

Tribal dance forms of India

Hello Learners, in this session let us discuss on the Tribal Dance forms of India

A complete list of Folk and Tribal dance in India

India is a rich country of cultural and folk art. There are all kinds of dance forms from kathak to behu. From Indian Classical Dances to traditional dances. All traditional dance has long been a sacred expression of faith.

Indian folk and tribal dances are simple, and they are performed to get pleasure from them. Dancing is part of daily life and religious rituals; Indian folk dances have eternal forms and rhythm.

Traditional dancing is organized on every time, i.e., the births of children, festivals, marriage opportunities and the arrival of seasons. Folk and tribal dances of India are dance with minimal steps or movements. These folk dances of India are full of vibrancy, enthusiasm and energy.

Today, HTOI going to introduce you to some of the top Indian folk and tribal dance forms of India. So, for what you are waiting let's explore the famous Indian folk and tribal dances.

Bagurumba, Assam

Many folk and tribal dances have originated from Assam. Bagurumba is one of the popular dances in Assam, which is performed by the Bodo women. During this festival, they wear some colorful dresses such as dokhna, jwmgra and aronal and they perform with some instrumental music.

Even some instruments are made with local bamboo and animal skins and they are specially made for this occasion, and you can find the perfect hilly flute music mixed with drum, serja, gongwna and tharkha. This is a purely folk-dance form in India.

Bihu Dance, Assam

This is a famous Indian folk dance, which is conducted during the Bihu festival in Assam. Local Assamese men & women dancers wear some regional Assamese cloth and perform their local dance with brisk steps and fastest hand movements. They perform their dance with some local instruments including dhol, pepa, baahi, gagana.

Most of these instruments are made with local bamboo and this festival is one of the most colorful dance festivals in Assam. You can find some male dancers wearing dhoti and mustard color headband and women in mustard and red color sari. During this festival, the sound of flute and dancing to the beat of the drum goes to such a powerful level, that people cannot resist themselves to join these groups.

Bhortal Dance, Assam

This is a classical Indian dance form, which was developed by famous Satriya artist Narahari Burha Bhakat. This is one of the most popular dance forms in Assam which is conducted in Barpeta district in Assam every year.

Jhumur Dance, Assam

Jhumur is basically known as a folk-dance form, which has originated from assam and now this dance form become very popular in Bangladesh and eastern Indian parts. This dance is performed by young girls and men and they basically perform on the beat of musical instruments and vocals.

Bardo Chham, Arunachal Pradesh

This is a religious folk dance in Arunachal Pradesh and this dance is specially performed by a small community in west kameng district, sherdukpens, a community in Arunachal Pradesh performs this dance every year to protect its community from the evil forces. They believe that every month of year has some kind of evil power, and the community members wear some animal masks and dance with the beating of drums.

Raut Nacha, Chhattisgarh

This is one of the most popular folk-dance forms in Chhattisgarh along with ghotul dance performed by ghotul village community that you can enjoy on madai festival during rajim kumbh mela tour and you can find some picturesque memories of the Hindu religion through these dances. This dance is basically performed by yadavas which are known as descendants of lord Krishna, and they perform with some girls and dramatize some scenes of lord Krishna's lifestyle with his gopis.

You can find some similarity with Raas Leela with this Raut Nacha because both dance performances are dedicated lord krishna, and both of these dance forms imitate the lifestyle of lord krishna only. You can enjoy this beautiful dance on our Chhattisgarh Tour.

Fugdi, Goa

This dance form basically originated from Goa and people perform this dance during several festivals in Goa. But Fugdi is basically performed during the month of bhaadrapada, which is a special occasion for women, and during this time they usually take some break from their normal monotonous lifestyle.

Women in villagers create a group in circle position during this dance performance. and tribal women perform in a row on this dance. This dance is started in a slow motion and it ends with some fast movements. Local musical accompaniments are also there to compliment the dance steps. Fugdi dance is one of the can't miss attractions of Goa.

Dandia Raas, Gujarat

This is a vibrant and popular dance form in India, which originated from Gujarat. Some colorful polished sticks or Dandia are used for this dance and this mainly represents the fight between Hindu Goddess Durga and king Mahishasura. This is Garba Dan which is popular in other states of India.

These sticks are mainly used as a representation symbol of sword used by Devi Durga and you can find many similar dance forms and competitions in India as Dandia Dhamaka, Garba, Dandia on fire and lots more. Even people stay in western countries also perform on this dance form during Festival. You can enjoy the same with our Gujarat Tour Packages.

Garba, Gujarat

Garba is mainly performed by women and women dance in a circular motion and clapping on the rhythms. During the Navaratri, people lighted their temples with some perforated pot style lam and they used to carry these lamps or deep during their Garba dance also. This traditional folk dance is mainly performed during the Navaratri and along with the Gujarat many other states in India also conduct some celebration programs on this festival.

Apart from this, you can also find some tribal dance forms in Gujarat such as Tippani Dance and Padhar Dance. Tippani dance is an interesting dance form, which is performed by tribal men and women, and they carry some bamboo and wooden rods and beat on the floor with these sticks. Garba is as much famous as it's local tribes. Witness the lifestyle and local dances with Gujarat Tribal Tour.

Nati, Himachal Pradesh

Nati is one of the most traditional folk dances in India, which is mainly originated from kullu district of Himachal Pradesh. This dance form is listed as largest folk dance in Guinness book of world records in 2016. Apart from that kullu, you can also find the same dance in Chandigarh and Uttarakhand.

This dance form is also known as “Losar shone chukson” which indicate the local new year celebration in Himachal. There are seven different forms of Nati dances performed by Himachali youth such as lahauli Nati, Kinnauri, Sirmauri, Mahasuvi and Himachali Nati dance.

Ras Leela, Haryana

Ras Leela is a traditional dance form in India, which is based on a mythological Story of Hinduism. According to Bhagavata Purana and Gita, lord krishna was fond of dancing with Radha and Sakhis throughout the night and this was called as Raslila of Braj.

Rasa means aesthetics and leela means dance. So the meaning of Ras Leela is play of aesthetics or Dance of divine love. You can find different art and dance forms performed by the theme of Ras leela such as kathak, Odissi, Meite, Bharatanatyam and kuchipudi. Apart from that, you can also find some regional drama performances in Mathura and Brindavana in Uttar Pradesh during the Krishna Janmashthami and Holi festivals which are conducted with the dance.

Dumhal, Jammu and Kashmir

This is a classical folk dance, which is performed by the men only and this originated by the Wattal tribe in Kashmir region. They wear some colorful dress with tall caps made with some beads and shells during this dance performance and they carry some banner with some dance movements. Basically, men begin this dance performance with some musical instruments and they dance in a circular position.

Chakyar Koothu, Kerala

This is one of the traditional Hindu dances in India where performers narrate some Hindu epic like, Ramayana and Mahabharata. This is also considered as a comedy act where audience can place their comments directly and through these acts, people can also project some social-economic problems of the nations. They are basically related the current socio problems with our ancient lifestyles and narrate some dramatic dance forms on the stage.

Duffmuttu, Kerala

This is also known as Arabanmuttu and this is a traditional dance performance, which is conducted by some Muslim community. This dance is basically originated from Arabian country and still now people dance on the dance on the Arabian music only. Special instruments are used for this dance performance, which is called duff or tap. This instrument is like a drum and people dance on the rhythm of these drums. Hidden treasures of India also offer Kerala Tour Packages to watch out this beautiful traditional dance of Kerala.

Margamkali, Kerala

Syrian Christians of Kerala perform this dance in an artistic form and this dance is mainly conducted during the festival time and marriage ceremony in Kerala.

