder, intestines and colon of the abdomen. They deploy the weight of the body segments as well as the force of gravity to drive physiological advantages. These Asana are generally utilized to strengthen various neuromuscular co-ordinations, functional efficiency of different systems and organs of the body purification or better elimination of waste products from body. Some Yogic texts claim the benefit of purifying the Nadis or Nadishuddhi as the main function of a few cultural asana like Kukkutasana. Some of the examples of Cultural Asana are Paschimottanasana, Chakrasana, Trikonasana, Ardha Matsendrasana etc.

Relaxative Asanas

These are the Asana that are designed to give complete relaxation to the entire musculature of the body. The two well-known relaxative Asana are Shavasana and Makarasana. They not only remove bodily fatigue they also remove mental strain and thereby brings about peace and clarity of the mind.

Asana also classified into different types in relation to posture such as;

- Front bending postures Eg: Paschimottanasana, Hastapadasana.
- Back bending postures Eg: Chakrasana, Bhujangasana.

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Twisting postures
Eg: Ardha matsyendrasana, Pasasana.

Hand balancing postures Eg: Kakasana, Kukuttasana.

Standing postures
Eg: Vrikshasana, Ekapadasana.

Topsy-turvy postures Eg: Sarvangasana, Sirasasana.

Lateral bending postures Eg: Ardhakadi Chakrasana, Trikonasana

BENEFITS OF ASANAS

- 1. Doing asana so there is a reduction in the muscle's tone.
- 2. There is conservation of energy, reduction of rajasika (active) temperament, and reduction of excessive speed of the mind and it leads to stress release.
- 3. Asanas make the mind tranquil
- 4. All the cells in the brain start working in cohesion and the alpha rhythm is induced.
- 5. It brings a balance between the sympathetic and parasympathetic nervous system.
- 6. It also brings a balance in the autonomic nervous system and in the endocrine system, which in turn is responsible for the reduction of stress.
- 7. By doing asanas one can gain mastery over one's own desires and this can lead us to overcome worries, anxieties and tensions.
- 8. Asanas reduce this craving of food and hunger by gaining mastery over mind.

PRINCIPLES OF ASANAS

- ➤ Generally, the asanas are practiced in the sequence of standing, sitting, prone-lying and supine-lying position. Though there is other version which follow different sequence.
- Asanas must not be practiced in haste or by applying any sort of undue force. Jerks should be avoided.
- > Asanas should be performed with body and breath awareness. There should be coordination between breath and movement of body parts.
- As a general rule, inhale while raising any part of the body and exhale while bending down.
- > The practitioner has to follow instructions sincerely and practice them with an optimal attention.
- Final position should be attained slowly step by step and should be maintained with closed eyes for an inward awareness within the body.
- Final position of asanas must be maintained for as long as one is comfortable.
- One should maintain the final posture according to one's own limitations and should not go beyond one's capacity.

- During maintenance phase of asana, there should ideally be no tremors or any type of discomfort.
- An utmost care must be taken in increasing the time for maintaining the asanas.
- ➤ Regular practice is essential. Body starts listening to your command only after a regular and diligent training for a sufficient period of time. If regularity is disturbed due to some reasons, then one should resume the practice as soon as possible.
- ➤ In the initial phase, yogic practices involve de-conditioning and re-conditioning processes. Therefore, initially, one may feel little fatigued after the practice but after few days' practice, body and mind get adjusted and one starts experiencing a feeling of well-being and happiness again.

KAPALABHATI – MEANING

Kapalabhati is breathing at the speed of 120 breaths per minute through abdominal strokes to cleanse the entire respiratory passages as well as to stimulate blood circulation throughout the body.

TYPES OF KAPALABHATI

- (i) Chandra Anuloma Kapalabhati
- (ii) Surya Anuloma Kapalabhati
- (iii) Chandra Bhedana Kapalabhati
- (iv) Surya Bhedana Kapalabhati
- (v) Both nostril variation
- (vi) Alternate nostril variation

BENEFITS OF KAPALABHATI

- 1. Kapalabhati cleanses the lungs and entire respiratory system.
- 2. The blood is purified and body gets an increased supply of oxygen to all cells.
- 3. Digestion is improved.
- 4. Abdominal muscles are strengthened.
- 5. Prepare the mind for meditation.
- 6. Energizes the mind for mental work.
- 7. Activates the brain cells
- 8. Stimulates the abdominal organs.

