

Subject Name: Introduction to Indian Knowledge Systems (UM1IKBBH01)

Unit 2:- Contribution of IKS to the World

- ❖ Bhartiya Contribution in Mathematics and Astronomy
- ❖ Bhartiya Wisdom related to Life Science: Physics, Chemistry, Botany
- ❖ Bhartiya Science of Architecture with reference to Lothal, Mohan Jo Daro, Dholavira, Temple Architecture
- ❖ Ayurveda : Concept, Branches, Books and Pioneers
- ❖ Bhartiya Literature and Bhartiya Theory of Aesthetics and Rasa

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❖ **Bhartiya Contribution in Mathematics and Astronomy**

Science and Mathematics were highly developed during the ancient period in India. Ancient Indians contributed immensely to the knowledge in Mathematics as well as various branches of Science. In this section, we will read about the developments in Mathematics and the scholars who contributed to it. You will be surprised to know that many theories of modern day mathematics were actually known to ancient Indians. However, since ancient Indian mathematicians were not as good in documentation and dissemination as their counterparts in the modern western world, their contributions did not find the place they deserved. Moreover, the western world ruled over most of the world for a long time, which empowered them to claim superiority in every way, including in the field of knowledge. Let us now take a look at some of these contributions of ancient Indian mathematicians.

➤ **Baudhayan**

Baudhayan was the first one ever to arrive at several concepts in Mathematics, which were later rediscovered by the western world. The value of pi was first calculated by him. As you know, pi is useful in calculating the area and circumference of a circle. What is known as Pythagoras theorem today is already found in Baudhayan's Sulva Sutra, which was written several years before the age of Pythagoras.

➤ **Aryabhata**

Aryabhata was a fifth century mathematician, astronomer, astrologer and physicist. He was a pioneer in the field of mathematics. At the age of 23, he wrote Aryabhattiya, which is a summary of mathematics of his time. There are four sections in this scholarly work.

In the first section he describes the method of denoting big decimal numbers by alphabets. In the second section, we find difficult questions from topics of modern day Mathematics such as number theory, geometry, trigonometry and Beejganita (algebra).

➤ **Brahmgupta**

In 7th century, Brahmgupta took mathematics to heights far beyond others. In his methods of multiplication, he used place value in almost the same way as it is used today. He introduced negative numbers and operations on zero into mathematics. He wrote Brahm Sputa Siddantika through which the Arabs came to know our mathematical system.

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➤ **Bhaskaracharya**

Bhaskaracharya was the leading light of 12th Century. He was born at Bijapur, Karnataka. He is famous for his book Siddhanta Shiromani. It is divided into four sections: Lilavati (Arithmetic), Beejaganit (Algebra), Goladhyaya (Sphere) and Grahaganit (mathematics of planets). Bhaskara introduced Chakrawat Method or the Cyclic Method to solve algebraic equations. This method was rediscovered six centuries later by European mathematicians, who called it inverse cycle. In the nineteenth century, an English man, James Taylor, translated Lilavati and made this great work known to the world.

➤ **Mahaviracharya**

There is an elaborate description of mathematics in Jain literature (500 B.C -100 B.C). Jain gurus knew how to solve quadratic equations. They have also described fractions, algebraic equations, series, set theory, logarithms and exponents in a very interesting manner. Jain Guru Mahaviracharya wrote Ganit Sara Sangraha in 850A.D. which is the first textbook on arithmetic in present day form. The current method of solving Least common Multiple (LCM) of given numbers was also described by him. Thus, long before John Napier introduced it to the world, it was already known to Indians.

❖ **Bhartiya Contribution in Astronomy**

Indian astronomy has a rich history with significant contributions dating back to ancient times. Here are some key aspects of Bhartiya (Indian) contributions in astronomy.

- 1. Ancient Observations:** Indian astronomers made early observations of celestial bodies. The oldest known astronomical text, the Vedanga Jyotisha, dates back to around 1400-1200 BCE. It provided guidance on tracking the movements of the sun and the moon.
- 2. Aryabhata:** Aryabhata, an ancient Indian mathematician and astronomer, is often regarded as one of the pioneers in the field. His work, the "Aryabhatiya" (499 CE), contained valuable insights into mathematics and astronomy. Aryabhata accurately calculated the value of π (pi) and the length of a year.
- 3. Bhaskara I and II:** Bhaskara I (circa 600 CE) and Bhaskara II (1114-1185 CE) were renowned mathematicians and astronomers. Bhaskara II's work, the "Siddhanta Shiromani," contained important contributions to planetary motion, eclipses, and trigonometry.
- 4. Surya Siddhanta:** This ancient Indian text from around the 4th or 5th century CE

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provides detailed knowledge about solar and lunar eclipses, the position of the planets, and the calculation of the Earth's circumference.

