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TECHNOLOGY, RESEARCH, SOCIAL INNOVATION & PARTNERSHIPS

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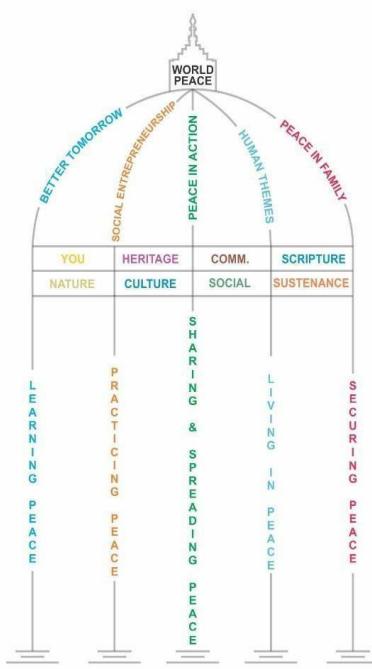
Study Material WPC701A

Indian Tradition, Culture and Heritage

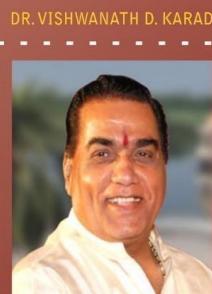




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I believe that the **PEACE**
would be established in this
world through the valued-based
"UNIVERSAL EDUCATION
SYSTEM" which inspires to
give back to the society.

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Unit 1: History of India

Introduction:

The history of India can be best described in the words of India's first Prime Minister Jawaharlal Nehru as "a bundle of contradictions held together by strong but invisible threads". Indian history dates back to almost 75000 years ago with the evidence of human activity of Homo sapiens. Indian history begins with the birth of the Indus Valley Civilization as evident from the sites at Mohenjo-Daro, Harappa, and Lothal which were earlier a part of the Indian subcontinent. The inhabitants were known as Dravidians who later migrated to South India probably due to ecological changes. Amazingly, almost five thousand years ago, the inhabitants of the Indus Valley Civilization had developed an urban culture based on commerce and sustained by agricultural trade. The migration of the Aryan tribes from the North West Frontier into the sub-continent around second millennium BC gradually merged with the pre-existing cultures. Mark Twain, aptly defines India, the world's archaeological gem: "India is a cradle of human race, the birthplace of human speech, the mother of history, the grandmother of legend, and the great grandmother of tradition. Our most valuable and most instructive materials in the history of man are treasured up in India only".

The Pre Historic Era:

The Stone Age

The Stone Age began 500,000 to 200,000 years ago and recent finds in Tamil Nadu (at C. 75000 years ago, before and after the explosion of the Toba Volcano) indicate the presence of the first anatomically humans in the area. Archaeologists have discovered up to 1.5 million years old, stone-age tools, at this prehistoric site (Attirampakkam) near Chennai. These are more prominently found at Pallavaram in Tamil Nadu, Hunsgi in Karnataka, Kuliana in Orissa, Didwana in Rajasthan, and Bhimbetka in Madhya Pradesh.

The Bronze Age

The early Indus Valley Civilization brought the Bronze Age in the Indian subcontinent which dates back to around 3300 BCE. It is one of the world's earliest, urban civilizations, along with Mesopotamia and Ancient Egypt. Inhabitants of this era developed new techniques in metallurgy and handicraft and produced copper, bronze, lead and tin, evident from the seals and statues. Harrappa was a significant bronze-age community; statues of various deities have also been found.

Early Historic Period:

Vedic Period

The Vedic Period dates back to the Aryans who were the first to invade the country. They came out of the North in about 1500 BC and brought with them strong cultural traditions. Their language of speech was Sanskrit, one of the most ancient languages which was used in the

compilation of the sacred Vedic Sanskrit texts in India. Situated on the Indo-Gangetic Plain, the Vedic Civilization formed the basis of Hinduism and the Indian culture. The Vedas, some of the oldest existing texts, next to those in Egypt and Mesopotamia date back to the 12th century BC and are believed to be oldest scriptures still in use. The Vedic era in the subcontinent lasted from about 1500-500 BCE, laying down the foundation of Hinduism and other cultural dimensions of early Indian society.

The Vedic Period can be divided into the following two phases:

Early Vedic/Rig Vedic Period (1700 BC to 1000 BC):

Early Vedic Period represents the time period when the Rig Veda was compiled. The king was believed to be the protector of the people, who actively participated in the overall administration of the government. The caste system started becoming rigid and the families started becoming patriarchal. The major events of this time are:

1700 BC - Late Harappan and Early Vedic period coincide

1300 BC - The end of Cemetery culture

1000 BC - Iron Age of India

Later Vedic Age (1000 BC to 500 BC):

The emergence of the later Vedic period made agriculture a dominant economic activity and a decline in the significance of cattle rearing. The political organization changed completely, with the reduction in the involvement of people in the administration. The major events are:

600 BC - The formation of Sixteen Maha Janapadas (Great Kingdoms)

599 BC - The birth of Mahavira, founder of Jainism

563 BC - The birth of Siddhartha Gautama (Buddha), founder of Buddhism

538 BC - Cyrus the Great conquered parts of Pakistan

500 BC - Earliest written records in Brahmi

500 BC - Panini standardized grammar and morphology of Sanskrit, converting it into Classical Sanskrit. With this, the Vedic Civilization came to an end.

Mahajanapadas

The rise of the Mahajanapadas ("maha" means great and the word "janapada" means foothold of a tribe), saw the second major rise in urbanization in India after the Indus valley Civilization. By 500 BCE, sixteen territorial states, "monarchies and republics" or Mahajanapadas has had come to be established, namely; Kasi, Kosala, Anga, Magadha, Vajji (or Vriji), Malla, Chedi, Vatsa (or Vamsa), Kuru, Panchala, Matsya, Surasena, Assaka, Avanti, Gandhara, and Kamboja.

Persian and Greek Conquests

Much of the Northwest subcontinent (currently Afghanistan and Pakistan) came under the rule of the Persian Achaemenid Empire in 520 BCE under the rule of Darius the Great and remained so for two centuries. In 326 BCE, Alexander the Great conquered Asia Minor and the Achaemenid

Empire. When he reached the Northwest frontier of the Indian subcontinent, he defeated King Porus and conquered most of Punjab.

Maurya Empire

The Maurya Empire, ruled by the Mauryan Dynasty from 322-185 BCE was a geographically extensive and mighty political and military empire in ancient India, established in the subcontinent by Chandragupta Maurya in Magadha (present-day Bihar) it further thrived under Ashoka the Great. At its pinnacle, the empire covered parts of modern day Iran and almost the entire Indian subcontinent, except the southern peninsular tip.

Ancient India Timeline:

Prehistoric Period: (400000 BC - 1000 BC): The period when man, basically a food gatherer, discovered fire and wheel.

Indus Valley Civilization: (2500 BC - 1500 BC): The Indus Valley Civilization, derived its name from the river Indus. Thus civilization thrived on agriculture and worshipped natural forces.

Epic Age: (1000 BC - 600 BC): The Epic age was significant as this age saw the compilation of the sacred Vedas. The existing society also saw the distinction of Varnas in terms of Aryans and Dasas (slaves).

Hinduism and Transition: (600 BC - 322 BC): The rigid caste system, divided into the Varnas and the Shudras saw the advent of Mahavira and Buddha who rebelled against casteism.

The Mauryan Age: (322 BC - 185 BC): This age was founded by the great emperor Chandragupta Maurya. The empire encompassed the entire North India and Bindusara further extended it. After fighting the Kalinga war, Ashoka embraced Buddhism.

The Invasions: (185 BC - 320 AD): The period saw the conquests and attacks of the Bactrians, Parthians, Shakas & Kushans, opening of Central Asia for trade, issuance of GOLD coins and introduction of the Saka era.

Deccan and South India: (65 BC - 250 AD): This period saw the arrival of Christianity to India. The southern part was ruled by Cholas, Cheras and Pandyas. The Ajanta and Ellora cave temples were constructed in this period.

The Gupta Dynasty: (320 AD - 520 AD): The Gupta dynasty founded by Chandragupta I, ushered in classical age in north India with Samudragupta extending his kingdom and Chandragupta II fighting against Shakas.

Age of Small Kingdoms: (500 AD - 606 AD): This period marked the migrations from Central Asia and Iran. There was rise of many small kingdoms as the North was divided into warring kingdoms.

Harshavardhana: (606 AD - 647 AD): Ruling from 606 to 647 CE, Harshavardhana became the most successful emperor of the Pushyabhuti dynasty. The famous Chinese traveller Huan Tsang visited India during Emperor Harshavardhana's reign. But his kingdom disintegrated into small states. It was a period when the Deccan and the south became powerful.

The Southern Kingdoms: (500 AD - 750 AD): Empire of Chalukyas, Pallavas & Pandya flourished. Zoroastrians (Parsis) came to India.

Chola Empire: (9th Cent. AD - 13th Cent. AD): Founded by Vijayalaya, the Chola empire adopted a maritime policy. Temples became cultural and social centres and Dravidian languages flourished.

The Northern Kingdoms: (750 AD - 1206 AD): This period also saw emergence of Rajput clans. Temples at Khajuraho, Kanchipuram, Puri were built and miniature paintings were started. The period witnessed invasion from the Turks.



Indian History in a Nutshell: Medieval India (AD 700 – AD 1857)

MEDIEVAL INDIA (1200-1761 A.D.)

200 0 100 200 300 400



Delhi Sultanate (1206 AD – 1526 AD):

The following dynasties flourished one after the other during the Delhi Sultanate period.

1. Slave Dynasty
2. Kilji Dynasty
3. Tuglaq Dynasty
4. Sayyid Dynasty
5. Lodi Dynasty

Mughals (AD 1526 – AD 1857):

- Great Mughals
- Later Mughals

Mughals from Babar (1526) to Aurangazeb (1707) were more powerful and hence known as Great Mughals. Mughals who ruled from 1707 to 1857 were known as Later Mughals.

- Arrival of Europeans
- Other Kingdoms of North India – Marathas, Sikhs

Modern India (AD 1857 +):

- First War of Indian Independence (1857)
- Formation of Indian National Congress (1885)
- Formation of Muslim League (1906)
- Non-Co-operation Movement (1920)
- Civil Disobedience Movement (1930)
- Quit India Movement (1942)
- Partition of India (1947)
- Constitutional Development of India (1946 – 1950)
- Economic Development of India
- Wars – India-Pak – Formation of Bangladesh; India- China
- New Economic Policy of 1991
- Nuclear, Space and Defense Development

History Schools

- Orientalist School – West Patronizing the East Culture – Not active now
- Cambridge School – Downplays ideology
- Nationalist School – Importance to Congress and Gandhi; Hindu Nationalists for Hindutva version
- Marxists School – Class conflict
- Subaltern School – Caste conflict

Social System:

Structure of the Society

The Indian rural society has undergone considerable change in the recent past, particularly since the Independence as a result of a series of the land reform legislations that have accelerated the pace of this change. India has a rich cultural heritage and is a land of diversities. The diversity in social life is reflected in multi-social, multi-lingual, multi-religious and multi-caste nature of the society. The important features of the Indian social structure are- predominant rural habitation in small villages; multi-religious and multi-caste social identities and important role of family in the social life.

Varna system

The concept of the Varna system dawns in the most ancient text of the world the Rigveda. It is mentioned in the verse of the tenth mandal of Rigveda. Purusha hymn 90 of book 10 of the Rigveda, dedicated to the Purusha, the Cosmic Being. This Cosmic being is defined in verses 1 to 5 of the Sukta. He is described as a being that pervades everything conscious and unconscious universally. The four components of the Varna system are the four basic pillars or the building blocks of each and every system that we deal with every day. Be it any kind of system in this universe. Be it a computer system or a defense system or any government or nongovernment organization or any other system. In Bhagavad Gita, verse 17.2 says about the three Guna (sattvic, rajasic and tamasic) as innate nature of an individual that determines Varna system. Hence, those three Gunas or elements are Saatvik (White, Neutral, Creator, Brahma), Rajas (Red, Positive, Preserver, Vishnu) and Tamas (Black, Negative, Restoration, Mahesh). These are the basic elements of any existing thing. Be it anything. An object, a mass, or any entity. These three basic elements of the entire universe could also be compared to Neutron with neutrality, Proton with positive charge and Electron with negative charge. Here, birth has no relation to Varna system. So, Hindus defend the Varna system by giving it a form of action based classification of humans.

This claim of actions or karma of an individual being the real basis of Varna system could also be proved wrong. Consider a scientist who calls himself a Brahman on the basis of his karma. He is always engrossed in studying, researching and acquiring knowledge. And this surely makes him a Brahman as per his actions but only at that point of time. The next morning when he gets up from sleep, he is going to get himself cleaned by taking a bath. What role is being played by him at that point of time? According to his karmas, he is a Shudra since he is purifying himself at that moment. Later when he is gathering money for his research he does the karma of a Vaishya. When he is protecting his research by obtaining copyrights and patents, he is a Kshatriya by his karmas. This is how; the same scientist who is performing his research work plays the role of all four Varnas. So how can he be classified into any one Varna? The birth based Caste system and Karma based classification and discrimination system is an insult and misuse of the Varna system to meet the selfish wants of the upper classes.

Bhagavad Gita on varna

The Bhagavad Gita also speaks of varna only in terms of one's gunas (aptitude), karma (work) and the psychological disposition of the individual or his inherent quality born of nature. It is, thus, implied that in varna-dharma, guna and not birth is important. Varna system is, therefore, not hereditary. In it there is social mobility. Hence, varna classification stands for open classification of society. Thus, a Sudra's son in whom the propensities of a Brahmin are found is a Brahmin and not a Sudra. A Brahmin's son in whom the propensities of a Sudra are found is a Sudra and not a Brahmin. That is anyone can attain Brahminhood. Some examples are- Valmiki, Vyasa, Vasistha and Narada. All are children of Sudras. Similarly, Visvamitra though born as a prince, became a Brahmin rishi. Thus, it is found that no varna is superior or inferior as it depends on one's qualities, not on birth.

Since the earliest times an attempt has been made by the thinkers to work out an ideal scheme of the society and an ideal pattern of individual life to reach the ultimate goal. According to Vedamitra the social structure in ancient India was based on scientific principles. He observes it is a wise and statesman-like classification which procured a general distribution of 78 wealth, expelled misery and want from the land, promoted mental and moral progress ensured material efficiency and, above all, made tranquility compatible with advancement. This classification was called the Vama^{ma}

According to the Yajurveda Samhita, we find the following four classes of people in Ancient India.

1. The Brahmanas - who devoted themselves to learning and acquiring wisdom and following the liberal arts and sciences.
2. The Kshatriyas - who devoted themselves to the theory and practice of the war and to whom the executive Government of the people was entrusted
3. The Vaisyas - who devoted themselves to trade and profession
4. The Shudras - (men of low capacities) who served and helped the other three classes.

With the ideals in view the Hindu society was based on Asrama Dharma and It has its utility for a life of peace and happiness in this world and release from the trammels of birth and death hereafter. Some of the Upanishads advance sound reasoning as to why It was necessary at all to project these ideals before the society. The Upanisadic seers maintain that in order to attain the highest goal of life a well-planned scheme is essential which may be worthwhile to the younger generation and useful to the community.

As a result, the institution of the Asramadharma or Catusrama evolved in the society. Thus intending the advancement of the people of the community as a whole, the span of life is divided into sub-periods assigning to each period certain obligations for spiritual growth one after another. Here in this scheme, life begins in obedience and ends in freedom. It was assumed that men are not born equally there are always individual differences, which has been now proved psychologically. Personal capacities differ from individual to individual. If a man does work for which he was got in-born capacities he can do better as well as derive self-satisfaction. Therefore, it was decided that every man must be asked to do work, for which he has got equal

capacities. Criticism against this theory also has been put forward by certain scholars. However, considering the context of ancient times it is better to assume thus. The society requires individuals, which put their best and contribute towards the advancement of the society as a whole. Therefore, society was divided into four Varnas that based on the sound principle of 'division of labour'^ because, for all round development of the society, it required the following classes of people.

1. The class that gives the society its laws and rules of conduct.
2. The class that protects the society and the country at large from external and internal aggressions.
3. The class that produces food and make available other necessities of life and helps in the economy of the country.
4. The class that can perform menial jobs, which may not suit to the previous three classes.

On the basis of the above classification the Varna system was evolved. Later on it was misunderstood and mistaken and rigidity crept into the system. The mistaken notion later on came to be known as 'caste', which was one of the factors responsible for degeneration and deterioration of the Indian Social Phenomena. Four Varnas went on multiplying into hundreds of castes. Consequently, the number of castes, as it stands today, has reached well over four thousand. The Varna srama was not the same as the caste system of the present day. No one was a Brahmana by blood or a Sudra by Birth, but everybody belonged to the order to which his merits suited him to be. The people were not irrevocably walled in by cartes, but they were free to rise to the highest social level or sink to the lowest position, according to the inherent qualities they might possess.

Asharam system

The literal meaning of word Ashrama is "a halting or resting place". Hence, Ashrama signifies halt, a stoppage or we may say a stage of rest in the journey of life to prepare a man for further journey. The word Ashrama is derived from the Sanskrit root 'Srama' which means to exert oneself. Hence, Ashrama stands to mean (i) the place where exertions are performed, (2) the action of performing such exertions is initiated. In the words of P.H. Pradhu, "The word, therefore, signifies a halt, a stoppage on a stage in the journey of life just for the sake of rest in a sense in order to prepare oneself for the further journey. He further says that "The Ashramas then are to be regarded as resting place during one's journey on the way to final liberation which is the final aim of life. It is the system that links parts to show a logical plan and establishes an orderly and methodical way of assuming one or several of these life styles.

Varna system preaches not the bifurcation of society but enables one to follow one's designated role in society. The individual and the social sides of Karma are inseparably intertwined. The theory of Varna or Caste emphasizes the social aspect, while the stages of life, concerned with a person's individual aspect. The four stages are:

1. Brahmacharya or the period of training
2. GrhasthaSrama or the period of work for the world as a house holder,

3. Vanaprastha or the period of retreat for the loosening of the social bonds, and
4. Sanyaasa or the period of renunciation and expectant awaiting of freedom. They indicate that life is a pilgrimage to the eternal life through different stages.

The four asramas of life, as divided in society, were-the Brahmacharya, Garhasthya, Vanaprastha and Sannyasa. These were the means of all round training and development, through which a Hindu could fulfill the purpose of his life. The duty of a person during Brahmacharya is to acquire knowledge. In Garhasthya he is to get married and maintain his family. At this stage a person strives toward the first three purusarthas – dharma, artha and kama. This stage also supports the other three asramas. During vanaprastha one is to go away from home and live in jungle thinking about God. It is supposed that the human lives for 100 years which is divided into four equal periods of 25 years of duration each. These stages are given as follows: Brahmacharya Ashram (0-25 years of age)v Garhastha Ashram (26-50 years of age)v Vanprastha Ashram (51-75 years of age)v Sanyas Ashram (76-100 years of age).

Brahmacharya Ashram: This period is meant for growth and education v since the person at this stage is to remain celibate, he is called a Brahmachari-one who lives or practice self-control in all matters, of foods, sex etc. during this period one is attempt to his physical and mental development. So, he can prepare himself for a good and happy life. In ancient India, education was imparted in Gurukuls which were located n the jungles away from the hum-dum of life. Each such school was headed by a Guru and students his family a child of about 6-8 years was admitted into it. At the time of admission, the following ceremonies were performed.

Grihastha Ashram: When a person completes his educationv during his Brahmacharya Ashram he enters into Grihastha Ashram after the age of 25 years. The Grihastha Ashram depends on two conditions: Career and Marriage. Marriage connects two people and tow families. So, the institution of marriage is important for not only for the family but for the society as a whole. Indian culture gives full importance to the institution of marriage and recognizes various types of marriages. There ar3 some purpose of marriage: Individual purpose, Social purpose, Situation of marriage.

Vanprastha Ashram: Indian culture divided the four ashrams in twov groups. The fist two constitute the life of indulgence (pravarti marga). And the second two prepare renunciation (nirvarti marga). The former aims at happiness and satisfaction of despite while the later at giving us of all desires. According to Indian culture nirvarti should come after pravarti, tendency to renounce things should come at a time when a person is fed up with a life of satisfaction. So that renunciation should grow out of indulgence. We consider that a person after his retirement from service or business becomes useless but Indian culture considers him useful.

Sanyas Ashram: This is the fourth and the last ashram of human life. The ultimate aim of human life according to Indian culture is to have a vision of God or attainment of Moksha. Therefore, the whole life is a long process to realize this goal. Ashram scheme takes a person gradually to his final goal of life, the spiritual union of all ashrams contribute to human development and he comes to realization of god and attainment of moksha. Therefore, ashram scheme is an ideal intelligent loaning of human life. This is the final phase of human life during which a person should devote his life and activities in the pursuit of moksha (the fourth purushartha) or final liberation. Regarding the ascetic life, the following verses are quoted from the Vashista Sutras.

- Let him wear a single garment, or cover his body with a skin or with grass.
- Let him sleep on the bare ground.
- Let him frequently change his residence,
- (Dwelling) at the extremity of the village, in a temple, or in an empty house, or at the root of a tree.
- Let him (constantly) seek in his heart the knowledge (of the universal soul).
- (An ascetic) who lives constantly in the forest,
- Shall not wander about within sight of the village-cattle.
- Freedom from future births is certain for him who constantly dwells in the forest, who has subdued his organs of sensation and action, who has renounced all sensual gratification, whose mind is fixed in meditation on the Supreme Spirit, and who is (wholly) indifferent (to pleasure and pain).'
- (Let him) not (wear) any visible mark (of his order), nor (follow) any visible rule of conduct.
- Let him, though not mad, appear like one out of his mind.

It may, however, be noted that these stages of life are meant for average persons. These are not necessary for a genius or for an extraordinarily gifted person. Persons like Tagore, (and Charles Dickens) never went to school. Persons like Shelley and Wordsworth did not have much college education and yet they were master poets. A genius can by-pass any stage(s) and reach the highest stage.

To sum up, the dominant ideal of the Indian social tradition has been conceptualized as Dharma with Moksha as the final aim which essentially the direction is sought to be imposed upon the lower by the higher self of man. The spiritually genuine and active person increasingly discovers Dharma within his own heart and is free to follow it. The average individual and all individuals to the extent they have not been spiritually transfigured can do no better than follow disinterestedly the rule of duty indicated to them by the actual group to which they belong. The group, on the other hand, is free to follow any tradition of cultural values without seeking to interfere with other groups through extending material co-operation to them. If these principles

are logically followed, we should have a universal society which would be stable and harmonious without being static and uniform.

Education - Gurukul way of education and its outcome:

In this living world, Human is such an individual who is dependent on others, from his birth till his last breath, to acquire knowledge and guidance. We can interpret from this that humans attain good characters from time to time by various techniques and behaviors. In ancient India, the Vedas, the Upanishads, the epics manifested and upheld the values of Indian society. Imparting value education was the main aim of the teachers of the ancient age (Pathania, 2011). From the time beyond our imagination, through the origin of Vedas, and till this very moment, the surroundings, society and teaching have affected the development of humans a lot because these are the only sources by which a child grows, develops, achieves, accomplishes and at last reaches great heights as a result of passionate thinking and study on the basis of his knowledge and will. Rabindra Nath Tagore, Maharishi Arvind, Mahatma Gandhi and such noble personalities have defined education as the finder of liberty, the one who has strengthened us mentally and emotionally, the one who has made us great philosophers and the one who makes us capable to find ways to success.

In these past years of independence, India has memorably developed in the field of technology, economy, social structure, democracy etc. but our education system has not reached the desired heights where it should have been and as a result there is mass dissatisfaction among the society as a whole. The present aim of education is to fulfill the need of a better structure and revitalization of benchmarks. As a result, most of today's philosophers, socialists, educationalists and researchers are found judging the present education system against the ancient one, commonly known as the 'Gurukul' system.

Education Today—A Crisis in National Character! (I will not let exams ruin my life video)

The National scene today on the Educational front presents a bewildering picture. The situation prevailing in the Educational Institutions and the Universities is alarming. The quality of the teachers and the students has taken a nosedive, in the recent years. The production of text books, the planning of their content, the methods of instruction as well as the goals to be kept in view for making our Education serve the National goal as well as the individual aims – all these are in a sorry mess today!

Today, the main concern in the modern India is that the quality of human material is rapidly declining in many fields. The goal of the education should be to supply a constant stream of men of character, to man the different walks in life-business, politics, Education, science and social work, is the National Aim of education.

Education is the only means of civilizing ourselves, or training ourselves to maintain high qualities of Integrity, devotion, sincerity and an ethical and moral purpose in our national life, and correct the poisonous trends of rank opportunism and political corruption which are destroying our national character. Our only means of educating the future political leaders is while they are still as students!

Education, must define its goal. The goal is individual's character-building. The aim our National Education should be to provide humans of character and patriotism, who are the basic material, for building up the Nation. A fearless open minded and truthful personality as the foundation to character-building –is the first purpose of "National Education", an honest, self-confident nature is the greatest security, against corruption, moral bankruptcy and fear complex, which we find in every walk of life to-day.

There has been a tremendous improvement in quality of life with the advances in technology. The young generation must realize how to use this technology for spreading knowledge and culture. The education should be imparted in peaceful, clean and natural environment far away from towns and villages. The Indian constitution has recently adopted the principle of equality in the field of education. The present education prepares the students for their future career as it used to be in ancient times. The vocational subjects have to be included in curriculum but much is needed to be done to achieve the desired aim. Rabindranath Tagore had assessed it long back that the Indian education system needs to change. We live in a society where child spends his parent's earnings and still not getting the standard education and struggling to get the desired employment. The increased competition in education sector sometimes crushes the creativity of millions of students and drives them to commit suicide. Education is treated as a means of achieving wealth.

Aim of Education

In ancient India Intellectual culture was not regarded as the highest ideal, but spiritual realization of the relation that exists between the individual soul and the universal spirit was the principal aim of education. Education", as Herbert Spencer has said, "the training of completeness of life." Education is to bring out the perfection of the man, which is already latent in his soul. Education does not mean that a lot of ideas or information will be poured into the brain of the individual, and they will run riot. But it means the gradual growth and development of the soul from its infancy to maturity. Education should be based upon the spiritual ideal that each individual soul is potentially divine, that it possesses infinite potentiality and infinite possibility, and that knowledge cannot come from outside into inside, but that all knowledge evolves from inside. No one can teach you, but you teach yourself and the teachers only give suggestions. This should be the principle of education.

Reference to Lord McCauley

Macaulay served as the Secretary at War between 1839 and 1841, and as the Paymaster-General between 1846 and 1848. He played a major role in the introduction of English and western concepts to education in India, and published his argument on the subject in the "Macaulay Minute" in 1835. He supported the replacement of Persian by English as the official language, the use of English as the medium of instruction in all schools, and the training of English-speaking Indians as teachers. He directs in his minutes

"In one point I fully agree with the gentlemen to whose general views I am opposed. I feel with them, that it is impossible for us, with our limited means, to attempt to educate the body of the people. We must at present do our best to form a class who may be interpreters between us and the millions whom we govern; a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals, and in intellect. To that class we may leave it to refine the vernacular dialects of the country, to enrich those dialects with terms of science borrowed from the Western nomenclature, and to render them by degrees fit vehicles for conveying knowledge to the great mass of the population."

"We have to educate a people who cannot at present be educated by means of their mother-tongue. We must teach them some foreign language. The claims of our own language it is hardly necessary to recapitulate. It stands pre-eminent even among the languages of the West. It abounds with works of imagination not inferior to the noblest which Greece has bequeathed to us, --with models of every species of eloquence, --with historical composition, which, considered merely as narratives, have seldom been surpassed, and which, considered as vehicles of ethical and political instruction, have never been equaled-- with just and lively representations of human life and human nature, --with the most profound speculations on metaphysics, morals, government, jurisprudence, trade, --with full and correct information respecting every experimental science which tends to preserve the health, to increase the comfort, or to expand the intellect of man."

Role of parents in Education

The other important aspect in Education is the *Parent is the natural teacher by default*. The Child learns from the parent all that is formative in its character. The reason is obvious. The cause is the natural tendency of the child to copy, to imitate and emulate what it sees in others, the elders-doing. Because this is the natural way of learning! Learning from what you see. A careful observation of nature shows that the cat teaches the kitten how to be a cat and the Child learns from the environment what it sees in others do, or hears and it is impelled to follow suit--from what its fellows do! This is Nature's way of educating a creature born into this world.

What is Gurukul

The Gurukul is the house of the Guru where a student is taught everything working, playing and living. Ancient scripts recommend that the student should begin to live under the supervision of his teacher (in Gurukul) after his Upanayana. The Gurukul system which necessitated the stay of student away from his home at the house of a teacher or in a boarding-house of established

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reputation, was one of the most Important features of ancient Indian education. Inquisitiveness was considered to be a must for good studentship. The entire gamut of relations between the teacher and taught was governed and guided by the common belief that Guru is indispensable and nobody can learn the desired Lore {Vidyas) fruitfully without approaching and satisfying Guru.

The aim of our traditional Gurukul technique was to develop the latent yogic powers of the child and build him up to into a Moral & Spiritual stalwart and not just a walking computer. In Gurukul, Guru develops his students into a real Purusha. A Purusha means a real hero, who is not afraid of everything, he is not afraid of life, disease. He also teaches how to analyze the fear and try to surpass it. The youngsters are trained in exercises and in Yogic Asanas and Mental Training in high concentration through Meditation for Awakening of Higher centers of understanding. Gurukul system devotes special attention to character building.

The Education of Rishies, is ‘Education from Within’ The basic idea underlying this concept, is that Man has in himself, the Source of true knowledge. The techniques adopted by religious mystics or Saints and Rishies, involves this idea of ‘illumination from Inside’. The Gurukula concept of Education as practiced by Ancient Vedic Rishis involves the idea of knowledge received from within—as a kind of inner light. ‘Tapas’ of penance involves purification of the body and the mind and sublimation of the desires and the lower cravings, and is followed by meditation/concentration by yoga. Tapas or penance in Yoga involves the purification of the mind. This mind is purified from all kinds of egoistic selfish and passionate impulses, by a regulated living of the disciple, or Bramhachari under the direct supervision of the Guru. This involves living with the Guru or personal initiation or Upadesha and training in practice.

Expected outcome of Gurukul

The objectives of this form of education were:

1. Diplomacy and maturity

2. Improvement of character

3. Learning friendliness or social mindfulness

4. Personality development

5. Proliferation of virtue

6. Preservation of learning and culture

7. To develop spiritual attitude.

8. To be a better civilian

The Upanishadic teachers laid great emphasis on intellect and character of the disciple, which should reinforce each other. They considered both these aspects to be equally important in preparing good man and the useful man of the society. The objective of the system was not

knowledge of values but commitment to them, and mention may be made of the following, which were chosen as guidelines in day-to-day conduct. {Taitiriya Upanisad- 1-11-2)

1. Adherence to truthfulness
2. Dutifulness
3. Love of scholarship
4. Service to the teacher
5. Reverence to mother father and teacher
6. Honesty, courtesy, self-discipline and self-sacrifice

Merits of Gurukul System

1. The Gurus had huge information and knew how to instruct the most troublesome things.
2. This Parampara used to take as much time as needed and shishiya have more time to learn and become meticulous.
3. This system helps to acquire high level of efficiency.
4. The shishiya have high regards for Guru.
5. The teaching was more of practical and shishya enjoying learning.
6. Environment in Gurukul teaching ensured that shishiya should accomplish in his field of interest

Practices at Gurukul

The classes were held in the shade of trees, and under some shelter during monsoon to ensure that the students are in touch with nature which benefitted their physical and mental development. The Gurukuls were situated at beautiful natural places which were near some rural or urban areas to fulfill the daily necessity requirement of the students and to have the facility of imploring. The age to begin Vedic education was usually eight to twelve years and for those parents who did not send their children to the Gurukul; a specific punishment was decided and implemented.

The education was totally influenced by thoughts, ideas and morality. There was the provision of free education but after the completion of education, money, land, animals, grain, etc. was given

as reward. Due to the lack of printed books, the lessons were delivered orally. There were certain rules for the students to adhere regarding their daily lives such as to lead a simple life, wake up early before the day breaks, get freshened up and take a bath early, and then worship the God and perform havan, etc. They could eat food twice a day. The students were asked to follow the rules of self control and discipline. For them, real merger of the Small 'I' or the individual self, into the larger self or the Universal Self is possible only through truly selfless action! The students had great respect for their teachers and treated them as their parents and king. The relation between the teacher and the students was of care, respect, trust and duty. Punishment was given but was not harsh. At that time, the state or the king did not interfere with the Gurukul.

Systems of study

Knowledge was passed on orally from one generation to another in ancient India. Education involved three basic processes, one, which included 'sravana'(stage of acquiring knowledge of 'shrutis' by listening). Two, 'manana'(meaning pupils to think, analyze themselves about what they heard, assimilate the lessons taught by their teacher and make their own inferences,) and three 'nidhyasana (meaning comprehension of truth and apply\ use it into real life). In ancient India women were given equal right to education and teaching. Many scholars came from out of India for education but no any Indian scholars went outside from India for acquire their knowledge.

It is said that Memorisation, recitation, recapitulation were the normal methods of education. Hieuan-Tsang mentioned the extraordinary memory of the Vedic Scholars in Nalanda University. Lectures, discussions, debates, seminars, group discussions etc.... were some of the methods of study in our ancient educational system. Doubt clarifications were considered to be the important aspect of our system.

Spirituality- A Path to Self-realization:

Spiritual approach to regulate the society is not something new or astonishing. Many societies have tried to regulate their social order putting spirituality as their central value. In India there has been a spiritual ethos since ancient times and even in modern times people have deep faith in spirituality. Therefore, in India there should be a greater likelihood of the spiritual approach succeeding. It is a guide to human action which leads to liberation of the individual as well as the society. It believes in Sanatana Dharma and can also be called religion of mankind. Its basic philosophy is to live and let live. It is highly tolerant and accommodative.

According to Swami Vivekananda (1863-1902), a great spiritual leader, thinker and reformer of India, spirituality is the very backbone of India. He observes that every nation has a particular ideal running through its whole existence, forming its very background. With some it is politics, while with others it is social culture, intellectual culture, and so on. Vivekananda says, our motherland has religion and religion alone for its backbone, for the bedrock upon which the whole building of its life has been based.' Since spirituality is the essence of religion, we should mark that Vivekananda has used the term religion in the same sense as spirituality

Why spiritual path?

The literal meaning of the word ‘philosophy’ is ‘love of wisdom,’ which has been split into ‘philo’ and ‘sophia.’ Since the term ‘philosophy’ is fascinating, but elusive, there are several definitions for this term. All the definitions centre on the intellectual exercise concerned with the nature of reality from human perspective. Mainly philosophy deals with the perennial problems of life. As life is a complex and complicated phenomenon, the role of philosophy is immense in making an enquiry into the issues emerging in human life. Issues concerning with social, political, moral, religious, racial, cultural, linguistic and economic spheres, confront human beings; the impact of philosophical investigation gains significance in explicating the real meaning or goal of life. Through this unit students would understand the nature of philosophy in relation to its different branches and the characteristic features of Indian philosophical systems. It is spiritual approach that goes deepest in finding out the basic causes of human suffering and shows the way out, howsoever difficult it may be. Reasons for failure can basically be found in human nature, which has always vacillated between higher aspirations and lower nature of man. The lower nature pulls a man down to a behavior based on passion, greed, violence, narrow interests and such tendencies. But higher nature and aspirations in a man’s in his elevated moments inspire him to values of ethics and spirituality. It is not easy, rather very difficult, to rise above such natural man and his limitations and negativities, which are so attractive for common men and their congregation.

Important questions to oneself

Life is generally and characteristically defined as the span of existence from cradle to grave. A child is born, grows, marries, brings forth offspring and dies. The doubt remains as to what happens to the soul after death, how does a soul enter into the body before birth? Why are we born? Why should we live? Why are there so many hurdles in life? How are we to overcome sufferings? What is the importance of material life? Is spiritual life superior to material life? What are permanence and change? Why are they caused? What is the problem of one and many? How was the world created? What is the stuff out of which it has been created? Will the universe exist forever? Is there any super power called God? How is God related to the soul and the world? Is the soul one or many? What are appearance and reality?

Vitality of Spirituality

Since the times of, ancient thinking, the dual nature and plurality of thought are found evident. Indian thinking does not deny the duality found in nature. They are opposite in nature as masculine and feminine, positive and negative, ascent and descent. These oppositions are very routes through which reality is finding its passage. So although reality is one, it does not negate dualism and pluralism. There is an ample place for difference of why we find Upanisadic thinking being contemplate the end of the Vedic period. There are twelve main opinions in Indian thought. That’s why we find Upanisadic thinking being contemplate the end of the Vedic

period. There are twelve main Upanishads and the main principles such as that of Brahman, Atman, the status of the world, the principle of causation like Satkaryavada, the principle of Karma and rebirth - all these are found elaborated in the Upanishads through stories, analogies and parables. It is true that Upanisadic idea; is not very clear. This is because it is expressed through stories. But its essence is quite evident.

Ancient philosophical and religious traditions

Indian spirituality is deeply rooted in ancient philosophical and religious traditions of the land. Philosophy arose in India as an enquiry into the mystery of life and existence. Indian sages called Rishis or 'seers', developed special techniques of transcending the sense and the ordinary mind, collectively called yoga. With the help of these techniques, they delved deep into the depths of consciousness and discovered important truths about the true nature of human being and the universe. The sages found that the true nature of the human being is not the body or the mind, which are ever changing and perishable but the spirit which is unchanging, immortal and pure consciousness. They called it the Atman.

Ancient path of Spiritual scripts

Ancient Indian thought: The Vedas are the earliest documents of the human mind that we possess. Since the time of Rg. Veda, the metaphysical bent of mind was continuing throughout the cultural and philosophical thinking in India. It is significant to note that although polytheism was found apparent in worship, prayer and later rituals, original thinking found in Rg. Veda is essentially metaphysical. The Vedic and Upanisadic thinkers were not against scientific and analytic thinking, but they were more interested in spiritual reality rather than in physical existence. This can be found in Rg. Veda Samhitas which consists of ten Mandalas and one thousand and seventeen Suktas.

The important principles found in earlier suktas "is that of the creation of the world. Although, the earlier saints and Sages believed in God, He was not a particular person according to them. God was a vast universe and He manifests in the whole world as solar light, air, fire, water, earth and other material phenomena. Indian religion, though having its foundation in supernatural revelation, gives a legitimate place to logic and reason and it has never been an obstacle to the growth of philosophic thinking. Philosophical Suktas in Rg Veda are those of Purusa Sukta and Nasadta Sukta and it is in Purusa Sukta that ultimate reality is held to be both transcendent and immanent. It is said in the Purusa Sukta that having manifested into the phenomena of world, "I am still ten fingers above the earth, 'Atythishthat Dashangulam.

Types of path

We know that there are three main paths - knowledge, action and devotion which leading to the recognition of reality. Ancient thinkers have thought upon the dominance of either knowledge or action or devotion. This emphasis has resulted into the later Kevaladvaita Vedanta, Visist-advaita Vedanta, Sudhoadvaita Vedanta and other forms of Vedanta.

After Upanisads, we have the age of 'darsanas' in which there are independent arguments for the existence of God, existence of self, pramanas and logic of thoughtful enquiries. The Sankhya is a philosophy of dualistic realism, attributed to the sage Kapila. It admits two ultimate realities namely purusa and prakrti. The evolution of the world has its starting point in the association (samyoga) of the purusa with prakriti. According to this system the existence of God cannot be proved in any way. The Yoga system is closely allied to the Sankhya and the sage Patanjali is the founder of this philosophy.

It mostly accepts the epistemology and the metaphysics of the Sankhya but admits also the existence of God. The Nyaya system is the work of the great sage Gautam and it is a realistic philosophy based mainly on logical grounds. The existence of God is proved by the Naiyayikas by several arguments. The Vaisesika system was founded by the sage Kanida. With regard to God and Liberation of the individual soul, the Vaisesika theory is substantially the same as that of the Nyaya.

Buddhism arose as a protest against the priestly class and elaborate rituals of worship. Buddha concentrated his teaching on the moral discipline and did not enter into metaphysical discussions. Jainism is also atheism as it rejects the existence of God. It is a kind of realism because it asserts the reality of the external world, and it is pluralism, because it believes in many ultimate realities. The charvaka philosophy holds that we should try to get the best out of this life by enjoying it as best as we can and avoiding as far as possible the chances of pain and that is why it means materialist.

Further development into Bhagvadgeeta and scripts

Alongside of the Vedas, there gradually came into being a large body of writings. Of these, there are two principal works, the Ramayana and the Mahabharata. They are all known in India as history. The Bhisma-Parva of Mahabharata contains Bhagvadgeeta, the philosophical discourse of Lord Krishna. But it stands apart and is completing itself. Bhagvadgeeta is regarded as the most sacred book of Hindus. It possesses equal authority with the Upanishads and the Brahma Sutra and the three together are called 'prasthana-traya'.

The Gita deals essentially with the spiritual background of human existence and it is in this context that the practical problem of everyday life appear. Innumerable commentaries on the Gita have appeared in the past and they continue to come with, in the present day. Tilak, Aurobindo Ghose, Gandhiji have written on it, each giving his own interpretation, Bhagvadgeeta gives not only metaphysics (Brahmavidya) but a discipline (Yoga-Shstra) also.

Jnyan Yoga:

The word Jnana means knowledge insight or wisdom. Jnyan Yoga is the most important, being the very essence of Reality. Karmayoga and Bhaktiyoga, understood in their proper senses are the manifestations of Jnyanyoga. Without Jnyan or knowledge or wisdom, liberation is not possible and so is detachment and renunciation in actions and so disinterested devotion. God has to give knowledge to his devotees so they may reach to Him. We must control our senses,

possess the faith that no n intellectual doubts disturb and train the understanding (buddhi). Jnyan and Ajnyan, knowledge and ignorance are opposed to each other as light and darkness. When wisdom down, ignorance dies and the evil is cut at the root. The liberated soul overcomes the world. Action no more binds. When we grow into wisdom, we live in the Supreme

Karma yoga:

Karma begins (Karma yoga) by the renunciation of all egoistic aim for our works and through renunciation mind is purified and the will becomes conscious easily to get the universal Energy. A true doer can make it possible through Tapasya of Karmayoga. The term 'Karma' stands for a particular kind of action which specifically denotes an attitude towards action. The Bhagavad Gita is the earliest scripture to teach Karmayoga in which Lord Sri Krsna has explained it to Arjuna It tries to build up a philosophy of karma based on Jnyana and supported by Bhakti in a beautiful manner. Bhagvadgeeta tells that Karma yoga is an alternative method of attaining goal of perfection and wisdom. It is known to all that to exist is to act. Even an inanimate object such as a rock has movement. The universe is a vast vibratory expanse and for existence Karma yoga is inevitable.

Bhakti Yoga:

Bhakti in Bhagvadgeeta is an utter self-giving to the Transcendent. It is to believe in God, to love Him, to be devoted to Him, to enter into Him. It is its own reward. Such a devotee has in him the contents of the higher knowledge as well as the energy of the perfect man. Bhakti means service of God. So it is also a form of karma. Bhakti leads to Jnan or knowledge. Bhakti is A sustained by knowledge but is not knowledge. Bhakti is a loving attachment to God. The devotee feels himself united intimately with the Supreme person. He sees God in himself and himself in God. In Bhaktiyoga, the emotional force of the human being is purified and channeled towards the Divine. In this discipline the bhaktiyogins or bhaktas tend to be more openly expressive of the typical raja yogin.

Vivekananda and his thoughts on Religion/Spirituality

“Every system of philosophy in India is a quest for Truth, which is one and the same, always and everywhere. The modes of approach differ, logic varies, but the purpose remains the same – trying to reach that Truth. “I am proud to belong to a religion which has taught the world tolerance and universal acceptance ... We believe not only in universal toleration, but we accept all religions as true.”

– Swami Vivekananda at Parliament of world Religions in Chicago 1893

Swami Vivekananda has given the descriptions of religion. He said "Be good and do good; that is all of religion". Here he was speaking of ethical religion where one can see the influence of the Buddha. Secondly he said "Be good and do good; that is all of religion". Here he was speaking of ethical religion where one can see the influence of the Buddha. Secondly he said: Each soul is

potentially divine. The goal is to manifest, divinity in man and that can be achieved by controlling nature, external and internal. Do this either by work or worship or psychic control, or philosophy, by one or more or all of these and be free. This is the whole of religion. Doctrines or dogmas or rituals or books or temples or forms are but secondary detail.

Prosperity of Ancient Indian Literature

Rigveda, the earliest known works of Indian literature is a collection of 1028 hymns written in Vedic Sanskrit. Indian literature includes everything that can be included under ‘literature’ broadly- religious and mundane, epic and lyrics, dramatic and didactic poetry, narrative and scientific prose along with oral poetry and song.

The Rig Veda was followed by Yajur Veda, Sama Veda, and Atharva Veda. There are other works after Vedas known as Brahmanas and Aryankas followed by philosophical doctrines of Upanishads.

- Yajur Veda – deals with directions for performance of the Yajnas.
- Sama Veda- deals with prescribed tunes for recitation of the hymns.
- Atharva Veda- deals with prescribing rites and rituals.
- Brahmanas- contains detailed explanation about Vedic literature and instructions.
- Aryankas- are a treatise of forest which explain the the rituals while dwelling into the philosophical discussions of the Brahmanas. They record the transitions between ritualistic symbolism of Brahmanas and philosophical aspects of Upanishads.
- Upanishads- deals with concepts about origin of universe, death and birth, material and spiritual world, which are written in poetry and prose, as expressions of philosophical concepts. Earliest Upanishads are Brihad-Aryanaka and Chandogya. They explain the highest thoughts described that can be realised by a man, according to ancient sages, in simple and beautiful imagery.