The dance is purely performed by women of Kerala. Margatnkali dance of Kerala can be seen during all the small festivals in Kerala. Onam festival is one of the major occasions where you can see people enjoy this traditional dance everywhere. You can also opt in for Onam festival tour packages.

Oppana, Kerala

This is a dance form, which is conducted by the Muslim community, and they mainly conduct this dance performance a day before their marriage ceremony. This is a very popular dance in Malabar region of Kerala and this is basically done by the women. The women relatives of the bride perform oppana and they celebrate the marriage by clapping around the bride during their dance. You can enjoy this traditional dance on your Kerala Tour.

Padyani, Kerala

This is a purely folk art which is related to the famous temples situated in southern Kerala. Padyani means military foundation and during this dance performance, people use to wear some popular masks, which is also called as kolams. Through this dance, people try to project some acts derived from the Hindu epic and they wear popular masks such as Bhairavi, Kalan, Yakshi and Pakshi. So when you see this dance performance, you can see some dramatic act done by the local artist and dress up with some colorful stalks.

Theyyam, Kerala

It is a temple ritual dance form and also known as Kaliyattam and this is a sacred dance form which is projected as Hindu Goddess Kali. Kaliyattam is a Malayalam word which means Daivam or God

You can find this dance performance in some villages in Kerala where people perform some ritualistic acts through this dance during their festive sessions and in temples daily. There are different types of theyyams in Kerala.

Thirayattam, Kerala

This is a purely folk art which is related to the famous temples situated in southern Kerala.

Padyani means military foundation and during this dance performance, people use to wear some colorful masks, which is also called as kolams.

Through this dance, people try to project some acts derived from the Hindu epic and they wear some popular masks such as Bhairavi, kalan, Yalshi and Pakshi. So, when you see this dance performance, you can see some dramatic act done by the local artists and they dress-up with some colorful stalks.

Matki dance, Madhya Pradesh

Matki is a solo dance which is performed by the women only. Women perform this dance during the wedding ceremony in their village, they use to place a pot on their head, and a group of women surrounds the main dance during their dance performance.

This is a tribal dance form, which is mainly conducted in some countryside villages in Madhya Pradesh, and you can also find some similar dance forms in the same state, which are known as Aada and Khada Nach.

Chang Lo, Nagaland

Chang Lo is also known as Sua Lua and it is a dance form performed by chang tribe in Nagaland. Earlier people used to perform this dance as a symbol of their victory over enemies, but now tribal people perform this dance during their community Naga warrior costumes during their performance.

Cheraw dance, Mizoram

This is a folk dance in Mizoram and you can see many local folk and tribal communities in Mizoram who perform this dance during their festive sessions.

Four people hold some bamboo sticks that are clapped together, and the main dancer starts the performance in the center position of the group.

Lavani Dance, Maharashtra

Lavani is a combination of tribal dance and song where people used to dance on the beats of Dholki. Dholki is a percussion instrument, which is also used in the marathi folk theatre.

Female dancers perform this dance and they wear some saris in marathi style during this performance, and they start their dance with slow movement and increase their movement with some quick tempo. You can enjoy this energetic dance on Central India Tour.

Parvi Nach, Maharashtra

If you want to see some tribal dance of hilly regions, then you can visit the hilly regions of Maharashtra and here you can find the beautiful tribal dance form performed by kokna tribal community. This dance is performed with some instrumental music and all of this music originated by some handmade musical instruments. Parvi Nach is popular tribal and folk dance in India.

Bhangra, Punjab

This is a most popular folk dance in Punjab, and dancers wear some classical style Punjabi dresses during their performance. Along with that, they also create some loud music through

several instruments such as dhol, chimta and algoza. Earlier, people used to perform this dance during their harvesting seasons, but now people in Punjab conduct some dance shows in their every festival including their marriage ceremony.

This dance is also very popular among the teenagers and you can find some Bhangra dance shows in foreign countries like USA, UK and Canada. Apart from this folk dance in Punjab, you can find some other similar folk dances such as dhamaal, fulka, siakoti, mirzi, fumnian, jhummar and sammi.

Giddha, Punjab

This is a similar dance form of Bhangra, which is performed by female dancers in Punjab. This is an energetic dance form which is also known as ring dance and this dance is also similar to bolliyan dances. On the other part, when male dancers perform the same dance, it is generally renamed as Malwai Giddha.

Kikkli, Punjab

Two girls hold their hand and twirl each other in a circular position and they also lift their feet from the floor and synchronize the dance between two dancers. This is a popular folk dance in Punjab and dancers this dance with their own groups. Local folk songs and clapping are used during this dance performance.

Chhau dance, Odisha

Chhau is one of the most traditional and popular dance forms in India which is originated from nilagiri region of baleswar district. This is an elegant dance form where two groups of dancers wear costumes imitating soldiers, and they attack each other with sword and shields.

These dancers enhance the movement of their dance, with the accompaniment of some instrumental music, and a large group of musicians is involved with this dance. The dancers usually try to accompany with the rhythm of dhola, mahuri, dhumsa and chanchadi.

Goti Pua, Odisha

Goti means 'one' and Pua means 'boy' and Goti Pua is a dance form which is performed by a male dancer in a form of female avatar. A boy who dresses up as a girl called as goti pua and this is an ancient Indian dance from which was performed by the students of the akhadas

This dance is a popular folk dance where you can find some ornamental presentation of male body, and many musical instruments are associated with this dance form such as pakhawaj, geeni and harmonium. Here the boys can sing during the dance performance or else they can also appoint a group of singers to provide the background music.

Baagh Naach, Odisha

This dance form is also known as tiger dance and it originated from binka and sonepur district of odisha. Some male dancers also perform this dance, and male dancers first paint their bare body with some black yellow stripes and attach a false tail at their back portion.

Then they used to move from one house to another house of their village and gather the audience for their dance. Drummer and a bell player constantly provide background music during this dance performance and this is just like the acrobatic movements of male

performers in rhythm. They also use to make some hissing sounds during their performance and this dance is also performed during the thakurani jatra in Berhampur.

Dalkhai, Odisha

Odisha is a place of performing arts and you can find many folk and tribal dance forms in odisha. Dusserah is one of the biggest Indian festivals and you can see this dalkhai dance in odisha during this festival.

Apart from that, this dance is also performed during other festivals too and you can see the dame dance performance during bhaijintia phagun puni and nuakhai. This is a tribal dance, which is performed by many tribal communities like kuda, mirdha, balangir, sundargarh, naupada and sama.

Dhap, Odisha

Basically, unmarried boys and girls from different villages participated in this dance performance and they conduct some couple dances. Dhap is a Sambalpuri folk dance and you can this dance performance in kosal regions and the dance is performed by kandha tribe. Dhap is a musical instrument, which is made with wood, and one side of this instrument is covered with some animal skin. The dancers used to hold this dhap instrument in their hand and perform with rhythm.

Gumra, Odisha

This is also a Sambalpuri dance form, which is also known as vira-badya. Earlier people used to perform on this dance form to encourage the soldiers. Dancers can easily perform some social act through this dance form, and they can also generate some social messages through their dances.

In this dance, yo can find a special drum, which is made with some reptile skin, and this sounds very uncanny. The dance is basically performed during the ghumra puni festival of odisha and dancers create some circle and do some slow circular movement at the beginning of the dance. The drum players use to stay in the center od these circles, and they use to control the dancers with their rhythm.

Karman Naach, Odisha

Karma means the “Fate” and this dance is mainly performed during the festival in Sambalpuri. An occasion started from Bhadra Shukla Ekadashi or the eleventh day of full moon and people used to dance on their folk music to remove their bad fortune, and this dance is performed for the god and goddess named karam devta and karmas ani devi.

This is a local folk dance in odisha and it is also performed during different festivals in separate regions of the state.