- 5. Concept of Zero:** While not exclusively related to astronomy, the invention of zero by Indian mathematicians was crucial for astronomical calculations and the development of the decimal numeral system.
- 6. Islamic Influence:** During the medieval period, Indian astronomy benefitted from interactions with Islamic scholars. Important works like the "Zij-i-Sultani" were created through collaborations between Indian and Persian astronomers.
- 7. Modern Astronomy:** India has made substantial contributions to modern astronomy. The Tata Institute of Fundamental Research (TIFR) and the Indian Space Research Organization (ISRO) has played key roles in astronomical research and space exploration.
- 8. Space Missions:** ISRO's space missions, such as Chandrayaan and Mangalyaan (the Mars Orbiter Mission), have contributed to our understanding of celestial bodies beyond Earth.
- 9. Research and Observatories:** India hosts several prominent observatories, including the Indian Institute of Astrophysics and the Tata Institute of Fundamental Research's National Centre for Radio Astrophysics.

In summary, Indian astronomy has a long and illustrious history, with contributions ranging from ancient texts to modern space exploration and research. These contributions have enriched our understanding of the cosmos and continue to play a vital role in global astronomical endeavors.

❖ **Bhartiya Wisdom related to Life Science: Physics, Chemistry, Botany**

India's Contribution to Science (From Ancient to Modern)

Advancements in science and technology have been the major reason for the development of human civilization. India has been contributing to the fields of science and technology since ancient times. Even today, what we term as 'traditional knowledge' is actually based on scientific reasoning

1. Physics

The concept of atom can be traced to the Vedic times. The material world was divided into five elements, namely, earth (Prithvi), fire (Agni), air (Vayu), water (Jal) and ether or space (Akasha). Paramanu (beyond atom) was considered to be the smallest particle, which cannot be divided further. Nuclear energy is produced today splitting the same.

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Physics, science that deals with the structure of matter and the interactions between the fundamental constituents of the observable universe. In the broadest sense, physics (from the Greek *physikos*) is concerned with all aspects of nature on both the macroscopic and sub microscopic levels. Its scope of study encompasses not only the behaviour of objects under the action of given forces but also the nature and origin of gravitational, electromagnetic, and nuclear force fields.

Its ultimate objective is the formulation of a few comprehensive principles that bring together and explain all such disparate phenomena.

Here are 3 main branches of Physics:

- Classical Physics
- Modern Physics
- Nuclear Physics

2. Chemistry

Chemistry is a branch of natural science that deals with the properties, composition, and structure of substances (defined as elements and compounds), the transformations they undergo, and the energy that is released or absorbed during these processes.

In a more formal sense, chemistry is traditionally divided into five major sub disciplines:

- A. Organic chemistry
- B. Biochemistry
- C. Inorganic chemistry
- D. Analytical chemistry
- E. Physical chemistry

A. Organic chemistry

Organic chemistry is the branch of Chemistry that involves the scientific study of **organic compounds** (compounds that contain covalently bonded carbon atoms). This branch of chemistry primarily deals with the structure and chemical composition of organic compounds, the physical and chemical properties of organic compounds, and the chemical reactions undergone by these compounds.

B. Biochemistry

The branch of science dealing with the study of all the life processes such as control and coordination within a living organism is called Biochemistry.

C. Inorganic chemistry

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The word organic refers to the compounds which contain carbon atoms in it. So the branch of chemistry that deals with the study of compounds, which does not consist of carbon - hydrogen atoms in it, is called 'Inorganic Chemistry.'

D. Analytical chemistry

Analytical chemistry is the branch of chemistry that deals with the analysis of different substances.

E. physical chemistry

Physical chemistry is the branch of chemistry devoted to the study of the behaviour of matter at an atomic or molecular level.

