



RACE IAS

## Daily current affairs

04 May 2022

### Basava Jayanti:

#### Context:

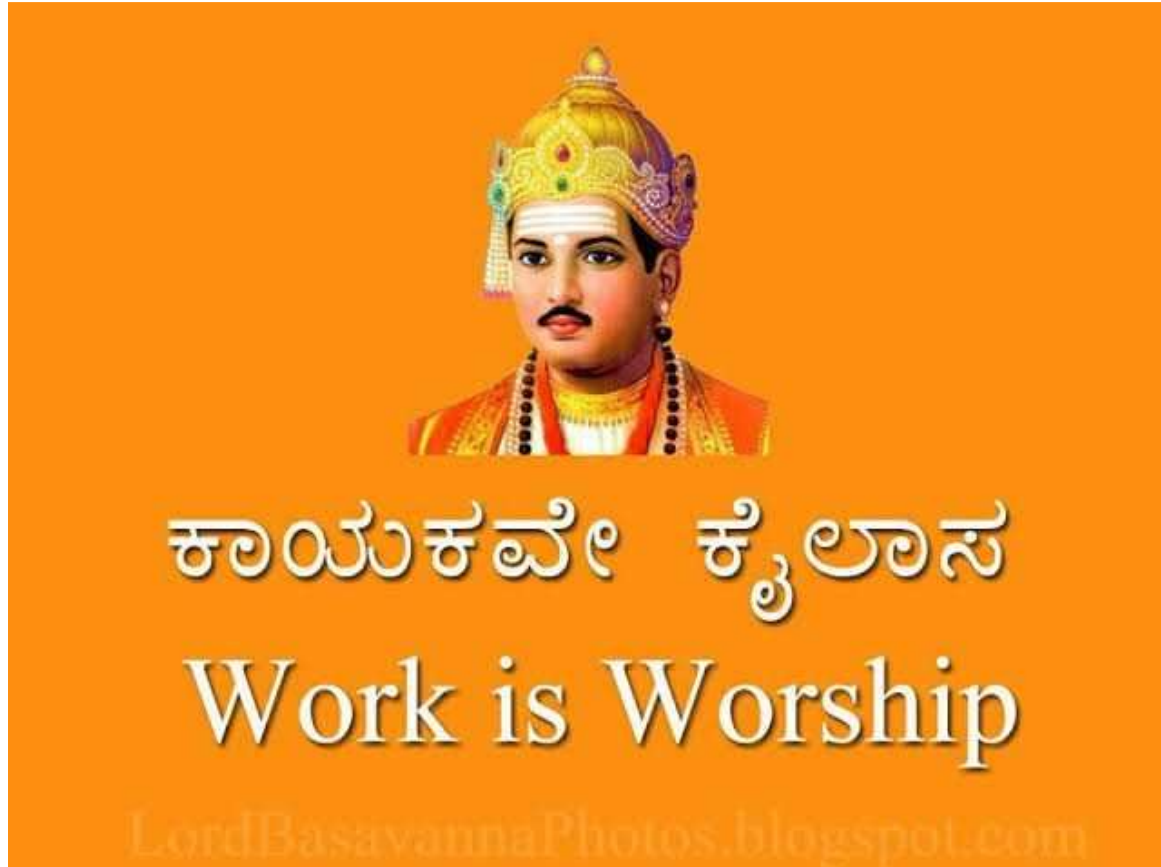
**Basava Jayanti** marks the birth anniversary of Lord Basavanna, the 12th-century poet-philosopher, and the founding saint of the Lingayat faith.

- This year it falls on 3rd May 2021.

#### About Basavanna, his thoughts and contributions:

- Basavanna was a philosopher, statesman, Kannada poet and a social reformer during the reign of the Kalachuri-dynasty king Bijjala I in Karnataka.
- Basavanna spread social awareness through his poetry, popularly known as
- Basavanna rejected gender or social discrimination, superstitions and rituals.
- He introduced new public institutions such as the Anubhava Mantapa (or, the “hall of spiritual experience”), which welcomed men and women from all socio-economic backgrounds to discuss spiritual and mundane questions of life, in open.
- As a leader, he developed and inspired a new devotional movement named Virashaivas, or “ardent, heroic worshippers of Shiva”. This movement shared its roots in the ongoing Tamil Bhakti movement, particularly the Shaiva Nayanars traditions, over the 7th- to 11th-century.
- Basava championed devotional worship that rejected temple worship and rituals led by Brahmins, and replaced it with personalized direct worship of Shiva through practices such as individually worn icons and symbols like a small linga.