Garadi, Puducherry

This dance form has a mythological background and according to the Hindu epic Ramayana, when God rama defeated ravana, then the vanars or monkeys performed this dace as a symbol of victory. The dance performed in every festival in and dancers act like monkey during this dace performance.

They hold some sticks and dance on the rhythm of drums. These drums are known as 'Ramadolus', and dancers wear some ankle rings called 'anjali' during this dance performance. You enjoy this amazing mythological background-based dance on Tamil Nadu Temple Tour with hidden treasures of India.

Ghoomar, Rajasthan

The female dancers perform this dance and they wear some long colorful skirt and Rajasthani dresses during their performance. Men and Women together Sing Some folk Songs as the background music. and dancers dance in a circle position.

The performers on the folk music, beating their palm on the ground during the low tone of the music and they also do somebody inclination during at the end of their performance. You can also find this dance performance during your travel time, and if you request for this dance performance to your travel guide then they can also organize the same. You can enjoy this royal dance with our royal Rajasthan tour.

Kalbelia, Rajasthan

This is one of the ancient tribal dance forms in Rajasthan, which is performed by the kalbelia community or Snake charmers. This is a tribal women's group of the kalbelia community and the main occupation of this community was catching snakes and trade their venom.

But they don't follow this profession and instead more into dancing as professionals. Dancers black long Skirts along with some Rajasthani heavy ornaments and they also dance with some community groups. The background music is basically done by 'been' or folk instruments and people can enjoy this tribal dance during their community festival or during special occasions. Be a part of a kalbelia dance on our Exotic Rajasthan tour.

Kachchhi Ghodi, Rajasthan

This dance mainly originated from the Shekhawati region of Rajasthan and dancers wear some horse costumes during this performance. Singers generally sing some folk tales with local music, and dancers perform on the beats of these songs.

This dance is commonly performed during community marriage ceremonies, and dancers perform this dance to welcome the bridegroom's party on their marriage day. The dance movements signify liveliness and a welcome gesture during the marriage ceremonies.

Parai Attam, Tamil Nadu

This is one of the oldest traditional folk dances in Tamil Nadu, which is performed by trained dancers only. Through this dance performance, people used to deliver some social messages such as warning for upcoming wars, battlefield, Victory and save water body of Tamil Nadu.

This dance performance is conducted several reasons such as for protecting animals, encouraging farmers to do the better harvesting and people perform this dance during several festivals including their marriage ceremonies, and social gatherings.

Kolattam, Tamil Nadu

The women dancers perform this dance and they hold some sticks in their hand and beat these sticks to make some rhythm. You can find some colorful laces, which have been used by the

dancers, and they use deft dance movements skip over these laces with their planned dancing steps.

This dance is basically conducted for ten days starting from the amavasi or new moon night after Diwali. Most of the dancers from different villages and they also wear some colorful local dresses during their performance.

Mayil Attam, Tamil Nadu

This is also known as peacock dance and dancers used to wear some dresses decorated with peacock feathers and they used to cover their head with glittering dress materials. You can find some other similar dance in Tamil Nadu such as Kaalai Attam Which is performed by the local dancers and they used to some bull dress. And karadi Attam, where dancers dressed as a bear.

Paampu Attam, Tamil Nadu

This is also known as snake dance and rural people think that snake can protect their life from severe diseases, and local young girls mainly perform this dance and they used to wear some snake like dresses. These dancers try to imitate the writing and creeping of snakes making some biting movement with their head and hands.

Oyilattam, Tamil Nadu

This is a dance of grace and this traditional dance is mainly performed by the men in Tamil Nadu. Men used to stand in a row and perform this dance according to the rhythm, but due to huge popularity of these dancers shows, now many women dancers also participate in these dance performances. Dancers used to perform this dance with some colorful handkerchiefs and they used to wear some ankle bells also. The folk background music which is accompanied with this dance is called as Thavil.

Puliyattam, Tamil Nadu

Earlier people used to conduct some folk dancers in Tamil Nadu, which was known as Puli Attam and this dance form was also known as a play of the tiger. In this dance form, people used to act some tiger steps and their bodies are painted by yellow and black color, and this is symbolized the replica of a tiger only. There are various musical instruments performed with this dance such as tharai, thappattai and lots more, and this dance is mainly performed during the temple festival of Tamil Nadu.

Poikal Kudirai Attam,

This folk dance is known as false legs dance in Tamil Nadu where dancers wear some dresses and they act like a horse. This is a traditional folk dance which is based on the theme of 'raja sedingu', who was known as a popular Rajput ruler. Apart from that, you can also find another interesting traditional dance form in Tamil Nadu which is known as Bommalattam. This is basically a poppet show which is conducted during the festivals of Tamil Nadu villages. Through these poppet shows, people can generate some social message and they can also conduct their shows on some Hindu epics and mythological stories.

Theru Koothu, Tamil Nadu

This dance basically conducted during the village festival and you can find the greatest theru kootu dance performances during Panguni and Aadi festivals. Only men can perform this dance and they wear some women dresses to play the roles of women. Dancers do some heavy make-ups and they wear some traditional dresses as well as dramatic costumes.

Through this dance performance, they do some story telling dialogue rendering and sing some background songs also. Most of the stories, which are performed through this dance forms derived from Hindi epics such as Ramayana and Mahabharata. You can find different forms of Theru Koothu dance in Tamil Nadu such as Vali koothu and Kuravai Koothu.

Hojagiri, Tripura

This is one of the oldest traditional dance forms of the reang community of Tripura. Men and women both participate in this dance performance and during this dance, they move their lower body, and clap their feet on the earth. Along with that, dancers also hold some bottle lamps on their head during this performance, and they fine-tune their bodies to balance these bottles on their head throughout their dance performance. The colorful tamps and the ornaments and gorgeous dresses enrich this dance performance to some highest level, and you can find this dance on every occasion conducted by the respected community.

Mayur Nritya, Uttar Pradesh

This dance is also known as peacock dance and girls use to dress as peacocks and they place some peacock's feathers on their head. Through this dance performance, dancers basically imitate the love story of Radha and Krishna. According to ancient Hindu mythology, when Radha wanted to see the Mayur Nritya, Lord Krishna used to portray himself as the peacock and he danced in front of Radha. Get unforgettable moments of Mayur Nritya with our Classical India Tour.

Charukala, Uttar Pradesh

This is a traditional Indian folk dance, which mainly originated from Brij region of Uttar Pradesh and the local women perform the dance only.

They use to hold some large multi-colored wooden pyramid on their head and lighten more than 108 lamps on the ground, and then they then start dancing on 'raisa' songs. The song is dedicated to lord krishna and you can see this dance shoe in various festival of India.

Gamghira, West Bengal

Gambhira is a theatre cum folk dance performing art which was mainly originated from maldah in west Bengal. After the partition of Bengal, people started performing some local theater to presented sole hindu folk cultures, and after that Gambhira has undergone some changes in the term of presentation.

Now Muslim communities also perform the dance in different forms and muslim dancers used to wear some local dresses such as lungi and kurtas. Through this theater and dance

form, people highlight some social problems and encourage the audience to avoid such issues to save their future and health from social evils.

Singhi Chaam, Sikkim

This is a mask dance of Sikkim, which also presents the symbol of a state through the dance performance. This dance is dedicated to the guardian deity of Sikkim guru padmasambhava and through this dance form, people also represent their hill folks by wearing some furry costumes, you can find this colorful mask dance during the state festival of Sikkim.