PRINCIPLES OF KAPALABHATI

- > Sit in comfortable crossed leg position with back straight. Hands resting on knees in either Chin or Dhyana Mudra. Face to be relaxed.
- ➤ To start forcefully expel all of the air from the lungs while pushing the abdominal diaphragm upwards.
- > The expulsion is active but the inhalation is passive.
- ➤ Inhale deeply through the nostrils, expanding abdomen and exhale with the forceful contraction of abdominal muscles.
- > The air is pushed out of lungs by contraction of the diaphragm.
- ➤ Gradual practice will lead to do 120 strokes per minute.
- > It cleanses the entire respiratory passage.

UNIT V

PRANAYAMA AND MEDITATION

PRANAYAMA- MEANING

The term Pranayama is derived from two root words 'Prana' which means vital energy or life force and 'Ayama' which means extension or expansion. So the word Pranayama means extension of the vital force (i.e. dimension of Prana) Pranayamas are practices that are designed to bring about voluntary control over respiration. The main purpose of Pranayama is to gain control over the autonomous nervous system through breath control and by it influence the mental function. It is useful in higher Yogic practices like Meditation.

TYPES OF PRANAYAMA

According to Hatha Pradipika, the eight varieties of Pranayamas are:

1. Surya Bhedana — Sun Cleaving Breath

2. Ujjayi — Victorious Breath

3. Sitkari — Hissing Breath (Cooling Breath)

4. Sheetali — Beak Tongue Breath (Icing Breath)

5. Bhramari — Sound of Bee Breath

6. Bhastrika — Bellows Breath

7. Murchha — Fainting or Swooning Breath

8. Plavini — Floating Breath

BENEFITS OF PRANAYAMA

- 1. It brings about a homeostatic equilibrium and a humoral balance within the body, thus influencing all Psycho-physiological functions favorably.
- 2. Improves heart and lungs capacity, so good for bronchial asthma.
- 3. Improves blood circulation throughout the body.
- 4. Tones up the abdominal muscles, removes lethargy.
- 5. This Pranayama helps to eliminate horrific thought or wave from the brain and give effective calmness to the mind and nervous system.
- 6. The function of the thyroid gland improves.
- 7. While practicing this Pranayama heart gets gladness and joy

PRINCIPLES OF PRANAYAMA

- Pranayama should be done preferably after the practice of asanas.
- Breathing in pranayama should be done through the nose only except sheetali and sheetkari.
- > During pranayama, there should not be strain in facial muscles, eyes, ears, neck, shoulders or any other part of the body.
- During pranayama, eyes should remain closed.
- In the beginning, one should be aware about the natural flow of the breathing. Make inhalation and exhalation prolonged in a gradual manner.
- ➤ While observing breathing, attend to your abdominal movement which bulges a bit during inhalation and goes in a bit during exhalation.
- ➤ In the beginning stage one should gradually learn to maintain the 1:2 ratio of breathing which means exhalation time should be double the inhalation.

MEDITATION - MEANING

This Pranayama helps to eliminate horrific thought or wave from the brain and give effective calmness to the mind and nervous system. The function of the thyroid gland improves. While practicing this Pranayama heart gets gladness and joy.

BENEFITS OF MEDITATION

- 1. It lowers oxygen consumption.
- 2. It decreases respiratory rate.
- 3. It increases blood flow and slows the heart rate.
- 4. Increases exercise tolerance in heart patients.
- 5. Leads to a deeper level of relaxation.
- 6. Good for people with high blood pressure as it brings the B.P. to normal.
- 7. Reduces anxiety attacks by lowering the levels of blood lactate.
- 8. Decreases muscle tension (any pain due to tension) and headaches.
- 9. Builds self-confidence.
- 10. It increases serotonin production which influences mood and behaviour. Low levels of serotonin are associated with depression, obesity, insomnia and headaches.
- 11. Helps in chronic diseases like allergies, arthritis etc.
- 12. Reduces Pre- menstrual Syndrome.

- 13. Helps in post-operative healing.
- 14. Enhances the immune system. Research has revealed that meditation increases activity of 'natural-killer cells', which kill bacteria and cancer cells.
- 15. Also reduces activity of viruses and emotional distress.