Another type of work that emerged in early period was **Vedangas**, which included astronomy, grammar, and phonetics. For example, *Ashtadhyayi* written by Panini is work on Sanskrit grammar.

Great Epics

The two inspirational epics from Ancient Indian Literature, Ramayana and Mahabharata have been developed to their present form over centuries, hence, they represent the ethnic memory of the Indian people. They were transmitted orally over the time by singers and story-tellers and were probably put to their written form around 2nd century BC. Ramayana is composed of 24000 verses which are spread across seven books referred to as Kandas. It is written in form of poetry which entertains while it instructs. It is the story of Rama, and tells how to achieve the fourfold objectives of human life (Purushartha), namely, Dharma, Artha, Kama, Moksha.

1. Dharma- righteous behavior or religion
2. Artha- achievement of worldly wealth and prosperity
3. Kama- fulfillment of desires
4. Moksha- ultimate liberation

The Mahabharata is considered to be Ithihasa Purana, meaning Mythical history (because this history is not merely the depiction of events that happened, but these are the vents that will always happen and repeat). It consists of one lakh verses which are spread across ten books, hence, it the longest poem in the world. It is written by Vyasa, about the story of war of succession to that throne between Pandavas and Kauravs with multiple stories interwoven together to form an epic. Along with the main story of war, a later addition of Bhagvad Gita enshrines an integrated view of Dharma (performance of righteous duty in selfless way of Nishkama Karma).

Puranas

They helped in development of early Vedic religion towards Hinduism. The literal meaning of the word “Purana” means “to renew the old”. They were written to illustrate the truth of Vedas to the people. Puranas explain the philosophical and religious truths through popular legends and mythological stories. Combined with the Ithihas (Ramayana and Mahabharata), Puranas consist of many stories and anecdotes of religious, social and cultural history of India.

Shastras and Smriti literature

Shastras contain work of philosophy and science. They cover areas like art, mathematics and other sciences. Arthashastra is a work on science of governance. Smritis deal with the performance of duties, customs and laws that are prescribed in accordance with Dharma. Manusmriti is the most important example, known as laws of Manu.

Early Buddhist Literature

The earliest Buddhist literature is written in Pali language. The *Sutta Pitaka* consists of dialogues between the Buddha and his followers. The *Vinaya Pitaka* deals with rules of organisation of the monasteries. *Milindapanho* is a work of dialogues between buddhist Nagasena and Indo-greek king Menandar. The Jatakas are another important contribution to the early Buddhist literature consisting stories that have also been incorporated in a number of sculptures.

Ancient Sanskrit literature

A number of literary works have been written just prior to the beginning of Gupta age which had secular character. This period saw development of poetry and drama. The subject of these works were majorly political events, allegories, comedies, romances, and philosophical questions.

- The works of Kalidasa include the Kumarsambhava, the Raghuvamsha, the Meghaduta, the Abhijnanshakuntalam which are considered classics in field of poetry and style.
- Bana wrote Harshacharita which is a biography of King Harsha and Kadambari.
- Bhavabhuti wrote Uttar-Ramayana.
- Bharavi wrote Kirtarjuniya.
- Vishakadutta wrote Mudra Rakshasa.
- Shudraka wrote Mricchakatika which covers social drama.

- Dandin wrote Daskumarcharita (the tale of 10 prince).

There were also a large number of philosophical literature. Most important ones are those of Sankaracharya. There are collections of stories in *Panchatantra* and *Kathasarit-sagar*.

South-Indian Literature

In Southern India, the ancient Indian writings were written in four Dravidian languages which developed their own script and literature, these are, Tamil, Telugu, Kannada, Malayalam. Among these, Tamil is the oldest with literature dating back to early centuries of Christian era. This developed during the three Sangams (assemblies of poets and writers) held during different times. The **Sangam literature** covers themes of war, love and politics to a great extent. Thus we get to know that when one surveys the history of the evolution of the Indian literature works; we realize that Indians have mastered most of the languages and the alien language, English with perfection too. At the same time, we find a variety of themes prevalent both in the pre and past independence period. There has been much experimentation in the past and they are ongoing still. Many writers have bejeweled the Indian English Literature with prestigious awards like Booker Prize. Indian English Literature is widely acclaimed and popular with the readers all over the world. The age in which they are written are invariably reflected with undoubted deliberations on the various aspects of India.

Unity in Diversity: Respecting Mutual Differences

India is a land of unity in diversity and so is Indian life and culture. The race inhabiting in this country, speaking different dialects and following distinctive ways of life, customs etc. within their different natural environments, contribute to the many-sided and multi-faceted splendour of the Nation, which is unique in the world.



The Whole concept of “Unity in Diversity” is directed towards the assimilation of different cultures, traditions, customs, communities etc. There is nothing called superior or inferior culture, in this process. Indian culture keeps evolving with time. This is something unique about it. Indians are known as well as associated to its culture. We think it makes our lives, more meaningful and colorful. The approach is “we all are one”. The social customs and traditions which the Indians observe irrespective of caste, race and creed in all parts of the country contains within them a sense of Unity. It has kept alive a message of Unity in Diversity in India.

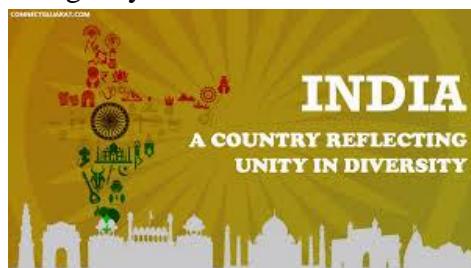
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The different traditions and shades of culture which diverse societies in India have developed have a sense of unity which keeps the people of India bonded together. This fundamental unity can be observed among all the Indian tribes and races.



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In India, every citizen enjoys freedom to choose and follow any religion, culture, tradition, custom etc. The open-minded approach helps to respect cultural norms and values. Unity in diversity is a lesson that everyone should learn from their earliest years because it helps us to live together in a kinder and more loving way.



This simple saying teaches us not to divide ourselves against each other into different camps, because this is where real conflicts can begin. Rather, the principle of unity in diversity teaches us that, fundamentally, we are all equal to each other and we all have equal rights.

Unity in diversity concept in India gives everyone a strong message that nothing is without unity. Living together with love and harmony provides the real essence of life. Unity in diversity in India shows us that we all are born, cared and nourished by one Supreme God.



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Unit 2: Nutrition & Diet

Introduction:

In nutrition, diet is the sum of food consumed by a person or other organism. The word diet often implies the use of specific intake of nutrition for health or weight-management reasons (with the two often being related). Although humans are omnivores, each culture and each person holds some food preferences or some food taboos. This may be due to personal tastes or ethical reasons. Individual dietary choices may be more or less healthy.

Complete nutrition requires ingestion and absorption of vitamins, minerals, essential amino acids from protein and essential fatty acids from fat-containing food, also food energy in the form of carbohydrate, protein, and fat. Dietary habits and choices play a significant role in the quality of life, health and longevity.



Religious and cultural dietary choices:

Some cultures and religions have restrictions concerning what foods are acceptable in their diet. For example, only kosher foods are permitted by Judaism, and Halal foods by Islam. Although Buddhists are generally vegetarians, the practice varies and meat-eating may be permitted depending on the sects. In Hinduism, vegetarianism is the ideal. Jains are strictly vegetarian and consumption of roots is not permitted.



Dietary choices:

Many people choose to forgo food from animal sources to varying degrees (e.g. flexitarianism, vegetarianism, veganism, fruitarianism) for health reasons, issues surrounding morality, or to reduce their personal impact on the environment, although some of the public assumptions about which diets have lower impacts are known to be incorrect. Raw foodism is another contemporary trend. These diets may require tuning or supplementation such as vitamins to meet ordinary nutritional needs.



Dieting is defined as the practice of eating food in a regulated and supervised fashion to decrease, maintain, or increase body weight. Dieting is often used in combination with physical exercise to lose weight, commonly in those who are overweight or obese. Some people, however, follow a diet to gain weight (usually in the form of muscle). Diets can also be used to maintain a stable body weight.

Obesity and being overweight is a problem all over the world and especially so in the United States with over 200 million Americans being classified as overweight, and child obesity statistics on the rise. Overweight people have a very serious risk for developing major chronic diseases, early disability, and even death as a result of being overweight.

Being overweight also harms a person's sense of well being. They may have lowered self-esteem, depression and eating disorders. In today's social environment, the ideal physical form is slim and sexy. Failure to match this form can destroy a person's self image.

The keys to dieting and losing weight fast in a healthy way are discipline and the will to achieve the desired body weight. This natural process involves moderate diet of healthy foods and enough exercise to burn approximately 150 calories a day, every day. It is a good idea to check with your family physician before you begin any type of diet or exercise regimen.

Dieting Tips-

Eat Moderately and Frequently



About This Image: A white bowl full of healthy fresh salad ingredients on a checkered table cloth. It is smarter to eat smaller meals every 3-4 hours instead of three large ones daily. This burns off more calories and you tend to not get hungry before your next meal. Carry healthy snacks like cut up veggies and stay away from junk food.

Exercise

Put together a good exercise routine that will firm up your muscles. It can be just 15-30 minutes, but make sure it is a workout that truly makes you sweat and breathe harder.

Every extra bit of exercise you can do will help you reach your goal. It all adds up. Some experts recommend wearing a pedometer and aiming for walking 10,000 steps a day.

Drink Water

Make sure to drink plenty of water. Water suppresses appetite.

The recommended water intake per day is 8 to 12 glasses per day. If you feel thirsty you are already dehydrated.

If you do not like to drink water, there are alternatives such as green tea, sugar-free lemon-aid and no calorie drink mixes.

Fiber

Fiber is important in your diet because it helps control blood sugar level, lower blood cholesterol and manage weight.

Most people today do not eat near enough fiber in their diet. Some great healthy sources of fiber are broccoli, potatoes, apples, beans, brown rice, whole grains, and strawberries.

Carbohydrates

The key is eating mostly complex carbohydrates (moderate amount) and eating them with protein. Complex carbs are broken down to sugar at a much slower rate during the digestive process than simple carbohydrates; they therefore do not raise the blood sugar levels as fast or as much as simple carbs.

Examples of complex carbs are whole grains, broccoli, squash and berries. Simple carbohydrates are sugar, alcohol, full calorie sodas, refined white flour, potatoes and most desserts.

Protein

Protein is a vital part of your diet. Every time you eat, be sure to include some protein, it will aid you to feel full faster, prevents sugar cravings and maintains muscle mass, which is a very vital part in burning fat. Good sources of protein are: fish, poultry, beef, pork, soy (tofu). Trim off visible fat. Beware of high fat and high calorie sauces and gravies as they make weight loss difficult.

Non-caloric Sweetener

Sugar can be a huge downfall for someone wanting to lose weight. Today, a person can still enjoy sweets due to the availability of good calorie-free sweeteners. Xylitol looks and tastes like sugar. It is natural and is widely distributed throughout nature in small amounts. It has only 40% of the calories of sugar and has little to no glycemic effect (it does not cause elevated blood sugar levels). It also is effective in both hot and cold foods and is very beneficial in reducing tooth decay. Stevia, is natural and tastes sweeter than sugar and works well for both cold and hot foods. Our bodies do not metabolize or break down the stevia complex so it does not affect blood sugar levels at all.

Dieting Facts-

- Diuretics induce weight loss through the excretion of water.
- The glycemic index (GI) factor is a ranking of foods based on their overall effect on blood sugar levels.

- Diets to promote weight loss are generally divided into four categories: low-fat, low-carbohydrate, low-calorie, and very low calorie.
- Very low calorie diets provide 200-800 calories per day, maintaining protein intake but limiting calories from both fat and carbohydrates.
- Low-calorie diets usually produce an energy deficit of 500 to 1,000 calories per day, which can result in a 0.5 kilogram (1.1 lb) to 1 kilogram (2.2 lb) weight loss per week.
- The most recent prescription weight loss medication released is Acomplia (generic name Rimonabant), manufactured by Sanofi Aventis.
- Low carbohydrate diets such as Atkins and Protein Power are relatively high in protein and fats.
- Low-fat diets involve the reduction of the percentage of fat in one's diet.
- Lengthy fasting can be dangerous due to the risk of malnutrition and should be carried out under medical supervision.

Weight management:

A particular diet may be chosen to seek weight loss or weight gain. Changing a subject's dietary intake, or "going on a diet", can change the energy balance and increase or decrease the amount of fat stored by the body. Some foods are specifically recommended, or even altered, for conformity to the requirements of a particular diet. These diets are often recommended in conjunction with exercise. Specific weight loss programs can be harmful to health, while others may be beneficial and can thus be coined as healthy diets. The terms "healthy diet" and "diet for weight management" are often related, as the two promote healthy weight management. Having a healthy diet is a way to prevent health problems, and will provide the body with the right balance of vitamins, minerals, and other nutrients.



Vegetarian Diet-

A vegetarian diet is one which excludes meat. Vegetarians also avoid food containing by-products of animal slaughter, such as animal-derived rennet and gelatin.

- Fruitarian diet: A diet which predominantly consists of raw fruit.
- Lacto vegetarianism: A vegetarian diet that includes certain types of dairy, but excludes eggs and foods which contain animal rennet. A common diet among followers of several religions, including Hinduism, Sikhism and Jainism, based on the principle of Ahimsa (non-harming).
- Ovo vegetarianism: A vegetarian diet that includes eggs, but excludes dairy.



- Ovo-lacto vegetarianism: A vegetarian diet that includes eggs and dairy.
- Vegan diet: In addition to the abstentions of a vegetarian diet, vegans do not use any product produced by animals, such as eggs, dairy products, or honey. The vegan philosophy and lifestyle is broader than just the diet and also includes abstaining from using any products tested on animals and often campaigning for animal rights.

Semi-vegetarian diets-

- Semi-vegetarianism: A predominantly vegetarian diet, in which meat is occasionally consumed.
- Kangatarian: A diet originating from Australia. In addition to foods permissible in a vegetarian diet, kangaroo meat is also consumed.
- Pescetarian diet: A diet which includes fish but not other meats.
- Plant-based diet: A broad term to describe diets in which animal products do not form a large proportion of the diet. Under some definitions a plant-based diet is fully vegetarian; under others it is possible to follow a plant-based diet whilst occasionally consuming meat.
- Pollotarian: Someone who eats chicken or other poultry, but not meat from mammals, often for environmental, health or food justice reasons.
- Pollo-pescetarian: Someone who eats both poultry and fish/seafood, though no meat from mammals.

Weight Control Diets-

A desire to lose weight is a common motivation to change dietary habits, as is a desire to maintain an existing weight. Many weight loss diets are considered by some to entail varying degrees of health risk, and some are not widely considered to be effective. This is especially true of "crash" or "fad" diets.

Many of the diets listed below could fall into more than one subcategory. Where this is the case, it is noted in that diet's entry.

Low-calorie diets-

- 5:2 diet: an intermittent fasting diet popularized by Michael Mosley in 2012.
- Intermittent fasting: Cycling between non-fasting and fasting as a method of calorie restriction.
- Body for Life: A calorie-control diet, promoted as part of the 12-week Body for Life program.
- Cookie diet: A calorie control diet in which low-fat cookies are eaten to quell hunger, often in place of a meal.
- The Hacker's Diet: A calorie-control diet from The Hacker's Diet by John Walker. The book suggests that the key to reaching and maintaining the desired weight is understanding and carefully monitoring calories consumed and used.

- Nutrisystem diet: The dietary element of the weight-loss plan from Nutrisystem, Inc. Nutrisystem distributes low-calorie meals, with specific ratios of fats, proteins and carbohydrates.
- Weight Watchers diet: Foods are assigned point values; dieters can eat any food with a point value provided they stay within their daily point limit.

Very low calorie diets-

- A very low calorie diet is consuming fewer than 800 calories per day. Such diets are normally followed under the supervision of a doctor.[15] Zero-calorie diets are also included.
- Inedia (breatharian diet): A diet in which no food is consumed, based on the belief that food is not necessary for human subsistence.
- KE diet: A diet in which an individual feeds through a feeding tube and does not eat anything.

Low-carbohydrate diets-

- Atkins diet: A low-carbohydrate diet, popularized by nutritionist Robert Atkins in the late-20th and early-21st centuries. Proponents argue that this approach is a more successful way of losing weight than low-calorie diets; critics argue that a low-carb approach poses increased health risks. The Atkins diet consists of four phases (Induction, Balancing, Fine-Tuning and Maintenance) with a gradual increase in consumption of carbohydrates as the person goes through the phases.
- Dukan Diet: A multi-step diet based on high protein and limited carbohydrate consumption. It starts with two steps intended to facilitate short term weight loss, followed by two steps intended to consolidate these losses and return to a more balanced long-term diet.
- Ideal Protein diet: A four-phase carbohydrate-restricted weight-loss plan composed of pre-made meals, protein, vegetables, and water, with the fourth phase introducing carbohydrates balanced with protein and fats.
- Kimkins: A heavily promoted diet for weight loss, found to be fraudulent.
- South Beach Diet: Diet developed by the Miami-based cardiologist Arthur Agatston, M.D., who says that the key to losing weight quickly and getting healthy isn't cutting all carbohydrates and fats from your diet, but choosing the right carbs and the right fats.
- Stillman diet: A carbohydrate-restricted diet that predates the Atkins diet, allowing consumption of specific food ingredients.

Low-fat diets-

McDougall's starch diet is a high calorie, high fiber, low fat diet that is based on starches such as potatoes, rice, and beans which excludes all animal foods and added vegetable oils. John A. McDougall draws on historical observation of how many civilizations around the world throughout time have thrived on starch foods.

Crash Diet-

Crash diet and fad diet are general terms. They describe diet plans which involve making extreme, rapid changes to food consumption, but are also used as disparaging terms for common eating habits which are considered unhealthy. Both types of diet are often considered to pose health risks. Many of the diets listed here are weight-loss diets which would also fit into other sections of this list. Where this is the case, it will be noted in that diet's entry.

- Beverly Hills Diet: An extreme diet which has only fruits in the first days, gradually increasing the selection of foods up to the sixth week.
- Cabbage soup diet: A low-calorie diet based on heavy consumption of cabbage soup. Considered a fad diet.
- Grapefruit diet: A fad diet, intended to facilitate weight loss, in which grapefruit is consumed in large quantities at meal times.
- Monotrophic diet: A diet that involves eating only one food item, or one type of food, for a period of time to achieve a desired weight reduction.
- Subway diet: A crash diet in which a person consumes Subway sandwiches in place of higher calorie fast foods. Made famous by former obese student Jared Fogle, who lost 245 pounds after replacing his meals with Subway sandwiches as part of an effort to lose weight.
- Western dietary pattern: A diet consisting of food which is most commonly consumed in developed countries. Examples include meat, white bread, milk and puddings. The name is a reference to the Western world.

Detox Diets-

- Detox diets involve either not consuming or attempting to flush out substances that are considered unhelpful or harmful. Examples include restricting food consumption to foods without colorings or preservatives, taking supplements, or drinking large amounts of water. The latter practice in particular has drawn criticism, as drinking significantly more water than recommended levels can cause hyponatremia.
- Juice fasting: A form of detox diet, in which nutrition is obtained solely from fruit and vegetable juices. The health implications of such diets are disputed.
- Master Cleanse: A form of juice fasting.

Belief-based diets-

- Some people's dietary choices are influenced by their religious, spiritual or philosophical beliefs.
- Buddhist diet: While Buddhism does not have specific dietary rules, some buddhists practice vegetarianism based on a strict interpretation of the first of the Five Precepts.
- Hindu and Jain diets: Followers of Hinduism and Jainism may follow lacto vegetarian diets (though most do not, as some Hindu festivals require meat to be eaten), based on the principle of ahimsa (non-harming).

- Islamic dietary laws: Muslims follow a diet consisting solely of food that is halal – permissible in Islam. The opposite of halal is haraam, food that is Islamically Impermissible. Haraam substances include alcohol, pork, and any meat from an animal which was not killed through the Islamic method of ritual slaughter (Dhabiba).
- I-tal: A set of principles which influences the diet of many members of the Rastafari movement. One principle is that natural foods should be consumed. Some Rastafarians interpret I-tal to advocate vegetarianism or veganism.
- Kosher diet: Food permissible under Kashrut, the set of Jewish dietary laws, is said to be Kosher. Some foods and food combinations are non-Kosher, and failure to prepare food in accordance with Kashrut can make otherwise permissible foods non-Kosher.
- Seventh-day Adventist: Seventh-day Adventists combine the Kosher rules of Judaism with prohibitions against alcohol and caffeinated beverages and an emphasis on whole foods. About half of Adventists are lacto-ovo-vegetarians.
- Word of Wisdom: The name of a section of the Doctrine and Covenants, a book of scripture accepted by members of The Church of Jesus Christ of Latter-day Saints. Dietary advice includes (1) wholesome plants "in the season thereof", (2) eating meat sparingly and only "in times of winter, or of cold, or famine", and (3) grain as the "staff of life".

Diets followed for medical reasons -

- People's dietary choices are sometimes affected by intolerance or allergy to certain types of food. There are also dietary patterns that might be recommended, prescribed or administered by medical professionals for people with specific medical needs.
- Diabetic diet: An umbrella term for diets recommended to people with diabetes. There is considerable disagreement in the scientific community as to what sort of diet is best for people with diabetes.
- DASH diet (Dietary Approaches to Stop Hypertension): A recommendation that those with high blood pressure consume large quantities of fruits, vegetables, whole-grains and low fat dairy foods as part of their diet, and avoid sugar sweetened foods, red meat and fats. Promoted by the US Department of Health and Human Services, a United States government organisation.
- Elemental diet: A medical, liquid-only diet, in which liquid nutrients are consumed for ease of ingestion.
- Elimination diet: A method of identifying foods which cause a person adverse effects, by process of elimination.
- Gluten-free diet: A diet which avoids the protein gluten, which is found in barley, rye and wheat. It is a medical treatment for gluten-related disorders, which include coeliac disease, non-celiac gluten sensitivity, gluten ataxia, dermatitis herpetiformis and wheat allergy.
- Gluten-free, casein-free diet: A gluten-free diet which also avoids casein, a protein commonly found in milk and cheese.

- Healthy kidney diet: This diet is for those impacted with chronic kidney disease, those with only one kidney who have a kidney infection and those who may be suffering from some other kidney failure. This diet is not the dialysis diet, which is something completely different. The healthy kidney diet restricts large amounts of protein which are hard for the kidney to break down but especially limits: potassium and phosphorus-rich foods and beverages. Liquids are often restricted as well—not forbidden, just less of.
- Ketogenic diet: A high-fat, low-carb diet, in which dietary and body fat is converted into energy. It is used as a medical treatment for refractory epilepsy.
- Liquid diet: A diet in which only liquids are consumed. May be administered by clinicians for medical reasons, such as after a gastric bypass or to prevent death through starvation from a hunger strike.
- Low-FODMAP diet: A diet that consists in the global restriction of all fermentable carbohydrates.
- Specific carbohydrate diet: A diet that aims to restrict the intake of complex carbohydrates such as found in grains and complex sugars. It is promoted as a way of reducing the symptoms of irritable bowel syndrome (IBS), Crohn's disease, ulcerative colitis, coeliac disease, and autism.

Other Diets-

- Alkaline diet: The avoidance of relatively acidic foods – foods with low pH levels – such as grains, dairy, meat, sugar, alcohol, caffeine and fungi. Proponents believe such a diet may have health benefits; critics consider the arguments to have no scientific basis.
- Blood type diet: A diet based on a belief that people's diets should reflect their blood types.
- Clean eating
- Eat-clean diet: Focusses on eating foods without preservatives, and on mixing lean proteins with complex carbohydrates.
- Fit for Life diet: Recommendations include not combining protein and carbohydrates, not drinking water at meal time, and avoiding dairy foods.
- Food combining diet: A nutritional approach where certain food types are deliberately consumed together or separately. For instance, some weight control diets suggest that proteins and carbohydrates should not be consumed in the same meal.
- Gerson therapy: A form of alternative medicine, the diet is low salt, low fat and vegetarian, and also involves taking specific supplements. It was developed by Max Gerson, who claimed the therapy could cure cancer and chronic, degenerative diseases. These claims have not been scientifically proven, and the American Cancer Society claims that elements of the therapy have caused serious illness and death.
- The Graham Diet: A vegetarian diet which promotes whole-wheat flour and discourages the consumption of stimulants such as alcohol and caffeine. Developed by Sylvester Graham in the 19th century.

- Hay diet: A food-combining diet developed by William Howard Hay in the 1920s. Divides foods into separate groups, and suggests that proteins and carbohydrates should not be consumed in the same meal.
- High-protein diet: A diet in which high quantities of protein are consumed with the intention of building muscle. Not to be confused with low-carb diets, where the intention is to lose weight by restricting carbohydrates.
- High residue diet: A diet in which high quantities of dietary fiber are consumed. High-fiber foods include certain fruits, vegetables, nuts and grains.
- Macrobiotic diet: A diet in which processed food is avoided. Common components include grains, beans and vegetables.
- Mediterranean diet: A diet based on habits of some southern European countries. One of the more distinct features is that olive oil is used as the primary source of fat.
- MIND diet: combines the portions of the DASH diet and the Mediterranean diet. The diet is intended to reduce neurological deterioration such as Alzheimer's disease.
- Montignac diet: A weight-loss diet characterised by consuming carbohydrates with a low glycemic index.
- Negative calorie diet: A claim by many weight-loss diets that some foods take more calories to digest than they provide, such as celery. The basis for this claim is disputed.
- Okinawa diet: A low-calorie diet based on the traditional eating habits of people from the Ryukyu Islands.
- Omnivore: An omnivore consumes both plant and animal-based food.
- Organic food diet: A diet consisting only of food which is organic – it has not been produced with modern inputs such as synthetic fertilizers, genetic modification, irradiation, or synthetic food additives.
- Paleolithic diet: Can refer either to the eating habits of humans during the Paleolithic era, or of modern dietary plans purporting to be based on these habits.
- Prison loaf: A meal replacement served in some United States prisons to inmates who are not trusted to use cutlery. Its composition varies between institutions and states, but as a replacement for standard food, it is intended to provide inmates with all their dietary needs.
- Pritikin Program for Diet and Exercise: A diet which focusses on the consumption of unprocessed food.
- Raw foodism: A diet which centres on the consumption of uncooked and unprocessed food. Often associated with a vegetarian diet, although some raw food dieters do consume raw meat.
- Scarsdale Medical Diet
- Shangri-La Diet
- Slimming World diet
- Slow-carb diet
- Smart For Life
- Sonoma diet: A diet based on portion control and centered around consuming “power foods”

- SparkPeople diet
- Sugar Busters!: Focuses on restricting the consumption of refined carbohydrates, particularly sugars.

Healthy eating pyramid:

A healthy diet may improve or maintain optimal health. In developed countries, affluence enables unconstrained caloric intake and possibly inappropriate food choices. Health agencies recommend that people maintain a normal weight by limiting consumption of energy-dense foods and sugary drinks, eating plant-based food, limiting consumption of red and processed meat, and limiting alcohol intake.

The Dietary Guidelines for Americans is an evidence-based information source that policy makers and health professionals use to advise the general public about healthy nutrition.



Eating disorders:

An eating disorder is a mental disorder that interferes with normal food consumption. It is defined by abnormal eating habits that may involve either insufficient or excessive diet. If your healthy eating efforts feel like they are being undermined, you may be making some tricky eating mistakes. There are several sneaky habits that can sabotage your weight-loss efforts. While there are no "bad" foods, there are smarter ways to eat, especially if you're trying to lose weight.

1. Bad Habit to Break: Keeping Tempting Foods Around

It's hard to resist temptation when it's staring you in the face. You're much more likely to grab cookies, candy or ice cream if it's always in your house. Do yourself a favor and keep tempting foods out of your sight. If you're going to keep irresistible snacks at home, stash them inside a cupboard (maybe on a top shelf?). Keep your fruit displayed proudly out on the counter and pre-chop veggies so they're ready for snacking.

2. Bad Habit to Break: Skipping Breakfast

You might think that skipping breakfast—a whole meal! —would help you cut calories, but the research says that eating breakfast can better help you lose weight. Breakfast eaters tend to weigh less and are more successful at losing weight—and keeping it off—than those who skip the meal. What's more, people who typically eat breakfast also get more fiber, calcium, vitamins A and C, riboflavin, zinc and iron. Not hungry when you first get up? Don't worry. Eating breakfast doesn't have to be the first thing you do each day. Just make sure that when you do eat, your meal is something that will sustain you for a few hours—it should include some fiber and protein.

3. Bad Habit to Break: Distracted Eating

You're eating alone, so you reach for your phone and text, scroll the 'gram or play games. Or you read the paper, watch TV or use your computer. All of these distractions take your attention away from eating and make it harder for you to really experience and tune in to how satiated/full you are. That can lead you to eat more than you're really hungry for, either now or later. Aim to be more mindful when you eat and really tune into how hungry and full you are.

4. Bad Habit to Break: Eating Straight Out of the Bag

If you're noshing directly out of the package—whether you're eating chips, crackers, cookies or ice cream—it's easy to eat several servings without realizing it. A key step when you're trying to lose weight is literally watching what you eat—being aware of what and how much you're eating. That's why keeping a food journal is so effective. Get a handle on runaway portions by measuring out a serving...if you want more, measure that too. Being conscious of what you're eating will help you meet your weight goals.

5. Bad Habit to Break: Eating on the Run

Eating in the car, snacking at your desk, drinking a high-calorie smoothie or latte while walking around—it's all too easy to take in excessive calories if you're eating on the go. To curb this type of distracted eating, sit down to eat.

It's not just willpower, or a lack thereof, that makes us overeat and gain weight. Sometimes, it's that sneaky bad habit you developed without even realizing it, like dashing out the door some mornings without breakfast, or munching chips in front of your favorite TV show. The next thing you know, one little bad habit can equal out to a lot of weight gain. The worst part is, you might not even realize what you're doing to your diet.

The Bad Habit: Mindless Eating



Cornell University food psychologist Brian Wansink, PhD, discovered that the larger the plate or bowl you eat from, the more you unknowingly consume. In one recent study, Wansink found that moviegoers given extra-large containers of stale popcorn still ate 45 percent more than those snacking on fresh popcorn out of smaller containers holding the same amount.

The Fix: Eat from smaller dishes. Try swapping out your large dinner plate for a salad plate, and never eat straight from a container or package.

The Bad Habit: Nighttime Noshing

Diet folklore suggests that eating at night is almost never a good idea if you want to lose weight. Although many experts say this old adage is pure myth, a new animal study backs up the idea that it's not only what you eat but also when you eat that counts. Researchers at Northwestern University found that mice given high-fat foods during the day (when these nocturnal animals should have been sleeping) gained significantly more weight than mice given the same diet at night.



The Fix: The diet take-away here? After dinner, teach yourself to think of the kitchen as being closed for the night, and brush your teeth — you'll want to eat less with a newly cleaned mouth. If a craving hits, wait 10 minutes. If you're still truly hungry, reach for something small like string cheese or a piece of fruit.

The Bad Habit: Endless Snacking



Here's a bad habit many are guilty of: snacking round-the-clock, often on high-calorie foods that are full of empty carbs. A recent study at the University of North Carolina found that it isn't

just a problem for adults: kids are snacking more and more often on unhealthy junk food including salty chips, soda, and candy.

The Fix: Keep only healthy snacks within reach, such as hummus, carrots and cucumber slices, air-popped popcorn, yogurt, and almonds, says Jessica Crandall, RD, a spokeswoman for the American Dietetic Association. Don't stock your desk or pantry with potato chips or cookies you know you can't resist.

The Bad Habit: Skipping Breakfast



You know that breakfast really is the most important meal of the day, but with so many other tasks competing for your attention, you may decide you don't have time to eat. When you skip meals, your metabolism begins to slow, Crandall explains, plus, breakfast gives you that boost of energy you need to take on your day. Without this fuel, chances are, you'll just overeat later. A new study of Chinese schoolchildren found that those who skipped breakfast gained significantly more weight over a two-year period than those who ate a morning meal.

The Fix: Have ready healthy breakfast foods you can consume on the run, Crandall says. If you're rushed, try easy items such as whole fruit, yogurt, homemade cereal bars, and smoothies.

The Bad Habit: Emotional Eating

You had a bad day at the office, and when you get home, you open the refrigerator and eat — not a good diet strategy. "You put food in your mouth as a coping mechanism," Crandall says. A number of studies confirm that emotions, both positive and negative, can cause people to eat more than they should, an easy weight-loss stumbling block.



The Fix: Find a new stress-buster, Crandall says. "If you're stressed out at work, when you get home, take a walk instead of eating or call a friend who will be empathetic," she suggests. "You can vent and take some of the stress off your shoulders." Choose any activity you like as long as it keeps you out of the kitchen.

The Bad Habit: Eating Too Quickly



Wolfing down your food, whether you're snacking or eating a meal, doesn't give your brain time to catch up with your stomach. Your brain doesn't signal that you're full until about 15 to 20 minutes after you've started eating. If you gulp down your meal in 10 minutes or less, you could end up eating way more than you need. In a study of 3,200 men and women, Japanese researchers found that eating too quickly was strongly associated with being overweight.
The Fix: To slow down your eating, physically put your fork down between bites, take smaller bites, and be sure to chew each bite thoroughly. Also, drinking water throughout your meal will help you slow down and feel fuller as you go.

The Bad Habit: Not Getting Enough Sleep

Could not getting enough sleep ruin your weight-loss efforts? Yes, according to a recent analysis by researchers in Tokyo. They found that men and women who slept five hours or less a night were more likely to gain weight than those who slept seven hours or more.



The Fix: Establish a routine for yourself, and try to go to bed and wake up at about the same times every day, even on weekends. Keep the bedroom dark and comfortable, and avoid TV or computers for at least an hour before bed. If you need extra motivation to shut off the lights early, remember that the better you sleep, the better the number when you step on the scale in the morning.

The Bad Habit: Vegging Out with Video Games



If you're watching TV, sitting in front of a computer, or playing video games, it's not only mindless snacking in front of the screen that you have to worry about. A new study found that teens who played video games for just one hour ate more the rest of the day, which resulted in weight gain. The researchers weren't sure why playing video games caused the boys to eat more, but said it's possible that sitting in front of a computer all day could have a similar effect on adults and lead to snacking.

The Fix: Take frequent breaks when you're in front of the computer — get up and walk around the room or office every 15 to 30 minutes. When the workday or your favorite TV show ends, remember to carefully monitor what you consume to you don't overstuff yourself.

The Bad Habit: Eating Junk Food

You know junk food doesn't help your waistline, but the effect may be worse than you think. Several animal studies have found that rat's brains find high-fat, high-sugar foods to be addictive — much like cocaine or heroin. Another study found that eating comfort food actually triggers feelings of happiness in humans.

The Fix: The solution isn't to eliminate your favorite indulgences from your diet — that will only make you crave them more, Crandall says. The key to weight-loss success is to identify what you really want, and indulge in your favorite foods in moderation as special treats, not every day.



What is junk food?

Junk foods are processed foods consisting of high calories, but that is considered only as a broad umbrella. These foods are prepared in a way that they look appealing and are enjoyable so you are chemically programmed to ask for more. According to Dr. Sunali Sharma, Dietician & Nutritionist, Amandeep Hospital, "Commercial products including but not limited to salted snack foods, gum, candy, sugary desserts, fried fast food, and sweetened carbonated beverages that have little or no nutritional value but are high in calories, salt, and fats may be considered junk foods. Though not all fast foods are junk foods, but a great number of them are. For instance, a salad may be fast food, but is definitely not junk food. Some foods like burgers, pizzas, and tacos may alternate between junk and healthy categories depending on the ingredients, calories and process of manufacturing."

Why are junk foods bad for you?

Frequent consumption of junk food increases the intake of excess fat, simple carbohydrates, and processed sugar which may lead to a higher risk of obesity and cardiovascular diseases among other chronic health problems. The resulting obesity may begin clogging up the arteries and lay the basis of an impending heart attack. It has also been suggested that eating junk food affects the brain in the same way as consuming addictive drugs. An addiction to junk food may even result in rejection of healthier food options like fruits, vegetables, salads etc. leading to further lack of nourishment.

How should you really avoid junk food?

According to Dr. Sharma, the red flags that you should look out for and avoid bringing home include trans-fats, refined grains, salt and high fructose corn syrup. Avoid foods that say corn sweetener, corn syrup, corn syrup solids, partially hydrogenated, fractionated, or hydrogenated on their label. So next time you want to know if what's on your plate is junk or not, ask yourself these 3 crucial questions:

1. How many calories am I consuming in this one serving?
2. What are the healthy nutrients I am taking in with this meal?
3. What's the quality of ingredients used; how fresh is this food item?

Do note that quitting junk food is a gradual process. If you are someone who is accustomed to daily doses of junk, then quitting may not be easy. The first few days could be tough as you may experience some of these symptoms: irritability, headaches, dip in energy levels and so on. An occasional treat never hurts, what you have to look out against is consistent consumption of junk foods, especially at the cost of healthy nutrition.

No one eats perfectly all the time – even dietitians! But when bad habits become common practice, you can end up with weight gain, high cholesterol, high blood pressure and a host of other potential health problems. So which lousy habits are getting folks into trouble? Here are the top 10 faux pas on our hit list, and how to avoid them. How many are part of your regular routine?

1: Poor Meal Planning

According to our readers, “time” is one of the biggest barriers to healthy eating, but last-minute decisions often lead to fast-food drive thrus and pizza delivery. Taking a few minutes to plan out weekly meals before shopping for the week will save you money, calories, and time in the long run.

2: Too Many Meals Away from Home

Restaurants and take-out will always mean super-sized portions, along with more calories and sodium. Make the effort to prepare meals at home most nights of the week and use our tips when you do venture out.

3: Too Many Processed Foods

Salty and fatty convenience foods that have been stripped of nutrients are everywhere you turn. Opt for mostly fresh and whole foods and read labels to help make the smartest choices when you do go for more highly processed goods.

4: Too Much Added Sugar

Aside from the candies, cookies and soda that Americans already eat too much of, sugar is lurking in places you might not expect, like whole grain cereals, salad dressings, condiments and breads. Take inventory of the total sugar in your diet and find ways to cut back on those empty calories.

5. Mindless Eating

Instead of just eating when hungry, many of us grab food when we're bored, tired, stressed, happy, sad – you name it!

6. Not Eating Together

Along the same lines as eating mindlessly comes eating while distracted, over-scheduled and in multiple shifts. Turn off the TV (and yes, even the computer and cell phone) at meals and make time to eat as a family as much as possible.

7: Eating on the Run

Leaving the house for a busy day without packed snacks or meals sets the stage for diet disaster. You'll resort to meals that are too processed, too heavy, and too much on your waistline.

8: Giant Portion Sizes

You *think* you can eyeball portions but have you ever *really* measured out your morning cereal, spoonfuls of peanut butter or olive oil for cooking? Overdoing portions (even with healthy foods) can cause a calorie overload. Just do it a few times to give yourself some perspective.

9: Too Many Liquid Calories

It's easy to forget that calories from soda, juices and other sugar-sweetened beverages count! Sip on calorie-free beverages like water, unsweetened teas and seltzers in place of the high calorie drinks.

10: Not Eating Enough Throughout The Day

Less definitely isn't always more! Not taking in enough calories throughout the day tanks energy levels, spikes hunger, and leads to overeating later on (when you're tired and ready to eat everything in sight). Avoid stuffing yourself into the afternoon and evening by spreading out calories starting with a healthy breakfast.

Awareness of the Dangers of Alcohol and Other Drugs:

Everyone can play a part in increasing awareness and reducing stigmas surrounding alcoholism. Whether you are in recovery yourself, have a loved one in treatment or recovery, or are simply passionate about the cause, your voice is important. Here are a few ways that you can make a positive difference:

1. Start with yourself. Be conscientious about your own thoughts, beliefs, and attitude regarding drinking and addiction. Read up on the negative impact drinking can have on your body, mind, health, finances, relationships, and more. Make it a point to be aware of how much and how often you drink, why you drink, and how it affects your life. Also consider the ways in which you talk about alcohol and alcoholism; what impression are you giving?

2. Talk to your family. Breaking down stigmas and raising awareness starts in your own home. It's never too early to begin educating your children about making healthy choices, dealing with stress in constructive ways, and learning how to say no. Use books, movies, news stories, and community outings to initiate conversation. Teach them about the dangerous effects drinking can have as well.
3. Share your story. There are so many ways to do this: write a blog, write a guest post for the newspaper, speak up when you hear someone sharing misinformation, or be a source of support for someone struggling with addiction or making strides in recovery. Whether you're speaking to one person or a thousand people, your story matters. You never know whose life you'll touch.
4. Attend community events. Show your support by participating in alcohol awareness or addiction recovery events in your community. Join forces with others who are also fighting for the same cause and learn even more as you go along. Networking can go a long way, as can being visible in showing support for a cause.
5. Host an event. If you're feeling motivated or inspired, host your own awareness event. Perhaps you could offer to speak at a school, community organization, or other outreach effort. Talk to others and share your ideas to create a more robust activity.
6. Seek treatment. Set a positive example and show that treatment does work and recovery is possible by seeking help if you're struggling with an alcohol use disorder. Or, encourage a loved one to enter treatment and make their well-being a priority.

Article Published on February 6th, 2018

In American culture, the drinking of alcoholic beverages is not only perceived as normal, but is also glorified for many different reasons. Some of these reasons include relaxation after a stressful event or day, socialization, or celebrating something. Consuming alcohol responsibly does not indicate a drinking problem. There are plenty of drinkers who are not alcoholics and who do not have a substance abuse disorder.

However, excessive drinking, using alcohol as a means of coping with life's problems, or being unable to control how much is consumed are all signs of developing alcoholism. If you find yourself self-medicating with alcohol, feeling dependent on alcohol, experiencing a decline in health due to alcohol, or especially if drinking is interfering with your life's balance, it's definitely time to assess whether or not you have or are developing alcoholism.

The week of January 22nd through January 28th was the ninth annual National Drug and Alcohol Facts Week, also known as NDAFW. During this week, the National Institute on Drug Abuse (NIDA) "links students with scientists and other experts to counteract the myths about drugs and alcohol that teens get from the internet, social media, TV, movies, music, or from friends," according to the website.

According to the National Institute on Alcoholism and Alcohol Abuse, (NIAAA), approximately 56% of Americans over the age of eighteen drink alcohol at least once a month. That's about 135 million of us who are drinkers. About 33 million of these drinkers are alcoholics. About 88,000 US citizens die every year due to alcohol-related causes. Alcohol is the

third most prevalent cause of preventable death in the country, behind only tobacco and lack of diet/exercise.

So obviously, alcohol is dangerous stuff. However, it's legal for everyone 21 years of age or older, and it's just about everywhere in the nation. Therefore, it's extremely important to recognize the differences between responsible drinking and problematic drinking, and also to raise awareness of the dangers of alcohol. We'll discuss this and NDAFW, also touching on the drug abuse prevention aspect, although this article is focused more on alcoholism.

Depending on how much is taken and the physical condition of the individual, alcohol can cause: short term effects of alcohol

- Slurred speech
- Drowsiness
- Vomiting
- Diarrhea
- Upset stomach
- Headaches
- Breathing difficulties
- Distorted vision and hearing
- Impaired judgment
- Decreased perception and coordination
- Unconsciousness
- Anemia (loss of red blood cells)
- Coma
- Blackouts (memory lapses, where the drinker cannot remember events that occurred while under the influence)

Long-Term Effects of Alcohol

Binge drinking and continued alcohol use in large amounts are associated with many health problems, including:

- Unintentional injuries such as car crash, falls, burns, drowning
- Intentional injuries such as firearm injuries, sexual assault, domestic violence
- Increased on-the-job injuries and loss of productivity
- Increased family problems, broken relationships
- Alcohol poisoning
- High blood pressure, stroke, and other heart-related diseases
- Liver disease
- Nerve damage
- Sexual problems
- Permanent damage to the brain
- Vitamin B1 deficiency, which can lead to a disorder characterized by amnesia, apathy and disorientation

- Ulcers
- Gastritis (inflammation of stomach walls)
- Malnutrition
- Cancer of the mouth and throat

As noted, alcohol kills approximately 88,000 people every year in the US. Although that's a whole lot of people, the number skyrockets up when you talk about tobacco products. They end nearly *half a million* lives in America every year. Drug overdoses kill nearly as many people as alcohol does, with a total of about 65,000 per year. The majority of fatal drug overdoses involve opioids.

Now, add all of this together, and the brain seriously starts to have a hard time comprehending. Tobacco, alcohol, and all other drugs of abuse combined are, in the US alone, responsible for approximately 650,000 deaths annually. *That's 1,780 people every day.* To put it another way, tobacco, alcohol & drugs kill as many people as heart disease does, which is the single leading cause of death in the US.

You've likely heard that we're currently amidst an opioid crisis, and we are indeed. That is however not the full picture. We are amidst a substance abuse crisis, and it includes every single drug you can think of, from nicotine to heroin.

Effects of tobacco:

The effects of any drug (including tobacco) vary from person to person. How tobacco affects a person depends on many things including their size, weight and health, also whether the person is used to taking it. The effects of tobacco, as with any drug, also depend on the amount taken. In Australia, tobacco use is responsible for approximately 15,000 deaths each year. In 2004–2005 approximately three-quarters of a million hospital bed-days were a result of tobacco use. **There is no safe level of tobacco use.** Use of any drug always carries some risk—even medications can produce unwanted side effects. It is important to be careful when taking any type of drug.

Immediate effects

Low to moderate doses-

Some of the effects that may be experienced after smoking tobacco include:

- initial stimulation, then reduction in activity of brain and nervous system
- increased alertness and concentration
- feelings of mild euphoria
- feelings of relaxation
- increased blood pressure and heart rate
- decreased blood flow to fingers and toes
- decreased skin temperature
- bad breath
- decreased appetite
- dizziness
- nausea, abdominal cramps and vomiting

- headache
- coughing, due to smoke irritation.