Kaaragattam, Tamil Nadu

This folk dance in Tamil Nadu is basically performed by the villages to praise to the rain goddess mari amman. The dance performed in two different ways such as Aatta Karagam and Sakthi Karagam. Dancers use to hold some decorated water pots on their head during the performed of Atta Karagam and this is purely dedicated to the goddess. On the other part, Sakthi Karagam is performed inside the temple for the entertaining purpose. Earlier these dancers were performed with the Naiyandi Melam and now these dancers performed with several songs and music. Some trained artists from different regions including Thanjavur, Ramanathapuram, Madurai, Tirunelveli and Pattukottai come to perform this dance during the annual festival of Tamil Nadu.

Keisabadi, Odisha

This is a folk dance in Odisha which is performed by men only, and they used to hold some long sticks and striking these sticks according to their song and rhythms. The leader used to sing the main song, which is called as 'Kosli' and people used to follow the rhythm and pronounce 'haido' after stanza of the song. This song is mainly dedicated to the love of Radha and Krishna.

Phulpati Dance, Madhya Pradesh

This dance is conducted during the holi festival and semi-rural unmarried girls mainly perform this dance with some musical instruments. They dance to the rhythmical vibration of drums.

Maanch, Madhya Pradesh

This is lyrical folk drama and this dance basically originated from Malwa region of Madhya Pradesh. Maanch, means the stage where people can perform different acts such as drama, dance, music and lot more. People from villages in Madhya Pradesh perform this dramatic dance and they perform the acts of the play and dance, making it into some small groups.

Grida dance, Madhya Pradesh

Rabi is a popular crop in Indian and farmer from remote village in Madhya Pradesh harvesting this crop throughout the year. When the first Rabi crops sway in the fields, the nearby villages conducted the Grida dance. They start their dance performance with some small groups, and this program starts from morning and ends at midnight. This dance from has three different phrases such as sela, selabhadoni and selalarki.

Forms of Indian Dance

History of Dance of India

Bharatnatyam

- Brahma, the supreme creator.
- The natya shastra written by Bharata
- Considered to be the fifth veda-any of the oldest and most authoritative Hindu sacred texts, composed in Sanskrit and gathered into four collections.
- This Bharata Natyam dancer's right hand is in the katakamukha hasta, the 3 joined fingers symbolizing the sacred syllable aum. The left hand's fingers are in alapaadma hasta, the rotating lotus of spiritual light. The eyes are directed towards the supreme lord. The left leg is lifted, symbolizing the swift ascent of the consciousness in one step from the earth to the heaven.

Kathakali

Kathakali has its origin in the courts of the kings of Kerala. It is one of the most refined and most scientific dance forms of Kerala. Its present form is not more than 300 years old. This art demands complete control over every part of the body. Kathakali draws heavily from drama, utilizing elaborate masks and costumes. The stories or attakathas, which are depicted via Kathakali are selected from epics and mythologies. These are written in a highly Sanskritised verse form in Malayalam. Here, the dancer expresses himself through highly complicated mudras, closely following the text being sung.

Kuchipudi

- South – East Indian state of Andhra Pradesh.
- Started by an orphan from Srikakulam.
- He vowed to become a sanyasi.
- Instructed Brahmin boys in the art of devotional dance based upon religious themes.
- Dances were offerings to God.
- The government gave them land.
- The dancers had political power (raja) and at one point had to be protected by the army.

Odissi

- Northern India
- Performed in temples by boys
- Resembles sculpture in India.
- Repeated use of the tribhangi, body is bent in three places to mirror the shape of a helix.
- Nritya or non-representational dance, in which ornamental patterns are created using body movements in space and time.
- Abhinaya, or stylized mime in which symbolic hand gestures and facial expressions are used to interpret a story or theme.
- Divine love tales of Radha and the cowherd God Krishna are themes for interpretation.

Forms of Indian Dance – 2

Mohiniyattam

- Originated in Kerala
- It is closely related to Bharathanatyam
- Originated as the temple dance performed by Devadasis, it portrays feminine love in its myriad forms – carnal, devotional and maternal – with accent more on lasya and bhava. In the main items cholkettu, padavarnam and padam, mudras and facial expressions are more important than the rhythmic steps.
- Costumes and ornaments of mohiniyattam have much in common with female characters of koodiyattam and kathakali.
- The language used in lyrics is a pleasant mixture of Malayalam and Sanskrit, known as manipravalam.
- Mohiniyattam gives more importance to gestural and facial acting.

Yakshagana

- From the rural areas of Karnataka.
- 400 years old themes based on Hindu epics.
- Has the characters sutra dhara (conductor) and the Vidhushaka (the jester)

Kathak

- Performed by band of storytellers who were connected with temple.
- Northern Kathak.
- Katha means story.
- Later added mime and gestures to accompany their storytelling.
- The dance focuses on rhythm mostly but also concentrates on erotic steps.
- An interesting piece of cross-cultural reference and tidbit of information.
- Kathak was primarily associated with an institution known as the tawaif. This is a much-misunderstood institution of female entertainers, very much like the geisha tradition of Japan. It was a profession which demanded the highest standards of training, intelligence, and most important, civility. It is said that it was common for royalty to send their children to the tawaifs for instruction in etiquette. Unfortunately, when the British consolidated their hold over India during the Victorian era, this great institution was branded as mere prostitution and was a reawakening in interest in traditional Indian artforms.

Manipuri

- Very ritualistic – heavy on the folklore and mythology
- Costumes are colorful and bright
- Music is slow and rhythmic
- Drums and cymbals are the main instruments
- There are very specific guidelines of this style of dance not like the others.

- The dance was comprised of two dances lai haraoba and rasa leela. The former deals with the creation of the world and the latter deals with intimacy between krishna and his consort – radha.

Elements and Features of Dance

Dance as an Art

Dance is a rhythmic and expressive movement of the body in successive movement usually accompanied by music. It has been said to be the mother of the arts, for it's the oldest of the art which actually reflects man's age old need to communicate different emotions such as joy, grief, excitement and others. Dance simply started as man's own life for almost all occasions, in whatever aspects, as birth, death, healing of the sick, asking for forgiveness, war, marriage-were celebrated by dancing. There are dance that express thankfulness for a good harvest, in celebration of religious festivities, or just a mere pleasurable expression of the body. It uniquely intensifies different moods and emotions that somehow deepen everybody's feelings.

Reasons why do people Dance

- It has been used in worship.
- It plays a role in courtship.
- It serves as a form of acquaintance for a man and woman.
- It is an expression of the joy one feels.
- As in old times, it brings magical powers to people.
- It brings victory or somehow restores health to life.
- It even breaks the monotony of the daily activities.
- It serves to entertain others.
- It gives beauty and inspiration to others.
- It provides personal and effectiveness of communication.

Significant features of the dance as a form

Two kinds of movement

1. Movement within the body which includes the hand and arms.
2. Movement from one space to another.

Features of dance

1. **Music** – It is closely related to dance for it plays a significant role in it. It used as accompaniment that somehow motivates the dancer's movement.
2. **Movement**- It refers to action of dances with the use of their bodies to create organized patterns.
3. **Theme**- It pertains to the content or main ingredient of the dance. It actually conveys the message of the dance.
4. **Techniques**- It refers to the skill in executing movement. As a dancer, one needs to have a complete control over the muscles of her/his body for her/him to be said technically proficient.
5. **Design**- It refers to the arrangement of movements according to pattern in time (either fast or slow) and space (one's position in relation to his background).
6. **Properties and Costume**- These contribute to the visual effect of dance. The costumes can somehow relate closely to the beliefs and environment of people.