PRINCIPLES OF MEDITATION

- Practice of asanas and pranayama will help in developing ability to sit in one position for a considerable period of time in meditation.
- > Select a peaceful calm and quiet place for the practice of meditation.
- Allow your eyes to get closed gently to enter into an inner awareness.
- > A meditative practice invites many thoughts, memories and emotions on the surface of mind. Remain nonreactive to them.
- As you continue with this process for some time, you may feel an abstract and a non-specific awareness of the whole body. Now continue with the whole body awareness. In case of any difficulty, go back to the breathing awareness.
- In the beginning, it is generally difficult to observe the breath. If mind wanders, do not feel quilty. Slowly but firmly bring your attention to your breath.

PRACTICAL LESSON

The loosening practices help to increase microcirculation. These practices can be done while standing and sitting.

I. NECK BENDING

Sthiti: Samasthiti (Alert Posture)

Technique

Stage i: (Forward and Backward Bending)

- Stand with the feet comfortably apart.
- Keep the hands straight beside the body.
- This is **Samasthiti**. This is also called **Tāḍāsana**.
- Keep your arms on the waist.
- While exhaling, move the head forward slowly and try to touch the chin to the chest.
- While inhaling, move the head as far back as is comfortable.
- This is one round: repeat 2 more rounds

Stage - ii : (Right and Left bending)

- While exhaling, bend the head slowly to the right; bring the ear as close as possible to the shoulder without raising the shoulder.
- While inhaling, bring the head to the normal position.
- Similarly, while exhaling bend the head to the left side.
- Inhale and bring the head up to normal position.
- This is one round: repeat 2 more rounds.

Stage - iii : (Right and Left Twisting)

- Keep the head upright.
- While exhaling, gently turn the head to the right so that the chin is in line with the shoulder.
- While inhaling, bring the head to the normal position.
- Similarly, while exhaling, turn the head to the left.
- Inhale and bring the head to the normal position.
- This is one round: repeat 2 more rounds.

Stage iv: Neck Rotation

- Exhale; bend the head forward trying to touch the chin to the chest.
- Inhale; slowly rotate the head clockwise in a circular motion, exhale while coming down





- Do a full rotation.
- Then rotate the head in an anti-clockwise direction.
- Inhale; go back and exhale, come down.
- This is one round: repeat 2 more rounds.

Note:

- Move the head as far as possible. Do not over strain.
- Keep the shoulders relaxed and steady.
- Feel the stretch around the neck and loosening up of the joints and muscles of the neck.
- Can be practiced sitting on a chair.
- People with neck pain can do the practice gently especially when taking the head back to the extent it is comfortable.
- Elderly people and persons with cervical spondylitis, high blood pressure may avoid these practices.

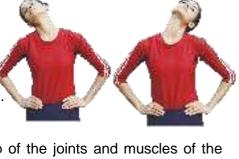
II. SHOULDER'S MOVEMENT

• Sthiti: Samasthiti (Alert Posture)

Stage i: Shoulder's Stretch

Technique:

- Feet together the body straight, the arms by the sides.
- Raise your both arms sideways above your head with the palm outward. Bring it down in the same manner.
- The arms must not touch the head when going up or the thighs when coming down.
- Palms must be opened, with fingers together.
 - Stage ii: Skandha Cakra (shoulder Rotation)
- Stand erect.
- Place the fingers of left hand on the left shoulder and the fingers of right hand on the right shoulder.
- Full rotation of the both elbows in a circular manner.
- Try to touch the elbows in front of the chest on the forward movement and touch the ears while moving up.
- Stretch the arm back in the backward movement and touch the side of the trunk while coming down.
- It is the clockwise rotation and repeat it for 5 times.
- Do the same with anti-clockwise.







Benefits:

- Practice of this kriya makes the bones, muscles and nerves of the shoulder region healthy.
- These practices are helpful in cervical spondylitis and frozen shoulder.

III. TRUNK MOVEMENT

Trunk Twisting (Kaţiśakti Vikāsaka)

Sthiti: Samasthiti (Alert Posture)

Technique

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

NOTE

- Do slowly with normal breathing.
- Cardiac patients shall do with care.
- Avoid this practice in case of severe back pain, vertebral and disc disorders, after abdominal surgery and during menstruation.



IV KNEE MOVEMENT

Sthiti: Sama Sthiti (Alert Posture)

Technique

- Inhale; lift your arms up at the shoulder level, palms facing downwards.
- Exhale; bend the knees and bring down your body to the squatting position.
- In the final position, both the arms and thighs should be parallel to the ground.
- Inhale; and straighten the body.
- Exhale while bringing down the hands.
- Repeat two more times.