Higher doses-

A high dose of nicotine can cause a person to overdose. This means that a person has taken more nicotine than their body can cope with. The effects of very large doses can include:

- an increase in the unpleasant effects
- feeling faint
- confusion
- rapid decrease in blood pressure and breathing rate
- seizures
- Respiratory arrest (stopping breathing) and death.
- 60 mg of nicotine taken orally can be fatal for an adult.

Long-term effects-

Tar in cigarettes coats the lungs and can cause lung and throat cancer in smokers. It is also responsible for the yellow–brown staining on smokers’ fingers and teeth. Carbon monoxide in cigarettes reduces the amount of oxygen available to the muscles, brain and blood. This means the whole body—especially the heart—must work harder. Over time this causes airways to narrow and blood pressure to rise, which can lead to heart attack and stroke. High levels of CO, together with nicotine, increase the risk of heart disease, hardening of the arteries and other circulatory problems.

Some of the long-term effects of smoking (Quit Victoria, 2010) that may be experienced include:

- increased risk of stroke and brain damage
- eye cataracts, macular degeneration, yellowing of whites of eyes
- loss of sense of smell and taste
- yellow teeth, tooth decay and bad breath
- cancer of the nose, lip, tongue and mouth
- possible hearing loss
- laryngeal and pharyngeal cancers
- contributes to osteoporosis
- shortness of breath
- coughing
- chronic bronchitis
- cancer
- triggering asthma
- emphysema
- heart disease
- blockages in blood supply that can lead to a heart attack
- high blood pressure (hypertension)

- myeloid leukaemia, a cancer that affects bone marrow and organs that make blood
- stomach and bladder cancers
- stomach ulcers
- decreased appetite
- grey appearance
- early wrinkles
- slower healing wounds
- damage to blood vessel walls
- increased likelihood of back pain
- increased susceptibility to infection
- lower fertility and increased risk of miscarriage
- irregular periods
- early menopause
- damaged sperm and reduced sperm
- impotence.

Other effects of tobacco use

Passive smoking-

Passive smoking occurs when a person who is not smoking breathes in the smoke from people who are smoking. Passive smoking can irritate the eyes and nose and cause a number of health problems such as heart disease and lung cancer. Tobacco smoke is especially harmful to babies and young children.

Using tobacco with other drugs

Nicotine can affect the way the body processes many different drugs. This can affect how these drugs work. For example, nicotine can decrease the effectiveness of benzodiazepines. Smoking while taking the contraceptive pill increases the risk of blood clots forming. Check with your doctor or other health professional whether nicotine might affect any medications you are taking.

Pregnancy and breastfeeding

Read about the effects of tobacco use on pregnancy and breastfeeding. Many drugs can cross the placenta and affect an unborn child. In general, using drugs when pregnant can increase the chances of going into labour early. This can mean that babies are born below the normal birth weight. If a mother uses drugs while breastfeeding, they may be present in her milk, and could affect the baby. Check with your health professional if you are taking or planning to take any drugs during pregnancy, or while breastfeeding.

Tolerance and dependence

People who use tobacco regularly tend to develop a tolerance to the effects of nicotine. This means they need to smoke more tobacco to get the same effect.

They may become dependent on nicotine. Dependence can be psychological, physical, or both. People who are dependent on nicotine find that using the drug becomes far more important than other activities in their life. They crave the drug and will find it very difficult to stop using it.

People who are psychologically dependent on nicotine may find they feel an urge to smoke when they are in specific surroundings or socializing with friends.

Physical dependence occurs when a person's body adapts to the nicotine and gets used to functioning with the nicotine present.

Awareness: Advantages of Quitting Smoking

We've already described the negative consequences of smoking, but do you know how many benefits you can gain from quitting? You might be surprised! First and foremost, the decision to quit smoking can truly be a life-saving one. Just as continuing to smoke sets you up to experience life-threatening health problems, quitting can reverse the process, making you healthier today and more likely to avoid serious health problems in the future. Quitting can also improve your social interactions and can put money in your pocket. This section outlines some of the reasons that may help you to decide that the benefits of quitting are greater than the benefits of continuing to use tobacco.

Health and Vitality Benefits

Because many of the health risks associated with smoking can lead to death, the most important benefit of smoking cessation is the ability to choose life over death. Regardless of the actual symptoms individual smoker's experience, it is estimated that the average male smoker loses about 13 years of life and the average female smoker loses about 14 years of life. Also, because the effects of quitting start on the very day you stop smoking, former smokers live longer than people who continue to smoke. Smoking cessation has immediate and long term consequences for a smoker's health. ***The American Cancer Society reports the following benefits of smoking cessation, based on Surgeon Generals' Reports in 1988 and 1990:***

- 20 minutes after quitting blood pressure drops to a level close to that before the last cigarette. Temperature of hands and feet return to normal.
- 8 hours after quitting the level of carbon monoxide in the blood returns to normal.
- 24 hours after quitting the risk of a heart attack decreases.
- 2 weeks to 3 months after quitting circulation improves and lung function increases up to 30%. 1 to 9 months after quitting symptoms such as coughing, sinus congestion, fatigue, and shortness of breath decrease. Cilia (tiny hair-like structures in the lungs that remove mucus from the lungs) regain normal function which increases the ability for them to clean the lungs and reduce infection.
- 1 year after quitting the extra risk of coronary heart disease is reduced to half that of a smoker.

- 5 to 15 years after quitting smoking stroke risk is reduced to the level of a nonsmoker.
- 10 years after quitting the death rate from lung cancer is about half that of someone who continues to smoke. Risk of cancer of the mouth, throat, esophagus, bladder, kidney, and pancreas decreases.

15 years after quitting risk of coronary heart disease is the same as a nonsmoker. Quitting smoking also reduces the effects of tobacco on your physical appearance and improves social interaction with nonsmokers by:

- reducing premature wrinkling of the skin
- eliminating bad breath associated with smoking
- eliminating a major cause for stained teeth
- reducing the risk of gum disease
- eliminating the smoke smell from your clothing and hair
- eliminating a cause of yellow fingernails.

Smoking also has many effects on your body that have become a part of your life so gradually that you might not even be aware of them. Once you quit smoking you will notice that:

- food tastes better
- your sense of smell will return to normal
- it will take more activity for you to be out of breath
- you will feel more energetic and your stamina for physical activity will increase
- exercise will become more enjoyable
- breaks at work will no longer have to revolve around smoking
- you will no longer have to go outside in inclement weather to smoke
- you, your clothes, your car, and your house will no longer smell like smoke
- falling ashes will no longer damage your clothes
- if you are single, you will have a larger group of people to date and possibly establish a long term relationship with
- you will no longer be burdened by social stigmas associated with being a smoker
- You probably haven't even considered some of these benefits, but knowing how quitting can improve your life can provide you with increased motivation to kick the habit.

Saving Money-

If health improvements and more social freedom don't motivate you to quit, consider the financial rewards. To find out how much money you can save by quitting smoking, take the cost per day for your smoking materials and multiply it by 365 days. Surprised? Now multiply that amount by 10 so you can see how much you could save in the next 10 years.

Chances are you've never considered how much money you could save by quitting because smoking is a normal part of your everyday life. Right now you are accustomed to living without

the money you spend on tobacco products and supplies. When you quit, it should be simple to switch from paying for your habit to putting money in the bank, where you can watch it accumulate instead.

Weight Gain-

Many people are afraid to quit smoking because they don't want to gain weight. Many smokers do gain some weight when they quit smoking—an average of five to seven pounds—and women gain slightly more weight than men. It is important to keep in mind that most smokers are about five to seven pounds underweight anyhow, so the weight a person gains when they quit smoking often simply returns them to their optimum weight. Another thing to keep in mind is that most people gain fewer than 10 pounds, even without making any changes to diet or regular exercise routines. If a person gains more than ten pounds while quitting smoking, other factors are typically to blame. The bottom line, however, is that the addition of a few pounds is worth the benefits you will gain from quitting.

If you are concerned about gaining weight when you quit smoking, evaluate which is more important to you—quitting the habit or quitting the habit without gaining weight. For some people, it is important to focus on the goal of quitting, and worrying about gaining weight only makes the process more difficult. Others can make maintaining their weight or improving their overall fitness level a part of the process of quitting. It is up to you to decide which method will work for you.

Keep in mind that food will begin to taste better to you as your body starts to eliminate the effects of nicotine, making this a perfect time to reacquaint yourself with healthy food choices. Try fresh, raw vegetables when you get the urge to snack, and be sure to drink plenty of water to help flush the nicotine from your system. Also, choose low-fat or fat-free varieties of your favorite foods. Because nicotine acts as an appetite suppressant, you may find that you feel hungry more often once you quit smoking. Plan three nutritious meals and two or three nutritious snacks each day, but do not increase the number of calories you eat. Eat slowly so you can savor your food, leave the table as soon as you are finished, and brush your teeth right away so you won't be tempted to eat more. Maintaining calorie intake and eating small meals and light snacks throughout the day instead of three large meals can help you to maintain your weight.

As your endurance levels increase and light exercise becomes easier, beginning an exercise routine might be also good idea. Exercise can help to relieve stress and can serve as a substitute activity for smoking. It is a good idea to plan to include a minimum of 20–30 minutes of exercise into your daily schedule. As you are able to increase the intensity of your workout you will discover that exercise has important psychological benefits. Many of the psychological benefits you may feel you get from tobacco can also be obtained from exercise. Exercise can not only make you feel more energetic in general, but can also improve your quality of sleep and help you relax when under stress.

If you decide to begin an exercise routine, select activities you think you might enjoy and give them a try. Walking is a great activity to substitute for smoking. Instead of an after dinner smoke,

take a walk. Another option is to take a yoga class and take note of positions you find most relaxing. When you feel stressed, spend a few minutes in one of your favorite positions instead of smoking or eating. Plan non-food and non-tobacco related rewards to keep you motivated to work toward your goal. Having an exercise plan and alternate activities to take the place of smoking can help you to maintain your weight.

Regardless of how you plan to deal with potential weight gain, keep in mind that the most important part of your goal is to actually stop smoking. If you find that it is too difficult to watch your weight and quit smoking at the same time, concentrate on giving up smoking first, and make a promise to yourself to start working on your weight as soon as you have successfully quit. Remember, the long term benefits of quitting outweigh the short term effects of weight gain.

Once you are aware of the advantages and disadvantages associated with quitting and have made the decision to quit, you are ready to move into the Preparation stage. During this stage, you will decide which approach to quitting is appropriate for you.

The Effects of Smoking on the Body-

No matter how you smoke it, tobacco is dangerous to your health. There are no safe substances in any tobacco products, from acetone and tar to nicotine and carbon monoxide. The substances you inhale don't just affect your lungs. They can affect your entire body. Learn more about the symptoms and overall effects of smoking on the body below.

Tobacco smoke is incredibly harmful to your health. There's no safe way to smoke. Replacing your cigarette with a cigar, pipe, or hookah won't help you avoid the health risks.

Cigarettes contain about 600 ingredients, many of which can also be found in cigars and hookahs. When these ingredients burn, they generate more than 7,000 chemicals, according to the American Lung Association. Many of those chemicals are poisonous and at least 69 of them are linked to cancer.

In the United States, the mortality rate for smokers is three times that of people who never smoked. In fact, the Centers for Disease Control and Prevention (CDC) says that smoking is the most common "preventable cause of death" in the United States. While the effects of smoking may not be immediate, the complications and damage can last for years. The good news is that quitting smoking can reverse many effects.

mood stimulation

Smoking can temporarily put you in a good mood, but dependence is common and withdrawal side effects like anxiety and irritability can be challenging to manage.

anxiety and irritability

You might find yourself a bit on edge if you missed your cigarette break. Nicotine withdrawal is responsible for these symptoms.

smelly hair

Tobacco smoke can stick to your clothes and hair. In fact, just being around secondhand smoke can make your hair and clothes smell.

unhealthy teeth

Yellowish or brownish stains on the teeth are telltale signs of long-term smoking. Smoking also increases your risk for infections or inflammations that can lead to tooth and bone loss.

bronchitis

Smokers have a higher rate of bronchitis. Secondhand smoking can also increase the risk for bronchitis, especially in children. Other respiratory problems such as tuberculosis and pneumonia may worsen by smoking.

persistent coughing

You know the infamous term "smoker's cough"? This is where it comes from. Damage to the airways contributes to this cough.

heart disease

Smoking is one of the well-proven lifestyle habits that contribute to heart disease. Both people who smoke and those who are regularly exposed to secondhand smoke are at higher risk for heart attacks.

high cholesterol

Tobacco smoke lowers your HDL (good) cholesterol and increases your LDL (bad) cholesterol. It also raises total cholesterol and triglycerides, which are fats in your blood.

immune system

Smoking lowers your immune system's ability to fight off infection. Smokers have more infections of the respiratory tract than people who don't smoke.

infertility

Both men and women who smoke are more likely to experience short- and long-term fertility issues than people who don't smoke.

erectile dysfunction

An erection requires adequate blood flow, but smoking can constrict your blood vessels and make this process more difficult.

diabetes complications

Type 2 diabetes tends to progress more rapidly in people who smoke, because smoking increases the amount of insulin resistance in the body. If you have diabetes and smoke, you're also at a higher risk for other complications, such as kidney problems, eye problems, and heart attack.

blood clotting

Smoking can increase clotting throughout your body. Blood clots increase the risk of heart damage, stroke, and pulmonary embolism (a blood clot in the lungs).

early menopause

Female smokers tend to enter menopause earlier than nonsmokers. Smoking has also been shown to increase hot flashes.

poor vision

Smoking can cause future vision problems and increase the risk of eye problems like glaucoma, macular degeneration, and cataracts.

dull sense of smell and taste

Your sense of smell and taste can be dulled by smoking, which can decrease your appetite.

lung cancer

Smoking puts you at a significantly higher risk of developing lung cancer. Lung cancer is the most common cause of death due to smoking, according to the CDC. It's also the most common cause of cancer death in both men and women.

constricted blood vessels

Nicotine causes blood vessels to tighten and restrict blood flow, which increases your risk for high blood pressure, stroke, and heart attack.

COPD

Developing chronic obstructive pulmonary disease (COPD) is more common in smokers. In fact, 8 out of 10 cases of COPD are due to smoking. Your asthma symptoms can worsen as well.

loss of appetite

Smoking can suppress your appetite by decreasing your sense of taste. This can make eating less enjoyable. Once you stop smoking, you'll be more likely to taste your food fully again.

yellow fingers

Handling tobacco products can stain your fingers and fingernails, turning them yellow.

cervical cancer

The risk for developing cervical cancer is increased in women who smoke.

wrinkly skin

Substances in cigarettes can cause dry skin and premature aging. Reduced blood flow also causes your skin to get less nutrition.

problems with pregnancy and newborns

Smoking during pregnancy can increase the risk for miscarriage, asthma, ear infections, and death in your newborn. It also puts the baby at risk for oxygen deprivation, growth problems, physical deformities, and sudden infant death syndrome (SIDS).

cancer connection

Smoking-related cancers can occur anywhere in the body. People who smoke have a higher rate of certain cancers, including cancer of the mouth, throat, bladder, and kidneys.

increased risk of blood cancer

When compared with people who don't smoke, people who do smoke have an increased risk of blood cancer, such as leukemia.

Central nervous system

One of the ingredients in tobacco is a mood-altering drug called nicotine. Nicotine reaches your brain in mere seconds and makes you feel more energized for a while. But as that effect wears off, you feel tired and crave more. Nicotine is extremely habit-forming, which is why people find smoking so difficult to quit. Physical withdrawal from nicotine can impair your cognitive functioning and make you feel anxious, irritated, and depressed. Withdrawal can also cause headaches and sleep problems.

Respiratory system

When you inhale smoke, you're taking in substances that can damage your lungs. Over time, this damage leads to a variety of problems. Along with increased infections, people who smoke are at higher risk for chronic nonreversible lung conditions such as:

- emphysema, the destruction of the air sacs in your lungs
- chronic bronchitis, permanent inflammation that affects the lining of the breathing tubes of the lungs
- chronic obstructive pulmonary disease (COPD), a group of lung diseases
- lung cancer

Withdrawal from tobacco products can cause temporary congestion and respiratory discomfort as your lungs and airways begin to heal. Increased mucus production right after quitting smoking is a positive sign that your respiratory system is recovering.

Children whose parents smoke are more prone to coughing, wheezing, and asthma attacksthan children whose parents don't. They also tend to have higher rates of pneumonia and bronchitis.

Cardiovascular system

Smoking damages your entire cardiovascular system. Nicotine causes blood vessels to tighten, which restricts the flow of blood. Over time, the ongoing narrowing, along with damage to the blood vessels, can cause peripheral artery disease. Smoking also raises blood pressure, weakens blood vessel walls, and increases blood clots. Together, this raises your risk of stroke.

You're also at an increased risk of worsening heart disease if you've already had heart bypass surgery, a heart attack, or a stent placed in a blood vessel.

Smoking not only impacts your cardiovascular health, but also the health of those around you who don't smoke. Exposure to secondhand smoke carries the same risk to a nonsmoker as someone who does smoke. Risks include stroke, heart attack, and heart disease.

Integumentary system (skin, hair, and nails)

The more obvious signs of smoking involve skin changes. Substances in tobacco smoke actually change the structure of your skin. A recent study has shown that smoking dramatically increases the risk of squamous cell carcinoma (skin cancer).

Your fingernails and toenails aren't immune from the effects of smoking. Smoking increases the likelihood of fungal nail infections.

Hair is also affected by nicotine. An older study found it increases hair loss, balding, and graying.

Digestive system

Smoking increases the risk of mouth, throat, larynx, and esophagus cancer. Smokers also have higher rates of pancreatic cancer. Even people who “smoke but don’t inhale” face an increased risk of mouth cancer.

Smoking also has an effect on insulin, making it more likely that you’ll develop insulin resistance. That puts you at increased risk of type 2 diabetes and its complications, which tend to develop at a faster rate than in people who don’t smoke.

Sexuality and reproductive system

Nicotine affects blood flow to the genital areas of both men and women. For men, this can decrease sexual performance. For women, this can result in sexual dissatisfaction by decreasing lubrication and the ability to reach orgasm. Smoking may also lower sex hormone levels in both men and women. This can possibly lead to decreased sexual desire.

Takeaway

Quitting smoking is difficult, but your doctor can help you make a plan. Ask them for advice. There are a variety of nonprescription and prescription medications that can help you quit. You can also turn to our smoking cessation resource center, which has advice, stories from others, and more. There are both short and long-term benefits to quitting smoking. Since smoking affects every body system, finding a way to quit is the most important step you can take to living a longer and happier life.

Cigarettes are everywhere. Cigars are status symbols. Now, e-cigarettes and vaping are extremely popular, the health risks of which have not even yet fully been determined. Alcohol is virtually everywhere in the country. Nearly every home has one or more bottles of wine, beer or liquor. Nearly every store sells it. Nearly every party is accompanied by it. Alcohol creates the most peer pressure of all substances, and the pressure to participate does not fade with age. Going out after work? It’s likely you’ll hit the bar, or at least a restaurant that serves...

There are millions and millions of opioid painkiller prescriptions written every year – enough to supply each and every American adult with his or her own bottle. Nine out of ten heroin addicts say they began with pills. Now that heroin is at its peak of popularity, it’s easy enough to trace the steps as to how it got that way. Meth is still an epidemic, especially in the American southwest, and with a recent surge in music festival popularity, psychedelic drugs are becoming more and more prevalent as well.

Perhaps the scariest notion in the entire realm of substance abuse is that of the synthetic drug. Substances such as fentanyl and carfentanil, which are 50 to 500 times stronger than heroin respectively, are being laced into several different drugs, mainly heroin. Single grains of these

potent substances can end a full grown human being's life. Every time someone purchases some heroin, or some other opioid, they are gambling with life itself.

Until the time we can stop addiction altogether, our best bet is educating the youth. Over 75% of substance addictions begin before the age of 25. If we can manage to get our youth to say no to drugs, the tradition will continue and eventually we can beat the crisis.

This is why we are so glad for programs like the National Drug and Alcohol Facts Week, which strive to create a sober generation and continue that sobriety for many more generations to come.

Ayurveda:

History of Ayurveda -

According to modern Ayurvedic sources, the origins of Ayurveda have been traced to around 6,000 BCE when they originated as an oral tradition. Some of the concepts of Ayurveda have existed since the times of Indus Valley Civilization. The first recorded forms of Ayurveda as medical texts evolved from the Vedas. Ayurveda is a discipline of the upaveda or "auxiliary knowledge" in Vedic tradition. The origins of Ayurveda are also found in Atharvaveda, which contains 114 hymns and incantations described as magical cures for disease. There are various legendary accounts of the origin of Ayurveda, e.g. that it was received by Dhanvantari (or Divodasa) from Brahma. Tradition also holds that the writings of Ayurveda were influenced by a lost text by the sage Agnivesa.

Ayurveda is one of the few systems of medicine developed in ancient times that is still widely practiced in modern times. As such, it is open to the criticism that its conceptual basis is obsolete and that its contemporary practitioners have not taken account of the developments of modern medicine. Responses to this situation led to an impassioned debate in India during the early decades of the twentieth century, between proponents of unchanging tradition (*śuddha* "pure" ayurveda) and those who thought ayurveda should modernise and syncretize (*aśuddha* "impure, tainted" ayurveda). The political debate about the place of ayurveda in contemporary India has continued to the present (2015), both in the public arena and in government. Debate about the place of Ayurvedic medicine in the contemporary internationalized world also continues today (2015).



Charaka

Main texts-

There are three principal early texts on Ayurveda, the Charaka Samhita, the Sushruta Samhita and the Bhela Samhita. The Sushruta Samhita is based on an original from the 6th century BCE, and was updated by the Buddhist scholar Nagarjuna in the 2nd century CE. The Charaka Samhita, written by Charaka, and the Bhela Samhita, attributed to Atreya Punarvasu, are also dated to the 6th century BCE. The Charaka Samhita was also updated by Dridhabala during the early centuries of the Common Era.

The Bower Manuscript includes of excerpts from the Bheda Samhita and its description of concepts in Central Asian Buddhism. In 1987, A. F. R. Hoernle identified the scribe of the medical portions of the manuscript to be a native of India using a northern variant of the Gupta script, who had migrated and become a Buddhist monk in a monastery in Kucha. The Chinese pilgrim Fa Hsien (c. 337–422 AD) wrote about the healthcare system of the Gupta empire (320–550) and described the institutional approach of Indian medicine. This is also visible in the works of Charaka, who describes hospitals and how they should be equipped.

Other early texts are the Agnivesha Samhita, Kasyapa Samhita and Harita Samhita. The original edition of the Agnivesha Samhita, by Agnivesa, is dated to 1500 BCE, and it was later modified by Charaka. Kasyapa Samhita includes the treatise of Jivaka Kumar Bhaccha and is dated to the 6th century BCE. While Harita Samhita is dated to an earlier period, it is attributed to Harita, who was a disciple of Punarvasu Atreya. Some later texts are *Astanga nighantu* (8th Century) by Vaghbata, *Paryaya ratnamala* (9th century) by Madhava, *Siddhasara nighantu* (9th century) by Ravi Gupta, *Dravyavali* (10th Century), and *Dravyaguna sangraha* (11th century) by Cakrapanidatta, among others.

Illnesses portrayed-

Underwood and Rhodes state that the early forms of traditional Indian medicine identified fever, cough, consumption, diarrhea, dropsy, abscesses, seizures, tumours, and leprosy, and that treatments included plastic surgery, lithotomy, tonsillectomy, couching (a form of cataract surgery), puncturing to release fluids in the abdomen, extraction of foreign bodies, treatment of anal fistulas, treating fractures, amputations, cesarean sections, and stitching of wounds. The use of herbs and surgical instruments became widespread. During this period, treatments were also prescribed for complex ailments, including angina pectoris, diabetes, hypertension, and stones.

Further development and spread-

Ayurveda flourished throughout the Indian Middle Ages. Dalhana (fl. 1200), Sarngadhara (fl. 1300) and Bhavamisra (fl. 1500) compiled works on Indian medicine. The medical works of both Sushruta and Charaka were also translated into the Chinese language in the 5th century, and during the 8th century, they were translated into the Arabic and Persian language. The 9th-century Persian physician Muhammad ibn Zakariya al-Razi was familiar with the text. The Arabic works derived from the Ayurvedic texts eventually also reached Europe by the 12th

century. In Renaissance Italy, the Branca family of Sicily and Gaspare Tagliacozzi (Bologna) were influenced by the Arabic reception of the Sushruta's surgical techniques.

British physicians traveled to India to observe rhinoplasty being performed using native methods, and reports on Indian rhinoplasty were published in the *Gentleman's Magazine* in 1794. Instruments described in the *Sushruta Samhita* were further modified in Europe. Joseph Constantine Carpue studied plastic surgery methods in India for 20 years and, in 1815, was able to perform the first major rhinoplasty surgery in the western world, using the "Indian" method of nose reconstruction. In 1840 Brett published an article about this technique.

During the period of colonial British rule of India, the practice of Ayurveda was neglected by the British Indian Government, in favor of modern medicine. After Indian independence, there was more focus on Ayurveda and other traditional medical systems. Ayurveda became a part of the Indian National health care system, with state hospitals for Ayurveda established across the country. However, the treatments of traditional medicines were not always integrated with others. Ayurveda is a system of medicine with historical roots in the Indian subcontinent. Globalized and modernized practices derived from Ayurveda traditions are a type of alternative medicine. In countries beyond India, Ayurveda therapies and practices have been integrated in general wellness applications and in some cases in medical use.

The main classical Ayurveda texts begin with accounts of the transmission of medical knowledge from the Gods to sages, and then to human physicians. In *Sushruta Samhita* (*Sushruta's Compendium*), Sushruta wrote that Dhanvantari, Hindu god of Ayurveda, incarnated himself as a king of Varanasi and taught medicine to a group of physicians, including Sushruta. Ayurveda therapies have varied and evolved over more than two millennia. Therapies are typically based on complex herbal compounds, minerals and metal substances (perhaps under the influence of early Indian alchemy or *rasa shastra*). Ancient Ayurveda texts also taught surgical techniques, including rhinoplasty, kidney stone extractions, sutures, and the extraction of foreign objects.

Although laboratory experiments suggest it is possible that some substances used in Ayurveda might be developed into effective treatments, there is no scientific evidence that any are effective as currently practiced. Ayurveda medicine is considered pseudoscientific. Other researchers consider it a protoscience, or trans-science system instead. In a 2008 study, close to 21% of Ayurveda U.S. and Indian-manufactured patent medicines sold through the Internet were found to contain toxic levels of heavy metals, specifically lead, mercury, and arsenic. The public health implications of such metallic contaminants in India are unknown.

Some scholars assert that Ayurveda originated in prehistoric times, and that some of the concepts of Ayurveda have existed from the time of the Indus Valley Civilization or even earlier.

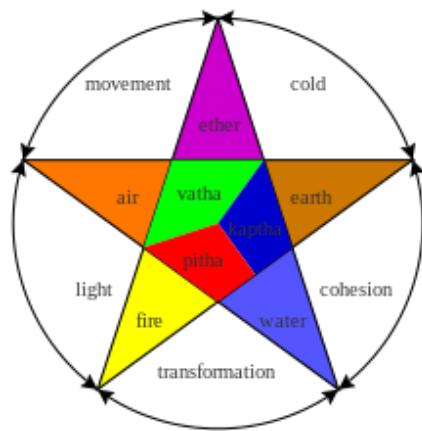
Ayurveda developed significantly during the Vedic period and later some of the non-Vedic systems such as Buddhism and Jainism also developed medical concepts and practices that appear in the classical Ayurveda texts. *Doṣa* balance is emphasized, and suppressing natural urges is considered unhealthy and claimed to lead to illness. Ayurveda treatises describe three elemental *doṣas* viz. *vāta*, *pitta* and *kapha*, and state that equality (Skt. *sāmyatva*) of the *doṣas* results in health, while inequality (*viśamatva*) results in disease. Ayurveda treatises divide medicine into eight canonical components. Ayurveda practitioners had developed various medicinal preparations and surgical procedures from at least the beginning of the Common Era.

Eight components -

The earliest classical Sanskrit works on Ayurveda describe medicine as being divided into eight components (Skt. *anṅga*). This characterization of the physicians' art, "the medicine that has eight components" (Skt. *cikitsāyām aṣṭāṅgāyām*), is first found in the Sanskrit epic the Mahābhārata, 4th century BCE. The components are:

- Kāyacikitsā: general medicine, medicine of the body
- Kaumāra-bhrtya: the treatment of children, paediatrics
- Śalyatantra: surgical techniques and the extraction of foreign objects
- Śālākyatantra: treatment of ailments affecting ears, eyes, nose, mouth, etc. ("ENT")
- Bhūtavidyā: pacification of possessing spirits, and the people whose minds are affected by such possession
- Agadatantra: toxicology
- Rasāyanatantra: rejuvenation and tonics for increasing lifespan, intellect and strength
- Vājīkaraṇatantra: aphrodisiacs and treatments for increasing the volume and viability of semen and sexual pleasure.

Principles and terminology -



The three *doṣas* and the five elements from which they are composed.

The word "ayurveda" is Sanskrit: आयुर्वेद, *Āyurveda*, meaning knowledge of life and longevity.

The central theoretical ideas of Ayurveda developed in the mid-first millennium BCE, and show parallels with Sāṅkhya and Vaiśeṣika philosophies, as well as with Buddhism and Jainism. Balance is emphasized, and suppressing natural urges is considered unhealthy and claimed to lead to illness. For example, to suppress sneezing is said to potentially give rise to shoulder pain. However, people are also cautioned to stay within the limits of reasonable balance and measure when following nature's urges. For example, emphasis is placed on moderation of food intake, sleep, and sexual intercourse.

Ayurveda names seven basic tissues (*dhatu*), which are plasma (*rasa*), blood (*rakta*), muscles (*māmsa*), fat (*meda*), bone (*asthi*), marrow (*majja*), and semen (*shukra*). Like the medicine of classical antiquity, Ayurveda has historically divided bodily substances into five classical elements, (Sanskrit) *panchamahabhuta*, viz. earth, water, fire, air and ether. There are also twenty *gunas* (qualities or characteristics) which are considered to be inherent in all matter. These are organized in ten pairs: heavy/light, cold/hot, unctuous/dry, dull/sharp, stable/mobile, soft/hard, non-slimy/slimy, smooth/coarse, minute/gross, and viscous/liquid.

Ama (a Sanskrit word meaning "uncooked" or "undigested") is used to refer to the concept of anything that exists in a state of incomplete transformation. With regards to oral hygiene, it is claimed to be a toxic byproduct generated by improper or incomplete digestion. The concept has no equivalent in standard medicine. Ayurveda also names three elemental bodily humors, the *doshas* (called Vata, Pitta and Kapha), and states that a balance of the doshas results in health, while imbalance results in disease. One Ayurvedic view is that the doshas are balanced when they are equal to each other, while another view is that each human possesses a unique combination of the doshas which define this person's temperament and characteristics. In either case, it says that each person should modulate their behavior or environment to increase or decrease the doshas and maintain their natural state.

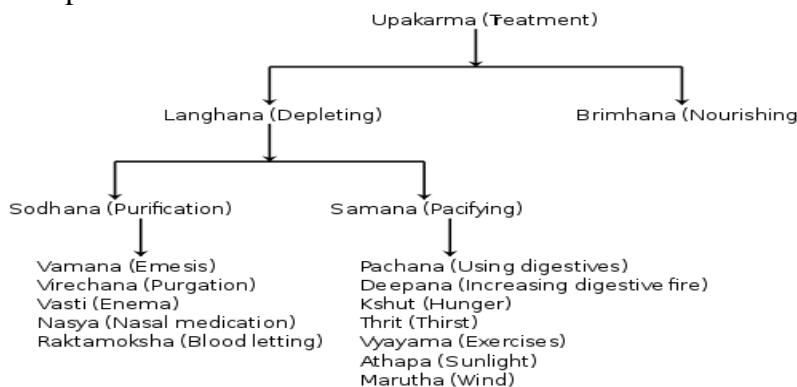
In medieval taxonomies of the Sanskrit knowledge systems, Ayurveda is assigned a place as a subsidiary Veda (upaveda). Some medicinal plant names from the *Atharvaveda* and other Vedas can be found in subsequent Ayurveda literature. The earliest recorded theoretical statements about the canonical models of disease in Ayurveda occur in the earliest Buddhist Canon.

Practice -

Ayurvedic doctors regard physical existence, mental existence, and personality as a unit, with each element being able to influence the others. This is a holistic approach used during diagnosis and therapy, and is a fundamental aspect of Ayurveda. Another part of Ayurvedic treatment says that there are channels (*srotas*) which transport fluids, and that the channels can be opened up by massage treatment using oils and Swedana (fomentation). Unhealthy, or blocked, channels are thought to cause disease.

Diagnosis -

Ayurveda has eight ways to diagnose illness, called Nadi (pulse), Mootra (urine), Mala (stool), Jihva (tongue), Shabda (speech), Sparsha (touch), Druk (vision), and Aakruti (appearance). Ayurvedic practitioners approach diagnosis by using the five senses. For example, hearing is used to observe the condition of breathing and speech. The study of the lethal points or marman marma is of special importance.



An Ayurvedic practitioner applying oils in head massage.

Treatment and prevention -

Two of the eight branches of classical Ayurveda deal with surgery (*Śalya-cikitsā* and *Śālākya-tantra*), but contemporary Ayurveda tends to stress attaining vitality by building a healthy metabolic system and maintaining good digestion and excretion. Ayurveda also focuses on exercise, yoga, and meditation. One type of prescription is a Sattvic diet.

Ayurveda follows the concept of Dinacharya, which says that natural cycles (waking, sleeping, working, meditation etc.) are important for health. Hygiene, including regular bathing, cleaning of teeth, tongue scraping, skin care, and eye washing, is also a central practice.

Substances used -

Plant-based treatments in Ayurveda may be derived from roots, leaves, fruits, bark, or seeds such as cardamom and cinnamon. In the 19th century, William Dymock and co-authors summarized hundreds of plant-derived medicines along with the uses, microscopic structure, chemical composition, toxicology, prevalent myths and stories, and relation to commerce in British India.^[44] Animal products used in Ayurveda include milk, bones, and gallstones. In addition, fats are prescribed both for consumption and for external use. Consumption of minerals, including sulphur, arsenic, lead, copper sulfate and gold, are also prescribed. The addition of minerals to herbal medicine is called *rasa shastra*.

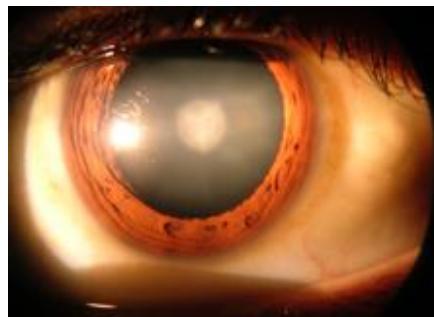
Ayurveda uses alcoholic beverages called *Madya*, which are said to adjust the doshas by increasing Pitta and reducing Vatta and Kapha. Madya are classified by the raw material and fermentation process, and the categories include: sugar-based, fruit-based, cereal-based, cereal-based with herbs, fermented with vinegar, and tonic wines. The intended outcomes can include causing purgation, improving digestion or taste, creating dryness, or loosening joints. Ayurvedic texts describe *Madya* as non-viscid and fast-acting, and say that it enters and cleans minute pores in the body.

Purified opium is used in eight Ayurvedic preparations and is said to balance the Vata and Kapha doshas and increase the Pitta dosha. It is prescribed for diarrhea and dysentery, for increasing the sexual and muscular ability, and for affecting the brain. The sedative and pain-relieving properties of opium are not considered in Ayurveda. The use of opium is not found in the ancient Ayurvedic texts, and is first mentioned in the *Sarngadhara Samhita* (1300-1400 CE), a book on pharmacy used in Rajasthan in Western India, as an ingredient of an aphrodisiac to delay male ejaculation. It is possible that opium was brought to India along with or before Muslim conquests. The book *Yoga Ratnakara* (1700-1800 CE, unknown author), which is popular in Maharashtra, uses opium in a herbal-mineral composition prescribed for diarrhea. In the *Bhaisajya Ratnavali*, opium and camphor are used for acute gastroenteritis. In this drug, the respiratory depressant action of opium is counteracted by the respiratory stimulant property of Camphor. Later books have included the narcotic property for use as analgesic pain reliever.

Cannabis indica is also absent from the ancient Ayurveda books, and is first mentioned in the *Sarngadhara Samhita* as a treatment for diarrhea. In the *Bhaisajya Ratnavali* it is named as an ingredient in an aphrodisiac.

Ayurveda says that both oil and tar can be used to stop bleeding, and that traumatic bleeding can be stopped by four different methods: ligation of the blood vessel, cauterisation by heat, use of preparations to facilitate clotting, and use of preparations to constrict the blood vessels. Oils are also used in a number of ways, including regular consumption, anointing, smearing, head

massage, application to affected areas, and oil pulling. Liquids may also be poured on the patient's forehead, a technique called shirodhara.



Cataract in human eye – magnified view seen on examination with a slit lamp. Cataract surgery is mentioned in the Sushruta Samhita, as a procedure to be performed with a jabamukhi salaka, a curved needle used to loosen the obstructing phlegm and push it out of the field of vision. The eye would later be soaked with warm butter and then bandaged.

Panchakarma -

According to Ayurveda, *panchakarma* are techniques to eliminate toxic elements from the body.

According to some sources, up to 80 percent of people in India use some form of traditional medicine, a category which includes Ayurveda.

In 1970, the Indian Medical Central Council Act which aimed to standardise qualifications for Ayurveda practitioners and provide accredited institutions for its study and research was passed by the Parliament of India. In 1971, the Central Council of Indian Medicine (CCIM) was established under the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH), Ministry of Health and Family Welfare, to monitor higher education in Ayurveda in India. The Indian government supports research and teaching in Ayurveda through many channels at both the national and state levels, and helps institutionalise traditional medicine so that it can be studied in major towns and cities. The state-sponsored Central Council for Research in Ayurvedic Sciences (CCRAS) is designed to do research on Ayurveda. Many clinics in urban and rural areas are run by professionals who qualify from these institutes. As of 2013, India has over 180 training centers offer degrees in traditional Ayurvedic medicine.

To fight biopiracy and unethical patents, in 2001 the government of India set up the Traditional Knowledge Digital Library as a repository for formulations of various systems of Indian medicine, such as Ayurveda, Unani and Siddha. The formulations come from over 100 traditional Ayurveda books. An Indian Academy of Sciences document quoting a 2003-04 report states that India had 432,625 registered medical practitioners, 13,925 dispensaries, 2,253 hospitals and a bed strength of 43,803. 209 under-graduate teaching institutions and 16 post-graduate institutions. Insurance companies cover expenses for Ayurvedic treatments in case of

conditions such as spinal cord disorders, bone disorder, arthritis and cancer. Such claims constitute 5-10 percent of the country's health insurance claims.

Maharashtra Andhashraddha Nirmoolan Samiti, an organisation dedicated to fighting superstition in India, considers Ayurveda to be pseudoscience.

Other countries using Ayurveda on the Indian subcontinent -

About 75%-80% of the population of Nepal use Ayurveda, and it is the most practiced form of medicine in the country.



Ayurveda spas are common in Sri Lanka, and some functions as home-based income generating activity.

The Sri Lankan tradition of Ayurveda is similar to the Indian tradition. Practitioners of Ayurveda in Sri Lanka refer to Sanskrit texts which are common to both countries. However, they do differ in some aspects, particularly in the herbs used.

In 1980, the Sri Lankan government established a Ministry of Indigenous Medicine to revive and regulate Ayurveda. The Institute of Indigenous Medicine (affiliated to the University of Colombo) offers undergraduate, postgraduate, and MD degrees in Ayurveda Medicine and Surgery, and similar degrees in unani medicine. In the public system, there are currently 62 Ayurvedic hospitals and 208 central dispensaries, which served about 3 million people (about 11% of Sri Lanka's population) in 2010. In total, there are about 20,000 registered practitioners of Ayurveda in the country.

According to the Mahavamsa, an ancient chronicle of Sinhalese royalty from the sixth century C.E., King Pandukabhaya of Sri Lanka (reigned 437 BCE to 367 BCE) had lying-in-homes and Ayurvedic hospitals (Sivikasotthi-Sala) built in various parts of the country. This is the earliest documented evidence available of institutions dedicated specifically to the care of the sick anywhere in the world. Mihintale Hospital is the oldest in the world.

Outside the Indian subcontinent -

Ayurveda is a system of traditional medicine developed during antiquity and the medieval period, and as such is comparable to pre-modern Chinese and European systems of medicine. However, beginning in the 1960s, Ayurveda has been advertised as alternative medicine in the

Western world. Due to different laws and medical regulations in the rest of the world, the unregulated practice and commercialisation of Ayurveda have raised ethical and legal issues. In some instances, Ayurvedic practices or terminology have also been adapted specifically for Western consumption, notably in the case of "Maharishi Ayurveda" in the 1980s. In some cases, this involved active fraud on the part of proponents of Ayurveda in an attempt to falsely represent the system as equal to the standards of modern medical research.

Baba Hari Dass was an early proponent who helped bring Ayurveda to the US in the early 1970s. He taught classes derived from the *Suśrutha Saṃhitā* and the *Charaka Saṃhītha*, leading to the establishment of the Mount Madonna Institute, College of Ayurveda, Ayurveda World, and Ayurvedic pharmacy. He invited several notable Ayurvedic teachers, including Vasant Lad, Sarita Shrestha, and Ram Harsh Singh. The Ayurvedic practitioner Michael Tierra wrote that "the history of Ayurveda in North America will always owe a debt to the selfless contributions of Baba Hari Dass."

In the United States, the practice of Ayurveda is not licensed or regulated by any state. Practitioners of Ayurveda can be licensed in other healthcare fields such as massage therapy or midwifery, and a few states have approved schools teaching Ayurveda.

Classification and efficacy -

Although laboratory experiments suggest it is possible that some substances in Ayurveda might be developed into effective treatments, there is no evidence that any are effective in themselves. According to Cancer Research UK, no significant scientific evidence has shown effectiveness of Ayurvedic medicine for the treatment of any disease, although massage and relaxation are often beneficial for some cancer patients and there are indications from animal studies that some herbal products used in Ayurveda might be explored further.

Today, ayurvedic medicine is considered pseudoscientific on account of its confusion between reality and metaphysical concepts. Other researchers debate whether it should be considered a protoscience, an unscientific, or trans-science system instead.

A review of the use of Ayurveda for cardiovascular disease concluded that the evidence is not convincing for the use of any Ayurvedic herbal treatment for heart disease or hypertension, but that many herbs used by Ayurvedic practitioners could be appropriate for further research.

Research into ayurveda has been characterized as pseudoscience. Both the lack of scientific soundness in the theoretical foundations of ayurveda and the quality of research have been criticized.

Research -

In India, research in Ayurveda is undertaken by the Ministry of AYUSH, an abbreviation for the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy, through a national network of research institutes.

In Nepal, the National Ayurvedic Training and Research Centre (NATRC) researches medicinal herbs in the country.

In Sri Lanka, the Ministry of Health, Nutrition and Indigenous Medicine looks after the research in Ayurveda through various national research institutes.

Use of toxic metals -

Rasa shastra, the practice of adding metals, minerals or gems to herbal preparations, may include toxic heavy metals such as lead, mercury and arsenic. The public health implications of metals in rasa shastra in India is unknown. Adverse reactions to herbs are described in traditional Ayurvedic texts, but practitioners are reluctant to admit that herbs could be toxic and that reliable information on herbal toxicity is not readily available. There is a communication gap between practitioners of modern medicine and Ayurveda.

Some traditional Indian herbal medicinal products contain harmful levels of heavy metals, including lead. A 1990 study on Ayurvedic medicines in India found that 41% of the products tested contained arsenic, and that 64% contained lead and mercury. A 2004 study found toxic levels of heavy metals in 20% of Ayurvedic preparations made in South Asia and sold in the Boston area, and concluded that Ayurvedic products posed serious health risks and should be tested for heavy-metal contamination. A 2008 study of more than 230 products found that approximately 20% of remedies (and 40% of *rasha shastra* medicines) purchased over the Internet from U.S. and Indian suppliers contained lead, mercury or arsenic. A 2015 study of users in the United States found elevated blood lead levels in 40% of those tested, leading physician and former U.S. Air Force flight surgeon Harriet Hall to say that "Ayurveda is basically superstition mixed with a soupçon of practical health advice. And it can be dangerous."

Heavy metals are thought of as active ingredients by advocates of Indian herbal medicinal products. According to ancient Ayurvedic texts, certain physico-chemical purification processes such as *samskaras* or *shodhanas* (for metals) 'detoxify' the heavy metals in it. These are similar to the Chinese *pao zhi*, although the Ayurvedic techniques are more complex and may involve physical pharmacy techniques as well as mantras. However, these products have nonetheless caused severe lead poisoning and other toxic effects. Between 1978 and 2008, "more than 80 cases of lead poisoning associated with Ayurvedic medicine use [were] reported worldwide". In 2012, the U.S. Centers for Disease Control and Prevention (CDC) linked Ayurvedic drugs to

lead poisoning, based on cases where toxic materials were found in the blood of pregnant women who had taken Ayurvedic drugs.

Ayurvedic practitioners argue that the toxicity of bhasmas comes from improper manufacturing processes, contaminants, improper use of Ayurvedic medicine, quality of raw materials and that the end products and improper procedures are used by charlatans.

In India, the government ruled that Ayurvedic products must be labelled with their metallic content. However, in *Current Science*, a publication of the Indian Academy of Sciences, M. S. Valiathan said that "the absence of post-market surveillance and the paucity of test laboratory facilities [in India] make the quality control of Ayurvedic medicines exceedingly difficult at this time". In the United States, most Ayurvedic products are marketed without having been reviewed or approved by the FDA. Since 2007, the FDA has placed an import alert on some Ayurvedic products in order to prevent them from entering the United States.