Kinds of Dance

1. **Ethnologic Dance**- This dance that is indigenous to a certain race or country. The term ethnic is used to distinguish religious dances, and designed as hymns of praise to a god, or to bring on good fortune in peace and war. They are symbolic in meaning that can't be understood easily by persons who don't belong to the ethnic group.
2. **Social Dance**- These are popular type of dancing for pleasure as generally performed by pairs or groups of people following a definite step or pattern. Most of these have specific rhythms and coordinated with the movement and steps of the body, hand, foot and head.
 - a. **Ballroom Dance**- It actually originated as square dance which was followed by waltz, tango, foxtrot, swing, etc.
 - b. **Folk Dance**- It usually derived from ethnic dance. People all over the world have their own folk dances as distinct to their specific culture.
3. **Spectacular or Theatrical Dance**- These are dances which are intended for viewing audience. Usually, these are performed for the entertainment of spectators.
 - a. **Ballet**- It's the ultimate expression of art in dance which originated in the royal courts during the Middle Ages. The term ballet refers to series of solo and converted dances with poses and steps combined with light flowing figures, music accompaniment and expressive scenic accessories of a dramatic atmosphere. The movement of the dance is subject to definite of the body, hands, legs and others. Usually a ballet includes staging, scenery, costumes dancing and music; but no singing and dialogue.
 - b. **Modern dance**- It is often characterized as something natural and free. It is also been called as expressional dance. This dance emerged as a form of a revolt against the strictness governing the old forms of dance. It has varied styles of movements based on the new trend; therefore, it doesn't stick to conventions. The major emphasis of this dance is on the expression through the dancer's execution.

The elements of dance

Time

- **Speed:** slow, medium, fast, freeze, suspend
- **Rhythm:** pulse, beat, pattern, syncopation

Space

- **Place:** personal, general
- **Size:** small, medium, big
- **Level:** low, middle, high
- **Direction:** forward, backward, left, right, up, down, diagonal
- **Pathway:** straight, curved, zigzagged, turning.

Energy

- Light, strong, weak, sharp, smooth

Weight

- Light, medium, heavy

Body

- **Shape:** lines, curves, angles, various shapes
- **Parts:** head, neck, shoulders, arms, hands, back, stomach, bottom, legs, fingers, toes.

Movement Concepts

- **Locomotor:** walk, run, leap, hop, jump, gallop, slide, crawl, roll, creep, slither.
- **Nonlocomotor:** bend, twist, stretch, reach, swing, push, pull, fall, melt, sway, turn, spin, dodge, kick, poke, carve, curl, lunge, slash, dad, punch, flick, float, glide, press, shake, rise, shrink, burst, wiggie, explode.

INDIAN MUSIC

India is the inheritor of one of the oldest and most evolved musical systems in the world. Its music is considered as the oldest unbroken musical tradition with the most intricate musical system that contains highly developed polyrhythms, delicate nuances, ornamentation, and microtones.

Remember

- India is the inheritor of one of the oldest and most evolved music system in the world. The study of Indian music begins with the religious and philosophical beliefs of its culture.
- The Guru, the Vinaya, and the Sadhana form the "heart" of musical tradition in India.
- The development of Indian music emerged from the religious chants called Vedas.
- Indian musical history is divided into three periods. The ancient, the medieval, and the modern period.

Ancient	}	Development of Indian Music
Medieval		
Modern		

ANCIENT (1000-300 BC)

Vedas and Upanishads were used to create musical expressions.

MEDIEVAL (Fifth and Seven Centuries)

Ragas were classified by seasons and the different time of the day.

Hindustani- northern Indian Style (foreign elements).

Carnatic- southern Indian Style.

Both are basically the same of their spiritual characteristics.

MODERN PERIOD

Marked by the efforts of individuals who contributed much to the development of seventy-two Melakartas or parents scales.

Elements of Indian Music

Indian Music: Musical Background

The music of India includes multiple varieties of folk, popular, pop, classical music and R&B. India's classical music tradition, including Carnatic and Hindustani music, has a history spanning millennia and, developed over several eras, it remains fundamental to the lives of Indians today as sources of spiritual inspiration, cultural expression and pure entertainment. India is made up of several dozen ethnic groups, speaking their own languages and dialects, having very distinct cultural traditions.

Classical Music Tradition: Carnatic Music

Carnatic music is a very complex system of music that requires much thought, both artistically and technically.

Classical Music Tradition: Carnatic Music

The basis of Carnatic music is the system of ragas (melodic scales) and talas (rhythmic cycles). There are seven rhythmic cycles and 72 fundamental ragas. All other ragas are considered to have originated from these. An elaborate pattern exists for identifying these scales, known as the 72 Melakarta Raagas.

Classical Music Tradition: Carnatic Music

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Classical Music Tradition: Hindustani Music

It is unclear when the process of differentiation of Hindustani music started. The process may have started in 14th century courts of the Delhi Sultans. However, according to Jairazbhoy, the North Indian tradition likely acquired its modern form after the 14th or after the 15th century. The Hindustani music development reached a peak in the Indian subcontinent during the reign Of Akbar. During this 16th century period, Tansen studied music and introduced musical innovations, for about the first sixty years of his life with patronage of the Hindu king Ram Chand of Gwalior, and thereafter performed at the Muslim court of Akbar. Many musicians in northern Indian subcontinent consider the 16th century Tansen as the founder of Hindustani classical music.

Classical Music Tradition: Hindustani Music

Hindustani music style is mainly found in North India, Pakistan and Bangladesh. It exists in four major forms: Dhrupad, Khyal (or Khayal), Thumri and Tappa. Dhrupad is ancient, Khyal evolved from it, Thumri evolved from Khyal. Dhrupad is solemn music, uplifting and heroic, pure and spiritual. Khyal adds ornamental notes, shorter, moody and celebratory. Thumri goes one step further in their brevity, and are graceful songs. There are three major schools of Thumri: Lucknow gharana, Banaras gharana and Punjabi gharana. These weave in folk music innovations Tappa is the most folksy, one which likely existed in Rajasthan and Punjab region before it was systematized and integrated into classical music structure. It became popular, with the Begali musicians developing their own Tappa.

Genres of North Indian vocal music

- Dhrupad (several centuries old)
 - Less popular today; religious themes
- Khayal (prominent in last 200 years)
 - Most widely sung form of classical music; heavy on virtuosic improvisations
- Bhajan (generic name for devotional songs)
 - Could be lighter or more heavy classical (i.e. dhrupad/khayal)
- Thumri (semi-classical romantic songs to Krishna)
 - Famous in Lucknow/Varanasi area
- Ghazal (Indo-Persian-Arabic poetry)
- Songs with theme of separation and love
- Rabindrasangeet + Nazrulgeeti (Bengali language)
 - Music of Rabindranath Tagore / Kazi Nazrul Islam

Genres of Carnatic music

Composed music	Improvised music /
• Varnam	Manodharma
• Kriti	• Alapana
• Pada	• Nerval
• Javali	• Kalpana Swara
• Thillana	• Tana
• Bhajan	• Pallavi

Vocal Music of India

Vocal music, from the very beginning of human civilization, has been the leader and the kingpin of all forms of music. Without doubt it has been the greatest single purveyor of the deeper artistic and musical urges of man and the means through which these urges have found artistic expression. As against vocal music, however, instrumental music is a derived form of music. Nevertheless, instrumental music is perhaps the finest extrapolation of the creative and inner urges of the artist and musical composer. In point of fact there is such a deep complimentary between vocal and instrumental music that it is impossible to visualize any musical performance without both of them existing together.

- Vocal music is considered very important and the most ancient of all its musical traditions. It is also well regarded and well appreciated by its people.
- Samaveda — the old musical texts in India which have crude musical notations.

- The performance of vocal music is a form of prayer and communication to the Supreme Being.
- For them, a song is a vehicle or medium for communication and interaction process between the worshipper and the deity.
- Vocal music in India is a way to express deep devotion to God.
- It is manifested through the art of vocalization, which becomes more than just a vocal warm-up but an act of worship. It is accompanied by long hours of physical practice and yoga.