Note:

- Strengthen knees' and hips' joint.
- Avoid this asana in case of acute conditions of arthritis.

ASANA

Meaning

In Patanjali's Yoga *Sutras*, asana is defined as a "steady, comfortable posture." The sutras do not specify any particular poses, but require simply that in practicing asanas, a position which is both steady and comfortable should always be sought.

TYPES OF ASANAS

Asanas are classified into 4 types based on posture there are

- 1. Standing
- 2. Sitting
- 3. Prone
- 4. Supine

1. STANDING POSTURES

TADASANA (Palm Tree Posture)

Tada means palm tree or mountain. This asana teaches one to attain stability and firmness and forms the base for all the standing asana.

Technique

- Stand with feet 2 inches apart. Inter lock the fingers, and turn the wrist out wards. No inhale, raise the arms up
- Bring in line with the shoulders.
- Raise the heels off the floor and balance on the toes. Stay in this
 position for 10-15 seconds



- Exhale, bring the heels down.
- Release the interlock of the fingers and bring the arms down
 Parallel to the trunk, and come back to standing posture.

Benefits

- This asana brings stability in the body, helps to clear up congestion of the spinal nerves, and corrects faulty posture.
- Helps to increase height up to a certain age.

A Word of caution

Avoid lifting the toes in case of acute cardiac problems varicose veins and vertigo
 Vrksasana (The Tree Posture)

Vrksa means tree. The final position of this asana resembles the shape of a tree, hence the name.

Technique

- Stand with feet 2 inches apart.
- Focus on a point in front.
- Exhale, bend the right leg and place the foot on the inside of the left thigh.
 The heel should be touching the perineum.
- Inhale and extend the arms up and join the palms.
- Stay in the position for 10 to 30 seconds and breathe normally.
- Exhale and bring the arms and right foot down.
- Relax and repeat the asana by bending the left leg.

Benefits

- Improves neuro-muscular coordination, balance, endurance and alertness.
- It tones up the leg muscles and rejuvenates the ligaments also.

A Word of caution

• Please avoid this practice in case of arthritis, vertigo and obesity.

PADA HASTASANA (The Hands to Feet Posture)

Pada means feet, hasta means hands. Therefore, Pada Hastasana means taking the plalms down towards the feet. This is also referred as Uttanasana.

Technique

- Stand straight with feet 2 inches apart.
- Inhale slowly and raise the arms up.



- Stretch up the body from the waist.
- Exhale and bend forward until the trunk is parallel to the ground.
- Exhale, and bend forward until the entire palm rests on the ground.
- Maintain this final posture for 10-30 seconds.
- Those who are having stiff back should bend according to their capacity.
- Now inhale, come up slowly to the vertical position and stretch the arms above the head.
- Exhale and slowly return to the starting position in reverse order.
- Relax in Tadasana.

Benefits

 Makes the spine flexible, improves digestion, prevents constipation and menstrual problems.

A word of caution

- Please avoid this practice in case of cardiac or back problems, abdominal inflammation, hernia and ulcers, high myopia, vertigo and during pregnancy.
- Those with vertebral and disc disorders should also avoid this practice.

ARDHA CAKRASANA (The Half Wheel Posture)

Ardha means half. Cakra means wheel. In this posture, as the body takes the shape of a half wheel, hence it is called Ardha Cakrasana.

Technique

- Support the back at the waist with all the fingers together pointing forward or downward.
- Drop the head backwards stretching the neck muscles.
- As you inhale, bend backwards from the lumbar region; exhale and relax.
- Stay here for 10-30 seconds with normal breathing.
- Inhale and slowly come up.

Benefits

- Ardha Cakrāsana makes the spine flexible and strengthens the spinal nerves.
- Strengthens the neck muscles, and improves breathing capacity.
- Helps in cervical spondylitis.

A word of caution

- Avoid this posture in case of vertigo or a tendency to giddiness.
- Hypertensive patients shall bend with care.



TRIKONASANA (The Triangle Posture)

Trikona means triangle. Tri means three and kona is an angle. As the asana resembles three arms triangles made by the trunk and the limbs, it has been named Trikonasana.