3. Botany

Botany branch of biology that deals with the study of plants, including their structure, properties, and biochemical processes. Also included are plant classification and the study of plant diseases and of interactions with the environment. The principles and findings of botany have provided the base for such applied sciences as agriculture, horticulture, and forestry.

Plants were of paramount importance to early humans, who depended upon them as sources of food, shelter, clothing, medicine, ornament, tools, and magic. Today it is known that, in addition to their practical and economic values, green plants are indispensable to all life on Earth: through the process of photosynthesis, plants transform energy from the Sun into the chemical energy of food, which makes all life possible. A second unique and important capacity of green plants is the formation and release of oxygen as a by-product of photosynthesis. The oxygen of the atmosphere, so absolutely essential to many forms of life.

In time plants were not only collected but also grown by humans. This domestication resulted not only in the development of agriculture but also in a greater stability of human populations that had previously been nomadic.

❖ Bharti Science of Architecture with reference to Lothal, Mohan Jo Daro, Dholavira, Temple Architecture**🚩 Lothal**

Lothal was one of the ancient Indus Valley Civilisation's southernmost settlements, located in the Bhlarea of the current state of Gujarat. The city's construction is said to have begun about 2200 BCE. Lothal is situated between the Sabarmati and its tributary, the Bhogavo.

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Exploration of the Sabarmati Valley in the mid-1950s resulted in the discovery of Lothal and many additional Harappan sites, adding a new region to the Indus civilization's scope.

Lothal

- Lothal was an essential element of the **Harappan civilisation** not just because of its **fertile cotton and rice-growing lands**, but also because of its bead-making sector.
- The beads and semi-precious stones discovered at Lothal attest to a high degree of artisanal ability, and many of these beads have been discovered throughout **Mesopotamia**, indicating a thriving commerce.
- Over time, a well-planned township was built, a hallmark of the **Mature Harappan** era, coupled with a ship dock.
- The old village was split into multiple blocks of one or two-metre-high platforms built of sun-dried bricks, albeit only a tiny fraction is still visible.
- Lothal appears to have thrived for many years after the centre of the Indus civilization had disintegrated in **Mohan Jo Daro and Harappa**.
- Its continual dangers tropical storms and floods – wreaked havoc, destabilising the civilization and finally bringing it to an end.

In **1954-63**, archaeologist **S.R. Rao** led expeditions that found a number of Harappan sites, notably the harbour city of Lothal.

Conclusion

Lothal, like Mohenjo-Daro, means "mound of the dead." Lothal is located in Gujarat, between the Bhogavo and Sabarmati rivers, near the Gulf of Khambhat. Lothal was an important part of the Harappan civilization not just for its bountiful cotton and rice-growing areas, but also for its bead-making industry.

 **Mohan Jo Daro**

Mohan Jo Daro is an archaeological site in the Sindh province. It was one of the greatest communities of the ancient Indus Valley Civilisation, with uniform bricks, street grids, and covered sewage systems. It was built approximately 2500 BCE. It was one of the world's first great towns, existing with ancient Egypt, Mesopotamia, Minoan Crete, and Norte Chico civilizations.

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Mohan Jo Daro

Mohan Jo Daro is a collection of mounds and ruins on the Indus River's right bank in northern Sindh province, Pakistan.

- It's about 50 miles (80 kilometres) southwest of Sukkur, on the Indus' flat alluvial plain.
- The name Mohenjo-Daro means "**Mound of the Dead**," and it is the most well-known Indus site.
- The site features the ruins of one of two major **Indus civilisation** centres (c. 2500–1700BCE), the other being Harappa, about 400 miles (640 kilometres) to the northwest in Pakistan's Punjab state.
- It was one of the most important towns of the Indus Valley Civilization, also known as the Harappan Civilization, which sprang from the prehistoric Indus civilization circa 3,000 BCE.
- In 1922, **R.D. Banerjee, E. J. H. MacKay, and Marshall** explored the Mohan Jo Daro remains for the first time.

Conclusion

Mohan Jo Daro is a collection of mounds and ruins on the right bank of the Indus River in Pakistan's northern Sindh province. The site contains the ruins of one of two major Indus civilization centers (c. 2500–1700 BCE), the other being Harappa, which is located about 400 miles (640 kilometers) to the northwest in Pakistan's Punjab province. It coexisted alongside ancient Egypt, Mesopotamia, Minoan Crete, and Norte Chico civilizations as one of the world's earliest large settlements.