Most notable songs of North India:

- Dhun or Kirtan for Hindus
- Bhajan
- Shabad for Sikho
- Kawali for Muslims

Gangal — one style known for its rich romantic and poetic content.

Lakshan Geet — a style oriented toward musical education.

Swarmalika — used for pedagogic purposes and sargam is used instead of words.

Tamil Nadu — songs to describe the scenic beauty particular region in the country.

Vijaya — song used to bid a person farewell.

Instrumental Music of India

Instrumental music is presented in a highly abstract form and also in easily understandable and readily enjoyable fixed compositions. In both instrumental music and vocal music there is a bewildering variety of musical forms in which such music is presented. There are not only a large variety of musical instruments, but also different categories corresponding to the octaves and types of male and female voice. In vocal music, for instance, we have the form of abstract alap, dhrupa music, kheyal music, tappa music, thumri music, devotional music, regional music a wide-ranging variety of folk music and so on and so forth. In instrumental music also there are similar variations and if we construe even the main musical instruments of India, we have formidable number of musical forms, compositions and styles.

a) Non-membranous Percussion (Ghan)

1. Ghatam — a percussion instrument that is made out of clay. Actually, a clay pot and played striking with the hands.
2. Chhimta — fire tong with small brass jingles. It is played by clicking the tongs with the hand following a rhythmic pattern.

b) Membranous Percussion (Avanaddi)

1. Tabla — a pair of drums most common and popular in Northern India. It is made of wood and has head made of stretched animal skin. Both drums have a black spot at the center that is made of manganese and iron dust. It is made by tapping the fingers on the surface of the drums.
2. Mridangam — a classical drum of Southern India. It literally means clay-body and was originally made of clay. It is a double-headed drum that is barrel shaped and is played between the thighs of the drum players.

Udakkai

Is an hourglass shaped, membranous drum used in devotional and folk music throughout India.

Thavil

Is a percussion instrument used for accompanying the nadaswaram, a wind instrument used in Hindu religious music and as a solo instrument in Carnatic music.

Blown or Wind Instrument (Sushir)

1. Venu — flute found in the southern part of India. It has 8 holes.
2. Bansuri — flute from the northern part of India and holes.
3. Nagaswaram — a double-reed instrument with a conical bore that enlarges towards the end. It has 7 finger-holes with 5 additional holes drilled at the bottom that are used as controllers. it is played in temples, procession, festivals, and wedding ceremonies.

Plucked Stringed Instruments (Tat)

1. Veena — most distinctive instrument in Southern India. it is carved from a single block of jackwood which continues as a long-fretted neck from which another resonator is attached. 4 strings are used to play the melody while the remaining 3 strings are used to pl
2. Sarod — a musical instrument that is smaller the sitar. It has a metal finger board with no frets. The strings are plucked or played with a pick made of coconut shell.
3. Tambura — a drone instrument it is made of jackwood. it has a long unfretted neck which has 4-6 tuning pegs inserted to the upper end resonator.

4. Sitar — most popular string instrument in Northern India. It is made of a teakwood and seasoned gourds. It has a long neck with 20 metal frets and 6-7 main strings. It is used for solo parts in a position.

Bowed-Stringed Instruments (Vitat)

1. Sarangi — the most popular stringed instrument as is used to accompany vocal music. It is shaped like a squashed guitar and is made from a block of hollowed-out wood that is covered with parchment. This instrument has no frets and is played with a bow.
2. Saringda — a bowed fiddle similar to sarangi. It has either a round or pointed head, unlike the sarangi that has a square head. It is usually one to two feet in length. It is played with a bow made from horse hair.

Violin

In Carnatic music, the tuning is the same. The tuning is slightly modified for the Hindustani violin, but the playing style remains the same— Sitting cross legged on the floor with the scroll of the violin resting on the right foot of the player.

Tar Shehnai

The Tar Shehnai is an esraj (bowed string instrument) with an added mechanical amplifier. This amplifier fixed to the sound board of the instrument is modeled on the gramophone sound box to project a stronger, more directional sound.

Mandolin

A mandolin is a musical instrument in the lute family and is usually plucked with a plectrum or 'Pick'. It commonly has four courses of doubled metal strings tuned in unison, although five and six course versions also exist.

SCIENCE AND TECHNOLOGY IN MODERN INDIA

The government of India has recognised the importance of science and technology in national growth.

The Second Five Year Plan emphasised that "the community's readiness to apply modern science and technology is the most significant single component in supporting economic development.

" The Department of Research and Technology (DST) was established in 1971 to encourage new areas of science and technology.

State Science and Technology Councils have also been established at the state level.

AGRICULTURE:

The application of contemporary science and technology in agriculture has enabled India to produce 135 million tonnes of foodgrains now, up from 50 million tonnes thirty years ago.

These applications span from hybrid seed cultivation to agricultural energy management and post-harvest technology.

The Indian Council for Agricultural Research has taken the lead in these initiatives. The agricultural colleges include 73 agricultural, 32 veterinary, eight agricultural engineering, and one dairy institution.

ICAR has played an important role in the scientific education of farmers as well as those involved in agriculture, animal husbandry, fisheries, and forestry.

INDUSTRY:

Modern science and technology made their first and most significant impact in the realm of industry. The government of India has continually attempted to utilise modern science and technology for economic development.

The Council for Scientific and Industrial Research (CSIR) and the Defence Research and Development Organisation (DRDO) are two government organisations that handle a wide variety of science and technology research for civil and defence reasons.

NUCLEAR ENERGY:

The goal of India is to use nuclear energy for peaceful reasons.

India has achieved substantial advances in nuclear technology over the last sixty-three years, since the formation of the Atomic Energy Commission in 1948.

The Bhabha Atomic Research Centre (BARC) was established in Trombay in 1957. It is the country's largest single scientific establishment.

SPACE TECHNOLOGY:

The Indian space programme is aimed at achieving self-sufficiency in the utilisation of space technology for national development.

The space programme has established itself through a series of accomplishments over the years. They include the first launch of Aryabhata, an Indian space satellite, was launched in 1975, followed by Bhaskara I and Bhaskara II from the Soviet Union.

MEDICAL AND HEALTH SCIENCES:

Many advances have been made in the world of medicine. Significant progress has been made in the prevention and treatment of different diseases.

The small pox virus has been eradicated. The treatment of diseases such as tuberculosis, malaria, filaria, goitre, and cancer has improved significantly.

Apart from the major areas mentioned above, India has made much progress in several other fields as well.

These include the activities of the Oil and Natural Gas Commission oil exploration and refining and of the National Committee Environment Planning in environment protection and production of solar energy.

A Central Ganga Authority has been set up to check pollution in the river Ganga by using sewage treatment plants.

WITH THIS WE COME TO THE END OF OUR SESSION.

I HOPE YOU WOULD HAVE GOT A FAIR UNDERSTANDING ABOUT SCIENCE AND TECHNOLOGY IN INDIA

THANK YOU AND HAPPY LEARNING

DEVELOPMENT OF SCIENCE AND TECHNOLOGY IN MEDIEVAL INDIA:

During the medieval era (the eleventh to the seventeenth centuries), science and technology in India progressed along two lines: one concerned with the previously defined trajectory of earlier traditions, and the other with new influences that emerged as a result of Islamic and European influence.

There were maktabas and madrasas that followed a fixed curriculum. These institutions used to be patronised by the monarch.

Sheikh Abdullah and Sheikh Azzizullah, Rational Sciences (Magulat) specialists, led the madrasas in Sambhal and Agra.

In these madrasas, learned individuals from Arabia, Persia, and Central Asia were invited to teach.

The kings and nobility maintained a huge number of karkhana (workshops) to supply provisions, stocks, and equipment to the royal household and government offices.