Technique

- Stand on your feet comfortably apart.
- Slowly raise both the arms sideways till they are horizontal.
- Exhale, slowly bend to the right side and place the right hand just behind the right foot.
- The left arm is straight up, in line with the right arm.
- Turn the left palm forward.
- Turn your head and gaze at the tip of the left middle finger.
- Remain in the posture for 10-30 seconds with normal breathing.
- As you inhale slowly come up.
- Repeat for the left side.

Benefits

- Prevents flat foot.
- Strengthens calf, thigh and waist muscles.
- Makes the spine flexible, improves lungs capacity.

A word of caution

- Avoid this posture in case of slipped disc, sciatica, and after undergoing abdominal surgery.
- Do not do beyond limits and over do the lateral stretch.
- If one cannot touch the feet, one can reach for the knees instead.

2. SITTING POSTURES

BHADRASANA (The Firm/Auspicious Posture)

Bhadra means firm or auspicious.

Sthiti: Long sitting posture (Visramasana)

Technique

- Sit erect with the legs stretched out straight in the front. Sit erect with the legs stretched out straight in the front.
- Keep the hands beside the hips and palm resting on the floor. This is Dandasana.



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- Now put the soles of your feet together.
- Exhale and clasp your hands together over your toes.
 Pull your heels as close as possible up to perineum region.
- If your thighs are not touching or are not close to the floor,
 place a soft cushion underneath the knees for support.
- This is the final position.
- Stay here for sometime

Benefits

- Keeps the body firm and helps to stabilize the mind.
- Keeps the knees and hip joints healthy.
- Helps to relive knee pain.
- Acts on the abdominal organs and releases any tension in the abdomen.
- Benefits women by relieving abdominal pain often experienced during menstruation.

A word of Caution

• Avoid this practice in case of severe arthritis and sciatica.

ARDHAUSTRASANA (The Half Camel Posture)

Sthiti: Long sitting posture (Visramasana)

Ustra means camel. The final version of this asana resembles the hump of a camel.

In this version, only the first stage (half) of the asana can be practiced.

Technique

- Sit in Visramasana.
- Come to Dandasana.
- Fold your legs and sit on your heels.
- Keep the thighs close and big toes touching.
- Place the hands on the knees.
- The head and back should be straight
- This is vairasana.
- Stand on your knees.
- Place the hands on the waist with fingers pointing downward.
- Keep the elbows and shoulder parallel.
- Bend the head back and stretch the neck muscles; inhale and bend the trunk backwards as much as possible. As you exhale, relax.
- Keep the thighs perpendicular to the ground.





- Remain in the posture for 10-30 seconds with normal breathing.
- Return with inhalation; sit in Vajrasana.
- Relax in Visramasana.

Benefits

- It helps to strengthen back and neck muscles.
- · Relieves constipation and back pain
- Increases blood circulation to the head and cardiac region.
- Very useful practice for cardiac patient, but needs to practice with cautions.

A Word of Caution

• In case of hernia and abdominal injuries, arthritis, vertigo and pregnancy, please avoid doing this asana.

SASAKASANA (The Hare Posture)

Sasaka means hare

Sthiti: Vajrasana

Technique

- Sit in Vajrasana.
- Spread both the knees wide apart, keep the big toes touching.
- Keep the palms between the knees.
- Exhale and slowly stretch them full length.
- Bend forward and place the chin on the ground.
- Keep the arms parallel.
- Look in front and maintain the posture.
- Inhale and come up.
- Exhale and come back to Vajrasan.
- Stretch your legs back to Visramasan.

Benefits

- It helps to reduce stress, anger etc.
- It tones up reproductive organs, relieves constipation, improves digestion and relieves back pain.

A Word of caution

- Please avoid this posture in case of acute backache.
- Patients with osteoarthritis of the knees should exercise with caution or avoid Vajrasana.



• High blood pressure patients should not perform this practice.

VAKRASAN (The Spinal Twist Posture)

Vakra means twisted. In this asana, the spine is twisted which has a rejuvenating effect on its functioning.

Sthiti: Dandasana

Technique

- Bend the right leg, and place the right foot beside the left knee.
- As you exhale, twist the body to the right.
- Bring the left arm around the right knee and clasp the right big toe or place the palm beside right foot.
- Take the right arm back and keep the palm
 on the ground with the back straight. Remain in the posture of 10-30 seconds with
 normal breathing and relax.
- Take out your hands with exhalation and relax.
- Repeat the same on the other side.