Dholavira

Dholavira was a large Harappan city-state that existed between 3000 and 1500 BCE. It is one of the five major Harappan sites in India and one of the most important Indus Valley Civilization archaeological sites. It is also thought to have been the most magnificent city of its period. It's on Khadir Bet Island in the Great Rann of Kutch's Kutch Desert Wildlife Sanctuary.

Dholavira

Dholavira is the fifth greatest metropolis of the **Indus Valley Civilization**, after **Mohan Jo Daro**, Ganweriwala, and Harappa in Pakistan, and Rakhigarhi in Haryana, India.

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- On the arid island of Khadir in Gujarat, the ancient city of Dholavira, the southern centre of the **Harappan Civilization**, is located.
- The archaeological site, which was occupied between 3000 and 1500 BCE and is one of the best surviving urban settlements from the time in Southeast Asia, consists of a fortified city and a cemetery.
- Two **seasonal streams** supplied water to the walled city, which has a highly guarded fortress and ceremonial grounds, as well as streets and homes of varying percentage quality, indicating a tiered socioeconomic hierarchy in the region.
- The **Dholavira people's** tenacity in their quest to live and develop in a tough environment is demonstrated through a complex water management system.
- The site includes a large cemetery with cenotaphs of six types testifying to the Harappans unique view of death.
- Bead processing workshops and artefacts of various kinds such as copper, shell, stone, jewellery of **semi-precious stones, terracotta, gold, ivory and other materials have been found during archaeological excavations of the site**, exhibiting the culture's artistic and technological achievements.
- Evidence for inter-regional trade with other Harappan cities, as well as with cities in the Mesopotamia region and the Oman peninsula has also been discovered.
- Archaeologist Jagat Pati Joshi found it in 1968.

Conclusion

Dholavira, India's most recent UNESCO World Heritage site, was a large urban Centre in the Harappan civilization that existed between 3000 and 1500 BCE. It is the first Indus Valley Civilization (IVC) site in India to be put on the prestigious list. The others are the Indian ruins of Rakhigarhi and the Pakistani ruins of Harappa, Mohan Jo Daro, and Ganweriwala. Dholavira is located in Gujarat's Kutch area, on the Khadir Bet (island) in the Bhachau taluka, and is bordered by the Rann of Kutch Lake.

 **Temple Architecture**

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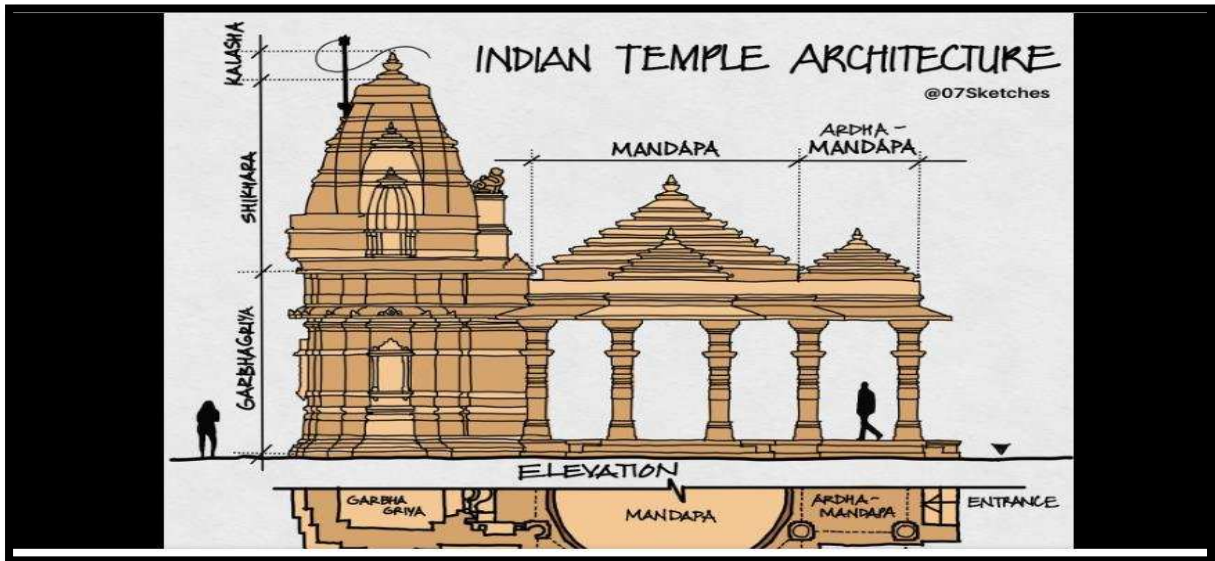