- The Sharana movement he presided over attracted people from all castes, and like most strands of the Bhakti movement, produced a corpus of literature, the vachanas, that unveiled the spiritual universe of the Veerashaiva saints.
- The egalitarianism of Basavanna's Sharana movement was too radical for its times.



Sources: PIB.

## Official language in Courts:

### Context:

Underlining the need to “encourage the use of **local languages in courts**” since a large section of the country’s population “finds it difficult to understand the judicial process and rulings of the court,” Prime Minister Narendra Modi recently said that such a move would help the common man relate to the judiciary.

**What the Constitution says?**

Article 348 (1) of the Constitution of India provides that all proceedings in the Supreme Court and in every High court shall be in English Language until Parliament by law otherwise provides.

- Under Article 348 (2), the Governor of the State may, with the previous consent of the President, authorize the use of the Hindi language or any other language used for any official purpose of the State, in the proceedings of the High Court having its principal seat in that State provided that decrees, judgments or orders passed by such High Courts shall be in English.

Section 7 of the Official Languages Act, 1963, provides that the use of Hindi or official language of a State in addition to the English language may be authorized, with the consent of the President of India, by the Governor of the State for purpose of judgments etc. made by the High Court for that State.

- The provision of optional use of Hindi in proceedings has already been made in the High Courts of Rajasthan, Uttar Pradesh, Madhya Pradesh and Bihar.

#### **Language of Subordinate Courts:**

- The language of all courts subordinate to High Courts generally remains the same as the language on the commencement of the Civil Procedure Code 1908, till the state government determines.
- There are two provisions regarding the use of language in subordinate courts. Under Section 137 of the Code of Civil Procedure, the language of the district courts shall be similar to the language of the act.
- The state government has the power to declare any regional language as an alternative for the proceedings of the court.

**Sources: the Hindu.**

## **What is hallmarking of gold?**

#### **Context:**

The second phase of the mandatory hallmarking vide **Hallmarking of Gold Jewellery and Gold Artefacts (Amendment) Order, 2022** will come into force from June 01, 2022.

- The second phase of the mandatory hallmarking will cover additional three caratages of gold jewellery/artefacts viz. 20, 23 and 24 carats as mentioned in the Indian Standard IS 1417.
- The second phase will cover 32 new districts under the mandatory hallmarking regime wherein an Assaying and Hallmarking Centres (AHC) has been set up post implementation of the first phase of the mandatory hallmarking order. The Centre notified the order on April 04, 2022.

### **Background:**

The government had announced the phased implementation of mandatory hallmarking of gold jewellery with effect from June 16, 2021.

### **In the first phase:**

Gold hallmarking will be available only in 256 districts and jewellers having annual turnover above Rs 40 lakh will come under its purview.

### **What is hallmarking of gold?**

Hallmarking is the “accurate determination and official recording of the proportionate content of precious metal in precious metal articles.”

- So, it is like a “guarantee of purity or fineness” of precious metal articles.

The Bureau of Indian Standard (BIS) operates a gold and silver hallmarking scheme in India.

### **Metals covered under the purview of hallmarking:**

1. Gold jewellery and gold artefacts.
2. Silver jewellery and silver artefacts.

### **Exceptions:**

1. Export and re-import of jewellery as per Trade Policy of Government of India – Jewellery for international exhibitions, jewellery for government-approved B2B domestic exhibitions.
2. Watches, fountain pens and special types of jewellery such as Kundan, Polki and Jadau.

### **What was the need of making hallmarking mandatory?**

1. India is the world's second-biggest gold consumer after China (Source: Business Standard). However, the level of hallmarked jewellery is very low in the country- only 30% of Indian gold jewellery is hallmarked. Main reason behind this is non-availability of sufficient assaying and hallmarking centres (A&HC).
2. The mandatory hallmarking will protect the public against lower caratage and ensure consumers do not get cheated while buying gold ornaments.
3. It will also help to get the purity as marked on the ornaments.
4. It will bring in transparency and assure the consumers of quality.