Benefits

- Helps to increase flexibility of the spine.
- Helps to overcome constipation, dyspepsia.
- Stimulates pancreas and helps in the management of diabetes.

A word of caution

 Please avoid this posture in case of severe back pain, vertebral and disc disorders, after abdominal surgery and during men striation.

3. PRONE POSTURE

BHUJANGASANA (The Cobra Posture)

Bhujanga means snake or cobra. In this asana, the body is raised like the hood of a snake.

Sthiti: Prone posture of Makrasana

Technique

- Lie down on your stomach, rest you head on your hands and relax the body.
- Now join your legs and stretch your arms.
- Keep the forehead on the ground.



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- Now place your hands just beside the body; keep palms and elbows on the ground.
- As you inhale slowly, lift the chin and chest come up to navel region.
- Stay there comfortably.
- This is called Sarala Bujangasana.
- Now come back and place your forehead on the ground.
- Keep your palms besides the chest and raise your elbows where they are.
- Inhale; slowly lift the chin and chest up to navel region.
- Exhale; rest our forehead on the ground and place your palms and rest your head on the palms and spread your legs and relax

Note:

Keep the legs firm so that no load or strain is felt on the lumbar spine.

Benefits

- This asana is best for stress management.
- It reduces abdominal fat and alleviates constipation.
- It also helps to remove backache and bronchial problems.

A word of caution

- Those who have undergone abdominal surgery should avoid this asana for 2-3 months
- Those who suffer from hernia, ulcers should not practice this asana.

SALABHASANA (The Locust Posture)

Salabha means a locust

Sthiti: Prone posture Makarasana

Technique

- Lie down on your stomach in Makarasana.
- Rest the chin on the floor; Keep both hands beside the body; palms facing upwards.
- Inhale; raise the legs off the floor as much as you can without bending the knees.
- Extend the arms and legs well to ease lifting the body of the floor.
- Stay in this position for 10-20 seconds breathing normally.
- Exhale; bring the legs down towards the floor.
- Rest for a few seconds in Makarasana.

Note:

 Pull up the knee caps and squeeze the buttocks to improve the posture. This asana is more beneficial performed after Bhujangasana.

Benefits

- Helps in sciatica and lower backache.
- Tones the hip muscles and those in the kidney region.
- Reduces fat on the thighs and buttocks; good in weight management.
- Helps the abdominal organs aiding digestion.

A word of caution

- Cardiac patients should avoid this posture. Please proceed cautiously in case of sever lower back pain.
- People with high blood pressure, peptic ulcers and hernia should also avoid this
 posture.

MAKARASANA (The Crocodile Posture)

In Sanskrit, Makara means crocodile. In this asana, the body resemble a crocodile.

Sthiti: Prone relaxation posture

Technique

- Lie down on your stomach with the feet wide apart, feet pointing outward.
- Bend both the arms and place the right hand on the left hands.
- Place the forehead on your hands.
- Keep the eyes closed. This is Makarasana.
- This asana is practiced for relaxation in all prone postures.

Benefits

- Promotes relaxation of the lower back.
- Helps in recovery of back problems.
- Indicated for all orthopedic ailments.
- Indicated to counter stress and anxiety.

A word of caution

 Avoid this practice in case of low blood pressure, severe cardiac problems and pregnancy.

4. SUPINE POSTURE

SETHUBANDHASANA (The Bridge Posture)

Sethubandha means formation of bridge. In this posture, the body is positioned like a bridge, hence the name. This is also called as Catuspadasana.

Technique

- Bend both the legs at the knees and bring the heel near the buttocks.
- While holding both the ankles firmly keep the knees and feet in one straight line.
- Inhale; slowly raise your buttocks and trunk up as much as you can to form bridge.
- Remain in this position for 10-30 seconds, with normal breathing.
- Exhale, slowly return to the original position and relax in Savasana.

Note

- In the final position, the shoulders and the head remain in contact with the floor.
- If required, in the final position, you can support your body at the waist with your hands.

Benefits

- Relieves depression and anxiety and strengthens lower back muscles.
- Stretches abdominal organs, improves digestion and helps to relieve constipation.

A word of caution

 People suffering from ulcers and hernia, and women in advanced stages of pregnancy should not practice this asana.

PAVANAMUTASANA (The Wind Releasing Posture)

Pavana means wind and mukta means to release or to make free. As the name suggests, this asana is useful in removing wind or flatulence from the stomach and intestines.