The karkhanas not only acted as manufacturing agencies, but also as technical and vocational training centres for young men.

The karkhanas trained and produced artisans and craftsmen in various fields, who ultimately established their own independent karkhanas (workshops).

Muslim monarchs attempted to improve primary school curricula. Some key disciplines, including as arithmetic, mensuration, geometry, astronomy, accountancy, public administration, and agriculture, were included in the primary education curriculum.

Attempts were made to achieve a form of synthesis between Indian traditional scientific culture and the prevalent scientific approach in other nations.

MATHEMATICS:

Brahmagupta, the renowned 7th century mathematician, described negative numbers as debts and positive numbers as riches, demonstrating that ancient Bharatiyas recognised the use of mathematics in practical trade.

CHEMISTRY:

The Mughals were well-versed in the manufacturing of gunpowder and its application in firearms.

Indian artisans learned the technology and developed appropriate explosive formulations.

They were aware of the procedure of preparing gunpowder in various ratios of saltpetre, sulphur, and charcoal for use in various sorts of cannons.

The most common types of fireworks were those that pierced the air (rockets), generated sparks of fire, flared with varied colours, and finished in an explosion

ASTRONOMY:

A variety of remarks on already established astronomical conceptions occurred in astronomy.

The principal observatories were in Ujjain, Varanasi, Mathura, and Delhi. Firoz Shah Tughlaq set up monitoring points in Delhi.

Firoz Shah Bahmani established an observatory in Daulatabad under the supervision of Hakim Hussain Gilani and Syed Muhammad Kazimi.

There were both lunar and solar calendars in use.

MEDICINE:

There was an attempt to create specialised treatises on various ailments. For diagnostic purposes, pulse and urine tests were performed. Opium is recommended for medicinal purposes by the Sarangdhara Samhita.

The rasachikitsa method was primarily concerned with a wide range of mineral medicines, including metallic preparations. The Tuhfat-ul-Muminin was a seventeenth-century Persian treatise composed by Muhammad Munin that discussed the viewpoints of physicians.

AGRICULTURE:

The pattern of agricultural activities in the mediaeval period was similar to that of early and early ancient India. However, foreigners were responsible for some significant modifications, such as the introduction of new crops, trees, and horticulture species. Wheat, rice, barley, millets, pulses, oilseeds, cotton, sugarcane, and indigo were the main crops.

The Western Ghats continued to produce high-quality black pepper, and Kashmir retained its saffron and fruit traditions. Tamilnadu's ginger and cinnamon, as well as Kerala's cardamom, sandalwood, and coconuts, were becoming increasingly popular.

SCIENCE AND TECHNOLOGY IN INDIA

Hello learners welcome to the session SCIENCE AND TECHNOLOGY IN INDIA

Indians, like people in other parts of the world, have a rich tradition of scientific ideas. The urge to know the unknown, along with experimentation and observation, has always produced a scientific temper.

This has led to the idea that truth may be found in the real world, with all of its diversity and complexities.

Indians, like people in other parts of the world, have a rich tradition of scientific ideas. The urge to know the unknown, along with experimentation and observation, has always produced a scientific temper.

This has led to the idea that truth may be found in the real world, with all of its diversity and complexities.

On the following slides, you will learn about India's ongoing quest for knowledge and truth, which has resulted in discoveries and inventions, as well as their application in daily life.

DEVELOPMENT OF SCIENCE AND TECHNOLOGY IN ANCIENT INDIA

Ganita is the broad word for mathematics, which covers arithmetic, geometry, algebra, astronomy, and astrology. Arithmetic has various names, including Anka Ganita (calculations on board), Pattin Ganita (calculations with numerals).

Geometry is referred to as Rekha Ganita (line works), and Algebra, Bija Ganita (seed analysis), Astronomy, and Astrology are all referred to as Jyotisa.

India has a rich scientific and technological background. Science advancements may be able to alleviate our reliance on nature. Religion and science collaborated closely in ancient India.

Let us investigate the advancements in several disciplines of knowledge throughout the ancient times.

ASTRONOMY:

Astronomy has made remarkable strides. Planetary motion became emphasised and extensively monitored.

The Jyotishvedanga texts established systematic categories in astronomy, while Aryabhatta dealt with the more fundamental issue (499 AD).

In ancient India, astrology and horoscopes were studied. Aryabhatta's theories marked a significant change from astrology, which emphasised beliefs above scientific studies.

MATHEMATICS:

Harappa's urban planning demonstrates that the residents were well-versed in measurement and geometry.

By the third century AD, mathematics had evolved into a distinct field of study. The Sulvasutras are thought to be the source of Indian mathematics.

In the second century BC, Zero was found in India.

Brahmagupta's Brahmasputa Siddhanta was the first text to mention 'zero' as a number; thus, Brahmagupta is known as the one who discovered zero. He explained how to use zero with other numbers. Aryabhata discovered algebra as well as the area of a triangle, which led to the development of trigonometry.

MEDICINE:

Takshila and Taranasi evolved as medical and educational hubs.

Charaksamhita by Charak and Sushrutsamhita by Sushruta are two prominent texts in this topic.

The fact that their work spread as far as China and Central Asia through translations in several languages demonstrates the significance of their efforts.

The plants and herbs that are used for medical purposes are listed in the Charaksamhita. Around the fourth century AD, surgery was listed as a separate stream. Sushruta was a forerunner in this field.

METALLURGY

By the first century AD, mass manufacturing of metals such as iron, copper, silver, and gold, as well as alloys such as brass and bronze, was underway.

The iron pillar in the Qutub Minar complex demonstrates the exceptional level of alloying that took place.

Alkali and acids were created and used to make medications.

This process was also employed in other crafts such as dyeing and colouring.

Dyeing textiles was popular. The quality of colour is reflected in the Ajanta frescoes. These artworks have survived to the present day.

GEOGRAPHY:

People were compelled to study geography as a result of the ongoing interplay between man and nature.

Though the people were aware of their own physical geography, as well as that of China and Western countries, they were unaware about their position on the globe and the distances between countries.

Indians also helped with shipbuilding. The Indians were unfamiliar with travel and navigation during the ancient period.

Hello Learners, in this session, we will discuss on the Indian Dance and Drama

Dances of India

- Like music, Indian dance has also developed a rich classical tradition. It has a great power of expression and emotions while telling a story. In India, the art of dancing may be traced back to the Harappan culture. The discovery of the bronze statue of a dancing girl testifies to the fact that some women in Harappa performed dances.
- In traditional Indian culture the function of dance was to give symbolic expression to religious ideas. The figure of Lord Shiva as Nataraja represents the creation and destruction of the cosmic cycle. The popular image of Shiva in the form of Nataraja clearly shows the popularity of dance form on the Indian people.
- There is not a single temple at least in the southern part of the country which does not show the sculptures of the dancers in their different forms. In fact, classical dance forms like Kathakali, Bharatnatyam, Kathak, Manipuri, Kuchi pudi and Odishi are an important part of our cultural heritage.
- Gradually dances came to be divided as folk and classical. The classical form of dance was performed in temples as well as in royal courts. The dance in temples had a religious objective whereas in courts it was used purely for entertainment. In both cases for the artists devoted to this art form, it was no less than praying to God.
- In southern India Bharatanatyam and Mohiniattam developed as an important aspect of the rituals in temples. Yakshagana, a form of Kathakali in Kerala, tells us stories of Ramayana and Mahabharata whereas Kathak and Manipuri are mostly related to the stories of Krishna and his leela (exploits). Performance of Odissi is related to the worship of Lord Jagannath.
- Manipuri dance was also performed for religious purposes. Folk dances evolved from the lives of common people and were performed in unison. In Assam people celebrate most of the harvesting season through Bihu. Similarly, Garba of Gujarat, Bhangra and Gidda of Punjab, bamboo dance of Mizoram, Koli, the fisherman's dance of Maharashtra, Dhumal of Kashmir, and Chhau of Bengal are unique examples of performing arts that gave expression to the joys and sorrows of the masses.
- In the last few decades, the status of dance as well as its performers has changed. Young people have started learning dance to enrich their personal qualities. In some of the schools, colleges and universities separate departments have been established for imparting training in dance. Several renowned classical dancers have been awarded national awards like the Padmashree and the Padmabhusan.
- Throughout the different periods of history starting from the dancing figure found in the Indus valley civilization to the present, Indian people have expressed their joys and sorrows by singing and dancing through various art forms. This art form has been used to express their love, hatred, their aspirations and their struggle for survival which ultimately led to the enrichment of our culture.