Agricultural Methods:

Farms are systems with inputs, processes and outputs

- Inputs: Money, labour, soil, climate, drainage, fertiliser, fuel
- Processes: Planting, ploughing, spraying, harvesting, shearing, milking
- Outputs: Milk, cereals, eggs, wool, meat, hay, waste material

Farming can be classified (grouped) according to what it grows and how it is grown

- Arable: Crops
- Pastoral: Animals
- Mixed: Crops and animals
- Subsistence: Grown just for the farmer and his family
- Commercial: Grown to sell
- Intensive: High inputs of labour or capital usually small
- Extensive: Low inputs of labour or capital
- Sedentary: Permanently in one place
- Nomadic: The farmers move around to find new areas to farm

Farming Systems in India are strategically utilised, according to the locations where they are most suitable. The farming systems that significantly contribute to the agriculture of India are subsistence farming, organic farming, and industrial farming. Regions throughout India differ in types of farming they use; some are based on horticulture, ley farming, agroforestry, and many more. Due to India's geographical location, certain parts experience different climates, thus affecting each region's agricultural productivity differently. India is very dependent on its monsoon cycle for large crop yields. India's agriculture has an extensive background which goes back to at least 10 thousand years. Currently the country holds the second position in agricultural production in the world. In 2007, agriculture and other industries made up more than 16% of India's GDP. Despite the steady decline in agriculture's contribution to the country's GDP,

agriculture is the biggest industry in the country and plays a key role in the socioeconomic growth of the country. India is the second biggest producer of wheat, rice, cotton, sugarcane, silk, groundnuts, and dozens more. It is also the second biggest harvester of vegetables and fruit, representing 8.6% and 10.9% of overall production, respectively. The major fruits produced by India are mangoes, papayas, sapota, and bananas. India also has the biggest number of livestock in the world, holding 281 million. In 2008, the country housed the second largest number of cattle in the world with 175 million.

Climate effect on farming systems

Each region in India has a specific soil and climate that is only suitable for certain types of farming. Many regions on the western side of India experience less than 50 cm of rain annually, so the farming systems are restricted to cultivate crops that can withstand drought conditions and farmers are usually restricted to single cropping. Gujarat, Rajasthan, South Punjab, and northern Maharashtra all experience this climate and each region grows such suitable crops like jowar, bajra, and peas. In contrast, the eastern side of India has an average of 100–200 cm of rainfall annually without irrigation, so these regions have the ability to double crop. West Coast, West Bengal, parts of Bihar, U.P. and Assam are all associated with this climate and they grow crops such as rice, sugarcane, jute, and many more.

There are three different types of crops that are cultivated throughout India. Each type is grown in a different season depending on their compatibility with certain weather. Kharif crops are grown at the start of the monsoon until the beginning of the winter, relatively from June to November. Examples of such crops are rice, corn, millet, groundnut, moong, and urad.

1. Irrigation farming

Irrigation farming is when crops are grown with the help of irrigation systems by supplying water to land through rivers, reservoirs, tanks, and wells. Over the last century, the population of India has tripled. With a growing population and increasing demand for food, the necessity of water for agricultural productivity is crucial. India faces the daunting task of increasing its food production by over 50 percent in the next two decades, and reaching towards the goal of sustainable agriculture requires a crucial role of water. Empirical evidence suggests that the increase in agricultural production in India is mostly due to irrigation; close to three fifths of India's grain harvest comes from irrigated land. The land area under irrigation expanded from 22.6 million hectares in FY 1950 to 59 million hectares in FY 1990. The main strategy for these irrigation systems focuses on public investments in surface systems, such as large dams, long canals, and other large-scale works that require large amounts of capital. Between 1951 and 1990, nearly 1,350 large- and medium-sized irrigation works were started, and about 850 were completed.

Problems from Irrigation

Because funds and technical expertise were in short supply, many projects moved forward at a slow pace, including The Indira Gandhi Canal project. The central government's transfer of huge amounts of water from Punjab to Haryana and Rajasthan contributed to the civil unrest in Punjab

during the 1980s and early 1990s. Problems also have arisen as ground water supplies used for irrigation face depletion. Drawing water off from one area to irrigate another often leads to increased salinity receiving water through irrigation are poorly managed or inadequately designed; the result often is too much water and water-logged fields incapable of production.

Geography of irrigation in India

Irrigation farming is very important for crop cultivation in regions of seasonal or low rainfall. Western U.P., Punjab, Haryana, parts of Bihar, Orissa, A.P., Tamil Nadu, Karnataka, and other regions thrive on irrigation and generally practice multiple or double cropping. With irrigation, a large variety of crops can be produced such as rice, sugarcane, wheat and tobacco.

2. Shifting cultivation

Shifting cultivation is a type of subsistence farming where a plot of land is cultivated for a few years until the crop yield declines due to soil exhaustion and the effects of pests and weeds. Once crop yield has stagnated, the plot of land is deserted and the ground is cleared by slash and burn methods, allowing the land to replenish. Crops like yam cassava , maize, potatoes CV are mostly grown This type of cultivation is predominant in the eastern and north-eastern regions on hill slopes and in forest areas such as Assam, Meghalaya, Nagaland, Manipur, Tripura, Mizoram, Arunachal Pradesh, Madhya Pradesh, Orissa, and Andhra Pradesh. Crops such as rain fed rice, corn, buck wheat, small millets, root crops, and vegetables are grown in this system. Eighty-five percent of the total cultivation in northeast India is by shifting cultivation. Due to increasing requirement for cultivation of land, the cycle of cultivation followed by leaving land fallow has reduced from 25–30 years to 2–3 years. This significant drop in uncultivated land does not give the land enough time to return to its natural condition. Because of this, the resilience of the ecosystem has broken down and the land is increasingly deteriorating.

Shifting cultivation in Odisha

Odisha accounts for the largest area under shifting cultivation in India. Shifting cultivation is locally known as the podu cultivation. More than 30,000 km of land (about 1/5 land surface of Odisha) is under such cultivation. Shifting cultivation is prevalent in Kalahandi, Koraput, Phulbani and other southern and western districts. Tribal communities such as Kondha, Kutia Kondha, Dongaria Kondha, Lanjia Sauras, and Paraja are all involved in this practice. Many festivals and other such rituals revolve around the podu fields, because the tribals view podu cultivation as more than just a means of their livelihood, they view it as a way of life. In the first year of podu cultivation, tribals sow kandlan (variety of arhar dal). Sowing means spraying the seeds and is used at pre-monsoon time and the area is adequately protected. Yield differs from area to area depending on local climatic factors. After harvest, the land is left fallow. During the pre-monsoon, varieties of rice, corn and ginger are also sown. Generally, after the third year, the tribals abandon this land and shift to new land. On the abandoned land, natural regeneration starts from the available root stocks and seed bank. Bamboo comes up naturally; along with many other climbers that regenerate. Generally, this land is not cultivated for the next 10 years.

Impacts of shifting cultivation

Frequent shifting from one land to the other has affected the ecology of these regions. The area under natural forest has declined; the fragmentation of habitat, local disappearance of native species and invasion by exotic weeds and other plants are some of the other ecological consequences of shifting agriculture. Areas that have a fallow cycle of 5 to 10 years are more vulnerable to weed invasion compared to 15-year cycles, which have more soil nutrients, larger variety of species, and higher agronomic yield.

3. Commercial agriculture

In a commercial based agriculture, crops are raised in large scale plantations or estates and shipped off to other countries for money. These systems are common in sparsely populated areas such as Gujarat, Tamil Nadu, Punjab, Haryana, and Maharashtra. Wheat, cotton, sugarcane, and corn are all examples of crops grown commercially.

Types of commercial agriculture

Intensive commercial farming: This is a system of agriculture in which relatively large amounts of capital or labor are applied to relatively smaller areas of land. It is usually practiced where the population pressure is reducing the size of landholdings. West Bengal practices intensive commercial farming.

Extensive commercial farming: This is a system of agriculture in which relatively small amounts of capital or labor investment are applied to relatively large areas of land. At times, the land is left fallow to regain its fertility. It is mostly mechanized because of the cost and availability of labor. It usually occurs at the margin of the agricultural system, at a great distance from market or on poor land of limited potential and is usually practiced in the tarai regions of southern Nepal. Crops grown are sugarcane, rice and wheat.

Plantation agriculture: Plantation is a large farm or estate usually in a tropical or sub-tropical country where crops are grown for sale in distant markets rather than local consumption.

Commercial grain farming: This type of farming is a response to farm mechanization and it is the major type of activity in the areas of low rainfall and low density of population where extensive farming is practiced. Crops are prone to the vagaries of weather and droughts and mono culture of wheat is the general practice.

4. Ley farming

With increases in both human and animal populations in the Indian arid zone, the demand for grain, fodder, and fuel wood is increasing. Agricultural production in this region is low due to the low and uneven distribution of rainfall (100–400 mm yr⁻¹) and the low availability of essential mineral nutrients. These demands can be met only by increasing production levels of these Aridisols through adoption of farming technologies that improve physical properties as

well as biological processes of these soils. Alternate farming systems are being sought for higher sustainable crop production at low input levels and to protect the soils from further degradation.

In India's drylands, ley farming is used as a way to restore soil fertility. It involves rotations of grasses and food grains in a specific area. It is now being promoted even more to encourage organic farming, especially in the drylands. Ley farming acts as insurance against crop failures by frequent droughts. Structurally related physical properties and biological processes of soil often change when different cropping systems, tillage, or management practices are used. Soil fertility can be increased and maintained by enhancing the natural soil biological processes. Farming provides balanced nutrition for sustainable production through continuous turnover of organic matter in the soil.

5. Plantation farming

This extensive commercial system is characterized by cultivation of a single cash crop in plantations of estates on a large scale. Because it is a capital centered system, it is important to be technically advanced and have efficient methods of cultivation and tools including fertilizers and irrigation and transport facilities. Examples of this type of farming are the tea plantations in Assam and West Bengal, the coffee plantations in Karnataka, Kerala, and Tamil Nadu, and the rubber plantations in Kerala and Maharashtra.

6. Forestry

In contrast to a naturally regenerated forest, tree plantations are typically grown as even-aged monocultures, primarily for timber production. These plantations are also likely to contain tree species that would not naturally grow in the area. They may include unconventional types of trees such as hybrids, and genetically modified trees are likely to be used in the future. Plantation owners will grow trees that are best suited to industrial applications such as pine, spruce, and eucalyptus due to their fast growth rate, tolerance of rich or degraded agricultural land, and potential to produce large quantities of raw material for industrial use. Plantations are always young forests in ecological terms; this means that these forests don't contain the type of growth, soil or wildlife that is typical of old-growth natural ecosystems in a forest.

The replacement of natural forest with tree plantations has also caused social problems. In some countries, there is little concern or regard for the rights of the local people when replacing natural forests with plantations. Because these plantations are made solely for the production of one material, there is a much smaller range of services for the local people. India has taken measures to avoid this by limiting the amount of land that can be owned by someone. As a result, smaller plantations are owned by local farmers who then sell the wood to larger companies.

Teak and bamboo

Teak and bamboo plantations in India are a good alternative crop solution to farmers of central India, where conventional farming is popular. Due to rising input costs of farming many farmers have grown teak and bamboo plantations because they only require water during the first two years. Bamboo, once planted, provides the farmer with output for 50 years until it flowers. Production of these two trees positively impacts and contributes to the climate change problem in India.

7. Crop rotation

Crop rotation can be classified as a type of subsistence farming if there is an individual or communal farmer doing the labour and if the yield is solely for their own consumption. It is characterised by different crops being alternately grown on the same land in a specific order to have more effective control of weeds, pests, diseases, and more economical utilisation of soil fertility. In India, leguminous crops are grown alternately with wheat, barley, and mustard. An ideal cropping system should use natural resources efficiently, provide stable and high returns, and avoid environmental damage.

Many farmers in India utilise the crop rotation system to improve or maintain soil fertility, check soil erosion, reduce the build-up of pests, spread the workload on family labour, mitigate the risk of weather changes, become less reliant on agricultural chemicals, and increase the net profit.

Different sequences of crop rotation

Rotation of two crops within a year i.e.:

- Year 1: Wheat
- Year 2: Barley
- Year 3: Wheat again

Three crop rotation i.e.:

- Year 1: Wheat
- Year 2: Barley
- Year 3: Mustard
- Year 4: Wheat again

Pearl millet

Pearl millet crop is mostly grown as a rainfed monsoon crop during kharif (June–July to September–November) and also as an irrigated hot weather (February–June) crop in central and south India. Pearl millet is often grown in rotation with sorghum, groundnut, cotton, foxtail millet, finger millet (ragi), castor, and sometimes, in the south India, with rice.

On the red and iron rich soils of Karnataka, pearl millet and ragi rotation is practised although pearl millet isn't always grown annually. Cluster bean – Pearl millet crop sequence with crop residue incorporation has significantly increased the productivity in the arid zone of Western

Rajasthan where Fallow – Pearl millet/Pearl millet after Pearl millet crop sequence is practised. In Punjab, the dryland rotation may be small grain-millet-fallow. In irrigated lands, pearl millet is rotated with chickpea, fodder sorghum, and wheat. In the dry and light soils of Rajasthan, southern Punjab and Haryana, and northern Gujarat, pearl millet is most often rotated with a pulse-like moth or mungbean, or is followed by fallow, sesame, potato, mustard, moth bean, and guar. Sesame crop may be low-yielding and may be replaced by castor or groundnut.

8. Dairy farming

In 2001 India became the world leader in milk production with a production volume of 84 million tons. India has about three times as many dairy animals as the USA, which produces around 75 million tons. Dairy Farming is generally a type of subsistence farming system in India, especially in Haryana, the major producer of milk in the country. More than 40% of Indian farming households are engaged in milk production because it is a livestock enterprise in which they can engage with relative ease to improve their livelihoods. Regular milk sales allow them to move from subsistence to earning a market-based income. The structure of the livestock industry is globally changing and putting poorer livestock producers in danger because they will be crowded out and left behind. More than 40 million households in India are at least partially dependent on milk production, and developments in the dairy sector will have important repercussions on their livelihoods and on rural poverty levels. Haryana was chosen to assess possible developments in the Indian dairy sector and to broadly identify areas of interventions that favour small-scale dairy producers. A methodology developed by the International Farm Comparison Network (IFCN) examined impacts of change on milk prices, farm management and other market factors that affect the small-scale milk production systems, the whole farm and related household income.

9. Co-operative farming

Co-operative farming refers to pooling of farming resources such as fertilisers, pesticides, farming equipments such as tractors. It however generally excludes pooling of land unlike in collective farming where pooling of land is also done. Co-operative farming is a relatively new system in India. Its goal is to bring together all of the land resources of farmers in such an organised and united way so that they will be collectively in a position to grow crops on every bit of land to the best of the fertility of the land. This system has become an essential feature of India's Five Year Plans. There is an immense scope for co-operative farming in India although the movement is as yet in its infancy. The progress of co-operative financing in India has been very slow. The reasons are fear of unemployment, attachment to land, lack of proper propaganda renunciation of membership by farmers and existence of fake societies.

Vedic literature provides some of the earliest written record of agriculture in India. Rigveda hymns, for example, describes plowing, fallowing, irrigation, fruit and vegetable cultivation. Other historical evidence suggests rice and cotton were cultivated in the Indus Valley, and

plowing patterns from the Bronze Age have been excavated at Kalibangan in Rajasthan. Bhumivargaha, an Indian Sanskrit text, suggested to be 2500 years old, classifies agricultural land into 12 categories: urvara (fertile), ushara (barren), maru (desert), aprahata (fallow), shadvala (grassy), pankikala (muddy), jalaprayah (watery), kachchaha (contiguous to water), sharkara (full of pebbles and pieces of limestone), sharkaravati (sandy), nadimatruka (watered from a river), and devamatruka (rainfed). Some archaeologists believe that rice was a domesticated crop along the banks of the river Ganges in the sixth millennium BC. So were species of winter cereals (barley, oats, and wheat) and legumes (lentil and chickpea) grown in northwest India before the sixth millennium BC.[citation needed] Other crops cultivated in India 3000 to 6000 years ago, include sesame, linseed, safflower, mustards, castor, mung bean, black gram, horse gram, pigeon pea, field pea, grass pea (khesari), fenugreek, cotton, jujube, grapes, dates, jackfruit, mango, mulberry, and black plum[citation needed]. Indians might have domesticated buffalo (the river type) 5000 years ago[citation needed].

According to some scientists' agriculture was widespread in the Indian peninsula, 10000–3000 years ago, well beyond the fertile plains of the north. For example, one study reports 12 sites in the southern Indian states of Tamil Nadu, Andhra Pradesh and Karnataka providing clear evidence of agriculture of pulses (*Vigna radiata* and *Macrotyloma uniflorum*), millet-grasses (*Brachiaria ramosa* and *Setaria verticillata*), wheats (*Triticum dicoccum*, *Triticum durum/aestivum*), barley (*Hordeum vulgare*), hyacinth bean (*Lablab purpureus*), pearl millet (*Pennisetum glaucum*), finger millet (*Eleusine coracana*), cotton (*Gossypium sp.*), linseed (*Linum sp.*), as well as gathered fruits of *Ziziphus* and two *Cucurbitaceae*.

Some claim Indian agriculture began by 9000 BC as a result of early cultivation of plants, and domestication of crops and animals. Settled life soon followed with implements and techniques being developed for agriculture. Double monsoons led to two harvests being reaped in one year. Indian products soon reached trading networks and foreign crops were introduced. Plants and animals—considered essential to survival by the Indians—came to be worshiped and venerated.

The middle ages saw irrigation channels reach a new level of sophistication, and Indian crops affected the economies of other regions of the world under Islamic patronage. Land and water management systems were developed with an aim of providing uniform growth.

Despite some stagnation during the later modern era the independent Republic of India was able to develop a comprehensive agricultural programme.

Agriculture and colonialism

Over 2500 years ago, Indian farmers had discovered and begun farming many spices and sugarcane. It was in India, between the sixth and four BC, that the Persians, followed by the Greeks, discovered the famous "reeds that produce honey without bees" being grown. These

were locally called Sākhara. On their return journey, the Macedonian soldiers carried the "honey bearing reeds," thus spreading sugar and sugarcane agriculture. People in India had invented, by about 500 BC, the process to produce sugar crystals. In the local language, these crystals were called khanda, which is the source of the word candy.

Before the 18th century, cultivation of sugarcane was largely confined to India. A few merchants began to trade in sugar — a luxury and an expensive spice in Europe until the 18th century. Sugar became widely popular in 18th-century Europe, then graduated to become a human necessity in the 19th century all over the world. This evolution of taste and demand for sugar as an essential food ingredient unleashed major economic and social changes. Sugarcane does not grow in cold, frost-prone climate; therefore, tropical and semitropical colonies were sought. Sugarcane plantations, just like cotton farms, became a major driver of large and forced human migrations in 19th century and early 20th century — of people from Africa and from India, both in millions — influencing the ethnic mix, political conflicts and cultural evolution of Caribbean, South American, Indian Ocean and Pacific Island nations.

The history and past accomplishments of Indian agriculture thus influenced, in part, colonialism, slavery and slavery-like indentured labor practices in the new world, Caribbean wars and world history in 18th and 19th centuries.

Indian agriculture after independence



Cotton flower in India.

This is a cash crop in central India. In the years since its independence, India has made immense progress towards food security. Indian population has tripled, and food-grain production more than quadrupled. There has been a substantial increase in available food-grain per capita.



The state of Punjab led India's Green Revolution and earned the distinction of being the country's bread basket.

Before the mid-1960s India relied on imports and food aid to meet domestic requirements. However, two years of severe drought in 1965 and 1966 convinced India to reform its agricultural policy and that they could not rely on foreign aid and imports for food security. India adopted significant policy reforms focused on the goal of foodgrain self-sufficiency. This ushered in India's Green Revolution. It began with the decision to adopt superior yielding, disease resistant wheat varieties in combination with better farming knowledge to improve productivity. The state of Punjab led India's green revolution and earned the distinction of being the country's bread basket.

The initial increase in production was centred on the irrigated areas of the states of Punjab, Haryana and western Uttar Pradesh. With the farmers and the government officials focusing on farm productivity and knowledge transfer, India's total foodgrain production soared. A hectare of Indian wheat farm that produced an average of 0.8 tonnes in 1948, produced 4.7 tonnes of wheat in 1975 from the same land. Such rapid growth in farm productivity enabled India to become self-sufficient by the 1970s. It also empowered the smallholder farmers to seek further means to increase food staples produced per hectare. By 2000, Indian farms were adopting wheat varieties capable of yielding 6 tonnes of wheat per hectare.



Men and women at work in rice paddy fields

With agricultural policy success in wheat, India's Green Revolution technology spread to rice. However, since irrigation infrastructure was very poor, Indian farmers innovated with tube-wells,

to harvest ground water. When gains from the new technology reached their limits in the states of initial adoption, the technology spread in the 1970s and 1980s to the states of eastern India — Bihar, Odisha and West Bengal. The lasting benefits of the improved seeds and new technology extended principally to the irrigated areas which account for about one-third of the harvested crop area. In the 1980s, Indian agriculture policy shifted to "evolution of a production pattern in line with the demand pattern" leading to a shift in emphasis to other agricultural commodities like oilseed, fruit and vegetables. Farmers began adopting improved methods and technologies in dairying, fisheries and livestock, and meeting the diversified food needs of a growing population.

As with rice, the lasting benefits of improved seeds and improved farming technologies now largely depends on whether India develops infrastructure such as irrigation network, flood control systems, reliable electricity production capacity, all-season rural and urban highways, cold storage to prevent spoilage, modern retail, and competitive buyers of produce from Indian farmers. This is increasingly the focus of Indian agriculture policy.

India ranks 74 out of 113 major countries in terms of food security index. India's agricultural economy is undergoing structural changes. Between 1970 and 2011, the GDP share of agriculture has fallen from 43% to 16%. This isn't because of reduced importance of agriculture or a consequence of agricultural policy. This is largely because of the rapid economic growth in services, industrial output, and non-agricultural sectors in India between 2000 and 2010.

Agricultural scientist MS Swaminathan has played a vital role in the green revolution. In 2013 NDTV awarded him as 25 living legend of India for outstanding contribution to agriculture and making India a food sovereign country.



An irrigation canal

Irrigation contributes significantly to agriculture in India. Two states, Sikkim and Kerala have planned to shift fully to organic farming by 2015 and 2016 respectively.

10. Irrigation

Indian irrigation infrastructure includes a network of major and minor canals from rivers, groundwater well-based systems, tanks, and other rainwater harvesting projects for agricultural activities. Of these, the groundwater system is the largest. Free power and attractive minimum

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support price for water intensive crops such as sugarcane and rice have encouraged ground water mining leading to groundwater depletion and poor water quality. Of the 160 million hectares of cultivated land in India, about 39 million hectare can be irrigated by groundwater wells and an additional 22 million hectares by irrigation canals. In 2010, only about 35% of agricultural land in India was reliably irrigated. About 2/3rd cultivated land in India is dependent on monsoons. The improvements in irrigation infrastructure in the last 50 years have helped India improve food security, reduce dependence on monsoons, improve agricultural productivity and create rural job opportunities. Dams used for irrigation projects have helped provide drinking water to a growing rural population, control flood and prevent drought-related damage to agriculture.



Indian agriculture is diverse, ranging from impoverished farm villages to developed farms using modern agricultural technologies. This image shows a farming community in a more prosperous part of India.



The changing face of Indian agriculture: formation of larger farms and adoption of wind power generation technologies.



A panoramic view of rice, cassava and banana farm in Kerala state.



A mustard farm in Rajasthan state.



Amul: an integrated dairy with milk processing plant in Gujarat state.



India has some of the world's best agricultural yields in its tea plantations. A tea estate in Kerala state.

As of 2011, India had a large and diverse agricultural sector, accounting, on average, for about 16% of GDP and 10% of export earnings. India's arable land area of 159.7 million hectares (394.6 million acres) is the second largest in the world, after the United States. Its gross irrigated crop area of 82.6 million hectares (215.6 million acres) is the largest in the world. India is among the top three global producers of many crops, including wheat, rice, pulses, cotton, peanuts, fruits and vegetables. Worldwide, as of 2011, India had the largest herds of buffalo and cattle, is the largest producer of milk and has one of the largest and fastest growing poultry industries.

11. Organic Agriculture

Organic agriculture has fed India for centuries and it is again a growing sector in India. Organic production offers clean and green production methods without the use of synthetic fertilisers and pesticides and it achieves a premium price in the market place. India has 6,50,000 organic producers, which is more than any other country. India also has 4 million hectares of land certified as organic wildculture, which is third in the world (after Finland and Zambia). As non availability of edible biomass is impeding the growth of animal husbandry in India, organic

production of protein rich cattle, fish and poultry feed using biogas /methane/natural gas by cultivating *Methylococcus capsulatus* bacteria with tiny land and water foot print is a solution for ensuring adequate protein rich food to the population.

Farmer suicides

In 2012, the National Crime Records Bureau of India reported 13,754 farmer suicides. Farmer suicides account for 11.2% of all suicides in India. Activists and scholars have offered a number of conflicting reasons for farmer suicides, such as monsoon failure, high debt burdens, genetically modified crops, government policies, public mental health, personal issues and family problems. Agromarketing is poorly developed in India.

Diversion of agricultural land for non-agricultural purpose

Indian National Policy for Farmers of 2007 stated that "prime farmland must be conserved for agriculture except under exceptional circumstances, provided that the agencies that are provided with agricultural land for non-agricultural projects should compensate for treatment and full development of equivalent degraded or wastelands elsewhere". The policy suggested that, as far as possible, land with low farming yields or that was not farmable should be earmarked for non-agricultural purposes such as construction, industrial parks and other commercial development.

Amartya Sen offered a counter viewpoint, stating that "prohibiting the use of agricultural land for commercial and industrial development is ultimately self-defeating." He stated that agricultural land may be better suited for non-agriculture purposes if industrial production could generate many times more than the value of the product produced by agriculture. Sen suggested India needed to bring productive industry everywhere, wherever there are advantages of production, market needs and the locational preferences of managers, engineers, technical experts as well as unskilled labour because of education, healthcare and other infrastructure. He stated that instead of government controlling land allocation based on soil characteristics, the market economy should determine productive allocation of land.

Initiatives



Viticulture farms in Maharashtra.



Coffee farms in Tamil Nadu.

The required level of investment for the development of marketing, storage and cold storage infrastructure is estimated to be huge. The government has not been able to implement schemes to raise investment in marketing infrastructure. Among these schemes are 'Construction of Rural Godowns', 'Market Research and Information Network', and 'Development / Strengthening of Agricultural Marketing Infrastructure, Grading and Standardisation'.

The Indian Council of Agricultural Research (ICAR), established in 1905, was responsible for the search leading to the "Indian Green Revolution" of the 1970s. The ICAR is the apex body in agriculture and related allied fields, including research and education. The Union Minister of Agriculture is the president of the ICAR. The Indian Agricultural Statistics Research Institute develops new techniques for the design of agricultural experiments, analyses data in agriculture, and specialises in statistical techniques for animal and plant breeding.

Recently (May 2016) the government of India has set up the Farmers Commission to completely evaluate the agriculture programme. Its recommendations have had a mixed reception.

In November 2011, India announced major reforms in organised retail. These reforms would include logistics and retail of agricultural produce. The announcement led to major political controversy. The reforms were placed on hold by the government in December 2011.

In the summer of 2012, the subsidised electricity for pumping, which has caused an alarming drop in aquifer levels, put additional strain on the country's electrical grid due to a 19% drop in monsoon rains and may have contributed to a blackout across much of the country. In response the state of Bihar offered farmers over \$100 million in subsidised diesel to operate their pumps.

In 2015, Narendra Modi announced to double farmer's income by 2022.

Startups with niche technology and new business models are working to solve problems in Indian agriculture and its marketing. Kandawale is one of such e-commerce website which sells Indian Red Onions to bulk users direct from farmers, reducing unnecessary cost escalations.

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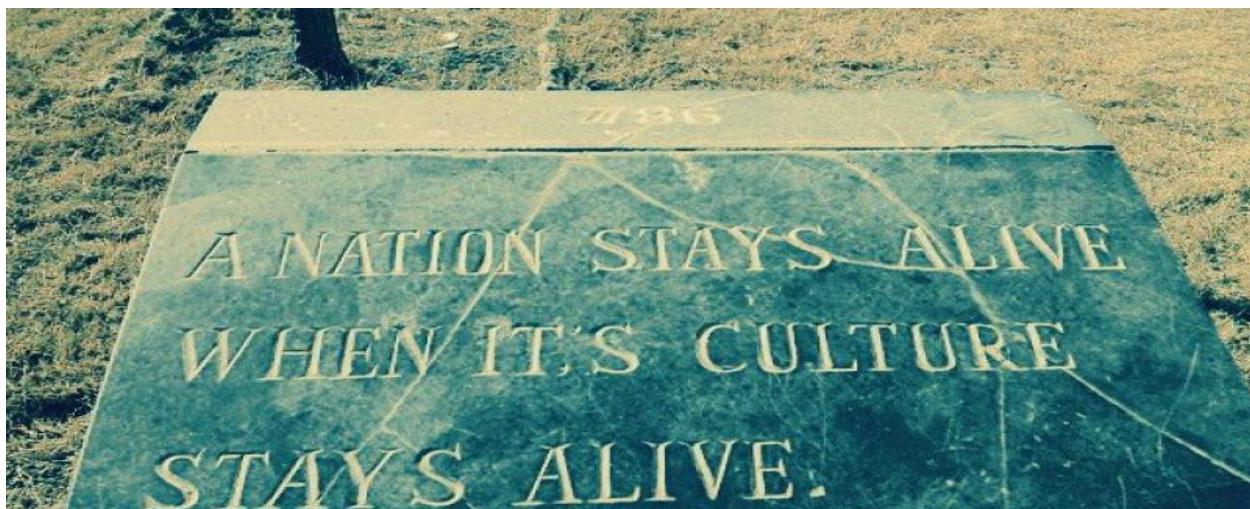
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Unit 3: Indian Culture



Culture is the characteristics and knowledge of a particular group of people, encompassing language, religion, cuisine, social habits, music and arts.

The word "culture" derives from a French term, which in turn derives from the Latin "colere," which means to tend to the earth and grow, or cultivation and nurture. "It shares its etymology with a number of other words related to actively fostering growth," De Rossi said.



Meaning of Culture:

Culture describes a certain set of customs, ideas and social behavior of a group of similar people in a society. Geographical borders usually segregate cultures. Some characteristics like language, religion, food habits, social norms, music and arts stay specific in one particular culture. Throughout the world, we have a variety of cultures. Cultures have been maintained from time immemorial and have been handed down from one generation to another. Cultures help people connect with each other and build communities, within the same cultural backgrounds. Individuals belonging to the same culture are usually like-minded and have the same ancestral values.

Cultural traits of a particular cultural community is preserved over time and get passed on to future generations. Cultural traits live through tide of times. Knowledge, traditions, language scripts, dress codes, etc. are some of the cultural traits that are unique to a particular region's culture. Culture is important to us because it defines our evolutionary identity. Culture helps us understand our ancestral values and gives us the very meaning of life. It also makes us unique from other parts of the world. When born in a particular region, we grow up by learning our regional culture and the society shapes our lives to become what we are today! Traditional culture of a community keeps us bonded forever.

Importance of preserving cultural heritage lies in the sense of belonging and unity that it offers. Cultural heritage and traditions serve to link us with our ancestors, which is valuable and should not be lost. The beliefs and laws laid down by the roots of our culture are meaningful and are for the betterment of our lives. Everything from marriage traditions to religious beliefs should be valued, in any culture. Even though times are changing now and "mixed cultures" are in fashion, effort to not let go of regional cultures are constantly carried out.

The top 10 reasons Why Culture is so Important.

- 1. Ancestry:** Our cultures help us gain valuable information about our ancestry. Cultural traditions are like pages in a history book which should be read with interest. Human beings do not live for eternity, but their cultures do. Cultures give us a gateway to study about our ancestors.
- 2. Self-realization:** When we study about the roots of our cultures and follow them accordingly, we get to know about ourselves much better. We can better relate to our origin and value ourselves more. It boosts our self-respect and dignity to follow our culture. It also makes us feel proud to belong to our own culture.
- 3. Evolutionary enlightenment:** Knowing our culture in-depth gives us a sneak peek into our evolution. Cultures have originated in ancient times when human beings started to live as a community. Thus, studying about our cultures and of the entire world's is extremely interesting and it sure give us some enlightenment about ancient times. This also gives us the required clarity against all our doubts.

4. **Moral values:** Following a culture instills moral values in us. Every culture has its share of knowledge and beliefs which make us better human beings. It makes us responsible people who can co-exist with each other in a harmonious society.
5. **Discipline:** Cultural traditions keep us disciplined. Every culture has certain norms and laws laid down, which if followed leads to peaceful existence. The rules were made for a reason and should be followed rightly. Neglecting cultural traditions is not wise and should not be kept as an option.
6. **Knowledge:** Detailed study about every aspect of our culture can give us profound knowledge. Cultures never demand blind followers. Everything is well explained and accounted for in history. Studying about them will make us more knowledgeable.
7. **Compassion:** Every culture teaches us to co-exist with all the other cultures in the world. Cultural teachings always aim for peace. They teach us to live compassionately and respectfully with everyone, so that peace prevails.
8. **Meaning of life:** Cultures teach us the real meaning of life. Every phase of our life demands different actions and our culture teaches us that. As we grow up and grow old, our culture holds our hand and directs us towards the right path.
9. **Safeguard future generations:** Cultural traditions were made by our experienced ancestors who wanted to pass on their valued knowledge about life to every generation of mankind henceforth, to make their survival easier.
10. **Responsibility:** Cultural traditions teach us to be responsible human beings. A culture-less and lawless human being is just another animal. Our culture and society make us be the responsible entities that we are.

Our culture should be upheld as our heritage. Nothing and no one should be allowed to attack or destroy our cultural traditions. It is always wise to remember that our cultures define our existence and make us who we are. It should be passed on generations after generation, like it has been done until now. Every culture is unique. It has its traditional values, religion, dance, festivals, music, and cloth. This topic involves abundant number of information because it is almost unlimited.

Indian culture is one of the oldest. This country always had an urban civilization. Astonishing cultural diversity throughout whole country makes one to be amazed. Could you imagine that the South, North, and Northeast of India have their own traditions and culture. It is incredible thing to observe such immense variety in culture within one country. Indian cuisine, religion, and philosophy has a huge impact on the whole world.

India is one of the oldest civilizations. One may find this country to be highly populated. India belongs to the most religiously diverse countries in the world. This huge country along with cultural diversity possesses geographical characteristics. Climate in India is also extremely different. Scarcely any country in the world may compete in its cultural mixture with India.

The West has borrowed our Yoga, transcended meditation, Hare Rama Hare Krishna and Ayurveda seems none the worse for it. In fact it grows stronger even like us with our young ones

living it up in style. The world is after all heading for a Global Village so let us get the taste of it and continue to emancipate. Our culture can only gain by adding to it. What matters really is our identity and our ethics.

Our Indian Culture teaches us to respect elders and to treat the Guru or Teacher at a rank equal to ones' parents. This is something which is unheard of in the developed nations. Our culture is slowly being eroded and the day it is considered immaterial, we shall no more have a nation. The beliefs, development of human powers, mental and spiritual training in the background of our religious traditions, all make a concerted move for our culture to be vibrant and a living entity.

Culture unity means a wholesome cohesive undercurrent flowing into the beliefs of people which jointly compose our nation. These perennial beliefs, social traditions and spiritual practices make up our cultural fabric. Cultural unity means 'Unity in Diversity' but this has remained a fake rhetoric only. These are the discriminating factors which are slowly growing at the roots of our culture. Our Culture will be wiped out because of this ambiguity. Let us awake and be equal to all transgressions on our cultural unity.

Economy and trade in India:

India has a great variety of soils ranging from rocky to alluvial, diverse climate types and one of the most extensive agricultural lands in the world. India's monsoon is nature's abundant irrigating system and India is also blessed with a large network of perennial rivers that over ages have created vast stretches of highly productive alluvial soil.

Not surprising then that India has been an agricultural economy and civilization and has evolved a long, rich and diverse tradition of agricultural practices, including the selection of right soil and good seeds, techniques of irrigation and manuring, crop protection and grain storage as well as animal husbandry and pisciculture

Horticulture and Arboriculture

Harappans cultivated fruits such as date palm, pomegranate, lemon and melon. The Sangam literature refers to jackfruit, coconut, date palm, areca nut, plantain, and tamarind. A method of grafting described in Br̥hat Saṁhitā was what is known today as 'wedge grafting'. Surapāla's text mentions 170 species of plants including trees, shrubs and a few herbs, and deals with the laying out gardens and orchards and growing unusual trees. Layouts included designs such as maṇḍapa (canopy), nandyāvarta (quadrangle with an opening to the west), swastika (design of religious significance), chaturasra (square), sarvatobhadra (a square enclosing a circle), vīthi (line), nikuñja (arbour), and punjaka (cluster). The text recommends layouts for 'pleasure gardens'.

Fishing

The Harappans made fishing nets and consumed both sea and freshwater fish. The R̥gveda makes a general mention to fishes, but not specifically as a food item, while the Yajurveda mentions capturing fish by sedating them in a pond by treating the water with the bark of some

trees. Manusmṛti names two fishes, rohu and pathen, as suitable for food. It is believed that fish culture (or pisciculture) came from China, where it originated almost 2,500 years ago, to Bengal via Myanmar or Thailand. The Chalukya king Śomeśvaradeva (1127 CE) described methods of culturing fish and listed 34 kinds of fishes.

Trade

Much trade has been taking place in and from the Indian subcontinent for millenniums. But what do we precisely mean by ‘trade’? The word refers to the purchase and sale of goods and services for money or something equivalent to it. The producer or the manufacturer makes the goods and takes them to the consumer through intermediaries. Trade involves transfer or exchange of goods and services.

Trade in ancient India

At Mehrgarh, in Baluchistan, archaeology has brought to light trade networks as early as around 5000 BCE, in the Neolithic age. Some raw materials found there, such as shell, lapis lazuli and turquoise, must have come from distant regions. These trade networks expanded considerably in extent and diversity before and during the Indus Civilization (2600–1900 BCE), when cities like Mohenjo-daro (Sind), Harappa (Punjab), Rakhigarhi (Haryana) or Dholavira (Gujarat) became major trade centres. Still later, during the 1st millennium BCE, many large cities emerged, such as Takṣaśilā (or Taxila), Ujjayinī (Ujjain), Mathura, Pāṭaliputra (Patna), Rājagrha (Rajgir), Vārāṇasī, A Harappan terracotta tablet depicting a river boat.

Bhṛgukaccha (Bharuch or Broach); and in the South, Kāñcī (Kanchipuram), Madurai, Uraiyyur (near Tiruchi), Kaveripattinam and several more. Those cities were always important trading centres and generally located on some of the major trading routes.

That was also the time when well-structured states arose, which provided the required infrastructure and a suitable environment for the promotion of trade. Kauṭilya’s Arthaśāstra mentions trade as one of the three major types of economic activities and describes the duties of the ‘Superintendents’ of Commerce, Tolls, Shipping, Mining, Textile, Labour, etc. This 3rd or 4th century BCE text shows Magadha (corresponding roughly to Bihar and Jharkhand) trading in textiles, gems, coral and pearls, metals and minerals, with many parts of north, central and south India. Salt, too, was a major commodity whose production was strictly controlled by the state. The state also made sure that trade routes were safe and that goods were not adulterated or consumers duped by unscrupulous traders.



A seafaring ship depicted on a lead coin of a Sātavāhana king of the 1st– 2nd century CE.

About the same time, Megasthenes, a Greek envoy to the Mauryan Empire, mentions a Royal Road connecting Pāṭaliputra, Magadha's capital, to the delta areas. This is confirmed by Aśoka's edicts, which provide evidence of political and economic networks across the whole subcontinent, and in particular between north India and the southern kingdoms of modern Tamil Nadu, Kerala and Sri Lanka. Those networks were the channels for a brisk internal trade, which took place through sea routes — the coast and rivers — and land routes. Among the latter, two major ones, called Uttarāpatha and Dakṣināpatha, connected the northern and southern parts of the country.

Kauṭilya, in fact, preferred land or river routes over sea routes, which he thought were unsafe (except for those closely following the coast); and among land routes, he preferred the southward to the northward, because “with the exception of blankets, skins, and horses, other articles of merchandise such as conch shells, diamonds, precious stones, pearls and gold are available in plenty in the south” (Arthaśāstra, 7.12).

While Harappan trade was wholly based on barter, between 600 and 500 BCE punchmarked coins of silver were introduced in north and western India; they had irregular shapes (though precise weights), no inscriptions but various symbols ‘punched’ into them by dies. Later, round or square coins of gold, silver or copper were minted by various dynasties. The most common coins were the dīnāra, suvarṇa and kārṣapaṇa (or paṇa), and they generally had specific weights. Let us however note that despite the increasing use of coins, barter trade never completely disappeared, especially in local trade.

Different Countries, Many Goods

But India had long been engaged in external trade, too. The Harappans were exporting timber, beads of semiprecious stone (especially carnelian), shell bangles, ivory items, pearls, etc., to Oman, Bahrain and Mesopotamia through the Persian Gulf, besides Iran and Central Asia across the Afghan mountain ranges. As a result, Harappan seals and other evidence of trade have come to light at many sites in those regions. Curiously, little is known of what Harappans imported in return: perhaps gold, silver or, more likely, copper ore.

Around the beginning of the 1st millennium BCE, trade began with the Phoenicians, who appear to have reached India's western coast. Indian teak and cedar reached Babylonian builders, and a Buddhist Jātaka tale mentions trade with the city of Bāveru (Babylon). From India's western coast, spices, ivory, gems, timber, silks and other textiles, besides ‘exotic’ animals like monkeys and peacocks, found their way to Egypt, Asia Minor and the Near East, finally to Greece and Rome.

Trade with the Roman Empire began gradually in the 3rd century BCE, reached its peak in the 1st centuries BCE and CE, and slowly followed the decline of the Roman Empire. Archaeology, Greek and Latin texts and the Tamil Sangam literature agree with a wealth of details that Roman traders frequented south Indian ports. One early Tamil text states, for example, “The beautiful ships of the Yavanas [a word for Greeks or Romans] arrived filled with goods such as oil, wine,

glass vases, gold and silver coins.” While they brought glassware, wine or olive oil in sealed amphoras (tall conical jars with a pair of handles), pigments, coral and metals (such as copper, lead and tin), they took back home timber, sandalwood, precious and semiprecious stones (such as beryl or quartz), pearls, ivory, tortoise shells, spices (especially pepper, which they not only consumed but used for mummification), textiles (especially muslin), perfumes, medicinal and aromatic plants, and peacocks. Indian wootz steel was also exported to the Mediterranean world, where it was used to make lighter and sharper swords, among other weapons.

The findings of thousands of gold, silver and copper Roman coins in India, mostly in the South, bear testimony to this intense trade. Many coins depict the Roman emperor Augustus (63 BCE – 14 CE); he himself wrote, “Indian kings often sent me embassies, as no other Roman head had received so far.” It is generally assumed that those embassies from India were partly composed of merchants.



A gold coin of Augustus found in Pudukkottai (Tamil Nadu)

The 1st century BCE Greek geographer Strabo notes that in his time, about 120 ships sailed for India in a single season from the Red Sea port of Myos Hormos. Berenike (or Berenice) was another Egyptian port that saw many ships sailing to and from India, and where excavations have brought to light evidence of such fragments of cotton material from Gujarat were found in Egyptian tombs at Fustat, 5th century CE.

Inscriptions in Tamil language and Tamil Brahmi script have been found on potsherds at another Red Sea port, Quseir al-Qadim, dating back to the first centuries CE. Since there was no Suez Canal in those days, goods traded in either direction had to be offloaded in Egypt, either at Alexandria on the Mediterranean or at some Red Sea port, and carried overland. East Africa was also part of this trade network. The same sea routes were later much frequented by the Arabs for their trade with Indian ports.

Ports and Sailors

Indians too were shipbuilders and sailors. There is evidence (some of it from Greek texts) that shipbuilding was a flourishing activity right from Mauryan times. Early Buddhist and Jain literatures corroborate this: a Jain text, for instance, refers to a merchant, Nāgadatta, who travelled to Suvarnabhūmi (a reference to Sumatra) with five hundred ships to conduct trade.