Figure 1

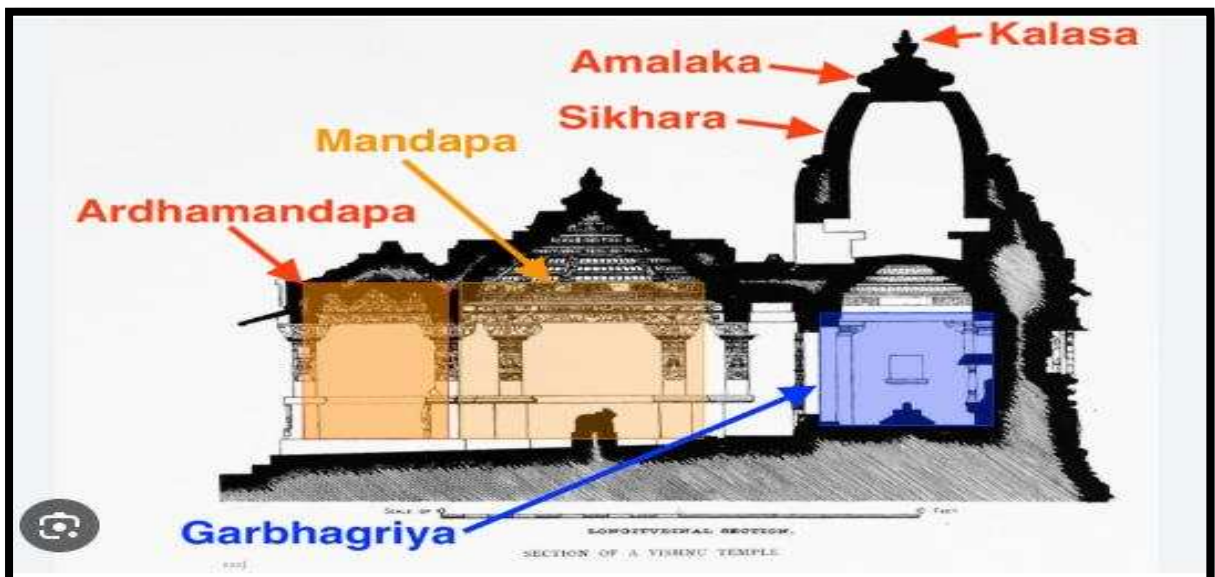


Figure 2

🏛️ Temple Architecture

Introduction

- Most of the architectural remains that survive from Ancient and Medieval India are religious in nature.
- In different parts of the country, distinct architectural style of temples was result of geographical, ethnic and historical diversities.
- Two broad orders of temples in the country are known as **Nagara in the north and Dravida in the south.**

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- At times, the **Vesara style** of temples is also found as an independent style, created through the selective mixing of the Nagara and Dravida orders.
- As temples grew more complex, more surfaces were created for sculpture by adding more and more rhythmically projecting, symmetrical walls and niches, without breaking away from the fundamental plan of the shrine.

✚ **Basic Features of the Hindu Temples**

The basic form of the Hindu temple comprises the following:

- ✓ **Sanctum (garbhagriha** literally ‘womb-house’)
 - It was a small cubicle with a single entrance which grew into a larger chamber in time.
 - The garbhagriha is made to house the main icon.
- ✓ **Entrance to the temple**
 - It may be a portico or colonnaded hall that incorporates space for a large number of worshippers and is known as a **mandapa**.
 - Freestanding temples tend to have a **mountain-like spire**
 - It can take the shape of a curving **shikhar** in North India and a pyramidal tower, called a **vimana**, in South India.
- ✓ **The vahan**
 - It was mount or vehicle of the temple’s main deity along with a standard pillar or dhvaj is placed axially before the sanctum.
 - Many Hindu temples, feature **mithun (embracing couple) sculptures**, considered auspicious.
 - Usually, they are placed at the entrance of the temple or on an exterior wall or they may also be placed on the walls between the mandapa and the main shrine.