Sources: the Hindu.

## Why are electric vehicles catching fire?

### Context:

The Union Government has constituted an expert panel to probe the recent series of battery explosions in electric vehicles (EVs).

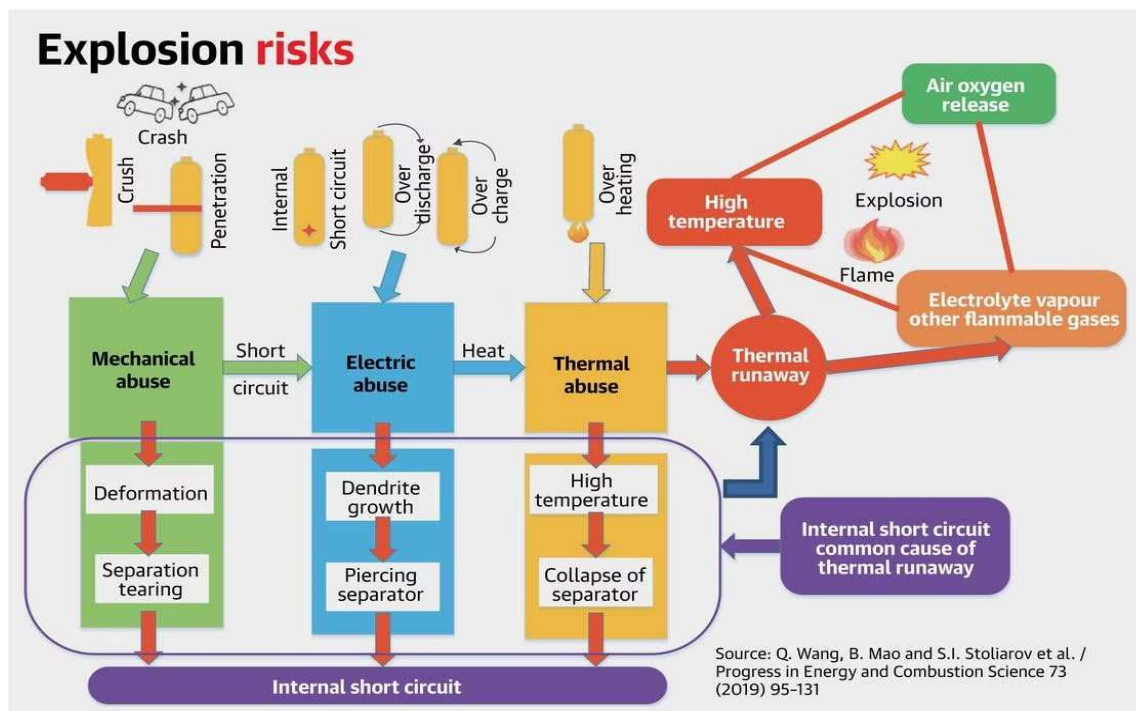
### Reasons for the recent increase in demand for electric vehicles:

- Concern over climate change.
- Cost of Li-ion (Lithium-ion) battery technology has decreased.
- Governments providing incentives to usher in the transition and private industry ramping up plans for capturing the market.

- Vehicle companies, battery manufacturers, and material suppliers vying with each other for market share.

### Concerns:

Hurrying the development of this complex technology without careful safeguards can lead to increasing safety incidents, as evidenced recently on Indian roads.



### Why do these batteries catch fire?

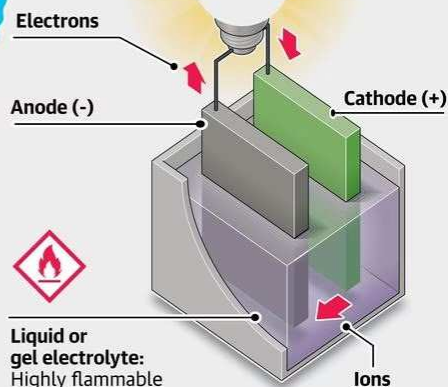
- Batteries do store energy in a small package and if the energy is released in an uncontrolled fashion, the thermal event can be significant.
- Battery fires, like other fires, occur due to the convergence of three parts of the “fire triangle”: heat, oxygen, and fuel. If an adverse event such as a short circuit occurs in the battery, the internal temperature can raise as the anode and cathode release their energy through the short.