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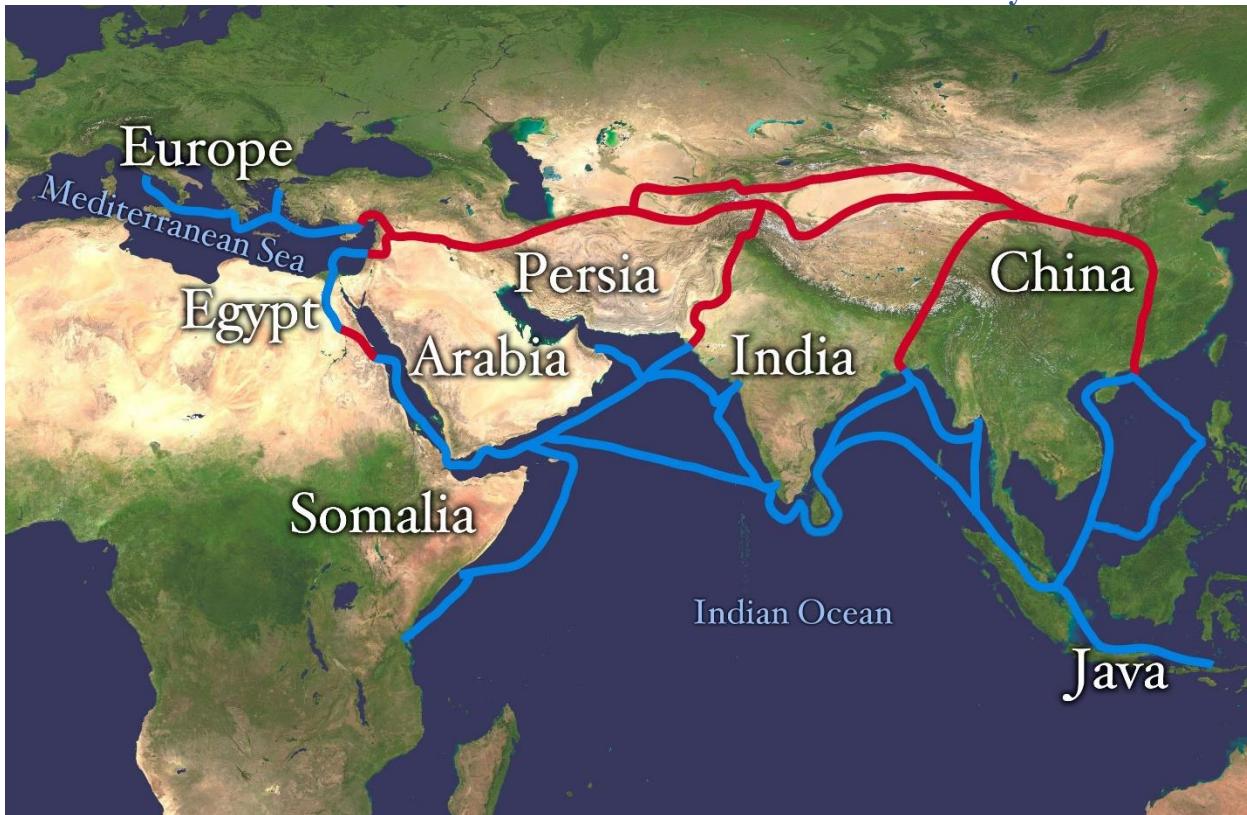
(The number is clearly exaggerated, but not the fact of the trade connection.) Chinese historical sources refer to maritime traders bringing Indian products to China as far back as the 7th century BCE. Glass beads and bangles found in the Malay Peninsula, Java and Borneo point to a trade contact with southern India going back to the 1st millennium BCE. A Sanskrit treatise on shipbuilding, Yuktikalpataru of Bhoja Narapati, of uncertain date, describes in great detail various kinds of ships, their proportions and sizes, the materials out of which they were built, the ways to decorate them, etc.

In the next millennium, Kaliṅga (modern Odisha) and Bengal were engaged in a busy traffic with Burma and all the way to Java; the 7th-century Chinese traveller Hsuan. Tsang noted that merchants left from Puri “for distant countries”. By the 9th century CE, the Cōlas kings of south India had built a navy powerful enough to briefly conquer parts of Malaysia (Perak) and Indonesia (the Śrīvijaya kingdom). Indian traders often visited countries and islands of Southeast Asia, selling silk, gems and other luxury items, and bringing back spices, camphor and fragrant woods.

Ports thus dotted the Indian coast, and many of them were listed in Greek and Roman texts, such as the Periplus Maris Erythraei or ‘Voyage around the Erythrean Sea’, an anonymous Greek travelogue of the 1st century CE, ‘Erythrean’ referring to the Arabian Sea together with the Red Sea and the Persian Gulf. It named ports such as Barygaza (Bhṛgukaccha in Sanskrit, modern Bharuch or Broach), Suppara (Sopara, north of Mumbai), Muziris (near Kodungallur in Kerala), Colchoi (Koṅkai in Tamil Nadu), Camara (known as Puhar or Kāvēripaṭṭinam in Tamil literature), Poduke or Poduca (Puducherry), Palaesimundu (in ‘Taprobane’, i.e., Sri Lanka) or Masalia (Masulipatam in Andhra Pradesh), among many others. With the exception of a few settlements such as Arikamedu near Puducherry, which was excavated in the 1940s, it is only in the last two or three decades that excavations, sometimes coupled with underwater explorations, have confirmed the antiquity of some of those ancient port towns.

Land Routes

Land routes were, of course, part of this network, especially the famed Silk Road through which countless caravans of traders crossing many kingdoms connected the Mediterranean world with Asia. (Romans, too, started their Indian trade through the land routes, but as toll taxes for safe passage increased, they turned to the sea route and soon learned to time their voyages to India with the monsoons so as to shorten them.) Indian traders made full use of those routes, and established trading stations at Kashgar, Yarkand and Khotan, among other cities of central Asia. They did not travel only westward: they also carried cotton to China and brought Chinese goods back home. Altogether, the ancient world appears like a bustling network of crisscrossing routes that nourished not only commercial and military but also cultural interactions.



By-Products of Trade

Indian texts emphasize that merchants and traders are to follow ethical principles in their businesses, and they were indeed respected and often praised by foreign travellers for their good character and trustworthiness. Thus the 12th-century Arab geographer al-Idrisi writes, ‘Indians are naturally inclined to justice and never depart from it in their actions. Their good faith, honesty, and fidelity to their engagements are well known, and they are so famous for these qualities that people flock to their country from every side.’ Five centuries later, about 1619, Edward Terry, a British traveler to India noted how “a stranger may travel alone, with a great charge of money or goods, quite through the country and take [Indians] for his guard, yet never be neglected or injured by them.”

Trade was thus not merely a source of economic prosperity but also earned fame for Indian goods and people. Along with trade, culture travelled and extensive as well as complex cultural interchanges took place in all directions. For instance, north India absorbed elements of Greek culture, as is especially visible in Gandhāra art. Similarly, trade promoted the spread of Buddhism to much of Asia and Hinduism to parts of Southeast Asia, along with much Indian art and literature.

Within India, the growth of trade networks promoted exchanges between regions and therefore cultural integration across the land. Altogether, trade has played an important part to play in the economic, social and cultural history of India.

Indian economy – Ancient and pioneering

India has a proud economic history. She was engaged in different economic activities. There were exclusive commercial cities and trade centers dominated by the merchant classes catering to the world markets, more than five thousand years ago. Evidences indicate that different forms of business organizations, including *srenis* (ancient corporate form) and partnerships, existed at least 2800 years earlier. Economics, as a subject of science, is believed to have originated in India more than 2600 years ago. *Arthashastra*, the first book on economics in the world, underlined that the basis of wealth of the nation was economic activity and that the state should run a ‘diversified economy.’

Cultural values as the bedrock of economy

India’s greatest asset is her cultural backgrounds. The traditional institutions of close knit families and societies are the products of our culture. Hard work, frugal living, high rates of saving, higher levels of entrepreneurship, higher social capital and relationship- based activities are all part of our value systems that remain as the foundations of the economy. Indian culture treats everyone as part of the larger family. Faith, goodwill, integrity, mutual understanding, norms and ethics are the basic elements of Indian life that impact on the activities of our people, including the economic transactions.

India was a dominant economic power for most of the time during the earlier periods. She is emerging once again during the recent periods. The main reason for this is the unique functioning models that are built around the cultural foundations and traditions of this land. These models are the efforts of the native the Indian genius born out of the beliefs, lifestyles and practices of our people.

Politics of India

Indian civil polity is almost as old as that of Babylonia and has lasted, like that of China, longer than any other. It is founded on the dictum enunciated by Rāmadāsa in his Dāsabodha (I.10.25) that ‘man is free and cannot be subjected by force’

A ‘state’, rājya, has several dimensions — the duties / rights of the ruled and the rulers, the rules of governance and the rules that govern the rulers and the ruled. In the same way, a ‘society’, samāja, has its components, the different jātis or communities, and functional units that we may call varṇas or castes. A society has its structural units such as family, institutions such as marriage, and customs and practices such as inheritance, rituals of marriage and mourning, and finally a framework of individual and social life as for example the āśrama vyavasthā laid down in the Hindu society as an ideal organization of an individual’s life.

Indian society is among the oldest societies in continuous existence with broadly the same ancient social system codified in the long continuous, cumulative, attested textual tradition of sociological texts known as Dharmasūtras, Dharmasāstras and Nibandhas.

Polity:

Kauṭilya's Arthaśāstra (4th century BCE) is one of the most influential treatises of political science. It visualizes a huge bureaucratic structure, a complex tax structure, and an intricate intelligence system for effective governance.

Soldiers going to war and fighting (from a frieze at Khajuraho)

Arthaśāstra is divided into sixteen books dealing with virtually every topic concerned with the running of a state: taxation, law, diplomacy, military strategy, economics, bureaucracy etc. It advocates rational ethics in the conduct of the affairs of the state and emphasises the codification and uniformity of the law throughout the state. The basis of good governance, according to Kauṭilya, is knowledge and Arthaśāstra classifies the knowledge needed to run a State into four classes.

1. anvīkṣki (philosophy and logic). This is considered to be the 'lamp of all sciences';
2. trayī (the three Vedas, Sāma, Rg and Yajur). These texts establish the four classes (varṇas) and the four orders (āśramas);
3. vārta (economics, specifically agriculture, cattle breeding, and trade);
4. dandānī (law and governance).

The institution of State is created to enable the individual to practise his or her dharma. The condition of arājakatā (lawlessness) was viewed with distaste as it obstructs a life of righteousness. The breakdown of social order is described in the ancient epic Mahābhārata, as follows:

... Then foolishness or stupidity (moha) seized their minds. Their intelligence thus being eclipsed, the sense of justice (dharma) was lost. Cupidity or temptation (lobha) overpowered them next. Thus arose the desire (kāma) for possessing things not possessed. And this led to their being subjugated by an affection (rāga) under which they began to ignore the distinction between what should and what should not be done. Consequently, there appeared sexual license, libertinism in speech and diet, and indifference to morals. When such a revolution set in among men, Brahman (the idea of Godhead) disappeared, and with it, law (dharma).

Next to the king came the mantri pariṣad (council of ministers). The king was enjoined to discuss every matter with his Council of Ministers, which had two levels, inner and outer. The inner cabinet had four members: the Chief Minister, the Chief Priest, the Military Commander and the Crown Prince. The membership of the outer cabinet was not fixed in number; invariably the heads of the prominent guilds were co-opted in this body. Unlike the basic principle of Western monarchy, the 'Divine Right of Kings', the king was to regard himself as an agent of the people and had to abide by his dharma as laid out in the Śāstras. Kautilya.

'The monarch should seek happiness in the happiness of his citizens, his welfare is in their welfare, and his good is not in what pleases him but in what pleases the citizens.' Great value was therefore attached to a rigorous and continuous education of the king who was to acquire a thorough command of the different branches of knowledge and to display ātma vrata (self-

control), and for this he had to abandon the ‘six enemies’: kāma (lust), krodha (anger), lobha (greed), māna (vanity), mada (haughtiness), and harṣa (overjoy) (1, 7).

Kauṭilya realized the critical role of the tax system for ensuring the economic well-being of the society. The hallmark of his tax system was ‘certainty’ — of time, rate and mode of payment. Stability in the tax regime was an important factor in ensuring active trade and commerce in the Mauryan empire. This in turn strengthened the revenue base of the state and enabled it to maintain a huge standing army and the welfare apparatus.

For Kauṭilya laws were derived from four sources: dharma (moral righteousness), vyavhāra (accepted practices), carita (history and custom), and rājaśasana (the formulations made by the state). In case of conflict amongst the various laws, dharma, moral righteousness, was supreme. The ordering of the other laws was case specific.

Arthaśāstra outlines a system of civil, criminal, and mercantile law. For example, the following were codified: a procedure for interrogation, torture, and trial, the rights of the accused, what constitutes permissible evidence, a procedure for autopsy in case of death in suspicious circumstances, what constitutes defamation and procedure for claiming damages (Kauṭilya, 4, 7 & 8).

Bureaucracy

Kauṭilya has proposed a network of bureaucracy to manage the State. Bureaucracy had thirty divisions each headed by Chiefs, adhyakṣas. An important and large part of bureaucracy dealt with the necessity of state provision for strengthening trade and commerce. The bureaucracy was involved in organizing the quality control machinery, the system of currency, and the system of weights and measures. As a mark of quality, merchandise had to be marked with the abhijñyāna mudrā (state stamp) in sindūra (vermillion). Counterfeiting was strictly punished. Bureaucrats received a fixed pay and were also eligible for state subsidized housing. The bureaucratic tenure was not hereditary.

A State also needs an intelligence apparatus. Kauṭilya suggests mass participation in intelligence gathering through institutions such as religion. Spies could be under the following guises — kapaṭika chātra (fraudulent disciple), udasthita (recluse), grihapālaka (householder), vaidehaka (merchant), tapas (an ascetic practising austerities), satri (a classmate), tīkṣṇa (a fireband), rasada (a poisoner) and a bhikṣuki (a mendicant woman) (Kauṭilya, 1, 11).

Legal System

India has a long textual tradition of legal thinking that has been accompanied by an institutional system from the village council, pancayata to the king (and now the President of India) where justice has been dispensed in accordance with textual law (dharmaśāstras), common practice (vyavahāra), conduct of respected people (śiṣṭas), and in the absence of any or all of these, the conscience of the judge(s). The texts deal with all aspects of the legal system. They discuss the qualifications of judges, of witnesses, the nature of valid testimony / evidence, the nature of

crime(s), and the appropriate punishment. A village scene showing a gathering of people for a meeting similar to a pancayata from Sanchi.

To keep the process of justice free from the influence of the ruler, it was laid down that the king was not allowed to decide cases by himself alone. However, as is the modern practice, the courts functioned on behalf of the highest authority. It was the practice to keep records of all the decided cases. Further justice was administered in open courts and not away from the public gaze. The use of former judgement as an example was also well recognized.

Great value has always been attached by Indians to equality and justice. Rulers such as Vikramāditya who dispensed unqualified justice live in the memory of the people. Folk memory also remembers Rāja Hariścandra who would not violate the law even to facilitate his dead son's cremation.

A long-attested tradition of legal texts accompanies this primacy of justice. Kauṭilya notes that 'It is ... power (*daṇḍa*) alone which, only when exercised by the [ruler] with impartiality and in proportion to guilt either of his son or his enemy, maintains both this world and the next.'

Much of India's widespread customary law prevalent among people is based on the work of the smṛtikāras, thinkers of judiciary, whose injunctions are deeply embedded in the common traditions and practices of the society. As far as civil law is concerned, the British also based colonial India's legal system on this customary law itself. In the Bengal Regulation of 1780, Section 27 provided that '... in all suits regarding inheritance, marriage and caste and other religious usages or institutions, the law ... of the śāstras with respect to Gentus [Hindus] shall be invariably adhered to.' The Regulation of 1781 added 'succession' or inheritance to the list. The Indian law evolved gradually with the changing needs of society.

To capture the changing diverse customary practices of a changing society, Indian laws have been continuously adapted and extended through commentaries, bhāṣyas and nibandhas. Their authors introduced innovations, collected and harmonized the diverse texts and modified and supplemented the rules in the smṛtis 'in part by means of their own reasoning and in part in the light of usages that had grown up.' For example, Baudhāyana, one of the Dharmāstrakaras, has noted that the practices among the people of the north and the south differ from each other.

To sum up, the knowledge-centred Indian civilization has elaborate social, political and legal thought and institutions that are motivated to secure the highest ideals of equality and justice. Thus the Greek Diodorus Siculus, 1st century BCE, noted:

Of several remarkable customs existing among the Indians, there is one prescribed by their [Indian] ancient philosophers which one may regard as truly admirable: for the law ordains that no one among them shall, under any circumstances, be a slave, but that, enjoying freedom, they shall respect the principle of equality in all persons: for those, they thought, who have learned neither to domineer over nor to cringe to others will attain the life best adapted for all vicissitudes of lot: since it is silly to make laws on the basis of equality of all persons and yet to establish inequalities in social intercourse.

Over time, all societies develop infirmities but one must not forget to look at the ideals it upholds — for the Himalayas are to be judged not by the valleys but by the peaks.

A Ruler's Dharma

In Vālmiki's Rāmāyaṇa, Bharata goes and meets his brother Rāma at the Citrakūṭa hill as soon as he learns of the latter's exile. Without waiting to hear Bharata's news (of their father's death), Rāma gives Bharata detailed advice on how to rule the kingdom of Ayodhyā. This brief discourse encapsulates the dharma of a ruler.

Have you appointed ministers who are self-restrained and brave, who are well-born, trustworthy and skilled in the arts of diplomacy? Decisions taken after due consideration by ministers who are learned in polity as well as reliable are very important for the success of the kings. I trust that you do not sleep too much, that you wake at the appropriate time and spend the early hours of the morning thinking about how you can achieve your ends.

Do not take advice from only one man or either from too many and make sure that your innermost thoughts are not spread all over the kingdom. Do you act quickly and without delay so that you can achieve your ends by simple means? Do your tributary kings know about your plans only after they have been implemented or do they hear about them while they are in process? No one should know about the process of your deliberations unless you have taken that person into confidence.

Choose one learned and intelligent man as your advisor instead of a thousand foolish men, for the learned can do a great deal of good and achieve all your goals. A thousand foolish men can do nothing for a king, but one advisor who is skilled, observant, brave and intelligent can bring a king great glory.

Give the best of your retainers the most important tasks to perform the less important work to the middling retainers and the least important work to those who rank the lowest. Trust the significant affairs of state to men who are pure in thought, to those who have been tested and found true and to those who are hereditary holders of office. Do not let your subjects think badly of you. You must quickly get rid of a brave and skilled man who has conspired against you and aspires to power, or you will be killed by him.

Have you appointed a brave, resolute, wise, skilled and nobly-born man as the commander of your army? The men who lead your army are strong and skilled in the arts of war. Do you honour and praise them appropriately? Do you supply your army with proper food and pay each man his due? You must do this without any delay at the appointed time. For if food and wages are delayed, the army will rise against its master in anger.

Are all the princes and your retainers devoted to you? Will they calmly give up their lives for your sake? Have you chosen a man who is eloquent, wise, skilled and learned as your personal messenger? Do you keep the important men in other kingdoms and in your own under constant watch by three spies each, unknown to each other and to the world? Do you keep a special watch over your exiled enemies who have returned? Never think of them as weak or ineffectual. ...

Child, the city ruled by our forefathers that is filled with horses, elephants and chariots, inhabited by thousands of noble people and Brahmins, Kshatriyas and Vaishyas who are all enthusiastic, disciplined and devoted to their duty, do you protect that city of Ayodhya such that its name which means “impregnable” stands true? It is a king’s duty to protect his people with dharma. Do you reassure the women and make sure that they are safe? Do you ensure that you do not confide in them nor trust what they say?

Do you wake up early in the morning and show yourself to the people, fully adorned, in the assembly hall and in the main street? Are all your forts well supplied with grain and water, with weapons and machines, workmen and archers? Is your income greater than your expenditure? Do not waste your money on inconsequential things. Spend your money on worshipping the gods and the ancestors and in honouring Brāhmins, Kṣatriyas and your allies.

If a noble man who is pure in spirit and deed is accused of theft by conspirators, he must be questioned by experts before his wealth is attached out of greed. If a thief is caught and questioned and evidence is found against him, he should not be set free for reasons of greed. And when a man is in trouble, be he rich or poor, do your learned ministers inquire into the matter? The tears of a man unjustly accused can destroy the progeny and wealth of a king who rules for selfish pleasures.

Do you keep the elders happy by giving them what they want? And children happy by giving them affection and scholars happy by speaking with gratitude? Do you honour the elders and the teachers, ascetics, gods and guests, brahmins and those who have accomplished their ends?

Do not pursue dharma at the expense of material gain or power at the cost of dharma or neglect them both out of a desire for pleasure. Bharata, you know the appropriate time for all these things and, therefore, pursue each at the right time. Do the brahmins and the common people pray together for your welfare? Avoid the flaws that mar the personality of a great king, including atheism, untruth, anger, licentiousness and procrastination. Do not taste your food yourself and give generously to your friends and those who need help.

The Ideal King

Following are extracts from a Jain text, Nectar of Aphorisms on Polity (in Sanskrit prose) of Somadeva, a Digambara teacher of the 10th century. This is a collection of gnomic sentences on politics and good conduct, written in Sanskrit prose.

A true lord is he, who is righteous, pure in lineage, conduct and associates, brave, and considerate in his behaviour. He is a true king who is self-controlled whether in anger or pleasure, and who increases his own excellence. All subjects are dependent on the king. Those without a lord cannot fulfil their desires. Though they be rich, subjects without a king cannot thrive. How can human effort be of any avail in cultivating a tree without roots? If the king does not speak the truth all his merits are worthless. If he deceives, his courtiers leave him, and he does not live long. He is dear to the people who gives of his treasure. He is a great giver whose mind is not set on frustrating the hopes of suppliants. Of what use is the barren cow, which gives no milk? Of what use is the king’s grace, if he does not fulfil the hopes of suppliants? For an

ungrateful king there is no help in trouble. His frugal court is like a hole full of snakes, which no one will enter.

If the king does not recognize merit the cultured will not come to his court. The king who thinks only of filling his belly is abandoned even by his queen. Laziness is the door through which all misfortunes enter.... A king's order is a wall which none can climb. He should not tolerate even a son who disobeys his commands.... He should never speak hurtfully, untrustworthily, untruthfully, or unnecessarily. He should never be improper in dress or manners. When the king is deceitful, who will not be deceitful? When the king is unrighteous who will not be unrighteous? ... He should personally look into the affairs of his people.... Bribery is the door through which come all manner of sins. Those who live by bribery cut off their mother's breasts.... The king is the maker of the times. When the king rightly protects his subjects all the quarters are wishing — cows, Indra rains in due seasons, and all living things are in peace.

The Ideal of Government, and the Decay and Growth of Civilization

In the past there was a king called Dalhanemi. He was a Universal Emperor a king of Righteousness, a conqueror of the four quarters, a protector of his people, a possessor of the Seven Jewels-the Wheel, the Elephant, and Horse, the Gem, the Woman, the Householder, and the General. He had over a thousand sons, all heroes brave of body, crushers of enemy armies. He conquered the earth from ocean to ocean and ruled it not by the rod or by the sword, but by the Law of Righteousness.

Now after many thousands of years King Dalhanermi ordered one of his men thus: "When you see that the Divine Wheel has sunk or slipped from its place, come and tell me." ... And after many thousand years more the man said that the Divine Wheel had sunk ... and went and told the King. So King Dalhanemi sent for his eldest son, and said: "Dear boy, the Divine Wheel has sunk, and I've been told that when the Wheel of a Universal Emperor sinks he has not long to live. I have had my fill of human pleasure now the time has come for me to look for divine joys. Come, dear boy, you must take charge of the earth...." So King Dalhanemi duly established his eldest son on the throne, shaved his hair and beard, put on yellow robes, and left his home for the state of homelessness. And when the royal sage had left his home seven days the Divine Wheel completely vanished.

Then a certain man went to the King, the anointed warrior, and told him that it had vanished. He was beside himself with sorrow. So he went to the royal sage his father and told him about it. "Don't grieve that the Divine Wheel has disappeared," he said. "The Divine Wheel isn't an heirloom, my dear boy! You must follow the noble way of the Universal Emperors. If you do this and keep the fast of the full moon on the upper terrace of your palace the Divine Wheel will be seen again, complete with its thousand spokes, its tire, its nave, and all its other parts."

"But what, your Majesty, is the noble way of the Universal Emperors?"

"It is this, dear boy, that you should rely on the Law of Righteousness, honour, revere, respect, and worship it. You should be yourself the banner of Righteousness, the emblem of Righteousness, with Righteousness as your master. According to Righteousness you should

guard, protect, and watch over your own family and people, your armed forces, your warriors, your officers, priests and householders, townsmen and country folk, ascetics and brāhmaṇas, beasts and birds. There should be no evil-doing throughout your domains, and whoever is poor in your land should be given wealth.... Avoid evil and follow good. That is the noble way of the Universal Emperors.”

The Origin of Kingship

The Mahābhārata, an encyclopaedic epic composed by Sage Vedavyāsa, contains a number of sections dealing with state, polity and ethics.

Yudhiṣṭhīra said: “This word ‘king’ (rāja) is so very current in this world, O Bhārata; how has it originated? Tell me that, O grandfather.”

Bhīshma said: “Certainly, O best among men, do you listen to everything in its entirety — how kingship originated first during the golden age (kṛtayuga). Neither kingship nor king was there in the beginning, neither sceptre (dandā) nor the bearer of a sceptre. All people protected one another, by means of righteous conduct (dharma). Thus, while protecting one another by means of righteous conduct, O Bhārata, men eventually fell into a state of spiritual lassitude. Then delusion overcame them. Men were thus overpowered by infatuation, O leader of men, on account of the delusion of understanding; their sense of righteous conduct was lost.

“When understanding was lost, all men, O best of the Bhāratas, overpowered by infatuation, became victims of greed. Then they sought to acquire what should not be acquired. Thereby, indeed, O lord, another vice, namely desire, overcame them. Attachment then attacked them, who had become victims of desire. Attached to objects of sense, they did not discriminate between right and wrong action, O Yudhiṣṭhīra. They did not avoid, O king of kings, pursuing what was not worth pursuing, nor, similarly, did they discriminate between what should be said and what should not be said, between the edible and inedible, and between right and wrong. When this world of men had been submerged in dissipation, all spiritual knowledge (brahman) perished; and when spiritual knowledge perished, O king, righteous conduct also perished.

“When spiritual knowledge and righteous conduct perished, the gods were overcome with fear, and fearfully sought refuge with Brahmā, the creator. Going to the great lord, the ancestor of the worlds, all the gods, afflicted with sorrow, misery, and fear, with folded hands said: ‘O Lord, the eternal spiritual knowledge, which had existed in the world of men has perished because of greed, infatuation, and the like, therefore we have become fearful. Through the loss of spiritual knowledge, righteous conduct also has perished, O God. ...

“Then the gods approached Viṣṇu, the lord of creatures, and said: ‘Indicate to us that one person among mortals who alone is worthy of the highest eminence.’ Then the blessed lord god Nārāyaṇa reflected, and brought forth an illustrious mind-born son, called Virajas.

The Seven Limbs of the State

The state or sovereignty was regarded as an organic whole made up of seven constituents, which are called the “limbs” of the body politic — the monarch being just one of those constituents.

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The state can function effectively only if these constituents remain properly integrated with one another. Modern political theorists mention, territory, population, and central government as together constituting the state. It is interesting to note the additional constituents mentioned by Kauṭilya, who is first among ancient Indian writers to advance the theory of the seven constituents of the state. (Sources of Indian Tradition, p. 249)

The king, the ministers, the country, the forts, the treasury, the army, and the allies are the constituents of the state.

Of these, the perfection of the king is this: born of a high family; nonfatalistic; endowed with strong character; looking up to (experienced) old men (for guidance); religious, truthful in speech; not inconsistent (in his behaviour); grateful; having liberal aims; full of abundant energy; not procrastinating; controller of his feudatories; of determined intellect; having an assembly of ministers of no mean quality; intent on discipline these are the qualities by means of which people are attracted toward him. Inquiry, study; perception; retention; analytical knowledge; critical acumen; keenness for the realization of reality — these are the qualities of the intellect. Valour; impetuosity; agility; and dexterity — these are the qualities of energy. Of profound knowledge; endowed with strong memory, cogitative faculty, and physical strength exalted easily controlling himself; adept in arts; rid of difficulties; capable bearer of the sceptre (*danda*); openly responding both to acts of help and harm; full of shame (to do anything evil) ... seeing far and wide; ... skilled in discriminating between conditions which require conclusion of a treaty and manifestation of valour, letting off the enemies and curbing them, and waiting under the pretext of some mutual understanding and taking advantage of the enemies' weak points; laughing joyfully, but guardedly and without loss of dignity; looking straight and with uncooked brow; free from passion; anger, greed, obstinacy, fickleness, heat, and calumny. capable of self-management; speaking with people; smilingly but with dignity; observing customs as taught by elderly people — these are the qualities of the personality.

... [A minister should be] native to the kingdom, born of high family, influential, trained in arts, endowed with foresight, bold eloquent, dignity, endurance etc.

Firm in the midland and at the boundaries; capable of affording subsistence to its own people and, in case of difficulties, also to outsiders; easy to defend; affording easy livelihood to the people; full of hatred for the enemy; capable of controlling [by its strategic position] the dominions of the feudatories; devoid of muddy, rocky, salty, uneven and thorny tracts, and of forests infested with treacherous animals and wild animals; pleasing; rich in arable land, mines, and timber and elephant forests; wholesome to cows; wholesome to men; with well-preserved pastures; rich in cattle; not depending entirely on rain; possessing waterways and overland roads; having markets full of valuable, manifold, and abundant ware; capable of bearing the burden of army and taxation ... — this is the perfection of the country.

In the happiness of the subjects lies the happiness of the king; in their welfare, his own welfare. The welfare of the king does not lie in the fulfilment of what is dear to him; whatever is dear to the subjects constitutes his welfare. (From Kauṭilya's Arthaśāstra 1.9 & 6.1, quoted in Sources of Indian Tradition, pp. 248–250)

Morality and Politics

A study of Arthashastra reveals that what we generally understand by morality and ethics has hardly any place in politics. A few instances are given here:

In XII. 1, the author provides that, being attacked by a stronger king, a weak king should seek self-defence by trying to make peace or diplomatic war. If his effort be abortive, he is advised to resort to kuta-yuddha or deceitful war at an undeclared place and time (X.3). At such a juncture, the spies of the weak king may try to occupy the enemy's fort or camp by resorting to poisoning and incendiaryism. All sorts of disturbance and disruption should be created at the rear of the powerful king's army. The weak king may even try to get the enemy's territory devastated by the forces of the forest-chiefs. Attempt may be made to get the enemy ousted by some powerful person among the king's kin or by a prince who may have been confined by that king as a measure of punishment.

In connection with ministers, we have seen that all the methods of testing their integrity and loyalty were based on deceit.

It was nothing wrong for a king to create dissension among the people of his rival's kingdom, particularly to provoke sedition among the people, who were somehow or other, humiliated by that king.

State-control of the detestable profession of prostitution seems to have been resorted to for enriching the exchequer with the income derived from this source.

From IV.4 and 5 it is learnt that for detecting anti-social elements, various kinds of stratagem were recommended by the author of the Arthashastra.

Perhaps the climax of ruthlessness, advised for the security of a king is found in 1. 17. In this connection, Kautilya refers, apparently with approval, to the views of some authorities. Of them, Bharadvaja holds that princes, like crabs, devour their fathers. So, it is safe for a king to put to death such a son as does not love his father. Another authority, Vatavyadhi, says that it should be so arranged that such a son becomes excessively addicted to sensual pleasures. In V.1, Kautilya's advice is this. If a powerful member of the royal council (sabha) proves to be a menace to the kingdom, then the king may instigate the brother of that man to kill him. For this service, the king will promise to induct him into the post of the murdered person. After the operation, the king will convict him of fratricide, and put him to death. In V.2, the king has been advised to fill his depleted treasury with the wealth forcibly taken away from temples.

Adhikarana XTV, called Aupanisada (secret ways of destroying enemies) is a catalogue of nefarious tactics recommended for the destruction of enemies. For instance, the secret administration of poison is recommended for liquidating the enemy.

It is interesting to note that the ancient Greeks, particularly the Spartans, strongly felt that principles of morality were to be shunned in the interest of the State. In this respect, the opinion of Lysander (395 BC), a great military and political leader, is well known (Plato, Lysander, p. 7). Those, who believed that the descendants of Heracles (ad 575-641), an inspiring military leader, should not take recourse to deceitful means in battle, were ridiculed by the opponents; their

argument was that when the lion's skin fails to protect us, the jackal's skin ought to be sewn over it.

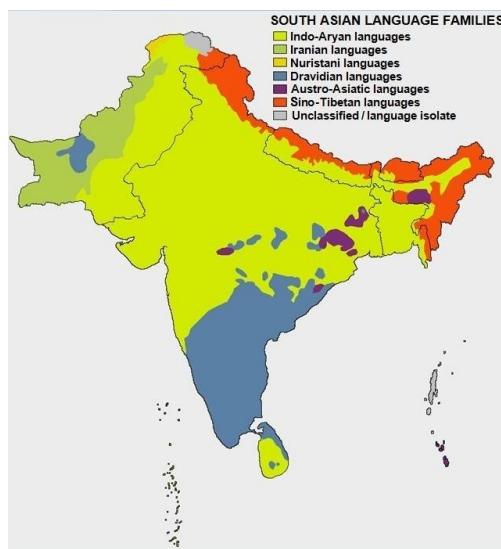
Language and Grammar

It is said that for the great Greek civilization, Geometry was the core science. For the older Indian civilization, Grammar (*vyākaraṇa*) is the core science. It was the first science to develop because it was needed to maintain and to understand the large body of intellectual texts such as the four knowledge texts, the *Vedas*, the numerous philosophical *Upaniṣads*, the prose *Brahmanas*, the sociological *Dharmaśāstras* and the phonetic-linguistic *Pratiśākhya*s.

India has been a knowledge society since the beginning, and for the Indian people *jñāna*, knowledge, is superior to action (*karma*) and worship (*bhakti*) and is considered as the great purifier. However, another important view is that knowledge and action are equally important. As the *Yoga-Vāsiṣṭha* notes, for human being's knowledge and action are like the two wings of a bird, both indispensable.

Indian languages may be grouped into Dravidian (see the map below) mainly in the northern part of India that includes languages spoken Kannada, Telugu and Malayalam. East, the northern Himalayan regions Chhattisgarh, Andaman etc. to the Dardic group.

The largest one is that of Indo-Aryan in the northern part of India. The second largest is the Dravidian that includes languages spoken in the southern part of India, the chief ones being Kannada, Telugu and Malayalam. Languages spoken by small communities in the North the northern Himalayan regions and also in different small areas man etc. belong to the Austro-Asiatic family while Kashmiri belongs to the Dardic group.



While there are almost 1,600 languages spoken in India, the Eighth Schedule of Indian Constitution accepts twenty-two as the official languages of India.

India's languages use a number of scripts, though only about 30 of the 1,600 languages are written down. Some of the major scripts used in Indian languages, including inscriptions, are Brahmi, Kharoshthi, Sharada, Devanagari, Dravida, Old Tamil, Perso-Arabic.

ક	ક̄	િ	િ	લ	લ̄
એ	એ	ઓ	ઓ	એ	એ
કા	કા	ગા	ગા	ના	ના
ચા	ચા	જા	જા	ઝા	ઝા
તા	તા	ધા	ધા	ના	ના
ટા	ટા	ડા	ડા	ધા	ધા
દા	દા	દા	દા	ના	ના
પા	પા	બા	બા	ભા	ભા
યા	યા	લા	લા	લા	લા
શા	શા	સા	સા	હા	હા

Study of Language in India

In R̄gveda, language is described as a revealer of true knowledge. Bharṭṛhari (5th century CE), the great grammarian, says that knowledge and language are interwoven. J.F. Staal has rightly observed that the Indian mind is obsessed with language and philosophy.

And indeed language has been studied since ancient times, aspects and issues such as:

- i. what is language,
- ii. speech-sounds (varṇamālā) and sound patterns (dhvani karma),
- iii. formation of words (pada-racanā),
- iv. classification of words (pada-jāti),
- v. process of derivation of a grammatical form of words,
- vi. meaning and interpretation of words and texts,
- vii. language of literary compositions,
- viii. meaning in / of a literary work,
- ix. relation between a word and the object it denotes, and
- x. śabda as the creative principle

Disciplines of Language Studies in India

Let us discuss in brief the four of the six vedāṅgas that deal with language: śikṣā (phonetics), vyākaraṇa (grammar), nirukta (etymology) and chanda (prosody).

Śikṣā (Phonetics)

Phonetics, the science of speech-sounds, developed in response to the need to preserve and articulate accurately the Vedic hymns (mantras) in the oral tradition. Yāska refers to this in his Nirukta. Phonetic study produced a brilliant understanding and a highly sophisticated analysis of the speech-sound structure and sound patterns of human languages. Four aspects of the speech-sounds have been studied:

- (i) how speech-sounds are produced,
- (ii) listing and classification of speech-sounds (varṇamālā, garland of letters or speech-sounds, the alphabet),
- (iii) sounds in context (sandhi), and
- (iv) how a sound changes when it is spoken along with other sounds.

Nirukta (Etymology)

Nirukta is the science of study of the meaning of words used in texts. It was composed by Yāska (9th century BCE). It is a commentary on Nighaṇṭu, a classified list of Vedic words compiled by Yāska himself. The text is composed in the form of a discussion. By the time of Yāska, the language of the Vedas had become difficult to understand because many words had gone out of use and their meanings were no longer clear. So some scholars, such as Kautsa, argued that Vedic hymns are meaningless. So Yāska prepared a list of such difficult words (Nighantu) and then explained their origin and meaning (in Nirukta).

Vyākaraṇa (Grammar)

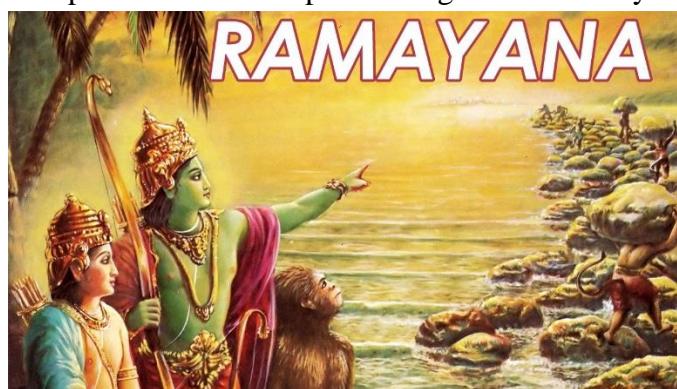
Grammar is valued as the most important discipline for the study of all other knowledge disciplines. The first attested study of language is a kind of lexicography, list-building — there are many pada-paṭha, enumerations of the Vedic words. It is not possible to do this without a knowledge of the grammar of language. These are lists of verb roots, prefixes etc. This breaking-down of a continuous text into its parts such as sentences and words is not possible without some knowledge of vyākaraṇa, literally ‘an instrument of division or analysis’. The scholars who prepared these lists of nouns or verbs were the first grammarians. In Sanskrit, several such lists have been made for both compositional / written (vaidikī) and spoken language (laukikī).

Chanda (Prosody)

The Vedas are also India’s first literary compositions and the Vedic seers are the first poets. A major portion of the Vedic compositions is metrical. So the science of prosody also developed in India in very early times. In oral traditions, prosody also helps to maintain the text as it is. A change occurring in a versified text in course of time can be easily traced as it disturbs the rhythm (flow) of the text. Sage Piṅgala, supposed to be a contemporary of Pāṇini, had composed a prosody text called Piṅgala-sūtra or Chandasūtra.

Literature

Indian literature has a long history, extensive linguistic diversity and immense variety of forms. The tradition records that the ancient sage Vālmīki, the composer of the Ramāyāna, was the first to compose a śloka, a metrical couplet, dealing with the theme of suffering. The legend goes that he was a hunter and he killed one of the mating birds — when its mate died, the other bird went into wails of lamentation. On observing its deep anguish, Vālmīki gave up hunting, became an ascetic and composed the first couplet dealing with a worldly matter.



Indian literatures are basically a product of the essentially oral Indian culture. Orality is an alternative culture — it may get written down or may co-exist with written analogue or it may not get written down. But even when an oral culture gets written down, it continues to be oral — witness for example texts such as Mahābhārata that remain recitative, performative texts even when rendered in different languages. There are also widespread compositions in almost all Indian languages of verse narratives devoted to love and war that are aural-visual compositions and are meant to be performed. As Bhalchandra Nemade notes in his 2009 book Nativism, ‘For centuries we have been accustomed to literature primarily as an oral manifestation of language.

The Mahabharata (composed between 300 BC and 300 AD) has the honor of being the longest epic in world literature, 100,000 2-line stanzas (although the most recent critical edition edits this down to about 88,000), making it eight times as long as Homer's Iliad and Odyssey together, and over 3 times as long as the Bible (Chaitanya vii). According to the Narasimhan version, only about 4000 lines relate to the main story; the rest contain additional myths and teachings. In other words, the Mahabharata resembles a long journey with many side roads and detours. It is said that “Whatever is here is found elsewhere. But whatever is not here is nowhere else.”

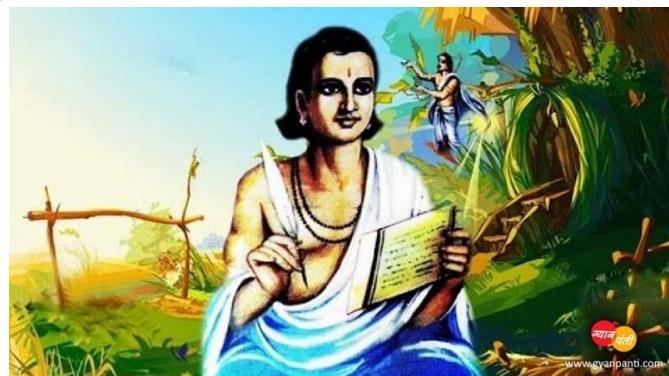
The name means “great [story of the] Bharatas.” Bharata was an early ancestor of both the Pandavas and Kauravas who fight each other in a great war, but the word is also used generically for the Indian race, so the Mahabharata sometimes is referred to as “the great story of India.



The Ramayana, along with the Mahabharata and the Puranas, constitutes the epic literature of India, composing the Itihasa(History) and the Purana, the study of which has been lightly stressed as necessary for the correct interpretation of the Vedas for over two thousand years, the Ramayana, like the Mahabharata, has been influencing deeply the religious and moral thought. Swami Vivekananda declared Ramayana and Mahabharata as the two encyclopedias of the ancient Aryan life and wisdom, portraying an ideal civilization, which humanity has yet to aspire after. According to MacDonnell, ‘Probably no work of world literature, secular its origin, has ever produced so profound an influence on the life and thought of a people as the Ramayana. The Ramayana and the Mahabharata, representing the ethos of the Indians, are the two national Epics of India. One of the greatest poets and dramatists in Sanskrit. His chronicle of the kings of the Raghu clan ('Raghuvamsha'), the great play 'Shakuntala' and other works depict, through many great characters, the highest ideals of life as seen by the ancient people of Bharat.

Kalidas

There are hundreds of languages in the world. However, great and classical literature which people in all countries need to read is found only in a few languages. One such great language is Sanskrit. It is one of the oldest languages. It is the mother of several Indian languages such as Hindi, Bengali and Marathi in the North. Kannada, Telugu and other languages in the South have also been nourished by it.



It needs the genius of poets who create literary epics and great thinkers for a language to achieve world-renown. Sanskrit is eminently lucky in this respect. Sages' celebration of the wonders of

nature, the sky, the stars, mountains and rivers, the sun, the moon, the clouds, fire ('Agni') and their devout offering of prayers to the Universal Power are all found in the Vedic classics which/are in Sanskrit. Puranas and historical epics like the Ramayana and the Mahabharat vividly describe the battle between the good and the evil. They also portray the virtues like devotion to truth, a sense of sacrifice, heroism, cultured living, etc. In Sanskrit there are also beautiful stories of birds and animals like Panchatantra; stories extolling good and basic qualities of wisdom and intelligence. Sanskrit can also justly boast of a rich treasure house of plays, poems and many scientific and philosophical treatises.

Sanskrit Literature

India has 22 officially recognized languages, and a huge variety of literature has been produced in these languages over the years. Hindu literary traditions dominate a large part of Indian culture. Apart from the Vedas, which are a sacred form of knowledge, there are other works such as the Hindu epics Ramayana and Mahabharata, treatises such as Vaastu Shastra in architecture and town planning, and Arthashastra in political science. The most famous works in Sanskrit are the Hindu holy texts like the Vedas, Upanishads, and Manusmriti. Another popular literature, Tamil literature has a rich literary tradition spanning over 2000 years, and is particularly known for its poetic nature in the form of epics, and philosophical and secular works.

Other great literary works, which marked the golden era of Indian literature, include 'Abhijanam Shakuntalam' and 'Meghdoot' by Kalidasa, 'Mricchakatika' by Shudraka, 'Svapna Vasavadattam' by Bhaasa, and 'Ratnavali' by Sri Harsha. Some other famous works are Chanakya's 'Arthashastra' and Vatsyayana's 'Kamasutra'.

The most famous works of the Indian literature can be traced in the vernacular languages of the northern Indian cults of Krishna and of Rama. Also included are the 12th-century poems by Jaydev, called the 'Gitagovinda' and religious love poems written in Maithili (eastern Hindi of Bihar). Literature was also produced in the form of Bhakti (a personal devotion to a god) addressed to Rama (an avatar of Vishnu), most notably in the Avadhi (eastern Hindi) works of Tulsi Das; his 'Ramcharitmanas'. The early gurus or founders of the Sikh religion, especially Guru Nanak Dev and Guru Arjun Dev, also composed bhakti hymns to their concepts of deity. In the 16th century, the Rajasthani princess and poet Mira Bai addressed her bhakti lyric verse to Krishna, as did the Gujarati poet Narsimh Mehta. Hindi Literature

Hindi literature started as religious and philosophical poetry in medieval periods in dialects like Avadhi and Brij. The most famous figures from this period are Kabir and Tulsidas. In modern times, the Khadi dialect became more prominent and a variety of literature was produced in Sanskrit. Chandrakanta, written by Devaki Nandan Khatri, is considered to be the first work of prose in Hindi. Munshi Premchand was the most famous Hindi novelist. The other famous poets include Maithili Sharan Gupt, Jaishankar Prasad, Sumitranandan Pant, Mahadevi Varma, and Ramdhari Singh 'Dinkar'.

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In the British era, a literary revolution occurred with the influence of Western thought and the introduction of printing press. Purposeful works were being written to support the cause of freedom struggle and to remove the existing social evils. Ram Mohan Roy's campaign for introduction of scientific education in India and Swami Vivekananda's works are considered to be great examples of the English literature in India.

During the last 150 years, many writers have contributed to the development of modern Indian literature, written in a number of regional languages as well as in English. One of the greatest Bengali writers, Rabindranath Tagore became the first Indian to win the Nobel Prize for literature (*Gitanjali*) in 1913.