❖ **Ayurveda : Concept, Branches, Books and Pioneers**

✚ **Ayurveda**

Ayurveda is an ancient system of traditional medicine that has its roots in India. The word “Ayurveda” is derived from two Sanskrit words: “**Ayur**” which means life, and “**Veda**” which means knowledge or science. Therefore, Ayurveda can be translated as the “science of life” or the “knowledge of life”.

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Ayurveda is a holistic approach to health and wellness that focuses on achieving a balance between the body, mind, and spirit to promote overall well-being. It has been practiced for thousands of years and is one of the world's oldest systems of medicine.

Key principles and concepts of Ayurveda include:

- **Doshas:** Ayurveda categorizes individuals into three primary constitutional types or doshas: Vata, Pitta, and Kapha. These doshas represent a person's unique combination of physical, mental, and emotional characteristics. Each dosha is associated with specific qualities and elements.
- **Prakriti and Vikriti:** Prakriti refers to an individual's natural constitution or their inherent dosha balance at birth. Vikriti, on the other hand, is an individual's current dosha imbalance, which can change due to various factors like diet, lifestyle, and environmental influences.
- **Five Elements:** Ayurveda is based on the concept of five elements—earth, water, fire, air, and ether (space). These elements combine to form the doshas, and they are also present in everything in the universe, including food and the human body.
- **Diet and Lifestyle:** Ayurveda places a strong emphasis on diet and lifestyle choices to maintain or restore balance. It suggests that different foods and activities have varying effects on each dosha and recommends personalized approaches to nutrition and daily routines.
- **Herbal Medicine:** Ayurvedic practitioners often use a wide range of herbs and natural substances to address health issues and imbalances. Herbal remedies are selected based on an individual's dosha and specific health concerns.
- **Yoga and Meditation:** Ayurveda is closely linked to yoga and meditation practices, as they are seen as effective tools for maintaining physical and mental balance.
- **Panchakarma:** Panchakarma is a detoxification and rejuvenation therapy in Ayurveda. It involves various cleansing procedures to remove toxins and restore balance in the body.

Use of Ayurveda

Ayurveda has a wide range of practical applications in real life, and many people use it to promote overall well-being, address specific health concerns, and maintain a healthy lifestyle. Here are some common uses of Ayurveda in everyday life:

1. **Diet and Nutrition:** Ayurveda provides guidelines for individualized dietary choices based on a person's dosha constitution (Vata, Pitta, or Kapha). By following Ayurvedic dietary principles, individuals can optimize their nutrition, digestion, and energy levels.

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This includes recommendations on what to eat, when to eat, and how to prepare and combine foods.

- 2. Stress Reduction and Mental Health:** Ayurveda recognizes the mind-body connection and emphasizes practices like yoga and meditation to reduce stress, improve mental clarity, and enhance emotional well-being. These practices are widely used to manage anxiety, depression, and other mental health issues.
- 3. Herbal Remedies:** Ayurvedic herbal remedies are used to address various health conditions. Common herbs and natural substances are employed to treat ailments such as colds, digestive disorders, skin issues, and more. Examples include turmeric, ashwagandha, ginger, and neem.
- 4. Detoxification and Cleansing:** Ayurveda incorporates detoxification techniques known as Panchakarma. These procedures help remove toxins from the body, boost the immune system, and restore balance. Common practices include oil massages (Abhyanga), herbal steam treatments (Swedana), and cleansing enemas (Basti).
- 5. Daily Routine (Dinacharya):** Ayurveda promotes the importance of establishing a daily routine that aligns with one's dosha constitution. This includes recommendations for waking up, sleeping, and daily self-care practices such as oil pulling, tongue scraping, and nasal cleansing.
- 6. Lifestyle Choices:** Ayurveda encourages making lifestyle choices that are in harmony with one's constitution. This may involve choosing physical activities that balance your dosha, managing your work schedule and stress levels, and creating a calming and balanced home environment.
- 7. Preventive Healthcare:** Many people use Ayurveda as a preventive healthcare system to maintain health and well-being, even when they are not experiencing specific health issues. By understanding their dosha and making appropriate lifestyle and dietary choices, individuals can reduce the risk of imbalances and diseases.
- 8. Holistic Wellness:** Ayurveda focuses on the holistic well-being of an individual, encompassing physical, mental, and spiritual aspects of health. It encourages self-awareness and self-care practices that support a balanced and harmonious life.