Sthiti: Savasana

Technique

- Lie down flat on the back.
- Bend both the knees and bring the thighs to the chest.
- Interlock the fingers and clasp the shin below knees.
- Exhale; raise the head till your chin touches the knees and relax.
- This is Pavanamuktasana.
- Bring the head back to the groud.



- While exhaling, lower the legs to the floor.
- Rest in Savasana.

Note

- Synchronise your breathing with the leg movement.
- While touching the knee with the nose / forehead, you should be able to feel the lumbar region stretch; keep the eyes closed and focus you attention on the lumbar region.

Benefits

- Removes constipation; gives relief from flatulence, decreases the bloating sensation in the abdomen and aids digestion
- Offers deep internal pressure, massage and stretching of the highly complicated network of muscles, ligaments and tendons in the pelvis and waist region.
- It tones up the back muscles and spinal nerves.

A word of caution

• Please avoid this practice in case of abdominal injuries, hernia, sciatica or severe back pain and during pregnancy.

SAVASANA (The Dead Body Posture)

Sava means dead body. The final position in this asana resembles a dead body.

Sthiti: Supine Relaxation Posture

Technique

- Lie down on your back with arms and legs comfortably apart.
- Palm facing upward; eyes closed.
- Relax the whole body consciously.
- Become aware of natural breath and allow it to become rhythmic and slow.
- Remain in the position till you feel refresh and relax.

Benefits

- Helps to relieve all kinds of tensions and gives rest to both body and mind.
- Relax the whole psycho-physiological system.
- The mind, which is constantly attracted to the outer world, takes a U-turn and moves inwards, thus gradullay getting absorbed; as the mind turns quiet and absorbed, the practitioner remains undisturbed by the external environment.
- It is found very beneficial in the management of stress and its consequences.



KAPALABHATI

Meaning

Kapalabhati is an important part of Shatkarma, the yogic system of body cleansing techniques. The word kapalbhati is made up of two words: *kapal* meaning 'skull' and *bhati* meaning 'shining, illuminating.' Due to the process, the organs in and under the skull mainly the brain, small brain and any of the spaces inside the head that are connected to the back of the nose are influenced in a good manner.

Sthiti: Any meditative posture e.g. Sukhasana / Padmasana / Vajrasana

Technique

- Sit in any meditative posture.
- Close the eyes and relax the whole body
- Inhale deeply through both nostrils, expand the chest.
- Expel the breath with forceful contractions of the abdominal muscles and relax.



- Continue active/forceful exhalation and passive inhalation.
- Complete 40 rapid breaths, then take a deep breath and exhale slowly.
- This is one round of Kapalabhati.
- Each round shall be followed by deep breathing.
- Repeat 2 more rounds.

Breathing:

Force full exhalation by contracting the abdominal muscles, without any undue movements in the chest and shoulder region. Inhalation should be passive throughout the practice.

Number of rounds:

Beginners can practice up to 3 rounds of 10 breaths each. The conut and rounds can be increased gradually over a period of time.

Benefits

- Kapalabhati purifies the frountal air sinuses; helps to overcome cough disorders.
- It is useful in treating cold, rhinitis, sinusitis, asthma and bronchial infections.
- It rejuvenates the whole body, and keeps the face young and vibrant.
- It balances and strengthens the nervous system and tones up the digestive system.



A word of caution

Please avoid this practice in case of cardiac conditions, giddiness, high blood pressure, vertigo, chronic bleeding in the nose, epilepsy, migraine, stroke, hernia and gastric ulcers.**PRANAYAMA MEANING**

Pranayama is a Sanskrit word which consists of prana and ayama. Prana means self-energizing life forces and ayama means extension. Pranayama may be defined as expansion and control of prana through various yogic techniques. In a simple way, we can say that pranayama is a combination of systematic exhalation and inhalation.

TYPES OF PRANAYAMA

- 1. Nadisodhana
- 2. Sitali pranayama
- 3. Bhramari pranayama

1. NADISODHANA (Alternate Nostril Breathing)

The main characteristic feature of this pranayama is alternate breathing throught the left and right nostrils without or with retention of breath (Kumbhaka).