In 1835, Britain's Lord Macaulay scoffed that "a single shelf of European books [is] worth the whole literature of India and Arabia." Hindu literature says MIT philosophy professor Huston Smith lacks a tragic element because in the Hindu view no one lifetime determines achievement or failure. The family is important in Indian literature and drama. Both the Mahabharata and Ramayana—the two most famous works of Indian literature and theater— are family epics, featuring cousins, uncles and aunts "struggling and killing each other over land and dharma and then mourning inconsolably." Many American dramas feature tough individuals. When these stories are adapted to India the individuals are first given a mother, father and ideally a brother or sister. The Hindi version of Harry Potter sells for \$3.60

Many Indians ave a passion for Persian poetry. Laila Majnu is a great Persian love story also well known in India. Sufism—mystical Islam—has had a strong impact on Indian literature. This is most evident in the poetry of great masters such as Kabir (1440-1518) a poet saint who helped introduce Sufi mysticism to wide audience among Muslims, Hindus and Sikhs.

The Gupta Empire (A.D. 320 to 647) is regarded as the classical period or golden age of Hindu art, literature and science. Art (often erotic), architecture and literature, all patronized by the Gupta court, flourished. Philosophy and science also enjoyed a kind of golden period. Under the Guptas, the Ramayana and the Mahabhatta were finally written down in the A.D. 4th century. India's greatest poet and dramatist, Kalidasa, acquired fame expressing the values of the rich and powerful. Poetry in the Gupta age tended towards a few genres: religious and meditative poetry, lyric poetry, narrative histories (the most popular of the secular literatures), and drama. The Nalanda University in Bihar, came to fame during the Gupta rule. [Sources: Glorious India, Library of Congress *]

Although Sanskrit was the language of learning and theology in South India, as it was in the north, the growth of the bhakti (devotional) movements enhanced the crystallization of vernacular literature in all four major Dravidian languages: Tamil, Telugu, Malayalam, and Kannada; they often borrowed themes and vocabulary from Sanskrit but preserved much local cultural lore. Examples of Tamil literature include two major poems, Cilappatikaram (The Jewelled Anklet) and Manimekalai (The Jewelled Belt); the body of devotional literature of Shaivism and Vaishnavism--Hindu devotional movements; and the reworking of the Ramayana by Kamban in the twelfth century.

English is arguably the most important thing the British left behind in India. English helped unify the Indian subcontinent by providing a common language for a region with a multitude of languages and dialects. It also provided a common tongue for administration and education. The Indian constitution and Indian legal code are written in English and the famous speech delivered by Nehru after India became independent was in English. English is especially popular among the affluent middle class. As was true in the colonial era, English is a prerequisite to getting ahead, especially in the outsourcing and technology world. English is more widely spoken in southern India than northern India in part because southerners loath to use Hindi.

The way English is spoken varies a great deal from place to place and with levels of fluency and wealth. It is commonly said that there are at least 15 different kinds of English, one to go with each of the each of the official languages.

Early Indian Literature and Theatre

Dr. Jukka O. Miettinen of the Theatre Academy of Helsinki wrote: “Theatre and dance, which are inseparable art forms in Indian culture, are present even in the earliest works of Indian literature. The Veda literature, or the four Vedas, which forms the basis of early Brahmanism and later Hinduism, mentions dance and open-air theatrical performance. Otherwise, the Vedas mainly include invocations and hymns to the gods, ritual formulas, and short stories.

“The Vedic tradition evolved orally through the centuries and received its written form much later in the post-Vedic period. Towards the end of the Vedic period, various gods, which were originally rather simple personifications of aspects of nature, began to acquire complicated mythologies, which personalised them. These mythologies were further elaborated in the early centuries A.D. by the Purana literature, while at the same these mythical stories became the main theme for much of the Indian theatrical arts.

“Indian literary heritage includes several shastras or manuals (also code, theory, treatise) covering a vast range of subjects from cooking, elephant and horse breeding, and lovemaking, as well as several art forms, such as poetics, music, theatre, and dance. The earliest treatise for theatre and dance is the Natyashastra or the Drama Manual. Other shashtra manuals also give information about theatrical practices, each according to their own specific viewpoint. The Kamashastra (Kamasutra), the treatise on love, informs us about the kind of role that theatrical performances had in the life of the upper class educated male citizen. The Arthashastra, the treatise on politics and administration, on the other hand, gives detailed information about the role of different kinds of performers in the ideal, yet highly hierarchical, society described in this manual written in the 4th century B.C.”

Sanskrit and Early Indian Literature

Sanskrit, Prakrits and the History of Indo-Aryan Languages of India

Modern linguistic knowledge of the process of assimilation of Indo-Aryan language comes through the Sanskrit language employed in the sacred literature known as the Vedas. Over a

period of centuries, Indo-Aryan languages came to predominate in the northern and central portions of South Asia.

Sanskrit is the ancient language of India and the sacred language of Hinduism. The Asian cousin of Latin and Greek, it is ideal for chanting as it is full of sounds that resonate in a special way. Traditionally it was a taboo for any caste other than Brahmins (India's highest caste) to learn Sanskrit—"the language of the gods." The Hindu epic Ramayana described a lower caste man who had molten metal poured in his ear after he listened to Sanskrit scriptures reserved for upper class Brahmins.

As Indo-Aryan speakers spread across northern and central India, their languages experienced constant change and development. By about 500 B.C., Prakrits, or "common" forms of speech, were widespread throughout the north. By about the same time, the "sacred," "polished," or "pure" tongue--Sanskrit--used in religious rites had also developed along independent lines, changing significantly from the form used in the Vedas. However, its use in ritual settings encouraged the retention of archaic forms lost in the Prakrits. Concerns for the purity and correctness of Sanskrit gave rise to an elaborate science of grammar and phonetics and an alphabetical system seen by some scholars as superior to the Roman system. By the fourth century B.C., these trends had culminated in the work of Panini, whose Sanskrit grammar, the Ashtadhyayi (Eight Chapters), set the basic form of Sanskrit for subsequent generations. Panini's work is often compared to Euclid's as an intellectual feat of systematization.

The Prakrits continued to evolve through everyday use. One of these dialects was Pali, which was spoken in the western portion of peninsular India. Pali became the language of Theravada Buddhism; eventually it came to be identified exclusively with religious contexts. By around A.D. 500, the Prakrits had changed further into Apabhramshas, or the "decayed" speech; it is from these dialects that the contemporary Indo-Aryan languages of South Asia developed. The rudiments of modern Indo-Aryan vernaculars were in place by about A.D. 1000 to 1300.

It would be misleading, however, to call Sanskrit a dead language because for many centuries huge numbers of works in all genres and on all subjects continued to be written in Sanskrit. Original works are still written in it, although in much smaller numbers than formerly. Many students still learn Sanskrit as a second or third language, classical music concerts regularly feature Sanskrit vocal compositions, and there are even television programs conducted entirely in Sanskrit.

Dr. Jukka O. Miettinen of the Theatre Academy of Helsinki wrote: "The classical language of Indian civilisation is Sanskrit. The four Vedas were written in Sanskrit, and later an enormous corpus of literary works of various kinds, including the so-called Sanskrit Dramas, which will be discussed later, were written in Sanskrit. Panini, the great grammarian of Sanskrit, mentions a short text on acting in the 5th century B.C. Sanskrit remained the language of the educated elite until the Indian Medieval Period. The way people informally spoke Sanskrit, however, changed

through the centuries. Thus Sanskrit ceased to be a natural, spoken language, a process similar to the fate of Latin in Medieval Europe.

“The opposite of standard Sanskrit is Prakrit, varieties of dialects, which evolved from Sanskrit. For example, one revolutionary aspect of the Buddha’s career as a teacher was that he preached in Prakrit, which was understood by ordinary people too. Prakrit became an important element in classical Sanskrit Drama, since the clown and many minor characters spoke vernacular Prakrit. India now has dozens of languages, including English, which, alongside Hindi, is a kind of universal language throughout the country. Sanskrit, however, remains an important key to understanding India’s religions and philosophy, as well as classical literature and theatre.”

Buddhist Literature and Theatre

The Jatakas is a group of stories that tell of Buddha's rebirths in the form of Bodhisattvas and animals, with each story embodying lesson from Buddha's teachings.

Dr. Jukka O. Miettinen of the Theatre Academy of Helsinki wrote: “Buddhist literature indicates that early Buddhism also created a rich theatrical tradition. For example, the Pali Suttas (5th–2nd centuries B.C.) mention theatre groups and various kinds of performers. It was by no means forbidden to portray the Buddha himself on stage, as has been sometimes the case later.

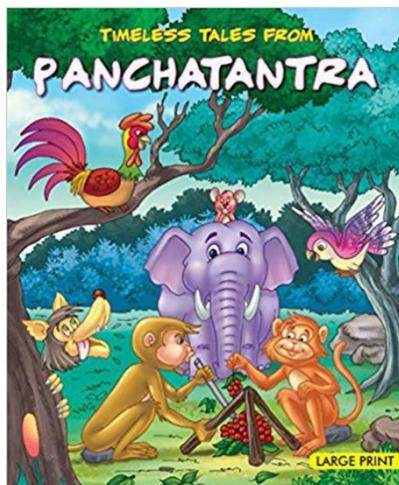
“The Buddhist theatrical tradition spread later via the caravan route network, or the “Northern Silk Road”, to East Asia, and influenced the development of early theatre in Central Asia, China, Korea and even Japan. Another wave of influence spread to the regions of the Himalayas, where a rich tradition of monastery dramas evolved.

“The Indian cultural sphere was the source of important Buddhist literature, which has been employed by numerous theatrical traditions both in ancient India and present-day Southeast Asia. The Buddhist Jataka or Birth Stories are morally instructive stories that came about at different times, in which the main character is an animal, a human being or a superhuman being seeking to do good. They were gathered into a collection of 547 (or 550) stories in the Pali language, the sacred language of Buddhism. The main characters were described as early incarnations of the Buddha. The Jatakas give much valuable information about various theatrical practices from the period they were written, i.e. c. 600–200 B.C.”

Panchatantra and Other Old Indian Stories

The Panchatantra is one of the best-known collections of old stories. "Panchatantra" is a Sanskrit word that means "five books." Each book has a framework story, sort of like Arabian Nights, into which shorter stories are interwoven. The fable-like stories are full of humor and sage advice. Many scholars say that The Panchatantra was originally composed in Kashmir about 200 B.C. According to legend, it was written for three princes to teach them the principals of "right living." Many of the stories are attributed to a writer named Bidpai, a wise man from India.

The Gupta period (A.D. 320 to 647) literature consists of fables and folktales written in Sanskrit. These stories spread west to Persia, Egypt, and Greece, and became the basis for many Islamic literary works such as, Ali Baba and the Forty Thieves and Aladdin and his Magic Lamp.



The Panchatantra and Kamasutra were written during this period. Storytelling has been a popular form of entertainment in India for centuries. Many regions and ethnic groups have their traditions of folk stories. The Hitopadesa ("Book of Good Counsel" in Sanskrit) is another book of fables written after The Panchatantra. The stories from Arabian Nights are very popular in India, many of the stories originated in India. Ancient philosophers were articulated by Shakyamuni.

Balladeers today begin learning the art of storytelling, dancing singing and playing the 19-stringed ravanhatta at the age of ten or eleven. By the age of about 15 they become full-fledged bhopas, balladeers and to tell and act out a 14th century story about a Rajput chief named Pabuji. The story is traditional performed at night in front of a huge illustrated scroll and it can take up to a week to relate.

R.K Narayan

R.K Narayan (1906-2001) is famous for his novels set in the small, fictional town of Malgadi in southern India. Bibhuti Bhushan Banerji wrote the Apu trilogy and Pather Panchali, made into a movie by the great Indian filmmaker, Satyajit Ray. Khushwant Singh is one of India's best known contemporary authors. A Sikh with a reputation as an eccentric, his book books include serious works of history, dirty joke books and The Fantasies of an Octogenarian, written when he was 84. His works captured the essence of ordinary life.

Often compared to William Faulkner, Narayan is one of the greatest and celebrated novelists in India. He is distinguished for his simple and unpretentious English writing style and is one of the most widely read Indian novelists. His stories were grounded in a compassionate humanism and celebrated the humour and energy of ordinary life. R.K. Narayan's writing style was marked by simplicity and subtle humour. He told stories of ordinary people trying to live their simple lives in a changing world. Narayan was nominated for the Nobel Prize in Literature multiple

times but did not win the honor. His popular works include The English Teacher, The Financial Expert and Waiting for the Mahatma.

Narayan was born on October 10, 1906 in Madras. His father was a provincial head master. Narayan spent his early childhood with his maternal grandmother, Parvathi in Madras and used to spend only a few weeks each summer visiting his parents and siblings. R.K. Narayan studied for eight years at Lutheran Mission School close to his grandmother's house in Madras, also for a short time at the CRC High School. When his father was appointed headmaster of the Maharaja's High School in Mysore, R.K. Narayan moved back in with his parents. He obtained his bachelor's degree from the University of Mysore.

Narayan's original name was Rasipuram Krishnaswami Narayanswami. He took the name R. K. Narayan at the suggestion of Graham Greene. He learned Tamil and English in school. Narayan completed his education in 1930 and briefly worked as a teacher before deciding to devote himself to writing. He began with his first novel Swami and Friends in 1935. Besides novels, he wrote short stories, travelogues, condensed versions of Indian epics in English besides his memoir.

Books by R.K Narayan

Narayan's His first novel, Swami and Friends (1935), is an episodic narrative recounting the adventures of a group of schoolboys. That book and much of Narayan's later works are set in the fictitious South Indian town of Malgudi. Narayan typically portrays the peculiarities of human relationships and the ironies of Indian daily life, in which modern urban existence clashes with ancient tradition. His style is graceful, marked by genial humour, elegance, and simplicity.

Narayan wrote fourteen novels, five volumes of short stories, a number of travelogues and collections of non-fiction, condensed versions of Indian epics in English, and the memoir My Days. Among the best-received of Narayan's novels are The Bachelor of Arts (1937), The Dark Room (1938), The English Teacher (1945), The Financial Expert (1952), Waiting for the Mahatma (1955), The Guide (1958), The Man-Eater of Malgudi (1961), The Vendor of Sweets (1967), Malgudi Days (1982), A Tiger for Malgudi (1983) and and The Grandmother's Tale (1993). Narayan also wrote a number of short stories; collections include Lawley Road (1956), A Horse and Two Goats and Other Stories (1970), and Under the Banyan Tree and Other Stories (1985). In addition to works of nonfiction (chiefly memoirs), he also published shortened modern prose versions of two Indian epics, The Ramayana (1972) and The Mahabharata (1978). In 1958 Narayan's work The Guide won him the National Prize of the Indian Literary Academy, his country's highest literary honor. In 1980 he was awarded the A.C. Benson Medal by the Royal Society of Literature and in 1982 he was made an Honorary Member of the American Academy and Institute of Arts and Letters. Besides, he was also conferred honorary doctorates by the University of Mysore, Delhi University and the University of Leeds. Narayan died in 2001 at the age of 94. He wrote for more than fifty years, and published until he was eighty-seven.

Rabindranth Tagore

Rabindranth Tagore (1861-1941), a poet, philosopher and writer from Calcutta, was the first non-European to win the Nobel Prize in literature. He was a formidable personality who played a major role in shaping the cultural life of India at the turn of the 20th century, "when the country was struggling for its independence and searching for its identity in the international community. He also helped introduce Indian literature to the West."

Tagore had a long white beard. He looked more like a holy man than a writer. In addition to being a poet and fiction writer he was also a dramatist, composer, playwright, painter, educator political thinker, and philosopher of science. Although he has been forgotten in much of the world and India he remains greatly loved among Bengalis in India and Bangladesh.

Nehru once wrote, "Gandhi and Tagore. Two types entirely different from each other, and yet both of them typical of India...There are many of course who may be abler than them or greater geniuses in their own line...It is not so much because of any single virtue, but because of the tout ensemble, that is felt. Among the world's great men today Gandhi and Tagore were supreme as human beings."

Tagore won the Nobel Prize for Literature in 1913. The chairman of the committee that selected him said, "In times to come, history will know better how to appraise the importance and influence of his work and draw inspiration from it." While he was in Sweden to receive the award Tagore insisted that a goat be taken his Stockholm hotel room so that he could a fresh supply of goat milk.

Works by Tagore

Tagore wrote more than 2,500 songs about God, nature and love as well poems and prose. He also produced more than 2,000 paintings and drawings, 28 volumes of poetry, drama, operas, short stories, novels, essays, diaries and large number of letters. The emotional impact of the world was also equal to the output.

Tagore's works initially won him recognition in Bengal. Gitanjali, an English translation of some of his poems, won worldwide acclaim in 1913, and paved the way for his winning the Nobel prize. The surprising thing about this work was that would probably have been better if Tagore hadn't translated the poems himself. Tagore wrote Gitanjali after his wife, son and daughter died in quick succession.

One of his more interesting short stories, Kabuliwalah, is about the friendship between a murderous Afghan merchant and a small girl told in the eyes of an upper-class Bengali man. Tagore's novel Home and the World is about a housewife who turns her back on her family and joins the struggle against British colonialism.

Tagore songs are collectively known as Rabindrasangeet ("the music of Rabindra"). They are frequently heard on the streets of Calcutta and are fixtures of wedding and festivals. One goes

something like this: "the necklace bruises me; it strangles when I try to take it off. It chokes my singing. Take it from me! I'm ashamed to wear it. Give men a simple garland in its place."

On his dabbling with dance and opera, Jukka O. Miettinen of the Theatre Academy Helsinki wrote: "He was particularly interested in, what he called, the "operatic" Southeast Asian theatre forms. He exclaimed that India had lost this kind of forms and he dedicated much energy to creating his own theatrical style, also combining dance and music Tagore had seen Manipuri dances even as early as in 1919 and became a great admirer of them.

Tagore and Indian National Anthem

Tagore Rabindranth wrote a poem which became the Indian National Anthem. It goes:
Where the mind is with fear and the head is held high;
Where knowledge is free;
Where the world has not
been broken up into fragments by narrow domestic walls;
...Where the clear stream of reason has not lost its way
into the dreary desert sand of dead habit;
...Into that heaven of freedom, my Father, let my country awake
Another song-poem Amar Sonar Bangla ("My Golden Bengal") became the national anthem of Bangladesh.

Festivals of India

1. Diwali



Diwali is the most spectacular festival of India, which is celebrated through the varied cultures of the country with vigor and enthusiasm, irrespective of different religions and societies. Autumn marks the arrival of this festival and the preparation for the same begins much in advance with people decorating their houses and exchanging gifts. Also known as the festival of lights, this festival is celebrated by decorating the houses with lights, clay lamps, and candles.

2. Holi



3. Dussehra

This festival marks the end of the nine-day long festival of Navaratrias. The day is commemorated as the day Lord Ram attained victory over Ravana, and therefore, this festival symbolizes the victory of good over evil. As a celebration, the symbolic statues of Ravana and his brothers Meghnath and Kumbhakaran, are built and placed at different avenues to be burnt by an arrow of fire.



Dussehra celebration in Mysore

4. Ramadan/ Eid –Ul-Fitr



EID celebration

One of the major religious festivals of India, Ramadan is celebrated mainly by the Muslim sect of the Indian demographic. Ramadan is the holiest month of the Islamic calendar and is used as the period for fasting, prayers, introspection and religious contemplation. The end of Ramadan is

celebrated with a three-day festival of Eid-Ul-Fitr, where Muslims break their fasts by gathering together for prayers and celebration.

5. Christmas

Among the most famous festivals of India, Christmas is celebrated on the 25th of December each year. Celebrated to commemorate the birth of Jesus Christ, this festival is the time for religious and cultural celebrations for Christians. Usually celebrated by decorating the Christmas tree and exchanging gifts, this festival is known for merrymaking.



Christmas celebration

6. Ganesh Chaturthi



Ganesh Chaturthi Celebration

Celebrated with much fervor and excitement, the festival of Ganesh Chaturthi revels the homecoming of Lord Ganesh. One of the most colorful and exciting 10 day long celebrations of the festival are initiated with installing the idol of Lord Ganesh at home to bless the house, and its members with happiness and prosperity. At the end of the ten days, this idol is taken with much pomp and show to be immersed in water.

7. Durga Pooja

This festival is nothing less than a five-day long carnival in Bengal with religious associations. Held in the honor of Goddess Durga, this puja is a festival which witnesses exuberant preparations for months in advance. Setting of decorative pandals and preparing for various cultural activities are a part of this festival.



Durga pooja

8. Baishakhi

One of the major festivals of the Sikhs, this festival is celebrated on the 13th of April each year. This festival marks the harvest of Rabi crops and therefore, is reveled heartily among the farming community of Punjab. Celebrated by performing traditional folk dances of the state, this festival has a great religious significance too.



Baisakhi celebration

9. Easter



Easter celebration

This festival celebrates Jesus Christ's resurrection from the dead and is among the most important festivals for Christians. Celebrated on the first Sunday falling between March 22 and April 25 every year, this festival is reveled with inexplicable enthusiasm, so much so, that this

festival is celebrated throughout the preceding week of the festival itself. Easter eggs, bunnies, baskets and candy are a standard part of this event.

10. Onam



Onam Festival

The biggest festival of the state of Kerala, Onam is a harvest festival that is celebrated all across the state by people of all communities. Celebrated as the initiation of the Malayalam calendar, this festival falls between August-September. The festival lasts from 4-10 days and elaborate feasts, folk songs, elegant dances, energetic games, elephants, boats, and flowers, all are a part of this dynamic festival.

11. Raksha Bandhan and Bhai Dooj



Rakhshabandhan

Celebrated to cherish the bond between brothers and sisters, this festival is among the national festivals of India. Celebrated by applying saffron tilak on the brother's forehead and tying a rakhi on his wrist, this festival holds impeccable importance for Indian brothers and sisters.

12. Budh Poornima

Celebrated by the devotees of Gautam Buddha, this festival commemorates his birthday. The



festival falls in the Hindu month of Vaisakhaon on the day of the full moon. People celebrate this festival by preaching and discussing the life and teachings of Lord Buddha. to celebrate the festival, people worship decorated idols of Lord Buddha, eat simple, meditate and chant.

13.Krishan Janamashtmi

The legend of Lord Krishna's birth and his triumph over evil is celebrated on this single day. On this pious occasion, devotees throng temples to offer their prayers and bhog to their beloved deity. Another one of the religious festivals of India, it is celebrated with complete devotion by Hindus.



Janamashtmi

14. Pongal

Pongal is the four-day-long harvest festival celebrated in Tamil Nadu. The festival is celebrated as a thanksgiving to nature. Falling typically on the 14th or the 15th of January, this festival has different rituals for each of the four days. One of the famous festivals of India, it is celebrated with vigor and enthusiasm.

15. Maha Shivratri

This festival is an annual event in honor of the great Lord Shiva. The festival is celebrated on the 13th night or 14th day of the lunar month Maagha or Phalguna. The celebration of the festival



includes keeping day long and night long fast by devotees, performing rituals and offering prayers to the traditional Mahashivalingam.

16. Bihu

Bohag Bihu is one of the most important festivals of Assam. Beginning from the 14th of April, this festival is observed for a period of seven days.

Though the festival is only a week long, the celebration extends for a month. This festival has several rituals which are different for each of the days of celebration. Bihu dance is the specialty of this festival and is performed in different parts of the state on a regular basis for a complete month.



17. Chhath Pooja



This festival is celebrated in the devotion of the Sun God. The puja is observed to thank Sun God for his protection and to seek blessings from him for good health and happiness. Celebrated mainly in Bihar and Uttar Pradesh, this festival is now gaining national recognition too.

18. Makar Sankranti



Celebrated on the 14th of January each year, this festival is one of the oldest traditions in India. This festival is celebrated all over India but with different names in different states. It marks the end of an inauspicious period and the start of the auspicious month.

19. Hemis



Hemis festival

One of the biggest and prime festivals of Leh-Ladakh, the Hemis festival marks the birth anniversary of Ladakhi spiritual leader Padmasambhava. Culminating on the tenth day of the Tibetan lunar month, this festival is carried on for two days. Masked dance performers and traditional Buddhist rituals are the highlights of the festival.

20. Losar festival

One of the major festivals of the state of Arunachal Pradesh, this three-day long festival is celebrated with sheer pomp and show. The festival has distinguished and defined rituals for each of the three days. The merriment is enhanced by visiting friends and tying of colorful flags on

rooftops. Though the festival is for three days, the merrymaking can continue for up to a period of 15 days.



Traditional dance during losar festival

21. Hornbill festival

The 7-10-day festival is celebrated from the 1st of December each year and bears witness to all the major tribes of Nagaland. Exquisite costumes, colorful headgear, soulful war cries and warrior log drums are the highlight of this festival. One of the religious festivals of India, it is celebrated with great enthusiasm.



Hornbill festival

22. Lohri



A truly Punjabi folk festival, Lohri is celebrated primarily by the Sikhs and Hindus of the Punjab region or origin. Having a trail of legends behind it, this festival is primarily a thanksgiving day for farmers, where the harvest of the Rabi crop is celebrated. The main celebration of the festival involves lighting a bon fire and throwing in foods like gajak, chikki, puffed rice, popcorn and sugarcane in it, to pay homage to roots.

23. Karwachauth



This festival is celebrated by the women of north India for the safety and long life of their husbands. As a celebration of this festival, women dress up, apply henna on their hands and fast from sunrise to moonrise. The festival is a full day event with a plethora of vivid rituals.

24. Navratri



The nine-day long festival culminates in the lunar month of Ashwin. Considered to be one of the most important festivals of Hindus, this festival is celebrated with extensive grandeur. Sharad Navratri marks the start of the festive season in India. Being one of the different festivals of India, this festival stands out.

25. Teej

Celebrated to seek blessings for a happy married life from Lord Shiva and Goddess Parvati, this festival holds considerable significance for Hindus. Reveled in different parts of the country, this festival is celebrated to commemorate the day on which Lord Shiva accepted Goddess Parvati's love. As a ritual for this festival, women married and unmarried fast and worship clay idols of Lord Shiva and Goddess Parvati. Dressing up impeccably is also a part of this festival.



Kajli Teej Festival celebrations

26. Ram Navami



This festival celebrates the birth of Lord Ram and falls on the ninth day of the Hindu lunar year. Ram Navami usually falls in the month of March or April. Among the national festivals of India, this festival is celebrated with devotion and enthusiasm by Hindus.

27. Saga Dawa



One of the religious festivals of India, Saga Dawa is a major festival of Buddhists and is celebrated between May and June. Commemorating the enlightenment of Lord Buddha, this festival is celebrated in Sikkim by offering water, incense sticks, and dhog at the Buddhist monasteries. Chanting of mantras and turning of the prayer wheels are the other rituals of this event.

28. Dree Festival



Taking place on the 5th of July each year, this festival is the biggest festival of the Ziro valley and is celebrated to ensure a good harvest. The traditions of this festival include distribution of cucumber to everyone, as a symbol of good harvest. Other facets of the celebration include offering prayers to four gods, brewing and drinking of wine and savoring various local dishes.

29. Moatsu Mong

Again an agricultural festival of the northeast, Moatsu Mong festival is celebrated by the AO tribe of Nagaland to celebrate the completion of the sowing season. Cultural programs, cleaning of wells, brewing of beer and preparation of local savories are some of the highlights of the festival.



30. Lui-Ngai-Ni



This festival marks the seed sowing season in Northeast India each year. Taking place on 15th of February each year, this festival is celebrated with the preparation of various delicacies, the

performance of traditional dances and rituals of lighting fire to bless the seeds that are been sown.

31. Gangaur



Gangaur Celebration in Rajasthan

One of the most important festivals of the state of Rajasthan, Gangaur is celebrated each year in the lunar month of the Chaitra (March-April). This festival celebrates the heavenly union of Lord Shiva and Goddess Parvati and is considered as a symbol of marital happiness. In this festival, which is especially celebrated by women, clay idols of Lord Shiva and Goddess Parvati are worshipped and immersed in water on the last day of the festival. Celebrated with great fervor, processions, and decorations, this festival is among the famous festivals of India.

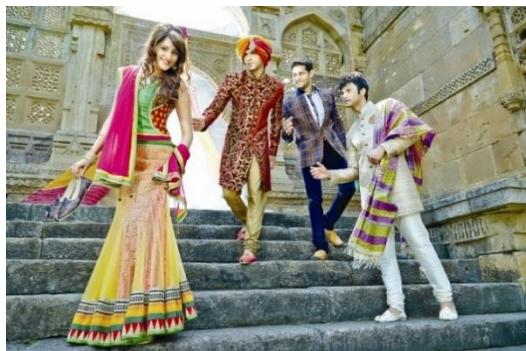
32. Mahavir Jayanti



The festival celebrated to commemorate the birth of Lord Mahavir, this is one of the main festivals of the Jain community. Reveled with great fervor and devotion, this festival falls during the period of March-April. Processions, joint chanting of prayers and giving alms to the poor are some of the highlights this festival.

The Indian belief system is much deeper than the apparent picture of gaiety (though that is something not to be missed) and to truly understand the depth of such greatness, one should understand the exquisite Indian culture. The ideal way to do that is to witness these astounding festivals first hand, which portray the real essence and depth of the Indian belief systems. The spellbinding effect that festivals of India have is truly something to be experienced and shared.

Traditional Dresses and Fashion Culture across different Indian States



Considering the cultural diversity from state to state in India, the country has a range of different languages, cuisines and fashion. Ethnic clothing in India not only vary by state but also according to the different religions, tribes and communities within the state. Heres a rundown of the various clothing and fashion styles found in some Indian states.

Assam



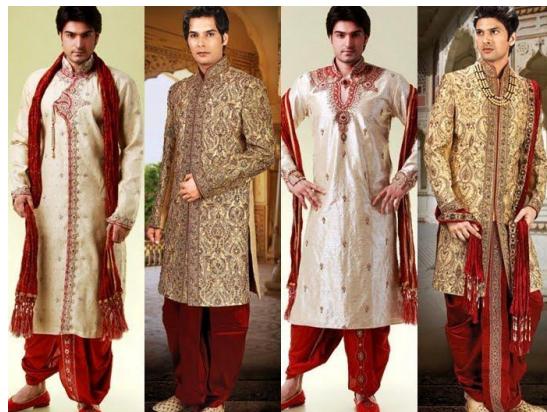
The clothing of Assam is as vibrant as it is varied. With several different tribes hailing from the region, there is a range of different ethnic clothing worn in Assam. Most of these are variations of the Mekhela, worn by women, and dhoti, worn by men. The women of the Bodo Tribe wear Mekhela paired with a chadar while women of the Thai Phake Tribe wear a striped girdle called Chiarchin. Many of the traditional wear in the state is made of the various kinds of silk exclusively produced in the region. Silks such as Paat, Eri and Golden Muga are used to make Sarees and Mekhelas.

Kolkata

The women of Bengal wear Sarees of various materials such as silk, Taant Cotton, chiffon, etc. The most popular modern draping method of Sarees originates from the British Capital of Kolkata. White Saree with red border is worn during many religious festivals and are made of cotton. The men of Kolkata wear Panjabi with Pajama or Dhoti. They are usually made of silk or cotton.



Uttar Pradesh



The most common of the traditional clothing of Uttar Pradesh is Salwar Kameez worn by the women. The distinctive style of bottom wear called Churidar originates from this state. They also wear Sarees with various embellishments. The men of Uttar Pradesh wear Kurta and Pajama along with headgear such as Topi and Pagri. Sherwanis are worn by men during festivals and special occasions.

Gujarat



Women in Gujarat traditionally wear Chaniyo and Choli, wearing embellished and embroidered Ghagra Choli and Lehenga Choli for religious festivals such as Navratri. Dupattas are worn as veils and are called Odhni. The men wear Churidar Pajamas and Kurta, paired with vibrant turbans for formal as well as casual occasions.

Punjab

Ensembles such as Salwar Kameez, ones featuring Churidar, are worn by the women of Punjab as well. Patiala Salwars originate from this state. The styles of this state feature scarves, or Dupattas, that contrast the color of the rest of the ensemble. The women of the state also wear Ghagra while the men wear Kurta Pajamas that sometimes feature the Churidar style as well. They also wear headgear such as Pagri. Punjab is known for its distinctive style of shoes, Juti, that has been adopted by the rest of the country for formal occasions.



Maharashtra

Sarees, paired with Choli, are the ethnic clothing of women in Maharashtra. The men of the state wear Dhoti, paired with Pheta. Their headdresses are made of cotton, silk or wool and are called Pagadi.



Jammu and Kashmir



Being a state that is so varied in communities and religion, Jammu and Kashmir is home to a variety of different fashion. Women in Jammu and Kashmir wear Pherans, which have different variations for Hindu and Muslim women. While the Hindu version has narrow sleeves, the Muslim version is characterized by its broad knee length sleeves. Hindu women pair these with a headdress called Taranga while Muslim women either wear Abaya or a headdress exclusive to the state that is tied around the head and pinned. The men wear Pherans meant for them with Turbans. The traditional clothing of Jammu and Kashmir is known for featuring bright contrasting color combinations.

Karnataka



The traditional clothing of the women of Karnataka is Saree. Karnataka, being the most popular supplier of silk in the country, produces Sarees made of Kanchipuram and Kanjivaram Silk, as well as those made of a variety of brocades and chiffons. The men of the state wear Lungi paired with Angavastram.

Kerala

The most well known of Kerala's ethnic wear is the Mundu. Worn mostly by men, the Mundu is the state's version of a Lungi. There are both formal and casual versions of this clothing as well various versions for women. These often have work done on them, with wedding wear having

the most intricate crystal embellishments. Sarees are also worn by women in this state and are often made of Kanchipuram Silk or Benarasi Silk and embellished in a similar way.



Delhi



Ethnic clothing for women in Delhi mostly consists of Salwar Kameez in its different variants and fashion style. They often feature Zardozi embroidery as well as influences from many other parts of India. The men wear Pajama with Kurta or Sherwani. Due to the metropolitan nature of Delhi, ethnic clothing from all parts of the country is seen here.

Arunachal Pradesh

Ladies wear a sleeveless chemise with a weaved, full-sleeves coat, alongside a slip or skirt. The clothing is never normally entire without ‘Mushaiks’ or petticoat. A skull-top loaded with Yak hair, called as the ‘Gurdam’, adds class to the general clothing. Men of this clan wear lungi of green shading with white, red and yellow yarn. They wear a sleeveless shirt and an upper piece of clothing.



Belief System

There are several founding principles or common values in Indian culture, these include:

- Tyaga, which is renunciation
- Dana, which is liberal giving
- Nishtha, which is dedication
- Satya, which is truth
- Ahimsa, which is non-violence
- Upaksha, which is forbearance

Respect is an extremely valued component of the everyday life of people in India. Children are taught from a very young age to always respect their elders. Even as adults, the elderly are still at the top of the totem pole. Children take care of their parents once they are adults, and their parents will most likely live with them until their lives have ended.

Family is also an extremely important component of Indian culture. Families are valued highly and are a part of an individual's life until death. Often when people get married, they take in their older relatives and other relatives and provide support of them.

Indians seek harmony throughout life. They are concerned with "cosmic energy."

Rites & Rituals:

Indian customs and rituals enrich the nation with culture and customs which have been followed over centuries and continue to form an integral part of Indian tradition. Different religions and faiths, which are a part and parcel of various communities of India, make the rituals very unique and interesting. Every belief system is identified by its own practiced set of rites and rituals thus making up a galaxy of rituals. Such rituals are practiced by innumerable residents of India with deep respect and devotion. Starting from birth and continuing till death, Indians follow a wide range of customs and rituals which are revered. Hindu Customs and Rituals



Hinduism comprises innumerable social and religious rituals and customs. They celebrate religious festivals by the standard ritual of inviting 'Brahmin' priests to their houses who officially conducts the 'puja' or process by which Hindu deities are worshipped. 'Yajnas' are performed by the holy priests to invoke the divine blessings of Hindu gods and goddesses. A detailed series of life-cycle rituals mark the major transitions in the life of the individual. Soon after the birth of a child, the 'Namkaran' ceremony is held, which is marked by the chanting of Sanskrit 'Shlokas' and singing of hymns. Hindu customs assert the significance of the 'Upanayana' or thread ceremony amongst Brahmins, to demarcate their distinction from the other castes or creeds of the Hindu society. The next important transition in life is marriage. For most Indians, the exact date and time of the wedding are matters decided by the parents in consultation with astrologers. Cremation is also part of the Indian Hindu customary ceremonies. Intricate procedures are carried out to perform the 'shraddhha' or funeral rites of deceased family members.

Muslim Customs and Rituals

Muslims follow multiple rituals related to birth, marriage, religious practises which involves worshipping 'Allah' and funeral customs and rituals. Muslim ceremonies regarding birth are specific, and whatever is practiced usually varies with the customs and habits of different regions. However, traditionally some practices are generally followed by all. After the birth of the child, he or she is smeared with the juice of palm dates on the upper jaw. It is believed that the very first words that a new born should hear are the words of God. Accordingly, the 'Azaan' is whispered into the child's right ear whereas the 'Iqamat' is spoken into the child's left ear. 'Nikaah' is the marriage ceremony followed religiously by the Muslims. It is quite brief and is confined to just two sentences. The boy has to say that he proposes to get married to a particular girl and the girl must accept this proposal three times. This event must be witnessed by at least two witnesses. A contract, known as the 'Nikahnama', is drawn up which is to be signed by the concerned people.

When a Muslim man or woman dies, people are to recite the phrase 'lilaha va inna illaha raziuun' meaning "We have come from God and unto him we shall return". Loud wailing and show of sadness is prohibited by Muslim law. The body is wrapped from head to toe in a white cloth called the 'Kafan' and it is then taken to the burial ground, carried on the shoulders of four people. This procession is called the 'Janasa'. A prayer called 'dua' is recited en-route. A prayer is said by all members of the congregation following which the body is buried. After the body is lowered into the ground, the head is tilted to face the 'Kaba'. Perfumed water is sprinkled on the grave and it is neatly sealed with stones, bamboo sticks or wooden boards. Handfuls of sand are thrown by the mourners over the grave and then finally it is sealed following which the prayer called 'Fatiha' is said for the deceased.

The other important customs of Muslims are fasting during the holy month of 'Ramadaan', going

on a religious pilgrimage which is termed as 'Hajj' which means travelling to the holy city of Mecca, which is now located in Saudi Arabia and animal sacrifice should be also be performed, mentioning the name of God while doing so.

Christian Customs and Rituals

In Christianity, following the birth of a child, the child is taken to the church for the baptism ceremony. It is the most important Christian sacrament as the child is admitted into the church as a Christian only after baptism. It is done before the first birthday of the child and the child is presented with white clothes, cap and shoes.

Next is the marriage ritual of Christianity. Weddings are conducted by the priest, inside a church. The father of the bride gives her hand to the groom. Prayers are said by the priest and he blesses them and prays for a happy life for them. The girl and boy exchange rings as a symbol of their ties to each other. They are then asked if they agree to accept each other as man and wife and following this they are pronounced man and wife. The priest delivers a small sermon and a feast is given for the invitees. Small girls with flower baskets accompany the couple, to sprinkle flowers over the couple. Most of the marriage customs are influenced by local customs and practices of the different regions.

On the event of a Christian's death, the body is laid out on a cot and a cross is placed nearby. Candles and incense sticks are lit all around. When all people have gathered prayers are held by the priest. The body is then bathed and placed in a coffin. It is kept open for the people to pay their last respects. The arms are kept folded across the chest. The priest reads verses from the Bible and gives a small lecture on the life and deeds of the deceased. The coffin is then carried to the crematorium by four people or even more on their shoulders. A small prayer is offered and the body is lowered into the pit. People throw sand on the coffin and pit is then closed. Relatives visit the coffin on the 3rd or 5th day to offer garlands and milk at the spot. Some prayers are also said.

Sikh Customs and Rituals

There are numerable customs and rituals of Sikhs when it comes to birth, marriage and death. Nothing much is fixed in regards to birth. Some sections of the Sikhs recite the five verses of the Morning Prayer, 'Japji Sahib' into the ears of the newborn child. Sometimes, in the 'Gurthi' ceremony, an intelligent and well-respected member of the family gives the newborn child a drop of honey so as to pass on his or her characteristics to the child. The ritual of the 'Sushak' involves the giving of gifts by the maternal grandparents to the child's family. These gifts usually include clothes, a spoon, glass and a bowl, money and gold ornaments for the child.



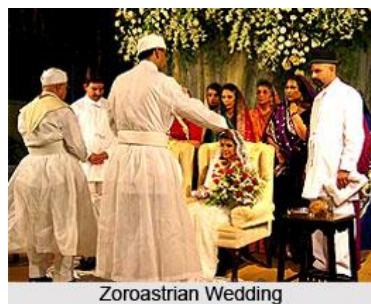
'Anand Karaj', the Sikh Marriage Custom

A Sikh wedding, called 'Anand Karaj', is quite similar to the Hindu wedding except that the Guru Granth Sahib is read instead of the Vedas. A number of traditional rituals are followed such as the 'Nanke Chak' where bride's maternal grandparents and uncle spend a lavish amount on the wedding and also host a meal, the 'Surma Pawai' when the groom's sister-in-law applies kohl to his eyes before he leaves for the bride's house. The actual marriage ceremony comprises 'Baraat', 'Milni', 'Lawaan', and the 'Doli' when the bride and the groom depart for the latter's home.

The 'Kirtan Solah' is read after the death of a person. People gather around the body and say the prayers and the body is then dressed and bathed with the five K's of the Sikhs. The Sikhs cremate their dead and this has to be done before sunset. Following the cremation, the people gather at the Gurudwara where some texts from the Granth Sahib are read and 'Prasad' is distributed.

Zoroastrian Customs and Rituals

On the event of the birth of a child in a Zoroastrian family, a lamp is lit and is kept in the child's room for forty days to keep away evil forces. Following the birth of a child in a Zoroastrian family, mother and child are not to leave the house for 40 days. 'Pachori' or 'Dasori' may be observed on the fifth or tenth day respectively. On the fortieth day the mother has to take a ceremonial bath with consecrated water. 'Para Haoma' is the event when the first drink is given to the newborn child, which is basically consecrated Haoma juice.



Zoroastrian Wedding

The formal initiation of a child into Zoroastrianism is called 'Navjote' where a number of ceremonies are performed such as 'Achoo Michoo', wearing of the 'Kushti' etc. Lastly the 'Doa Tandorosoti Prayer' is recited by the priest for the well being of the child, the parents as well as the community.

In marriage ceremonies, the groom goes to the bride's place for the marriage ceremony. He is welcomed with 'Kumkum' on his forehead and a shower of rice grains by the bride's mother. During the ceremony, the bridegroom is made to sit at the hand of the bride with both facing the eastern direction. A person has to stand near the couple with a burning flame as a sign of respect to their God of Fire. After getting the consent of the couple they are made to sit facing each other with a curtain between them holding each other's right hand. A cloth is wound around the chairs and its ends are tied to symbolize the marriage knot. Following this, the 'Yatha Ahuvairyo' is read. Finally, the marriage ceremony is over and the curtain is dropped as the couple shower each other with rice grains.

Death ceremonies of the Zoroastrians are in accordance with their strict rules on sanitation and purification. When a person is about to die, the head priests recite the 'Patet' prayer, and a few drops of Haoma juice are administered to the dying person. The dead are not burned or cremated but left in the Towers of the Dead where they will be devoured by vultures. This is to ensure that the five elements created by God, are not wasted. India is the glorious monumental example of the cultural and social diversity based on the diverse geography, newly adapted traditions and culture, ideas and national heritage. Such rituals form a fundamental part of the Indian history and will be followed with the same ardour, eagerness and zeal for centuries to come. It is these very practices which provide an inimitable sense of identity to the country and give it a mystical touch which attracts tourists from far and wide. Though the customs and rituals may vary from one region to another, essence is same and comprises the collective body of Indian customs and rituals.

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Unit 4: Heritage of India

India has a rich cultural tradition. There is a harmonious blend of art, religion and philosophy in the **Indian culture**. They are so prettily intermingled in the fabric of Indian way of life and thought that they are inseparable.



Indian culture is actually an outcome of continuous synthesis and has absorbed many external influences in the course of long journey of history. It is said that the first civilization occurred amongst the people of India some 4,000 years before the birth of Christ.

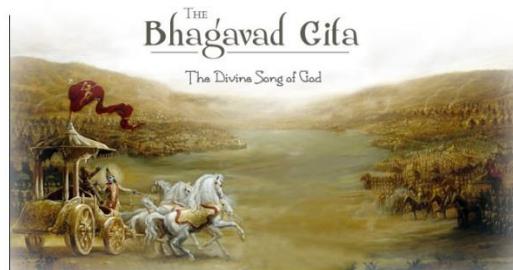
From those ancient times till recent past, we were exposed to unbroken system of civilizations. It is only the dynamism and the flexibility of Indian culture that enabled it to survive these foreign invasions and retain its originality and traditional character even after imbibing the best of these external influences.

Indian people, by nature are tolerant and fatalists, did not at any time ridicule the traditions of foreign civilizations. On the other hand, Indian mind has assimilated much of the thinking of the other cultures, thus enriching it and thereby becoming unique in its character. Today, it is the uniqueness which attracts the Western societies to the Indian culture. Disillusioned with their materialistic lives, they turn to India for solace and peace.

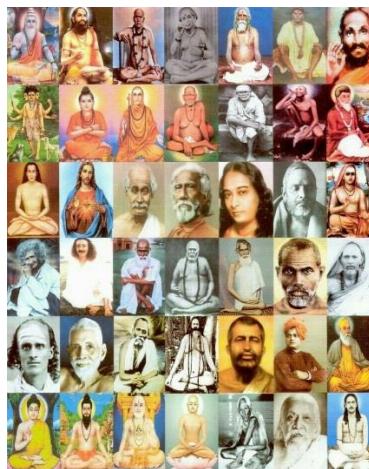
The wisdom of our ancient epics like the Ramayana and the Mahabharata serves as a beacon light to the seekers of spiritual bliss.