 **Branches of Ayurveda:**

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Ayurveda is an ancient system of natural healing that originated in India over 5,000 years ago. It encompasses various branches or specialties that focus on different aspects of health and well-being. Here are some of the main branches of Ayurveda:

- 1. Kaya Chikitsa (General Medicine):** Kaya Chikitsa is the branch of Ayurveda that deals with general medicine and the treatment of various diseases and disorders. It includes diagnosis, prevention, and treatment using a holistic approach.
- 2. Bala Chikitsa (Pediatrics):** Bala Chikitsa specializes in the care and treatment of children, including the management of childhood illnesses and the promotion of child health.
- 3. Graha Chikitsa (Psychiatry):** Graha Chikitsa focuses on the treatment of mental and emotional disorders. It uses Ayurvedic principles to address psychological and psychiatric conditions.
- 4. Urdhvaanga Chikitsa (ENT and Ophthalmology):** This branch deals with disorders of the head and neck, including ear, nose, throat, and eye-related conditions. It offers remedies for problems like sinusitis, vision issues, and more.
- 5. Shalya Chikitsa (Surgery):** Shalya Chikitsa is the surgical branch of Ayurveda. In ancient times, it involved various surgical procedures and techniques. However, modern Ayurvedic practices often refer surgical cases to conventional medicine.
- 6. Damstra Chikitsa (Toxicology and Forensic Medicine):** Damstra Chikitsa deals with toxicology, poisoning, and forensic medicine. It includes the identification of toxins, their effects, and the treatment of poisoning.
- 7. Jara Chikitsa (Geriatrics):** Jara Chikitsa is dedicated to the well-being of elderly individuals. It focuses on promoting longevity, preventing age-related diseases, and improving the quality of life in old age.
- 8. Vrisha Chikitsa (Aphrodisiacs and Reproductive Medicine):** This branch deals with issues related to sexual health, fertility, and reproductive medicine. It includes the use of herbs and therapies to address sexual and reproductive problems.
- 9. Agada Tantra (Toxicology):** Agada Tantra focuses on detoxification and the management of toxins in the body. It is concerned with preventing and treating toxic conditions.
- 10. Rasayana (Rejuvenation and Anti-aging):** Rasayana is a branch of Ayurveda that emphasizes rejuvenation and anti-aging practices. It involves the use of specific herbs, diet, and lifestyle modifications to promote longevity and vitality.

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- 11. Vajikarana (Aphrodisiacs and Fertility):** Vajikarana is closely related to Vrisha Chikitsa and focuses specifically on enhancing sexual potency, improving fertility, and promoting sexual health.
- 12. Stree Roga and Prasuti Tantra (Obstetrics and Gynecology):** This branch is dedicated to women's health, including the management of gynecological disorders, pregnancy, and childbirth.
- 13. Panchakarma (Detoxification and Cleansing):** Panchakarma is a therapeutic process in Ayurveda that involves a set of detoxification and cleansing procedures to remove toxins from the body and restore balance.

These branches of Ayurveda represent the diverse range of healthcare and wellness practices within this ancient system. Practitioners of Ayurveda may specialize in one or more of these areas depending on their training and interests.

Books and Pioneers of Ayurveda:

Ayurveda, as an ancient system of natural healing, has a rich history and numerous texts that have contributed to its development over thousands of years. Additionally, there have been many pioneers and scholars who have made significant contributions to Ayurvedic knowledge. Here are some important books and pioneers in the field of Ayurveda:

Important Ayurvedic Books:

Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Bhava Prakasha, Madhava Nidanam

Prominent Pioneers and Scholars of Ayurveda:

Acharya Charaka, Acharya Sushruta, Acharya Vagbhata, Acharya Madhavakara, Acharya Bhavamishra, Acharya Chakrapani Datta, Acharya Vaidya Narayana Murthy

❖ Bhartiya Literature and Bhartiya Theory of Aesthetics and Rasa

Bhartiya Literature

Indian literature is a rich tapestry that weaves together the diverse threads of culture, history, and spirituality. It is a reflection of the complexities and nuances of Indian society and has been a source of inspiration for centuries. At the heart of this literary tradition lies the Bhartiya Theory of Aesthetics and Rasa, a profound concept that delves into the emotional and aesthetic experience of literature.