Drama: Indian Theatre

- Indigenous tradition as well as modern research trace the origin of Indian drama to the Vedas. In the Ramayana we hear of drama troupes of women while Kautilya's Arthashastra mentions musicians, dancers and dramatic shows. Drama is a performing art, which has also been practised since times immemorial. Drama could spring from a child's play. The child enacts, mimics, and caricatures which was definitely the beginning of drama.
- While referring to drama, Bharata has mentioned nat (male artists), and nati (female artist), music, dance, musical instruments, dialogues, themes and stage. Thus, we find that drama achieved a great level of perfection during the age of Bharata. For Bharata, drama is a perfect means of communication. He also started the concept of an enclosed area for drama. There is mention of a community called 'shailoosh' which had professional drama companies. The practice of singing heroic tales became popular. As a result, professional singers called kushilavas came into existence.
- During the age of the Buddha and Mahavira, drama was a means of communicating the principles of their respective religions. Short skits and long plays were enacted to preach and educate the masses. Music and dance also played a vital role in increasing the appeal of drama. In the ancient period till the tenth century, the language of the educated, was Sanskrit. So, dramas were performed mostly in this language.
- In the context of drama, two types developed- the classic drama, which had intricacies of theme and subtle nuances of dramatic traits and folk theatre. It was of spontaneous and extempore nature. Local dialect was used in folk theatre and hence in different provinces many types of folk theatres developed. Acting with accompaniment of music and dance was the popular practice. Many names were given to the forms of folk theatre in different provinces like:
- Bengal - Jatra, Kirtania Natak, Bihar-Bideshia, Rajasthan - Raas, Jhumar, Dhola Maru, Uttar Pradesh - Raas, Nautanki, Svaang, Bhaand, Gujarat - Bhawai, Maharashtra - Larite, Tamasha, Tamil Nadu, Kerala, Karnataka - Kathakali, Yakshagana
- Modern Indian theatre emerged during British rule. It began as an outlet to vent frustration against the rulers. Soon enough it became the medium through which various socioeconomic issues like secularism, nationalism and casteism were highlighted.
- The association of people with these art forms definitely makes them better human beings as the very nature of music, dance and drama elevates human soul and creates a pleasant atmosphere. The knowledge and practice of these art forms help in the development of one's personality. The people involved in these art forms can attain balance and peace of mind, self-restraint and love for all. Their performance makes them self-confident and capable of adapting to all circumstances. Negative feelings vanish as the soul of music, dance and drama teaches us all about loving and caring.

Hello Learners, In this session, we are going to discuss on the Indian music and its divisions.

Indian Music and its divisions

- Art is an expression of all characteristics of the human mind aesthetically”. These characteristics, i.e., the varied human emotions, are known as ‘RAS’. In Hindi, ‘ras’ literally means a sugary juice. It signifies the ultimate satisfaction of ‘aanand’. Human emotions can be categorized into nine sub-headings or ‘navras’.
- The three art forms - music, dance and drama - have been an integral aspects of Indian culture
- Art reflects human emotions and human beings spontaneously express their frame of mind through various art forms.
- Singing, dancing, acting are attributes of performing arts. Music from time immemorial has been the most popular art form of India. They are Sa, Re, Ga, Ma, Pa, Dha, Ne the earliest tradition of Indian music may be traced to Sama Veda which contained the slokas that were put to music. Chanting of Vedic hymns with prescribed pitch and accent still form a part of religious rituals. The earliest text dealing exclusively with performing arts is Bharata’s Natyashashtra (compiled between second century BC and second century AD) which has six chapters on music.
- Many rulers such as Samudragupta, King Bhoja of Dhara and King Someshavra of Kalyana patronised music. The Gupta monarch Samudra Gupta was himself an accomplished musician.
- Music was also associated with the worship of Gods and Goddess in the temples. In the twelfth century, Jayadeva of Orissa produced the most brilliant raga kavya, the Gita Govinda, each song of which was set in a raga and was composed on the theme of love of Radha and Krishna.

Divisions of Indian Classical Music

- During the medieval period Indian classical music was broadly based on two traditions, the Hindustani classical music prevalent in North India and the Carnatic music of South India.

Hindustani Classical Music

- Hindustani classical music may be traced back to the period of the Delhi Sultanate and to Amir Khusrau (AD 1253-1325) who encouraged the practice of musical performance with particular instruments. He is believed to have invented the sitar and the tabla and is said to have introduced new ragas. Most of the Hindustani musicians trace their descent to Tansen. Different styles of Hindustani music are Dhrupad, Dhamar, Thumri, Khayal and Tappa. It is said that Tansen’s music had the effect of magic. He could stop the rising waves of the Yamuna and by the force of his ‘Megh Rag’ he could cause the rain to fall.

- Amongst the stringed instruments the most famous are sitar, sarod, santoor and sarangi. Pakhawaj, tabla and Mridangam are percussion or tal giving instruments. Likewise, flute, shehnai and nadaswaram are some of the chief wind instruments.
- The musicians of Hindustani classical music are usually associated to a gharana or a particular style of music. Gharanas refer to hereditary linkages of musicians which represent the core of the style and distinguish them from the other. The gharanas function in gurushishya parampara, that is, disciples learning under a particular guru, transmitting his musical knowledge and style, will belong to the same gharana. Some famous gharanas are Gwalior gharana, Kirana gharana, and Jaipur gharana.

Carnatic music

- The compositions in Carnatic music may be attributed collectively to three composers who lived between AD 1700 and 1850. They were Shyam Shastri, Thyagaraja and Mutthuswami Dikshitar. Purandardasa was another great composer of Carnatic music. Thyagaraja is revered both as a saint and an artist and epitomises the essence of Carnatic music. The main compositions are known as kriti and are devotional in nature. The three great musicians experimented with new forms.
- Flute, veena, nadaswaram, mridangam, ghatam is some of the instruments to accompany Carnatic music.
- Despite contrasting features between Hindustani and Carnatic music, one can find some similarities
- for example, the Carnatic alapana is similar to alap in Hindustani classical. Tilana in Carnatic resembles Tarana of Hindustani. Both lay stress on tala or talam.

Modern Indian Music

- With the British rule came Western music. Indians adopted some of their instruments such as violin and clarinet to suit the demands of Indian music. Orchestration of music on stage is a new development. Use of cassettes replaced oral transmission of tunes and ragas. Music education no longer depends on the master-disciple system but can be imparted through institutions teaching music.

Folk Music

- Besides classical music India has a rich legacy of folk or popular music. This music represents the emotion of the masses. The simple songs are composed to mark every event in life. They may be festivals, advent of a new season, marriage or birth of a child. Rajasthani folk songs such as Mand and Bhatiali of Bengal are popular all over India. Ragini is a popular form of folk songs of Haryana. Folk songs have their special meanings or messages. They often describe historical events and important rituals. Kashmir's Gulraj is usually a folklore and Pandvani of Madhya Pradesh is a narrative put to music.