In the Bhagavad Gita, Lord Krishna tells how every human being can come to live the subtle philosophical principles laid down in our scriptures in the actual day-to-day life.



Lord Buddha taught us to follow the ‘Middle Path’ by exercising control over the passions. One has to admit that Indian sages and philosophers had started pondering on great issues more than 200 years ago which have been raised in the West only in the last century.



Indian art was influenced by the religious beliefs and the philosophical trends of the times. The temples of the south, the caves of Ajanta, ‘Ellora’ and ‘Khajuraho’ are living testimony to the artistic excellence achieved by the Indian artists, sculptors and architects in those gone by days. Foreign tourists experience a spiritual revitalization on visiting these temples.

Indian music is remarkable because of the continuity in its growth. Long before the Christian era, it had developed not only definite laws of theory and practice, but even comprehensive theories of appreciation. Like Indian dance, it is built on the concepts of ragas and fast. Each raga is regarded as appropriate to certain emotions a certain mood suitable for certain time of the day or night.

There are two major schools of classical music—the Hindustani and the Karnataka. Both derive their rules from the classical treatises Natya Shastra of Bharata and SangeetRatnakar by Sarangdeva. There are about 250 ragas commonly used in north as well as south. Indian music has had great impact on the Western music. Great maestros like Pandit Ravi Shankar, Zakir Hussain, etc. have made valuable contribution towards popularising and promoting Indian music abroad.

The background of Indian dance is infinitely rich and varied, as varied as the land itself, yet with the same underlying unity which binds the people of the country together. The dances of India, whether folk or classical, are an eloquent expression of an ancient civilization, whose timeless wisdom continues to evoke the passionate search of man for conscious identity with God. Folk and tribal dances of India are of innumerable types. But they all express its people's natural gaiety, sense of abandon and rhythm. The origin of classical dances is attributed to the Hindu temples. It was in the temples that they were first conceived and nourished. It was also in the temples that they attained their full stature. While it is true that dances were also performed in courts, and on festive occasions, etc. yet the impulse that gave them birth was religious.

There are four major systems of classical dances in India— Bharat Natyam, Kathak, Kathakali and Manipuri. Other prominent dances are Kuchipudi of Andhra, Odissi of Orissa and Mohiniattam of Kerala. As in all Indian performing arts, so in dance the concept of rasa holds the central place. In dancing the rasa is conveyed through bhava or expression, through the technique of abhinaya. One of the latest developments in the field of dance is ballet, which has brought about a synthesis of the lyricism, grace and pictorial quality of Indian dance forms—classical and folk—combined.

Activity 1

5 minutes

Using a notebook or a tablet, write down some key words that spring to mind when you think of the term 'heritage'. Now try to write down some of the sorts of things that you think could be described as heritage. Save this list so that you can refer to it later on.

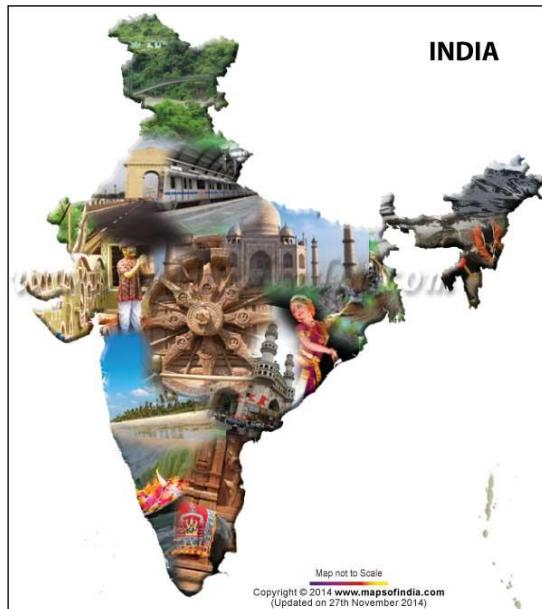
(Summing up what you think heritage is may not have been as easy as you thought it might be. Perhaps you wrote down something about 'the past' and 'old buildings', or something about places, objects or buildings that have some form of protection. You may have written down the word 'history'. It is impossible to capture the diverse range of meanings of heritage in such a short space of time.)

What is Heritage?

Heritage is the full range of our inherited traditions, monuments, objects, and culture. Most important, it is the range of contemporary activities, meanings, and behaviors that we draw from them. Heritage includes, but is much more than preserving, excavating, displaying, or restoring a collection of old things. It is both tangible and intangible, in the sense that ideas and memories--of songs, recipes, language, dances, and many other elements of who we are and how we identify ourselves--are as important as historical buildings and archaeological sites.

Heritage is, or should be, the subject of active public reflection, debate, and discussion. What is worth saving? What can we, or should we, forget? What memories can we enjoy, regret, or learn from? Who owns "The Past" and who is entitled to speak for past generations? Active public discussion about material and intangible heritage--of individuals, groups, communities, and nations--is a valuable facet of public life in our multicultural world.

Heritage is a contemporary activity with far-reaching effects. It can be an element of far-sighted urban and regional planning. It can be the platform for political recognition, a medium for intercultural dialogue, a means of ethical reflection, and the potential basis for local economic development. It is simultaneously local and particular, global and shared. Heritage is an essential part of the present we live in--and of the future we will build.



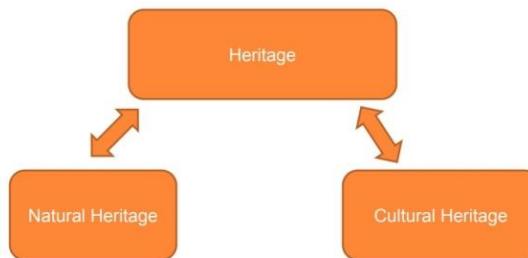
Types of Heritage

In 2002 during the United Nations year for cultural heritage, UNESCO produced a list of ‘types’ of cultural heritage (UNESCO, n.d.). This is one way of dividing and categorising the many types of object, place and practice to which people attribute heritage value. It should not be considered an exhaustive list, but it gives a sense of the diversity of ‘things’ that might be considered to be official heritage:

- cultural heritage sites (including archaeological sites, ruins, historic buildings)
- historic cities (urban landscapes and their constituent parts as well as ruined cities)
- cultural landscapes (including parks, gardens and other ‘modified’ landscapes such as pastoral lands and farms)
- natural sacred sites (places that people revere or hold important but that have no evidence of human modification, for example sacred mountains)
- underwater cultural heritage (for example shipwrecks)
- museums (including cultural museums, art galleries and house museums)
- movable cultural heritage (objects as diverse as paintings, tractors, stone tools and cameras – this category covers any form of object that is movable and that is outside of an archaeological context)
- handicrafts
- documentary and digital heritage (the archives and objects deposited in libraries, including digital archives)

- cinematographic heritage (movies and the ideas they convey)
- oral traditions (stories, histories and traditions that are not written but passed from generation to generation)
- languages
- festive events (festivals and carnivals and the traditions they embody)
- rites and beliefs (rituals, traditions and religious beliefs)
- music and song
- the performing arts (theatre, drama, dance and music)
- traditional medicine
- literature
- culinary traditions
- traditional sports and games.

Thus Heritage is anything that is considered important' enough to be passed on to the future generations. Heritage is broadly categorized into two main' divisions.



Natural Heritage refers to the natural aspects like the fauna and flora, landscapes, beaches, coral gardens etc that are considered important enough to be preserved for the future generations.

Cultural Heritage refers to the cultural aspects like heritage sites, monuments, folklore, traditional activities and practices, language etc that are considered vital to be preserved for the future generations. Cultural Heritage can be further divided into two main groups.



Tangible Heritage refers to those significant places that advocate the country's history and culture. For example monuments, mosques, shrines, monasteries etc.. Intangible Heritage refers to those aspects of a country that cannot be touched or seen. For example, traditional music, folklore, language etc. There are 4 main aspects to understand the significance of cultural heritage sites. These aspects help to determine the management policies and procedure pursuant

to the particular site. Thus It is very important to understand and determine the significances before embarking on a heritage project.

Aspects:

Historical Significances - The age or relationship to historical era, person or event. Historical significance is a relatively easy and over bearing trait in heritage management.

Social Significances - Social Significance is hard to ascertain. It refers to the social, spiritual and other community oriented values attributed to a place. This maybe because the place has existed to serve a certain important role in the society for a period of time. Eg: Local Market etc.

Aesthetic Significance - refers to this special sense of' Importance of a place. This could be in terms of architecture, scale or even the designs seen on the place.

Scientific Significance - refers to the scope or possibility of' scientific findings from a site, monument or place. Here the importance lies more in the information that may yield out of understanding and researching the place or site. This can mostly be attributed to archaeological sites or ancient monuments.

Activity 2

5 minutes

Now let's look at the ways in which a dictionary defines heritage. Using a dictionary, physical or online, search for the word 'heritage' and make a note of the definition provided.

One of the meanings of 'heritage' offered by the Oxford English Dictionary (OED) is 'characterized by or pertaining to the preservation or exploitation of local and national features of historical, cultural, or scenic interest, esp. as tourist attractions', but there are several other meanings of the word, including 'inheritance' and 'lineage'.

Indian Fine arts

Kala and Lalita reflect the culture and civilization of any country. India, with its remarkable sculptures, paintings, architecture, dance and music has always been a wonder to the world.

Origin of Kalas

Fine arts which existed in Ancient India, reveal that they have had the origin in the vedic period. Indians, have always had a tendency to attribute the origin of any sastra of any such work to the ultimate or the God himself along with a mythical story. It is said in Kalikapurana, that the kalas were born along with bhavas and havas from sandhya when Brahma experienced the feelings of love for her.

Vedic hymns & Kalas

Vedic hymns while describing the dawn i.e. the Usas Goddess addresses her as a dancer, dressed up beautifully in different colours. She, the daughter of the day, is a beautiful girl dressed suspiciously and always dancing. This shows the high esteem in which dancing must have been held in Vedic period.

The concept of Tvashta and Visvakarman

The concept of Tvashta and Visvakarman in the vedas help us to get the origin of painting, sculpture and architecture. The person who models the form, beauty feminine grace etc., is called Tvasta. This is revealed by the sentence in RG SAMHITA and the one that appears TAITIRIYA BRAHMANA. Again in TAITIRIYA BRAHMANA, there comes a reference in which Tvasta is called as Rupakrt, the word which denotes a sculptor in later literature.

Rig-Veda on Tvashta

RIGVEDA compares Tvashta to a woodcarver fashioning various forms. Tvasta is the creator of powerful weapons of war again. He is the one who made the vajra and gave it to Indra to kill the demon called vrtra. He is also the creator of exquisite jewels for ornamentation and the golden vessels designed beautifully.

Rudradhyaya on kalas

In Rudradhyaya, the lord is addressed as a chariot - maker, wood - carver, a potter and a metal worker. These clearly point out the active work in wood carving, clay work and metal work. Selecting of ore, carving, making jewellery, weapons, vessels etc. are well known in Vedic period.

Vedic reference to Murtis in Temples

Though many people argue that there was no idol worship in vedic period, we get many references in Vedic literature which show that idol worship had its base in vedas only. In Shadvimsha Brahmana, there is a reference to the Murtis in the temples. These temples may probably be referring to the Devamanas mentioned in the Rigveda. The abode of Yama, constructed by Devas, is mentioned.

Devamaana and Yajnashala

Rig veda says that Devamana is an exquisite type of building to be desired by men for themselves. With these, we can conclude that Indian architecture, sculpture and iconography have developed from the Vedic description of the Murtis of several deities and the Devamanas and elaborate Yajnasalas mentioned therein.

Model making

Model making was well developed in vedic period. In Samavidhana Brahmana, a line talks about the dolls of elephants, horses, chariots etc. made by dough.

Creating forms

The earliest conception of Indian arts is creating forms with due measure, revealing and concealing the vision of eternal truth. The word shilpa is found in many places in Vedas and Brahmanas. But its meaning is slightly different from one which occurs in classical literature.

Concept of Shilpa

Aitreya Brahmana says that shilpa is the refinement of the self. Kaushitaki Brahmana says that shilpa is threefold consisting of Gita, Vaditra and Nrtya. The word shilpa that occurs in Satapatha Brahmana, stands for the art of modeling, painting etc. as per the commentary of Sayana. In Chandogya, one of the earliest Upanishads, the list of arts and sciences has been mentioned.

Artistic insight of seers

The artistic insight of our seers is seen from the exclusive and elaborate construction of Yajnashalas and Vedis(altars) which looked in different patterns from an aerial view.

Music and the veda

Saman is a song based on a Rigveda. The singing of Samaveda is of various kinds. There are songs for the villages, songs to be sung in the forests, and songs called Uha and Uhya. In a ceremony such as that of the Mahavrata, dance, singing and instrumental music are combined. In the later vedic literature the different notes on the octave are clearly mentioned. From this Saman, the Gandharva Veda or the science of music has developed. Bharata attributes the origin of Gandharva to lute and the flute.

Beauty is Truth – “Raso vai Sah”

In the Vedic conception beauty is inseparable from Goodness and the vision of truth. The hymns to dawn show that, to the seers it was the expression of divine glory, conformity with the divine law. The Upanishads identify beauty with Rasa.

Arts in Ancient Literature

The puranas, Vishnu Purana and Bhagavata Purana mention these arts. It is said in the Bhagavata Purana, that the brothers Balarama and Krishna learnt the sixty-four branches of arts in sixty-four days. In the first epic poem Ramayana, Valmiki talks about these kalas in a few places. In the Mahabharata it is stated that Siva taught Ganges the Sixty-four branches of fine arts. Apart from these, many of the descriptions in these two works show all different arts like dancing, music, sculpture, painting, polity and state craft etc which had developed well by that time. The art of dancing and acting had developed well by the time of Panini and were codified into Natya Sutras by Shilalin.

Buddhist scriptures talk about quite many numbers of fine arts. In Buddhist literature, art is what gives rest and lucidity to mind. Lalita Vistara, a buddhist work, describes Buddha as an expert in as many as eighty-six Kalas. In the same work it is also said that Buddha was equally good at the sixty-four Kama kalas. Jatakamala also mentions about these Kalas. Jaina scriptures Kalpasutra, Aupapatikam, Prashnavyakaranam etc, have mentioned seventy-two different Kalas. In the Mahabhashya of Patanjali, the sentence “Are the Kalas like her mother are not”, indicates the development of Kalas by Patanjali’s time. Dandin in Dasakumara Carita, describes the hero as an expert in the sixty-four Kalas. In the great prose romance Kadambari, Bana describes Sukanasa the prince as an expert who has learnt many of the kalas.

These Kalas are frequently referred to in the Kamasutra of Vatsyayana. They are also mentioned by later writers like Vamana, Magha, Bhavabhuti, Bharavi etc., many of the Kavyas obviously show that the Kalas were very well developed and they were learnt and practised by many of the citizens in the period of classical literature. The Kamasutra, explains how a person is well esteemed in the society, if he knows the Kalas. The works of the great poets like Kalidasa, Magha, Harsha and others stand testimony to their sound knowledge in all the branches of fine arts

Art is dynamic

We can never say that development in arts has reached the saturation point and there is no room for further development. If an artist ever is satisfied that he has created the best art piece in the world, then the world will seem to become dormant without evolution and there will be no freshness and beauty in art. Thus the artistic evolution will always continue and the dynamism of the world will always be kept going.

Traditional 64 arts.

It is traditionally known that the number of ancient Indian fine arts is sixty-four. The term Catuhshasti Kala is a commonly known term. Though the enumeration of all the sixty-four arts is not found in the books of vedic and puranic literature. Commentators on Bhagavata Purana, have described the Kalas, but have not given full account of it.

Number of kalas vary

There are innumerable number of lists enlisted in many Kavyas. Kadambari of Bana, Campuramayana of Bhojaraja, a work named Sritattvanidhih, Sukranitisara and many other works, give a list of these fine arts. But all these lists differ from each other in their number and the arts mentioned.

Concept of Kalas changes

A study of these lists very well speaks about the development of fine arts from time to time. And time goes on concepts changes and any science, which is prominent in that century, is included under the list of arts. Any art, which is not considered as important in a century, is also excluded from the lists. Thus from time to time, there are many inclusions and exclusions in the list, thereby giving rise to new arts.

India, is the land of God; religion, temples, sacred scripts, great sages; saints; philosophers; scientists, history, great rulers, traditions, festivals etc. incredibly rich in culture and heritage. Indian culture is unique culture. Only Indian civilization and culture has spread across the world and can be called as the first world culture.

Indian culture is human culture; the one that focuses on inculcating human values in a man. Culture of India refers to the way of life of the people of India. Indian culture often labeled as an amalgamation of several cultures spans across the Indian sub continent and has been influenced by a history that is several millions of years old. Every school of thought is a part and parcel of Indian culture. In the words of Max Muller (German Indologist) "If I am asked which

nation had been advanced in the ancient world in respect of education and culture then I would say it was India”

Art is a subdivision and essential part of culture. Since beginning of time, Arts have existed and have been used to display mans' life, struggles, tales, traditions etc. The arts are essential parts of the human experience and can be seen as a reflection of the society. Arts and culture preserve our heritage. Nowhere in the world have we come across such a great variety of arts/skills except in India.

It is how the concept of Chatuhshashti Kala – Sixty-four Great Indian Arts has come in to being, prevailing since pauranic days. In the good olden days of ancient India (Gurukula) traditionally people were taught in one or more of the skills according to their aptitude for livelihood. They were sixty-four (64) in number grouped together called as Chatuhshashti Kala, a classic curriculum of sacred sciences; arts; skills etc.

Enumeration

Given below a compilation of the great Indian arts and skills with possible nearest interpretation.

The list given in Kamasutra and the Interpretations of Yasodhara are followed here for the enumeration of the sixty-four arts.

1. **Geetam:** Art of Singing. Music is said to consist of four parts namely tuning, the composition, the timing, and the appeal, as per Yasodhara.
2. **Vadyam:** Art of Playing with Instruments. This is four types of namely stringed instruments, beating instruments, repercussion instruments and blowing instruments. These are respectively represented by Vina Mrdanga, Tala Vadya made of metal and flute.
3. **Nrtyam:** Art of dancing. This constitutes of Karanas, Caris, angaharas, Vibhavas, bhavas, anubhavas and the depiction of rasas.
4. Alekhyam: Art of Painting. art of preparing offerings from Painting has six angas namely rupabheda, pramana, bhava, lavanyayojana, sadrsya, and Varnikabhangha.
5. Viseshakacchedyam: Art of painting the face and body with color. This is called Patracchedyam also. Bhurja leaves are cut in different designs and applied as tilakas in the forehead.
6. Tandulakusumabalivikarah: Art of Decorating the floor with rice grains (Kolam of South India), and making garlands of flowers and arrangement of flowers for worship of God.
7. Puspastaranam: Making flower beds in houses and in temple for deities.
8. Dasana-Vasana-Anga-Ragah: Painting of the teeth and body and dyeing of clothes.
9. Manibhumika Karma: Fixing jewels like marakata on the floor for keeping floor cool to sleep during summer.
10. Sayanaracanam: Making beds and spreading out carpets and cushions.
11. Udagavadyam: Playing of Vessels filled with water. (Jalatarangam)
12. Udagaghatham: Doing Jalakrida with water splashed by hands and mechanical devices.
13. Citrasca Yogah: Art of performing wonders
14. Malyagranthana Vikalpa: Stringing of rosaries, garlands and wreaths for worship of Gods and nepathyā.
15. Skharakapida Yojanam: Binding of turbans chaplets and making crests and top knots with flowers.

16. Nepathy Prayogah: Dressing up in different ways suited to the country and occasion.
17. Karna Patra Bhangah: Making ear ornaments from ivory, conch etc
18. Gandha Yuktih: Technique of making different perfumes, perfumed oils etc.
19. Bhushana Yojanam: Making necklaces with pearls jewels, corals and manufacturing of ornaments like Kataka, Kundala etc.
20. Aindrajalah: Magic or sorcery
21. Kaucumara Yogah: An art which gives success in many affairs which cannot be performed by usual means.
22. Hastalaghavam: Quickness and dexterity in manual skill. Also doing magic with palm for playing.
23. Vicitra Sakayusha Bhaksha Vikara Kriya: Preparation of cooked and uncooked food which are four fold namely Bhojya, Bhaksha, Lehya and Peya.
24. Panaka Rasa Raagaasava Yojanam: Preparation of lemonades, sherbets, panaka with colour and flavour, and also preparation of medicinal decoctions and cooked soups.
25. Sucivana Karma: Sewing and needle work
26. Sutra Krida: Making magic with threads of different colours.
27. Veena Damaruka Vadya: Playing of Vina and damaru. Though they come under Vadya, they are mentioned separately due to their importance it can also be taken as producing vocal sounds resembling the sound of these instruments.
28. Prahelika: Puzzles and riddles
29. Pratimala: Saying verses starting with the aksara which came at last of the verse recited by the previous person. (Antyakshari)
30. Durvacaka Yogah: A game of obscure word making. Like Ulukajit for Indrajit.
31. Pustakavachanam: Reading, Chanting and intonating.
32. Natakakhyayika Darsanam: Depicting the story of a drama or an akhyayika
33. Kavya Samasyapuranaam: The art of completing the verse which is partly recited
34. Pattika Vetravana Vikalpah: Making things like cane boxes, bags, mats, cots etc. with canes.
35. Taksakarmani: Chiseling and polishing things made of metal on the lathe machine
36. Taksanam: The art of carpentry
37. Vastuvidya: Architecture.
38. Rupya Ratnapariksha: Knowledge of the good and bad in gold and silver coins, and jewels.
39. Dhatuvadah: Extraction, purification and alloying of minerals ores, metal and jewels.
40. Maniragaakaara Jnanam: Enamelling sphatikamani and the knowledge of mineral deposits from the surface.
41. Vrukshayurvedayogah: Knowledge of laying garden, orchard, making hybrids, remedy for diseases etc.
42. Mesha Kukkuta Lavaka Yuddhavidhih: Knowing the rules of Ram (male sheep) fight, cock-fight and lavaka (sickle) fight.
43. Sukasarika Pralapanam: Training of birds to talk like humans and to take messages.
44. Utsadane samvahane kesamardane ca kausalam: Art of applying perfumed ointments to the body, massaging and dressing up the hair in different styles.

45. Aksara Mushtika Kathanam: The art of writing in cipher and deciphering. This is of two kinds writing in words and writing without words maintaining secrecy.
46. Mlecchitavikalpa: Speaking in foreign jargons. Speaking by changing the form of words for maintaining secrecy.
47. Desabhasha Vijnanam: Knowledge of languages and vernacular dialects.
48. Pushpa Sakatika: Making flower carriages and cars Palanquins, chariot etc.
49. Nimitta Jnanam: Knowledge of astrology, good and bad omens.
50. Yantramatrakah: Knowledge of the machineries run by animate and inanimate objects.
51. Dharana Matrakah: Art of remembering the granthas and sastras heard.
52. Sampathyam: Completing a stanza or a verse on receiving a part of them for sport of competition.
53. Manasi Kavya Kriya: Composing poems on the hints given.
54. Abhidhana Kosam: Knowledge of words and their meanings
55. Chando Jnanam: Knowledge of metres.
56. Kriyakalpah: Theoretical knowledge of composing poems
57. Chalitaka Yogah: Art of disguising by concealing the true appearance.
58. Vastragopanani: Wearing the clothes tactfully so that it doesn't slip off and also the torn places are hidden.
59. Dyuta Viseshah: Knowing different varieties of gambling.
60. Aakarsha Krida: Playing with dice.
61. Balakridanakanai: Skill in games for children like playing with balls and dolls.
62. Vainayiki: The art of courtesy
63. Vaijayiki: The art of gaining victory
64. Vyayamiki: The art of hunting, yogas, gymnastics and sports.

1. Music

Music is a universal language. Every community, every culture has its characteristic music. India too has a long history of music thinking and practice. Music is interwoven in ordinary life as Indian life and culture, from birth to death, are essentially celebratory and all ceremonies are conducted accompanied by singing, recitation or music.

The origin of Indian music is conventionally traced back to the Vedic period. The Vedic hymns are metrical and intended to be recited with great modulation of voice and intermediate pauses. Music is dealt with extensively in the *Vālmiki Rāmāyaṇa*. Nārada is an accomplished musician, as is Rāvaṇa; Sarasvatī with her *vīṇā* is the goddess of music. Music made a move beyond the liturgical towards the wider concerns of life to express the joy and the sorrows, the languishing hopes and despairs and the thousand and one little vanities of the ordinary human life.

The first available classical manual on music is Bharata's *Nātyaśāstra* (about 2nd century BCE). It gives a clear and detailed account of music, both **Instrumental** music and **Vocal** music. Let us first have the classification of accompanying instruments which are of four types: (i) **Tanta** (stringed instruments); (ii) **Anavaddha** (percussion or stretched instruments); (iii) **Ghana** (metallic instruments); and (iv) **Susira** (wind or reed-type instruments). The accompanying

instruments also find mention in a number of texts from the Gupta period; Kālidāsa mentions several kinds of instruments like the *parivādini* and *vipañcī vīnas*, the *mṛdaṅga*, the flute and conch. Music also finds mention in Buddhist and Jain texts from a few centuries BCE.

A number of musical instruments like *vīṇā*, *sītār*, *sarod*, *surbahār*, *surśringār*, *santūr*, *sāraṅgi*, *esrāj*, violin, flute, harmonium, *tablā* and *pakhāvaj* are associated with Indian classical music. Today the classification includes a variety of instruments used for Indian classical, western and folk music. Now the instruments, classified on the basis of the science behind them, are plucked-string, bowed-string, wind instruments and percussion instruments.

1. **Plucked-string instruments** include *ektārā*, *rubāb*, *santūr*, *sarod*, *sītar*, *surbahār*, *surśringār*, *swarmandal*, *mohan vīṇā*, *raudra vīṇā*.
2. **Bowed-string instruments** include *esrāj*, *mayūrī vīṇā* or *taus*, folk *sāraṅgī*, classical *sāraṅgī*.
3. **Wind instruments** - include *bānsuri*, *puṅgī* or *bīn*, *nādasvaram*, *śehnāī*, bagpipes, *śruti* box and harmonium.
4. **Percussion instruments** include hand drums (*dhād*, *damrū*, *dholak*, *duggī*, *ghat*, *singhārī khol*, *mizhavu*, *mṛdaṅgam*, *pakhāvaj*, *pancamukha vādyam*, *tabalā*), hand-frame drums (*daff*, *dimdī* or *dimrī*, *kānsī*), stick-and-hand drums (*dollu*, *dhak*, *dhol*, *dholī*, *idakkā*), stick drums (*chande*, *nagāḍā*, *pambai*, *sambal*), ideophones (*tāśā*, a type of kettle drum), cord percussion (*jhällari*, *gubgubā*), ideophones (*cimptā*, *ghatam* and *matkam*, *ghungrū*, *khartāl* or *ciplyā*, *manjīrā* or *jhānj* or *tāl*), melodic (*jal taraṅg*) and electronic (electronic *tānpurā*, *tāla* meter).

Activity:

1. Can you add some accompanying instruments to this classification?
2. Make a list of musical instrument and the Master Artist associated with them.
3. Collect images from Indian paintings and sculpture which depict the existence of music in ancient India. **Clue:** Visit National museum and world heritage sites.

Forms of Composition

Indian music has over time evolved numerous forms for the expression of its manifold beauties. Beginning with the *sāma-gāna* which had distinct stages in its progression, forms such as *chanda*, *gīta* and *prabandha* became current in later times. In northern India, vernacular compositions called *prabandhas* were first replaced by new compositions in Brijbhāṣā Hindi called *dhrupadas* and later by *khyālas*, *thumari*, *ghazal*, *tarānā*, *tappā*, etc. *Dhrupada* remains a respected form today. In olden days, a *dhrupada* had four parts known as *sthāyī*, *antarā*, *sancāri* and *abhoga*, but now it consists only of the first two. It strictly follows two well-known principles of rhythmic movement and procedure by determinate degrees. It usually bears *vīra*, *śringār* and *bhakti rasas* and *bhāvas*.

Ancient Texts on Music in India: A Selection

All excerpts have been taken from *Sources of Indian Tradition* edited by Wm. Theodore de Bary & A.T. Embree, Columbia University Press, New York 1958 (1st ed.), MLBD New Delhi Reprint 1963.

Taittīriya Brāhmaṇa

Two Brahmin lutists are singing to the lute; this thing this lute is verily the embodiment of beauty and prosperity; and these musicians of the lute do verily endow him (the patron) with prosperity. From abstract sound, the mystic syllable *OM*, appears and from it the seven notes of music. (3.9.14)

Note: *OM* is uttered at the beginning, and sometimes also at the end, of a Vedic recitation, prayer or chant. In the Upanishads (especially the *Chāndogya*), *OM* came to be regarded as the essence of the Vedas, indeed of the whole world.

Yājñavalkya Smṛti

One attains the Supreme Being by practising continuously the chanting of the *samans* (the sacred Vedic *mantras* set to music) in the prescribed manner and with mental concentration. The singing of the songs *Aparanta*, *Ullopya*, the songs composed by Dakṣa and Brahmin, constitute indeed liberation. One who knows the playing of the lute, has mastered the subtle semitones and understands the rhythms, attains the path of liberation without any strain. (3.4.112-115)

Viṣṇu Purāṇa

Whatever poetic utterance there are, and the song in their entirety, are aspects of lord *Viṣṇu* in his sonant form. (1.22.84)

Viṣṇudharmottarapurāṇa (tr. Priyabala Shah)

For music there are three *sthānas* [organs of utterances], *urah* [chest], *kanṭhah* [throat] and *śirah* [head]. They give rise to three [kinds of] notes — *mandra* [low], *madhya* [middle] and *tāra* [high]. There are three *grāmas* (parent scales): *śadaja*, *madhyama* and *gāndhāra*. There are seven notes [*saptasvaras*] — *śadaja*, *rṣabha*, *gāndhāra*, *madhyama*, *pancama*, *niṣāda* and *dhaivata*. There are twenty-one *mūrchanās* [intonations] of *saptasvaras* dependent on each of three *grāmas*. There are three *vṛttis* named *vādī*, *samvādī* and *anuvādī*. The nine *rasas* ... are related to these musical notes. For *hāsyā* and *śringāra*, *madhyama* and *pancama* are used, for *vīra*, *rauḍra* and *adbhuta* *śadaja* and *rṣabha* are used, for *karuṇā* *niṣāda* and *gāndhāra* are used, for *bībhatsa* and *bhayānaka* *dhaivat* is used and for *śānta* *madhyama* is used. Similarly, for different *rasas* different *layas* are used. (III.18, 2-3)

Skanda Purāṇa, sutra saṁhitā

The knowledge of music becomes an effective means of attaining oneness with Lord Shiva; for by the knowledge of music, one attains to a state of absorption and it is by attaining

such a state that oneness with Shiva could be obtained. ... One ought not to indulge, out of delusion, in worldly songs. [For] the yogin whose spirit attains a unified state in the uniform bliss engendered by the delectation of objects like music, there occurs an absorption and anchoring of the mind in that bliss. Where there is a long and continuous flow of sounds from stringed instruments, one becomes freed of objects of cognition and becomes merged in that ultimate and verily of the form of that supreme ether [the *brahman*]. (4.2.3.114-116)

Sārañagadevaśaṅgitaratnākara

We adore the supreme being of the form of sound [*nāda brahman*] which is the one bliss without, and the light of consciousness in all beings that manifested itself in the form of the universe. By the adoration of sound [*nāda*] are also adored gods Brahman [the Creator], Viṣṇu [the Preserver], Maheśvara [the destroyer] for they are the embodiments of sounds. (1.3.1-2)

Saṅgitajnamu (melody: Salagabhairavi)

O Mind! The knowledge of the science and art of music bestows on a person the bliss of oneness with the Supreme Being. Music such as is accompanied by the blissful oceanlike stories of the Lord which are the essence of love and all the other sentiments blesses a person with oneness with the Lord. Music such as that cultivated by the discerning Tyāgarāja bestows on a person affection [for fellow beings], devotion [to God], and attachment to good men, the Lord's grace, austere life, mental concentration, fame and wealth.

Ragasudharasa (melody: Andolika)

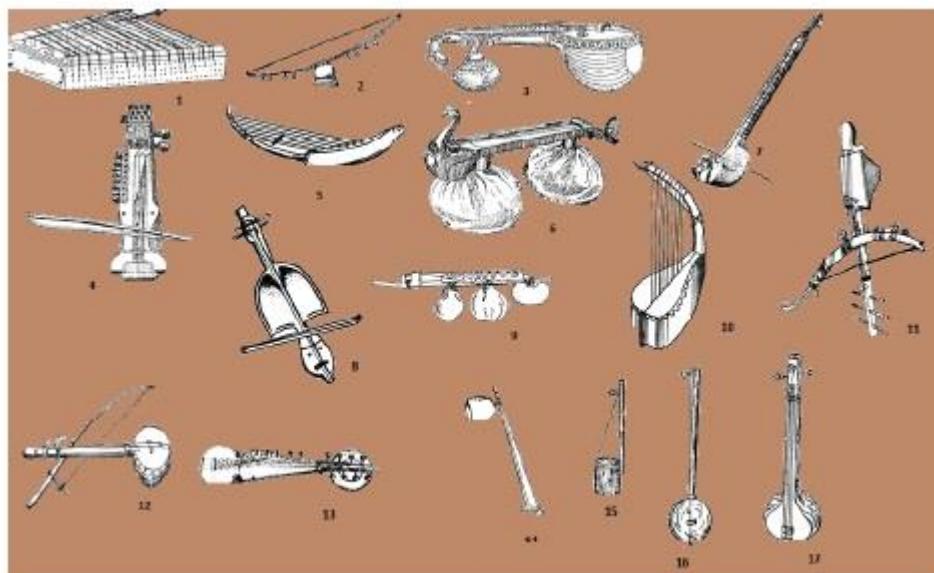
O mind! Drink and revel in the ambrosia of melody; it gives one the fruit of sacrifices and contemplation, renunciation as well as enjoyment; Tyāgarāja knows that they who are proficient in sound, the mystic syllable *OM*, and the music notes — which are all of the form of the Lord Himself — are liberated souls



Dancers and musicians on a bas-relief of Konarak's Sun Temple (Courtesy: Michel Danino)

Project ideas

Make a list of some important Indian musicians representing the forms of classical compositions - *dhrupada*, *khyāla*, *thumari*, *ghazal* of Hindustānī music and *prabandha*, *varṇam*, *javālī*, *padamam* of Carnatic music. Give an account of their contribution.



Look at the above pictures, which depict the rich and varied heritage of stringed instruments in India. Research and establish their association with Indian performing arts such as music, theatre, dance traditions.

The tata vādyā (stringed instruments)	Performing art and state
<i>santūr</i>	
<i>villadi vādyam</i>	
<i>Sarasvatī vīnā</i>	
<i>sāraṅgi</i>	
<i>saptatantrī vīnā</i>	
<i>vicitra vīnā</i>	
<i>tāraśehnāī</i>	
<i>sarinda</i>	
<i>tribal kinnarī</i>	
<i>yazh</i>	
<i>kingrī</i>	
<i>banam</i>	
<i>sarode</i>	
<i>tuliā</i>	
<i>tuntune</i>	
<i>ektāra</i>	
<i>tambūra</i>	

THINK: How Does Music become an effective means of attaining oneness with God?
Extended activities

- ❖ Acquire a basic knowledge of music and listen to some ghazals sung by Begum Akhtar and *ṭhumaris* sung by Bare Ghulām Alī Khān and try to imitate. Observe your emotional responses.
- ❖ The fundamental principal of music is that Nāda Brahma makes itself objective for the immediate vision; it concretizes itself so as to become object of sensuous perception; it manifests itself in the musical notes and all that is necessary for their production. To witness, learn some *rāgas* of śṛṅgāra and *bhakti rasas* and listen to the compositions based on them.
- ❖ Learn the classification of *rāgas* based on the kinds of notes, number of notes, variation of notes in *āroha* (ascent) and *avaroha* (descent) and time of singing etc and reflect how rich the Indian music thinking and practice has been.

Internet Resources (URLs)

- ‘*Hazrat tore kamāl*’, a late night rāga *Darbārī kānaḍā, badā khyāl* in *vilambit laya; ektāl bandiśa* by Pt. Omkārnāth Thākur www.youtube.com/watch?v=y13Ii3KcAZs
- ‘*Eri āli piyā bin*’, a *chotā khyāla* in *druta* (fast) by Sanjīv Abhayankar www.youtube.com/watch?v=89AjqBI8pcU#t=01m45
- *Dhrupad* in *Rāga Bhairavī* by Moinuddīn & Aminuddīn Dāgar www.youtube.com/watch?v=i0VS2bxafMQ
- *Thumarī* in *Rāga Bhairavī ‘Hey Rām kal nahīn āye’* by Begum Akhtar www.youtube.com/watch?v=UWB21eGGLn0
- For ghazal: ‘*e muhabbat tere anjām pe ronā āyā*’ www.youtube.com/watch?v=05ceV7swasA
- Bade Ghulām Alī Khān, *Thumarī* composed by Ustad ji after the tragic death of his beloved wife. ‘*Yād piyā kī āye*’ www.youtube.com/watch?v=LLbknarPdbY
- Lata Mangeškar: Song: ‘*aye mere watan ke logo*’ www.youtube.com/watch?v=RvG6ptzc1Go

Further Reading

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Script, Language and Literature

- The art of writing was known even during the Vedic age though memorization was preferred and encouraged.
- The two scripts – Brahmi and Kharosthi are known to have existed even in 600 BC.
- Both the Devangari and some of the South Indian scripts are its evolutes.
- Talapatra (palm-lead), Bhurjapatra (brickbark), wooden plates, cloth (of cotton or silk) leather, stone and bricks were used for writing.
- Sanskrit works existed even as early as 600-100 BC.
- Apart from the Vedas, the epics – the Ramayana and the Mahabharata stand out as monuments of exquisitely beautiful literature of a very high standard.
- The ease and facility with which the Sanskrit language has been used even in the composition of technical subjects bearing on liturgy, medical and health sciences, ethics or linguistics, is astounding.

Dance:



Śiva's *tāṇḍava*
(Belūr temple, Karnataka)

Indian dance forms fall into two broad categories — classical and folk (for folk dance forms, see this module's second unit). The present-day forms of classical Indian dances are performed on the stage on various occasions. In popular culture, the adapted, or 'semi-classical', forms of these styles have been exposed largely through depiction in popular movies and television

programmes. These dance forms include Bharatanātyam, Kathakali, Kathak, Odissī, Manipurī, Mohiniāṭṭam and Kucipudī.

Bharata-natyam

Bharatanātyam is a classical dance form from Tamil Nadu. It dates back to 1000 BCE. Its inspirations come from the sculptures of the ancient temple of Chidambaram. In ancient times Bharatanātyam was performed as *sadiraṭṭam* (court dance) by temple *devadāsīs*. E. Krishna Iyer and Rukmini Devi Arundale renamed *sadiraṭṭam* as Bharatanātyam in the 1930s. Bharatanātyam was codified and documented as a performing art in the 19th century by the Tanjore Quartet of Chinnayya, Ponniah, Śivanandam and Vadivelū of the Tanjore Court, during the rule of Maratha King Saraboji II (1798–1832). The Tanjore Quartet completed the process of re-editing the Bharatanātyam programme into its present shape with its various items.

There have been several varieties of Bharatanātyam costumes in different periods. From the ancient texts and sculptures, one can see that the original costume did not completely cover the dancers' bodies. In the medieval times, however, the *devadāsīs* used to wear a special, heavy *sārī* that severely restricted the dance movements. The modern costumes are deeply symbolic, as their purpose is to project the dancer's *sūkṣma śarīra* (subtle body) into the material world. Also different dances require different kinds and nature of dress.

Kathakali

Kathakali is a classical dance form which originated in Kerala. *Kathā* in Sanskrit means story and *kālī* in Malayalam means play. So Kathakali is a play based on a story. Kathakali, like other classical dances of India, has its origins in Bharata Muni's *Nātyaśāstra*. It is an art which has evolved from many social and religious theatrical art forms like Cakiarkoṭṭū, Kūdiaṭṭam, Kr̄ṣṇaṭṭam, Rāmaṭṭam which existed in the southern region in ancient times. The main custodian of Kathakali is the famous poet Vallathol Narayana Menon who established Kerala Kalamandalam in 1930 for the preservation of this art form.

Kathakali, a stylised art form, is a blend of dance, music and acting and dramatizes stories mostly adapted from the Indian epics. All the four aspects of *abhinaya* — *āṅgika*, *vācika*, *āhārya*, *sāttvika* — and the three components of the dance — *nātya*, *nṛtta* and *nṛtya* — are unified flawlessly in this form. The *abhinaya* is presented in three stages: (a) word-to-word synchronization; (b) interpretation of the full line; and (c) *abhinaya* of the dancer following the singer. The dancers express themselves through organized *muḍrās* and facial expressions.

As far as the costume of this dance form is concerned, it is elaborate and designed to heighten the effect of physical strength. The large overcoats, the flowing scarves, the bulging skirts, the antique ornaments, the strikingly opulent head dresses with streaming hair flowing down to the waist and covering the back — all create enlarged figures well befitting the sculptured facial features and produce tremendously impressive impersonations. If the characters are *sāttvika* (a righteous character or hero), the basic make-up is *pacca* (green); if the characters are *rājsika* (a character with particular vices or anti-hero), the basic make-up is *cūṭti* (white); and if the characters are *tāmsika* (an evil character or villain), the basic green make-up is broken up

by red patches. Also, on the basic green makeup, an oval red and white design is made on the nose and on the upper nose.



Aspects of Kathakali (source: Wikipedia)

Activity:

1. Make a list of make-up items used by Kathakali performers.

Kathak

Kathak originated in Uttar Pradesh, India. The name Kathak is derived again from the Sanskrit word *kathā* (story): *kathaka* means ‘he who tells a story, or has to do with stories’. This dance form traces its origins to the nomadic bards of ancient northern India, known as *kathakas* (storytellers). Its form today contains traces of temple and ritual dances, and the influence of the *bhakti* movement. From the 16th century onwards it absorbed certain features of Persian dance and Central Asian dance which were imported by the royal courts of the Mughal era.

There are three major *gharānās* (schools) of Kathak from which performers today generally draw their lineage: the *gharānā* of Benares (born in the courts of the Kachwāhā Rajput kings, the Nawāb of Oudh, and Varanasi respectively), the *gharānā* of Jaipur and the *gharānā* of Lucknow; there is also a less prominent Raigarh *gharānā* which amalgamated the technique from all three preceding *gharānā* but became famous for its own distinctive compositions.

Aside from the traditional *abhinaya* pieces performed to a *bhajan*, *ghazal* or *thumrī*, Kathak also possesses a particular performance style of expressional pieces called *bhāva batānā* (showing mood or feeling). It is a mode where *abhinaya* dominates, and arose in the Mughal court. It is more suited to the *mehfil* or the *darbār* environment, because of the proximity of the performer to the audience, who can more easily see the nuances of the dancer’s facial expression. Shambhu Mahārāj was known to interpret a single line in many different ways for hours but all the Mahārāj family have found much fame for the naturalness and innovativeness of their *abhinaya*.



As this dance form can be performed by a man or a woman, it has different costumes for them. For women there are two types of costumes, traditional Hindu and Mughal. The traditional Hindu costume for women sometimes consists of a sari, whether worn in an everyday style, or tied up to allow greater freedom of movement during dance. However, more commonly, the costume is a *lehangā-colī* combination, with an optional *odhnī* (veil). The traditional Mughal costume for women consists of an *angarkhā* on the upper body. The design is akin to a *cūdīdār-kameez*, but is somewhat tighter fitting above the waist, and the ‘skirt’ portion explicitly cut on the round to enhance the flare of the lower half during spins. The traditional Hindu costume for men leaves them bare-chested; below the waist is the *dhotī*, usually tied in the Bānglā style that is with many pleats and a fan finish to one of the ends. There is the option of wearing a men’s *bandī* too. The Mughal costume for men is *kurtācūrīdār*.

Kucipudī

Kucipudī is a dance form named after a village in the Krishna district of Andhra Pradesh. Renowned gurus like Vedāntam Lakṣmī Nārāyana, Cintā Kr̄ṣṇāmūrthy and Tadepalli Perayya broadened the horizons of this dance form. Kucipudī is non-narrative and abstract dancing. Usually *jātiswaram* is performed as the *nṛtta* number. Next is presented a narrative number called *śabdam*. One of the favourite traditional *śabdam* numbers is the Daśāvatāra (the ten avatars of Viṣṇu). The *śabdam* is followed by a *nātya* number called *kalapam*. Next in the sequence comes a pure *nṛtyabhinay*, a number based on literary-cum-musical forms like *padam*, *jāvli*, *ślokam*, etc. In such a number each of the sung words is delineated in space through dance i.e. visual poetry, *dṛśya-kavītā*. A Kucipudī recital is usually concluded with *taraṅgam*. In earlier times, the themes were related to Śiva, but with the arrival of the Bhakti movement from the seventh century onwards themes linked to Kr̄ṣṇa were also enacted.



Kuchipudī dancer

The Kuchipudī costumes look similar to those of Bharatanātyam. The important characters have different make-up and the female character's wear ornaments and jewellery such as *rakudi* (head ornament), *candravanki* (arm ornament), *addabhāṣā* and *kasinasāra* (neck ornament) and a long plait decorated with flowers and jewellery. Ornaments worn by the artists are generally made of a lightweight wood called *būrugū*.

Manipurī

Manipurī dance is one of the main styles of Indian classical dances that originated in the beautiful north-eastern state of Manipur. The origin of Manipurī dance can be traced back to ancient times. It is associated with rituals and traditional festivals; there are legendary references to the dances of Śiva and Pārvatī and other gods and goddesses who created the universe. The dance was performed earlier by *maibas* and *maibis* (priests and priestesses) who re-enact the theme of the creation of the world. With the arrival of Vaiṣṇavism in the 15th century, new compositions based on episodes from the life of Rādhā and Kṛṣṇa were gradually introduced. It was in the reign of King Bhāgyacandra that the popular *Rāsalīlā* dances of Manipur originated.