The Essence of Bhartiya Literature:

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Bhartiya literature is deeply rooted in the culture and traditions of India. It encompasses a wide range of languages, including Sanskrit, Hindi, Bengali, Tamil, and many others, each with its own unique literary heritage. From the ancient epics like the Mahabharata and Ramayana to the timeless verses of Tagore's poetry, Bhartiya literature showcases a vast spectrum of human experiences.

Understanding Bhartiya Theory of Aesthetics and Rasa:

At the core of Bhartiya literary theory is the concept of "Rasa." Rasa, in its simplest form, translates to "flavor" or "essence." It represents the emotional or aesthetic essence that a reader or audience experiences when engaging with a literary work, be it a poem, play, or story.

The Eight Rasas

The Bhartiya Theory of Aesthetics recognizes eight primary Rasas, each corresponding to a distinct emotional state:

The concept of Rasas in Indian aesthetics is a fundamental aspect of understanding the emotional and aesthetic experience in literature, drama, and art. There are eight primary Rasas, each representing a distinct emotional state or flavor. Let's explore each of them in detail.

1. SHRINGARA (LOVE):

Essence: Shringara represents the emotion of love, beauty, and romantic or erotic sentiment.

Expression: It is expressed through themes of love, attraction, and relationships. It can be the love between lovers, the love of a parent for a child, or even devotion to a deity.

Aesthetic Experience: When experiencing Shringara in a literary work or performance, the audience feels a sense of romantic longing, desire, and enchantment.

2. HASYA (HUMOR):

Essence: Hasya embodies the emotion of joy, humor, and laughter.

Expression: It is expressed through wit, satire, and comedic elements in literature, drama, or art.

Aesthetic Experience: Hasya evokes laughter, amusement, and a sense of lightheartedness. It is the Rasa associated with comedy and humor.

3. KARUNA (SORROW):

Essence: Karuna represents the emotion of sorrow, empathy, and compassion

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Expression: It is expressed through tragic stories, tales of suffering, and narratives that evoke a sense of empathy.

Aesthetic Experience: Karuna elicits feelings of sympathy, empathy, and a deep emotional connection with the characters or situations portrayed in the work

4. RAUDRA (ANGER):

Essence: Raudra embodies the emotion of anger, rage, and fury.

Expression: It is expressed through narratives that involve conflict, confrontation, and situations that provoke intense anger.

Aesthetic Experience: Raudra arouses a sense of outrage, indignation, and sometimes even a feeling of righteousness in response to injustice or wrongdoing.

5. VEERA (HEROIC):

Essence: Veera represents the emotion of heroism, courage, and valor.

Expression: It is expressed through epic tales of bravery, heroism, and triumph over adversity.

Aesthetic Experience: Veera inspires a sense of admiration, respect, and pride in the heroic deeds and noble qualities of the characters or individuals depicted.

6. BHAYANAKA (FEAR):

Essence: Bhayanaka embodies the emotion of fear, terror, and dread.

Expression: It is expressed through stories that involve supernatural elements, horror, or situations that induce fear.

Aesthetic Experience: Bhayanaka evokes a sense of suspense, anxiety, and fear in the audience, often associated with the unknown or the eerie.

7. BIBHATSA (DISGUST):

Essence: Bibhatsa represents the emotion of disgust, repulsion, and aversion.

Expression: It is expressed through narratives that depict unpleasant, repulsive, or revolting scenes.

Aesthetic Experience: Bibhatsa triggers feelings of discomfort, repulsion, and the sensation of being disgusted by the subject matter or imagery.

8. ADBHUTA (WONDER):

Essence: Adbhuta embodies the emotion of wonder, amazement, and astonishment.

Expression: It is expressed through tales of the miraculous, the supernatural, and the extraordinary.

Subject Name: Indian Knowledge System **Code:** (US1IKBCA08)

Aesthetic Experience: Adbhuta inspires awe, fascination, and a sense of wonder at the wondrous and inexplicable aspects of the narrative or artistic representation.

These eight Rasas provide a comprehensive framework for understanding and appreciating the emotional and aesthetic dimensions of literature, drama, and art in Indian culture. They demonstrate the depth and diversity of human emotions and experiences, allowing artists and creators to evoke specific emotional responses in their audience. Through the careful use of these Rasas, Indian artists and storytellers have crafted timeless works that resonate with audiences across generations.

References:

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