Sthiti: Any meditative posture

Technique

- Sit in any meditative posture.
- Keep the spin and head straight with eyes closed.
- Relax the body with few deep breaths.
- Keep the left palm on the left knee in
 Juana mudra and the right hand should be in Nasagra mudra.
- Place the ring and small fingers on the left nostril and fold the middle and index finger. Place the right thumb on the right nostril.
- Breathe in from the left nostril; close the left nostril with the small and ring fingers and release the thumb from the right nostril; exhale through the right nostril.
- Next, inhale through the right nostril.
- At the end of inhalation, close the right nostril, ipen the left nostril and exhale through it.



- This compete process is one round of the Nadisodhana or Anuloma Viloma
 Pranayama
- Repeat 5 rounds.

Ratio and timing

- For beginners, the duration of inhalation and exhalation should be equal.
- Gradually make 1:2; inhalation:exhalation

Breathing

 Breath should be slow, steady and controlled. It should not be forced or restricted in anyway.

Benefits

- The main purpose of this pranayama is to purify the principle channels of carrying energy called nadi's; hence nourishes the whole body.
- Induces tranquility and helps to improve concentration.
- Increase vitality and lowers the level of stress and anxiety.
- It elevates cough disorders.

2. SITALI PRANAYAMA

Sitali means cooling. It also means calm and passionless. As the name indicates this pranayama cools the mind-body system. It is specially designed to reduce the body temperature. Practice of this pranayama brings harmony in the physical body and calms the mind.

Technique

- Sit in Padmasana or any other comfortable sitting posture.
- Place the hand on the knees in Jnanamudra of anjalimudra.
- Roll the tongue from the sides to shape as a tube
- Inhale thought this tube shaped tongue, fill the lungs with air to their maximum capacity and close the mouth.
- Then slowly exhale through the nostrils.

Benefits

- Sitali pranayama purifies blood
- It has cooling effect on body
- It is beneficial for persons suffering from high blood pressure.
- It satisfies thirst and appeares hunger
- It relievers indigestion and disorders caused by phlegm (cough) and bile (pitta)

- It destroys the disorders of gulma (chronic dyperpsia) and sleen or other related diseases (H.P2/58)
- It is beneficial for skin and eyes.

3. BHRAMARI PRANAYAMA (BHRAMARI RECAKA)

Bharamari is derived bhramara which means black bee. During the practice of this pranayama, the sound produced resembles the buzzing of a black bee.

Technique:

Type-I

- Sit in any meditative posture with eyes closed.
- Inhale deeply through the nose.
- Exhale slowly in a controlled manner while making a deep, steady humming sound such as that of black bee. This is one round of Bhramari.
- Repeat 2 more rounds.

Type-II

- Sit in any meditative posture with eyes closed.
- Inhale deeply through the nose.
- Close the eyes with index fingers, mouth with ring and small fingers and ears from respective thumbs as shown in the figure. This is also called SanmukhiMudra.
- Exhale slowly in a controlled manner while making a deep, steady humming soul such as that of black bee. This is on e round of Bhramari.
- Repeat 2 more rounds.

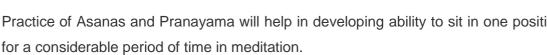
Benefits

- The practice of Bhramari relives stress and helps I alleviating anxiety, anger and hyperactivity.
- The resonance effect of humming sound creates a soothing effect on the mind and nervous system.
- It is a great tranquilizer found good in the management of stress related disorders.
- It is a useful preparatory pranayama for concentration and meditation.

Meditation

1. Practice of Asanas and Pranayama will help in developing ability to sit in one position





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2. Select a peaceful calm and quiet place for the practice of meditation.

3. Close your eyes gently to enter into an inner awareness.

4. In the first stage, sit comfortably, in a meditative posture, with head, neck and trunk

properly aligned. The body should not bend forward or backward.

5. Observe your natural flow of breath with a mindfulness continued towards the touch of

air within the nose walls and on the tip of nostrils.

6. As you continue with this process for some time, you may evidence an abstract and a

non specific awareness of the whole body. Now continue with the whole body

awareness. In the case of any difficulties, go back to the breathing awareness.

In the beginning it is generally difficult to observe the breath, if mind wanders, do not

feel guilty. Slowly yet firmly focus your attention on your breath.

"Change is not something that we should fear. Rather, it is something that we

should welcome. For without change, nothing in this world would ever grow or

blossom, and no one in this world would ever move forward to become the person

they're meant to be."

"The body is your temple. Keep it pure and clean for the soul to reside in."

–B.K.S lyengar