The *rāsa* costume consists of a richly embroidered stiff skirt which extends to the feet. A short fine white muslin skirt is worn over it. *Patlooi* is the typical costume of the female dancers. The *leheṅgā* is called *kumin* with mirrors and *zari* work intricately woven into beautiful designs. The women also wear a tight-fitting cone-shaped cap, garnished with a border of synthetic pearls, under a thin white veil. A dark coloured velvet blouse covers the upper part of the body and a traditional white veil is worn over a special hair-do which falls gracefully over the face. Krṣṇa wears a yellow dhoti, a dark velvet jacket and a crown of peacock feathers. The jewellery is very delicate and the designs are unique to the region.

The *kīrtan* form of congregational singing accompanies the dance which is known as *saṅkīrtana* in Manipur. The whole community celebrates childbirth, *upanayanam*, wedding and *śrāddha* with *saṅkīrtana* performances. The male dancers play the *puṅg* and *kartāl* while dancing. The *thāṅ-ta* is a martial dance which has its origin in the days when man's survival depended on his ability to defend himself from wild animals.

Odissī

Odissī is believed to be the oldest form of Indian dance from the state of Odisha according to the various sculptural evidences available. Archaeological evidences of this dance form dating back to the 2nd century BCE are found in the caves of Udayagiri and Khandagiri near Bhubaneswar. The dance movements, frozen in stone, continue to inspire Odissī dancers even today. For centuries *mahārisa* or *devadāsīs* (temple dancers) were the chief repositories of this dance. Later, a class of boys called *gotipuas* were trained in the art. They danced in the temples and also for general entertainment. Many of today's gurus of this style belong to the *gotipua* tradition.



(Top) Gotipua (source: www.citizen-side.com)
(Left) Odissi dancer (source: www.ananyadancetheatre.org)

Odissi mostly derives its theme from the 12th century *Gīta Govinda* by Jayadeva. It is generally believed that the composers fixed the *tāla* and *rāga* of each song after the model of *Gīta Govinda*. Odissi closely follows the tenets laid down by the *Nātyaśāstra* and the *Abhinaya Darpana*. Facial expressions, hand gestures and body movements are used to suggest a certain feeling, an emotion or one of the nine *rasas*.

Sattriya

Sattriya, recently included among principal classical Indian dance traditions, has been a living tradition in Assam since its creation by the founder of Vaiṣṇavism in Assam, the great saint Śrimanta Śaṅkaradeva in 15th-century Assam.



Sattriya
(source: musica-indiana.wordpress.com)

This dance form originated in monasteries and then moved to the metropolitan stage. Śaṅkaradeva introduced this dance form by integrating different elements from various treatises and local folk dances with his own rare outlook. Conventionally, this dance form was performed only by *bhokos* (male monks) in monasteries as part of their daily rituals or to mark special festivals. In the modern days, Sattriya is performed on stage by women and men. It is governed by strictly laid down principles in respect of *mudrās*, footwork, *āhāryas* (costume), music etc. It

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is performed with *borgīts* (musical composition) which are usually based on classical *ragas*. For tradition performance, the instruments that are used are *khole* (drums), *tālas* (cymbals) and the flute. Some of the recent additions are the violin and the harmonium. The dress is typical of Assam as the silk that are worn are produced in Assam, woven with meticulous designs.

Search and explore the UNESCO world heritage sites in India. Find the sculptures that seem similar to any dance form / features depicted by Bharata. Get to know about the place, period and dynasty when these marvels of architecture were built. Present a slide show in class with all the

- Identify the classical dance forms on the Indian stamps.



collected information.

Identify the students, who are learning various classical dances. Involve them. Collect basic information on any particular dance form. Present all the information in lecture, with demonstration style or a self-choreographed dance.

Further Reading

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Internet Resources

1. Demonstration of gaits of animals and birds in Manipur dance traditions by Guru Bipin

Singh — a legend and maestro of Manipurī dance:

www.youtube.com/watch?v=QD9rraCwI-Q

2. Manipurī Dance by Rinku Bhattacharya Das (disciple of Guru Bipin Singh):

www.youtube.com/watch?v=RSogQYsFTnI

3. Pung Cholam dance from Manipur: www.youtube.com/watch?v=ndPcNgupCdM

4. Kathak by Uma Sharma: www.youtube.com/watch?v=jssQvY9INU

5. Kathak Surya Namaskar (Shovana Narayan and group):

www.youtube.com/watch?v=PG5-DTTykdk

6. ‘Subhadraharanam’ (Kathakali) enacted by Kalamandalam Gopi:

www.youtube.com/watch?v=mH5OTuGHWM8

7. Raudrabheeman (Dushasanavadham) Padmasree Kalamandalam Gopi Ashan, 2 parts:

www.youtube.com/watch?v=OkCJqaNqvcs&

www.youtube.com/watch?v=V5kM1Ockjv8

8. Kucipudī Dance Concert, part 1/8. Performed by Raja Radha Reddy

www.youtube.com/watch?v=92qGxUj7sxw

9. Odissī Mangalacharan Sujata Mohapatra: www.youtube.com/watch?v=1wX5yHh6DHc

10. Sattriya by Mahapurush Srimanta Sankaradeva the great Vaiśavite Guru of Assam in

15th-16th century: www.youtube.com/watch?v=mcRQs7uy1U4

11. Sattriya: www.youtube.com/watch?v=YJ15-lRx_dA

Folk-Dances

- Bhangra (Punjab)
- Garba (Gujarat)
- Holi (Manipur)
- Kolata (Karnataka)
- Ludi (Punjab)
- Pangi (Himachal Pradesh)
- Suggi-kunita (Karnataka)
- Tabal Congbi (Manipur)
- Tiyan-baghi (Punjab)

1. **Geographical Heritage:** Monuments, Rivers, Sea, Forests and its co-relation with overall development of society. Heritage sites in India, declared by UNESCO-

Cultural (29)

- Agra Fort (1983)
- Ajanta Caves (1983)
- Archaeological Site of Nalanda Mahavihara at Nalanda, Bihar (2016)
- Buddhist Monuments at Sanchi (1989)
- Champaner-Pavagadh Archaeological Park (2004)
- Chhatrapati Shivaji Terminus (formerly Victoria Terminus) (2004)
- Churches and Convents of Goa (1986)
- Elephanta Caves (1987)

- Ellora Caves (1983)
- Fatehpur Sikri (1986)
- Great Living Chola Temples (1987,2004)
- Group of Monuments at Hampi (1986)
- Group of Monuments at Mahabalipuram (1984)
- Group of Monuments at Pattadakal (1987)
- Hill Forts of Rajasthan (2013)
- Historic City of Ahmadabad (2017)
- Humayun's Tomb, Delhi (1993)
- Khajuraho Group of Monuments (1986)
- Mahabodhi Temple Complex at Bodh Gaya (2002)
- Mountain Railways of India (1999,2005,2008)
- Qutb Minar and its Monuments, Delhi (1993)
- Rani-ki-Vav (the Queen's Stepwell) at Patan, Gujarat (2014)
- Red Fort Complex (2007)
- Rock Shelters of Bhimbetka (2003)
- Sun Temple, Konârak (1984)
- Taj Mahal (1983)
- The Architectural Work of Le Corbusier, an Outstanding Contribution to the Modern Movement (2016)
- The Jantar Mantar, Jaipur (2010)
- Victorian Gothic and Art Deco Ensembles of Mumbai (2018)

Natural (7)

- Great Himalayan National Park Conservation Area (2014)
- Kaziranga National Park (1985)
- Keoladeo National Park (1985)
- Manas Wildlife Sanctuary (1985)
- Nanda Devi and Valley of Flowers National Parks (1988,2005)
- Sundarbans National Park (1987)
- Western Ghats (2012)

Mixed (1)

- Khangchendzonga National Park (2016)

2. Visual Arts: Painting, Sculpture & Architecture



Śiva's *tāṇḍava*
(Belūr temple, Karnataka)

Painting, *citra kalā* in Hindi and anciently called *varṇana*, evolved in India through a fusion of various cultures and traditions over centuries, if not millennia. The earliest paintings in India are rock paintings of prehistoric times, found all over India, especially in places like the Paleolithic Bhimbetka rock shelters in Madhya Pradesh whose almost 10,000-year-old rock paintings display the concerns of early man — food, survival in a difficult environment and struggle in subduing animals. The colours used are mostly of mineral origin and have survived because the paintings were deep inside the caves or on inner walls. Bhimbetka was declared a UNESCO World Heritage Site in 2003.



Various scenes on a few of the rock shelters of Bhimbetka (courtesy: Wikimedia).

Mural Painting

India's literature is replete with texts that describe palaces of the aristocratic class embellished with paintings, but the paintings of the caves of Ajanta are the most significant. The story of Indian mural painting starts in the 2nd century BCE. There are several locations around India, the best known being Ajanta and Ellora in Maharashtra, Bagh in Madhya Pradesh and Panamalai

and Sittanavāsal in Tamil Nadu, all of them either natural caves or rockcut chambers. The paintings have both religious and other themes.



A rare 7th century Sittanavāsal painting in Tamil Nadu (courtesy: Wikipedia).

The Ajanta caves consist of 30 rock-cut Buddhist *caityas* and *vihāras* which date from the 2nd century BCE to the 7th century CE and include paintings and sculptures described as “the finest surviving examples of Indian art, particularly painting”, with depictions of the Buddha and the Jātaka tales. The Ajanta Caves are a Unesco World Heritage Site.

Like other ancient Buddhist monasteries, Ajanta was also a centre of learning. The layout of the caves with common exterior pathway shows this. Diññāga, the celebrated Buddhist logician and philosopher, lived here in the 5th century CE, according to Xuanzang (or Hsuan-tsang), a Chinese scholar who visited India in the 7th century.



Left: Depictions of Buddha in a cave at Ajanta (source: Wikimedia).
Right: An apsara, cave 17 (source: www.indian-heritage.org).

Bagh Caves

Similar to Ajanta's, beautiful frescoes were found at Bagh Caves, 150 km north of Ajanta. These paintings depict some aspects of Buddhist life and rituals besides scenes from

ordinary life. One of the most famous paintings depicts a procession of elephants, while another depicts a dancer and women musicians. The influence of Ajanta is very apparent at Bagh.



Bagh Cave painting

Badami

Very little survives in the 6th-century Western Cālukyan cave temples, but the stamp of Ajanta remains unmistakeable.

Pallava

The Pallavas were great patrons of art. Mahendravarman I, who lived in the 7th century CE, was known as “*Citrakāra puli*”, or “tiger among painters”. The Talagiriśvara temple at Panamalai in the Villupuram district of Tamil Nadu is one of two shrines that bear testimony to Pallava painting. A small shrine to the north has a small section of a mural painting of an exquisite female figure, her leg bent, standing against a wall and with an umbrella above her. The Kailāsanātha temple at Kanchipuram contains nearly fifty cells around the inner courtyard, with traces of paintings in red, yellow, green, and black vegetable colures.

Pāṇḍya

Sittanavāsal in Pudukottai district is the location of a Jain monastery of the 7th century. Its walls and ceiling have been painted with mineral colours in the fresco-secco technique. The themes include a beautiful lotus pond and flowers, people collecting lotuses from the pond, dancing figures, lilies, fish, geese, buffaloes and elephants. The ceiling of the *ardhamāṇḍapa* is decorated with murals and sculptures of Jaina *tīrthaṅkaras*. Originally, the entire cave temple, including the sculptures, was

covered with plaster and painted on the theme of the Jaina *samavasarāṇa*, the “most attractive heavenly pavilion”.

Cōla

Cōla frescoes were discovered within the circumambulatory corridor of Tanjavur’s Br̥hadīśvara temple. The walls on either side of the narrow and dark passage of the inner *vimāna*, above the sanctum sanctorum, were painted between 1008 and 1012 CE. The paintings celebrate

Lord Śiva. Each fresco, 4.5 metres tall and 3 metres wide, depicts Śiva: as Dakṣināmūrti; being worshipped by the Tamil Shaivite saint Sundarar; as Tripurāntaka; and as Naṭarāja at the Chidambaram temple, worshipped by Rāja Rāja Cōla and his family.

Vijayanagara

There is a wealth of Vijayanagara paintings all over South India but the best examples are to be seen in the Vīrabhadra temple at Lepakshi, on the ceilings of the Virupākṣa temple at Hampi and Ranganathaswamy temple of Srirangam, and on the walls of the Varadarāja temple at Kanchipuram. While the subjects are primarily religious, we learn a lot from the paintings about the life and times of the Vijayanagara court.



A 15th century, painted ceiling of Virupākṣa temple, Hampi
(courtesy: Wikimedia commons).

Nāyaka Painting

After the fall of the Vijayanagara Empire in 1565, the Nāyakas ruled from the 16th to the 18th century and left behind a prolific collection of mural and wall paintings whose best example is the painted ceiling of the Thiruvarur temple in Tamil Nadu, depicting the story of Mucukunda, a legendary Cōla king.

Miniature Painting

Miniature paintings are executed on books and albums, and on perishable material such as paper and cloth. The Pālas of Bengal were the pioneers of miniature painting in India. The art reached its zenith during the Mughal period and was pursued by the painters of different Rajasthani Schools of painting, like Bundi, Kishangarh, Jaipur, Marwar and Mewar. The Rāgamāla paintings also belong to this school, as do the Company paintings produced during the British Raj.



Top: Manuscript page including a painting of Maitreya Bodhisattva on his throne. Sanskrit *Aṣṭasāhasrika Prajñāpāramitā Sūtra*, manuscript written in the Ranjana script in India, in early 12th century (source: Wikimedia). Bottom: Manuscripts with miniatures (courtesy: Michel Danino & Guwahati State Museum).

Unfortunately, early miniatures in wood and cloth have been completely lost. The earliest extant, belonging to the late 8th or mid 9th century of the Pāla period in eastern India, are representations of Buddhist *yantras*, graphic symbols which were visual aids to the *mantras* and the *dhāraṇīs* (types of ritual speech). Conforming to the canons of iconography, these Buddhist miniatures portray Buddhist deities such as Prajñāpāramitā, who, as the mother of all the Buddhas, was the personification of esoteric knowledge. The Buddhist paintings were drawn in red and white, forming colour planes. The inspiration came from the metal images, giving an illusion of relief. Miniatures were painted according to the rules of mural painting; the rule of proportions being regulated by strict codes of measurement. Effects such as foreshortening were derived from the study of sculpture rather than from reality.

The earliest extant miniatures are found in the manuscript *Aṣṭasāhasrika Prajñāpāramitā*, dated to the rule of Mahipāla (from c. 988). This style disappeared from India by the late 12th century. Miniature painting developed in western India in the 10th century in the state of Gujarat. These paintings are seen in mini-books of the Vaiṣṇavas and Jains. Subsequent Jain miniatures moved away from flat, twodimensional compositions: images became animated and all conventional representations of perspective were no longer in vogue. The human figure was represented in the simplest and most visible manner. Against a background of rich colour, stood out thick, boldly drawn figures. The paintings were harmonized with the enclosing script. The

ornamentation was increased to result in heavy stylization. The Jain painters preferred three-quarter profiles, displacing one of the eyes to avoid foreshortening, while frontal images had eyes set near the bridge of the nose.

The Jain paintings gave rise to the Gujarat School, from where it spread further to Rajasthan and Malwa. This evolved into Rajput painting and the subsequent fusion of the Indian and Persian styles in Mughal art.

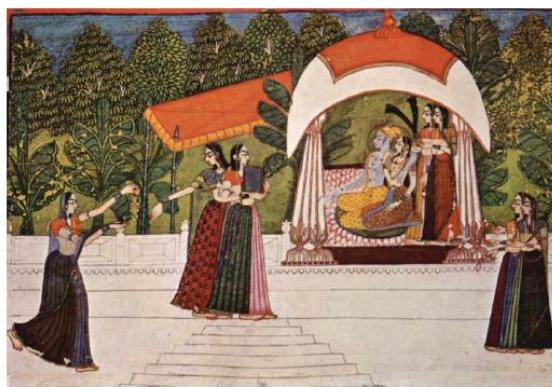
Mughal Paintings

The Mughal School of miniature painting reached its zenith under Akbar and Jehangir. The *Ain-i-Akbari* shows the importance the art had attained during this period. Basically Persian in style, the subjects depicted were scenes of warfare, hunting and trials of strength. The Mughal School saw an amalgamation of many influences: landscape details of Far Eastern art; clouds out of Chinese paintings;

mountains and water of Central Asian art. In Akbar's period, there was a greater attempt to portray reality as well as distance and horizontal perspective. Both Akbar and Jehangir encouraged the illustration of epics and histories, *Rāmāyaṇa*, *Mahābhārata*, *Akbarnāma* and *Hamzanāma*.

Rajput School and the Krṣṇa Cult

The Rajput School of miniature painting was spontaneous and vital in opposition to the heraldic court style of the Mughal School. Rajput paintings depicted festivals, mythological subjects and the important episodes from the life of Lord Krṣṇa. This coincided with the spread of the Krṣṇa cult as a part of the Bhakti movement in medieval northern India. Derived from the Gujarat School of painting, Rajput miniatures are based on drawings with bright splashes of colour. This school is divided into two main branches: Rajasthani and Pahāṛi.



An 18th-century Rajput painting by the artist Nihāl Chand (courtesy: Wikipedia).

The Pahāṛi School

The important centres of the Pahāṛi School were at Basholi, Jammu, Guler and Kangra. The Pahāṛi School was lively and romantic, technically superior with soft tonal shading, exquisitely created backgrounds that merged with the theme, and attitudes and postures highly evocative of the moods they were to convey. The Kangra paintings are as romantic as Kālidāsa's

descriptions of the mountains. In the Kangra School, Indian miniature paintings reached the zenith in the depiction of the Kṛṣṇa and Śiva legends. The colours were extracted from minerals, plant sources, conch shells, and even by processing precious stones; gold and silver were also used. The preparation of desired colours is a lengthy process, sometimes taking weeks.



Left: Folio from a *Rāmāyaṇa* manuscript: Rāma and Lakṣmaṇa defend sage Viśvamitra from demons, Basohli, early 19th century. Right: Kṛṣṇa lifting the Govardhana mountain, illustration to the *Bhāgavata Purāṇa*, Tira-Sujanpur, early 18th century.

Tanjore and Mysore Painting

The artists of Vijayanagara turned up in two great courts of late medieval India and created a new genre of painting, inspired by the great Vijayanagara traditions. Tanjore paintings are of popular Hindu deities and scenes from Hindu epics.

Mysore painting is another important legacy of classical Vijayanagara painting. The themes for most of these paintings are also Hindu deities and epic stories. With the help of a thin brush, all the jewellery and architectural features are painted over chalk paste, to give a slightly raised effect of carving, and then allowed to dry. A thin gold foil is pasted on this. The rest of the drawing is then painted using water colours.



Left: Mysore Painting of goddess Sarasvatī (courtesy: Wikimedia). Right: Kṛṣṇa in Tanjore painting (source: www.sandhyamanne.com).

Folk painting

There are many schools of Indian folk painting, a few of which are mentioned here.

1. Madhubani

Madhubani painting is practised in the Mithila region of Bihar. Themes revolve around Hindu deities and epic tales, especially tales of Lord Krṣṇa, and scenes of social events like weddings. No space is left empty: gaps are filled in with paintings of flowers, animals, birds and geometric designs. Artists use natural dyes and pigment extracted from leaves, herbs and flowers.

2. Paṭṭacitra

Paṭṭacitra (meaning “cloth painting”) is a folk style of Odisha closely linked with the worship of Lord Jagannath of Puri. While there is evidence of painting in the Khaṇḍagiri and Udayagiri caves, the earliest indigenous paintings from Odisha are the Paṭṭacitra done by the Chitrakars (a community of painters). The themes, centred around the Vaiṣṇava cult, Lord Jagannath and Lord Krṣṇa, are the major sources of inspiration. The painters still use vegetable and mineral colours and prepare their own paints. The old tradition of Oriya painting survives among the artists or Chitrakars of Puri, Raghurajpur, Paralekhamundi and Sonepur.

3. Kalamkāri

Kalamkāri or “pen craft” of SriKalahasti, is executed with a *kalam* or pen, used for free hand drawing of the subject and filling in the colours, entirely by hand. Paintings are usually handpainted or block-printed on cotton textile. This style grew around temples and had a distinctly religious identity scrolls, temple hangings, deities and scenes from the great Hindu epics. The Machilipatnam style tends to have more block printing. However, both use only vegetable colours.

There are several schools of tribal painting such as the Warli, Gond, Bhil and Kurumba, among others. Painting like most Indian art reflects the religious passion of the people, their joys and aspirations. It is also a documentation of the life and times, of kings and courts, nature, plants and animals. It is a celebration of colour, of festivals and all that is beautiful. India’s heritage of painting is a record of happy times and happy people who expressed their hopes and faith through their works of art.



Left: Gond art (source: www.crazygallery.info). Right: Warli art (courtesy: Uma Sharma).

Activities

- Design a card for various occasions using folk or tribal art. You could use Madhubani, Warli, Gond, Paṭṭacitra and Kalamkāri or any other such art form to depict the richness of this tradition.
- Debate on the topic “Techno-savvy man today has replaced the artist”.
- Select and observe a painting of your choice and develop your own story out of it. You may:
 - a) place yourself in the painting and write appropriate dialogues;
 - b) let your imagination go beyond the painting;
 - c) focus on the theme and enrich / enhance it with sound sequences.

Further Reading

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2. Chakraverty, Anjan. 2005. *Indian Miniature Painting*. New Delhi: Lustre Press
3. Cummins, Joan. 2006. *Indian Painting: From Cave Temples to the Colonial Period*. Boston: MFA Publications
4. Gupta, Charu Smita. 2008. *Indian Folk and Tribal Paintings*. New Delhi: Roli Books
5. Rawson, Philip S. 1961. *Indian Painting*. Paris: Pierre Tisné & New York: Universe Books
6. Sivaramamurti, C. 1996. *Indian Painting*. New Delhi: National Book Trust.

Internet Resources

- Mughal painting, www.britannica.com/EBchecked/topic/396178/Mughal-painting
- Miniature painting www.britannica.com/EBchecked/topic/383990/miniature-painting
- Different forms of Indian paintings, like cave painting, Miniature, Mughal, Mysore, Pahāṛi etc. www.culturalindia.net/indian-art/paintings/index.html
- Different forms of paintings. www.myindianculture.com/2011/12/indian-folk-art-tribalart-paintings.html
- History of Indian paintings www.itasveer.com/artsmart/articles/analysis-of-indianpaintings/history-of-indian-paintings

- Analysis of Indian paintings www.itasveer.com/artsmart/articles/gallery/analysis-ofindian-paintings
- Wall paintings of India <http://ccrtindia.gov.in/wall%20paintings.html>
- Miniature paintings <http://ccrtindia.gov.in/miniaturopainting.htm>
- Modern Indian paintings <http://ccrtindia.gov.in/modernindianpainting.htm>
- Miniature paintings <http://ngmaindia.gov.in/sh-miniature-painting.asp>
- Tanjore and Mysore Tradition <http://ngmaindia.gov.in/sh-tanjore.asp>
- Mysore painting <http://wiki.indianfolklore.org/images/d/d3/Mysore.pdf>
- Ajanta caves paintings www.indian-heritage.org/painting/ajanta/ajanta.html#links

Sculpture & Architecture:

Early and Classical Architecture

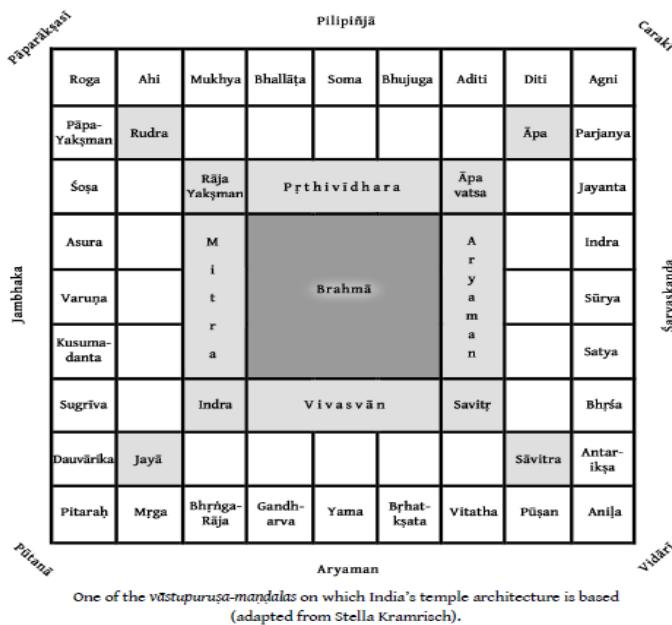
Vāstu-vidyā or *Śilpaśāstra* — the science of architecture — is one of the technical subjects studied in ancient India, along with *āyurveda* (science of medicine), *dhanurveda* (science of archery), *jyotiṣa* (astronomy), etc. In the earliest texts, the word *vāstu* occurs in the sense of a building site or the building itself. Later on, other subjects such as temple construction, town planning, public and private buildings and forts were included in the discipline in which the construction of a structure was regarded as a sacred act.

In the *Atharvaveda*, there are references to different parts of the building such as sitting-room, inner apartment, room for sacred fire, cattle shed and reception room. (*Atharvaveda*, IX.3). The *Sāṅkhāyana Grhya Sūtra* (c. 500 BCE) describes in three chapters the ceremonials performed for constructing a building. Kautilya's *Arthaśāstra* (c. 300 BCE) deals with town planning, fortifications and other structures of civil nature. *Samarāṅgaṇasūtradhāra*, authored by King Bhoja (1010-55 CE), discusses methods of examination of a site, analysis of the soil, systems of measurement, qualifications of the *sthapati* (architect) and his assistants, building materials, consecration of the plan followed by construction of foundation, basal mouldings and technical details for each part of the plan, design and elevation. The two principal south Indian texts, *Mayamata* (1000 CE) and *Mānasāra* (1300 CE), share a common understanding of the architectural plan and design of the southern (Drāviḍa) vintage but, while the former has a practical outlook, the latter develops the theory of the science.

Temple Architecture

India is justly famous as a land of temples. Many of these temples, especially those belonging to the ancient and medieval ages, are renowned on account of their architectural and sculptural excellence. Hindu temple architecture has broadly been classified as Nāgara or the north Indian style, Drāviḍa or the south Indian style, and Vesara which contains elements of both. Each region of India has given rise to a unique style of temple architecture due to the availability of stone and other material and in keeping with the climatic conditions and other factors.

The origin of Indian temple architecture can be traced to Vedic times. The square shape of the *vedi* (Vedic sacrificial altar) inspired the basic design of temples. The Indian shrine depicted in early bas-reliefs at Bharhut, Sanchi, Mathura and Amravati, has a small square altar, often enclosed by a *vedikā* (square railing) and shaded by a tree or a *chattrā* (parasol). *Vāstu Śāstra* visualizes the *vāstupuruṣa-mandala*- the abstract representation of temple architecture - as a square in the form of a *yantra* (symbolic diagram). The philosophy behind this concept is based on an equivalence behind the macrocosm — the universe, represented by the various gods or powers in the *mandala* — and the microcosm — the temple, often taken to be in the image of the human body. One central objective of Indian temple architecture is thus to connect the human being to the universe.



Rock-Cut Structures

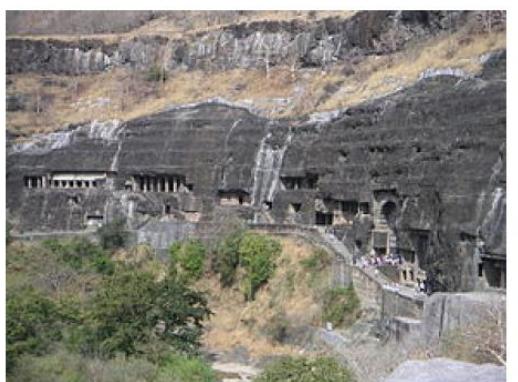
In India, temples were initially constructed of perishable material like wood, brick and mortar, perhaps reinforced by metal. Later, the need to have a permanent structure to house the deities led to the creation of shrines in stone and this is how the artificial ‘cave temples’, scooped out of hard rock came into being in several places in India. The early rock-cut cave temples in various parts of India were Hindu,

Jaina and Buddhist in nature. Some of the earliest examples of this type of architecture are the caves excavated during the 3rd century BCE in the time of the Mauryas, one of the best known being the Lomas Rśī cave in the Barabar Hills of Bihar, excavated out of hard granite for the Ājīvika sect, a heterodox sect. The entrance is a representation in stone of a hut’s entrance, with mock timber crossbeams protruding from the roof. A carved frieze of elephants is a stone imitation of similar work in wood along with a stone imitation of bamboo trellis.



Lomas Rsi cave, Bihar

Subsequently, the rock-cut caves of different parts of India developed variations depending upon the nature of the rock into which they were carved. The *caitya* shrines of the Buddhists as also the *vihāras* or monasteries are found in large numbers in the earliest phase of the evolution of cave temples. Remains of a circular *caitya* shrine belonging to the time of Aśoka are seen at Bairat in Rajasthan. Buddhist rock-cut caves are also found in Maharashtra, most notably at Ajanta and Ellora, where sandstone is abundant.



Left: Ajanta Caves, Right: Ellora Caves (source: Wikipedia)

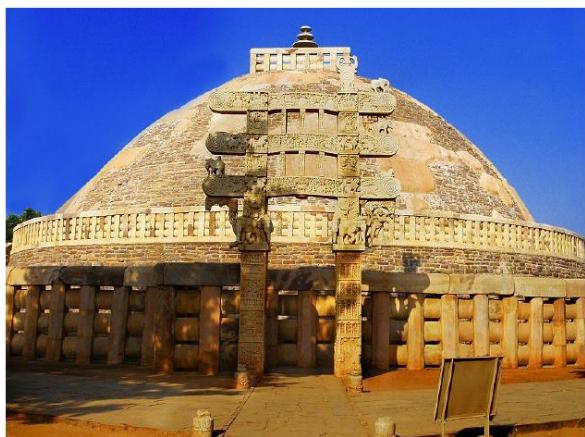
The earliest Hindu caves, which belong to the early 5th century, are seen at Udayagiri, near Bhilsa in Madhya Pradesh. Badami (ancient Vātāpi), in Karnataka, the capital of the Cālukyan dynasty is home to a number of such cave temples of sandstone belonging to the 6th century. They are mostly for Hindu deities and one is a Jaina cave temple. Many such cave temples were excavated during the Pallava dynasty of the 7th–8th century in the northern part of Tamil Nadu, especially at Mamallapuram (also known as Mahabalipuram), their port-city in Tamil Nadu. During the reign of the Pāṇḍyas of south Tamil Nadu who were the contemporaries of the Pallavas, many such Hindu and Jaina cave temples were excavated, followed by important Jaina cave temples at Ellora in the 9th century.

Monolithic Temples

The concept of creating cave temples slowly faded away as the architects graduated to making monolithic temples, i.e., shrines carved from top to bottom out of one piece of rock. Examples of these are seen in Mamallapuram, belonging to the 7th century. Famously known as the ‘Five Rathas’ (chariots), these five monolithic monuments are each of a different shape and size and are believed to replicate monuments made of perishable material that existed prior to their time. The grandest of the monolithic temples is the famous Kailāśa temple at Ellora in the reign of the Rāṣṭrakūṭas in the 8th century.

Constructed Temples

This type of architecture began with *stūpas* (relic mounds), *caitya* halls and *mahāvihāras*, which go back to the time of Buddha (6th century BCE). Originally the *stūpas* were made of bricks and surrounded by a wooden railing, then were enlarged and elaborated over centuries to magnificent complexes during the period of different empires and dynasties — Maurya empire, Śunga dynasty, Andhra period and Kuṣāṇ period.



The great stupa at Sanchi

Mauryan architecture, which is inspired by Buddhist thought, is illustrated by the *stūpas* at Sanchi, the monolithic rail at Sarnath and the pillars of Bodh Gaya. Śunga architecture added decorations of stone *vedikas* (railings) and gateways surrounding the *stūpa*. Examples of these monuments are the *stūpas* at Sanchi (near Bhopal), Bharhut (Madhya Pradesh), and Amaravati on the Krishna River. At Bharhut the gateways are imitations in stone of the wooden portals of early Indian towns. Most prominent in the embellishment of the *vedikas* are the carvings of Yakṣas and Yakṣīs (supernatural beings). The great *stūpa* at Sanchi, whose foundation was originally laid by Aśoka, was enlarged under the patronage of the Andhra Dynasty. Architecture under the Kuṣāṇas produced relief friezes carved in dark schist and portrayed figures in classical poses with flowing Hellenistic draperies; it also made use of ivory and imported glass. The *stūpa* in Gandhara marks the gradual elaboration of the primitive types known at Sanchi and Bharhut.

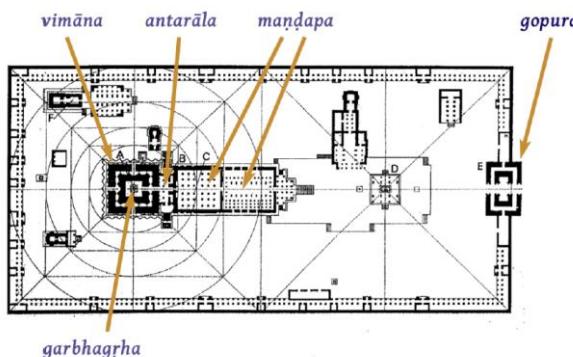
In the Gupta age, the tradition of excavating cave temples and monolithic shrines evolved into the construction of brick and stone temples. This was due to two reasons. One reason was that while the architects and sculptors could create a cave temple only where boulders or hills were available, a structural stone temple could be created at any chosen site by baking bricks or

quarrying and transporting stones. Secondly, there was more scope for architectural and sculptural innovation.

Experimentation while constructing a temple

Initially, temples were made as small shrines with possibly only the central sanctum sanctorum or the main cell enshrining the principal deity. Over time, they evolved into bigger temple complexes, with more sculptures and niches enshrining deities. Eventually, temples evolved into various styles, but those remained based on certain common concepts and features:

- **Gopura**: an elaborate gateway, especially in south Indian temples, generally in the form of a tower;
- **Jagatī** (literally, ‘earth’): the platform on which the temple is erected;
- **Māṇḍapa**: an open pillared hall for public events, including rituals, discourses or art performances;
- **Antarāla**: an antechamber between the *māṇḍapa* and the *garbhagṛha*;
- **Garbhagṛha**: the sanctum sanctorum, where the presiding deity is installed;
- **Sikharā** (for north Indian temples) or *vimāna* (for south Indian temple): the tower over the *garbhagṛha*.



The main parts of a classical Hindu temple (here the Br̥hadīśvara temple of Tanjavur)



Some of the best examples of such structural stone temples are of the Gupta age like the Daśavatāra Viṣṇu temple in Deogarh in Uttar Pradesh of the early 6th century (*right*), which is studded with intricate sculptures. The structural temples of the Cālukyas in Badami, Aihole and Pattadakal in Karnataka, belonging to the 7th and 8th centuries, follow close on the heels of the

Faculty of Peace Studies

Gupta creations. The temples of Aihole and Pattadakal need special mention as some are in the Drāviḍa and some in the Nāgara styles of architecture, situated in close proximity of each other.

Around this time, also arose the magnificent Drāviḍa temples of the Pallavas in Mamallapuram and in Kanchipuram, their capital city. Special mention must be made of the Shore temple in Mamallapuram which is one of the earliest structural stone temples of this dynasty constructed in the 8th century.



Shore Temple, Mamallapuram
 (courtesy: Dr. Chithra Madhavan)

In the same century was constructed the Śiva temple now known as the Kailāśanātha temple in Kanchipuram, almost wholly out of sandstone, far more grand than its predecessors. Later, many others in this town were constructed by the kings of this dynasty.



Kailāśanātha temple
 (courtesy: Dr Chithra Madhavan)

In Orissa, from the 7th century up to the 13th century, temples of the Nāgara order were built. These temples, while retaining the blueprint of the earlier ones of this style, became far larger and more ornate. This regional school, called the Kalinga or Orissan style, had a long period of evolution. The curvilinear śikhara over the sanctum sanctorum is the most eye-catching feature as also the hall called the *jagmohana*. The walls are profusely decorated with sculptures. The Paraśurāmeśvara temple in Bhubaneswar belongs to this century, the Mukteśvara temple (third quarter of the 10th century), the Rājārānī temple (11th century) and the Liṅgarājā temple (mid-

11th century). The best-known temple by way of architecture, the Sun temple in Konarak, is a 13th-century creation.



(Left:) Sun temple, Konarak. (Top right:) Lingarāja. (Bottom right:) Mukteśvara temple, Bhubaneswar (courtesy: Michel Danino)

With the coming of the age of the Imperial Cōlas who came to power in the 9th century with their capital initially at Tanjavur (Tamil Nadu), Dravidian temple architecture reached its pinnacle. The great temples of the Cōlas at Tanjavur, Gangaikondacholapuram, Darasuram and Tribhuvanam are standing examples of the height temple architecture of south India had reached. The *vimānas* are very tall in these four temples. In addition to these grand temples, the Cōlas constructed numerous others of varying sizes in almost every town and village across their vast empire. The innumerable sculptures of stone and bronze in the Cōla temples are outstanding examples of the skill and dexterity of the artisans of the period and also reflect the patronage given to them by the Cōla emperors. It must be pointed out that the grand *gopuras* of Tamil Nadu, which started to evolve in the Pallava times, gained much prominence in the Cōla age.



Great Cōla temples at Tanjavur and Darasuram, Tamil Nadu

Improving upon the already known Nāgara style and contributing greatly to this style of architecture of approximately between the 9th and the 12th centuries was the Candela dynasty. Its major claim to fame is the group of outstanding temples at Khajuraho in Madhya Pradesh, the

best-known being the Kandāriyā Mahādeva temple constructed in the 11th century. There are literally hundreds of sculptures

adorning the walls of these temples. Some of the minute carvings are explicitly erotic in nature. Scholars have over time attributed this to the then prevalent Tantric beliefs. The increasing complexity of the form of the Nāgara art and architecture is best exemplified in the architectural style of the Candelas.



Kandariyā Mahādeva temple (source: Wikipedia)



Minākṣi-Sundareśvarar temple in Madurai



Somanathapura (Keśava temple), near Mysore, in Hoysala style



(Left) Virupākṣa temple. (Top right) Viṭṭhala temple. (Bottom right) Acyutarāyā temple.



A view of the temples at Mount Chaturjaya (near Palitana, Bhavnagar district, Gujarat).
This site, which is sacred for Jains, has around 900 temples (source: Wikipedia).



A view of the Harmandir Sahib or Golden Temple in Amritsar (source: Wikipedia).

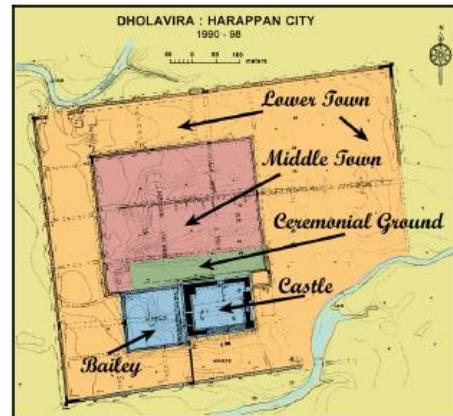
Public and Private Architecture

Excavations at Harappa and Mohenjo-daro in 1921-22 marked the discovery of the Indus or Harappan civilization (2600–1900 BCE). Later discoveries include major sites like Kalibangan (Rajasthan), Lothal (Gujarat) and, in the last two decades, Dholavira (Gujarat), Bhirrana, Rakhigarhi and Farmana (all three in Haryana). To date, over 1,100 urban and rural Harappan settlements have been found in the northwest of the Indian subcontinent.

Unlike our modern cities, most of which grew organically out of a town or a village, Harappan cities were planned, with the streets generally oriented along the cardinal directions. Houses were built with bricks of standardized proportions; some of the larger ones had at least an upper storey; roofs consisted of wooden structures covered with grass or leaves. Most houses had individual bathrooms connected to extensive drainage networks. Complex structures, such as Mohenjo-daro's Great Bath or the so-called Granary, demonstrated advanced planning and construction skills. In the Great Bath's central basin, for example, the floor was made of tightly fitted bricks set on edge and cemented with a gypsum plaster to make a watertight surface; it was then covered with a layer of bitumen (natural tar). Humbler structures, such as wells constructed with trapezoid bricks, which prevented inward collapse, were no less advanced. Some of these Harappan techniques and concepts were preserved in later Indian architecture: for instance, the general house plan, with rooms organized around a central courtyard, survives in many parts of rural India; the drainage system of the later Ganges civilization was very likely a Harappan legacy.



The Great Bath at Mohenjo-daro (source: Michael Jansen)



Dholavira's plan with the city's different areas
(adapted from Archaeological Survey of India)

At Dholavira, a large and rigorously planned city located on an island in the Rann of Kachchh, stone was used to build massive fortifications, while a network of enormous reservoirs ensured water supply to the city through the year. The city was divided into upper town (consisting of Castle and Bailey, see plan above); middle town (where most habitations were located), which included a 283-metre-long ceremonial ground; and lower town. Dressed stone was used in construction along with mud bricks that conformed to Harappan standardized proportions. Stone pillars made of highly polished segments have also been found here.



(Left:) Massive stone fortifications at Dholavira (courtesy: Michel Danino). (Right:) A row of bathing platforms connected by a common drain at Lothal (courtesy: Archaeological Survey of India).

Bathing platforms with drains were often situated in rooms adjacent to the wells. A small drain cut through the house wall out into the street directed dirty waters into a larger sewage drain. Tapered terracotta drainpipes were used to direct water out to the street. Many houses had distinct toilets, separate from the bath areas; commodes were large jars or sump pots sunk into the floors. Drains were made of burnt bricks and connected the bathing platforms and latrines of private houses to medium-sized open drains in the side streets. These open drains flowed into the larger sewers in the main streets: those were covered with baked bricks or dressed stone blocks. In Mohenjo-daro, large garbage bins were also provided along the major streets at regular intervals. Nearly a millennium after the Indus civilization had collapsed, the Ganges civilization arose in the first millennium BCE. Among the first cities to emerge in the Ganges plains from about 800 BCE were Mathura, Kanyakubja (modern Kanauj), Kauśāmbī and Vārāṇasī (Benares) in today's Uttar Pradesh, Rājagṛha (Rajgir) and Vaiśalī in Bihar. But this urban development extended beyond the Ganges valley, as testified by Takṣaśilā (Taxila, today in northern Pakistan), Ujjayinī (Ujjain, in Madhya Pradesh) or Śiśupālgarh (probably the ancient Kaliṅganagar, near Bhubaneswar in Odisha).



A segment of Rajgir's Cyclopean Wall, near the southern gateway (courtesy: Dr. B.R. Mani).

In Rājagṛha, a huge fortification called ‘Cyclopean Wall’, running over several kilometres around the city, consists of unhewn stones being piled one on top of the other; it was constructed in the 6th or 5th century BCE. At Śiśupālgarh (3rd century BCE at least), stone masons were at work using large blocks of laterite to build a very wellmade fort entrance that could be closed with huge doors turning on hinges. At the centre of the city, a huge apsidal

(semi-oval) structure with pillars has been excavated, which may have been either a temple or a palace.

Other important structures of this period include Aśoka's pillars, a series of columns dispersed throughout north India, erected or at least inscribed with edicts by the Mauryan emperor Aśoka during his reign in the 3rd century BCE.



One of Śiśupālgarh's gateways, excavated in 1948 (courtesy: Archaeological Survey of India)

Originally, there must have been many pillars but only nineteen survive with inscriptions. They are monolithic, about twelve metres high, two metres underground, with mirror-like polish. The finest among them, now in Sarnath museum, had at its capital (top) a sculpture of four lions fused together, which was adopted as the emblem of the Republic of India.



Examples of Aśoka's pillars with their capitals depicting lions (source: Wikipedia)

Write on -

- ‘Indian temples are renowned on account of their architectural and sculptural excellence.’ Justify.
- Name a few rock-cut temples in India mentioning the period in which they were carved.

Activity

- In groups, list the temples, forts, palaces, mosques and mausoleums of various states in India.
- Form groups, study important places of worship such as Golden Temple, Bodhgaya temple, Dilwara Jain temple and Belur temples and identify the various elements of a temple: *gopuram, jagatī, maṇḍapa, antarāla, garbhagṛha, śikhara* or *vimāna*.

- Go through the above Survey text above and prepare a worksheet on temples built by these various dynasties: Vijayanagara, Colās, Pāṇḍyas, Hoysālā, Kaliṅga. You may use the following hints to prepare your worksheet:

- Name of the monument
- Location (route from your school to the monument)
- Organization which maintains the place
- Interesting features and facts about the monument
- Add pictures / drawings of the mentioned monument
- Any suggestions and recommendations you would like to give a visitor to the heritage site.

Further Reading

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2. Agrawal, V.S., (ed.) 1966. *Samarāṅgaṇasūtradhāra*. Baroda: Oriental Institute
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Internet Resources

- Indian Temple Architecture: www.templenet.com/arch.html
- Archaeological survey of India, Photo gallery of monuments: http://asi.nic.in/asi_pgallery.asp
- Overview of Ajanta caves: <http://sahapedia.org/ajanta/>
- An online encyclopaedia on temple architecture of various regions: www.templenet.com/encyclo.html
- Monolithic temples in Mahabalipuram (Mamallapuram): http://asi.nic.in/asi_monu_whs_mahabalipuram_monolithic.asp
- Mohenjo-Daro: Introduction to the site: www.mohenjodaro.net/mohenjodaro/introduction.html
- Slides on Mohenjo-Daro: www.mohenjodaro.net/mohenjodaroslides.html
- Slides on Harrapan civilization: www.harappa.com/walk/index.html