## Bits and pieces



**Battery:**  
Charged ions travel from cathode to anode through electrolyte. Free electrons pass from anode to cathode, powering device

**Lithium-ion battery (Li-ion):**  
The technology has reached limit of efficiency



**Liquid or gel electrolyte:**  
Highly flammable

Sources: The Next Web, Nikkei Asia, Make Tech Easier  
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### How to prevent it?

1. Safety is a must and is an important consideration that battery and vehicle manufacturers can design for at multiple levels from the choice of battery material to designs at the cell, pack, and vehicle level.
2. Preventing fires requires breaking the fire triangle. Battery cathodes are a leading cause of the heat release. Some cathodes, such as ones with lower nickel content or moving to iron phosphate, can increase safety.
3. Tightly controlled manufacturing (Like adding Ceramic layer) will prevent accidental shorts in the cells, eliminating a leading cause of fires.
4. Protecting the cell with robust thermal management is critical, especially in India where ambient temperatures are high.
5. Battery packs need to be protected from external penetration.

### Various measures undertaken by the Centre and States include:

**PLI Scheme For Auto Sector:** In September 2021 this year, the Union Cabinet approved a Rs 26,058 crore production-linked incentive (PLI) scheme to accelerate domestic manufacturing of electric and fuel cell vehicles and drones in India.

**FAME II Amendment:** Under FAME-II (Faster Adoption and Manufacturing of Electric Vehicles-II) scheme, the government significantly reduced the price gap between petrol-powered two-wheelers and electric ones by increasing the subsidy rate for electric two-wheelers.

**Scrappage Policy:** In August this year, the government launched the Vehicle Scrappage Policy virtually at the Gujarat Investor Summit. The policy aims to phase out unfit and polluting vehicles in an environment-friendly manner.

Along with the Centre, state governments are also leaving no stone unturned to promote faster adoption of EVs in India. To increase penetration and adoption of battery electric vehicles (BEVs), governments of around 20 states in India, including Delhi, Gujarat, Goa, Maharashtra and Rajasthan have already come up with either a draft or final state level EV policies.

**Challenges ahead:**

1. The Indian electric vehicle (EV) market currently has one of the lowest penetration rates in the world.
2. Capital costs are high and the payoff is uncertain.
3. Local production of inputs for EVs is at just about 35% of total input production.
4. The production will be severely affected in terms of production costs.
5. An uncertain policy environment and the lack of supporting infrastructure are major roadblocks.

**Need of the hour:**

- Need to shift the focus from subsidizing vehicles to subsidizing batteries because batteries make up 50% of EV costs.
- Increasing focus on incentivizing electric two-wheelers because two-wheelers account for 76% of the vehicles in the country and consume most of the fuel.

A wide network of charging stations is imminent for attracting investment.

- Workplaces in tech parks, Public bus depots, and Multiplexes are the potential places where charging points could be installed. In Bangalore, some malls have charging points in parking lots.
- Corporates could invest in charging stations as Corporate Social Responsibility compliances.
- Acquiring lithium fields in Bolivia, Australia, and Chile could become as important as buying oil fields as India needs raw material to make batteries for electric vehicles.

**Sources: the Hindu.**



## Stubble Burning Issue:

### Context:

With wheat yield down this year, the rate of stubble burning is very high and farmers can earn huge profits by selling it. But despite that, 3,895 field fires have been reported from April 1 to April 29 in Punjab.

### Why do farmers opt for stubble burning?

1. They do not have alternatives for utilising them effectively.
2. The farmers are ill-equipped to deal with waste because they cannot afford the new technology that is available to handle the waste material.
3. With less income due to crop damage, farmers are likely to be inclined to light up their fields to cut costs and not spend on scientific ways of stubble management.

### What is stubble burning?

It is a common practice followed by farmers to prepare fields for sowing of wheat in November as there is little time left between the harvesting of paddy and sowing of wheat.

Impact: Stubble burning results in emission of harmful gases such carbon dioxide, sulphur dioxide, nitrogen dioxide along with particulate matter.

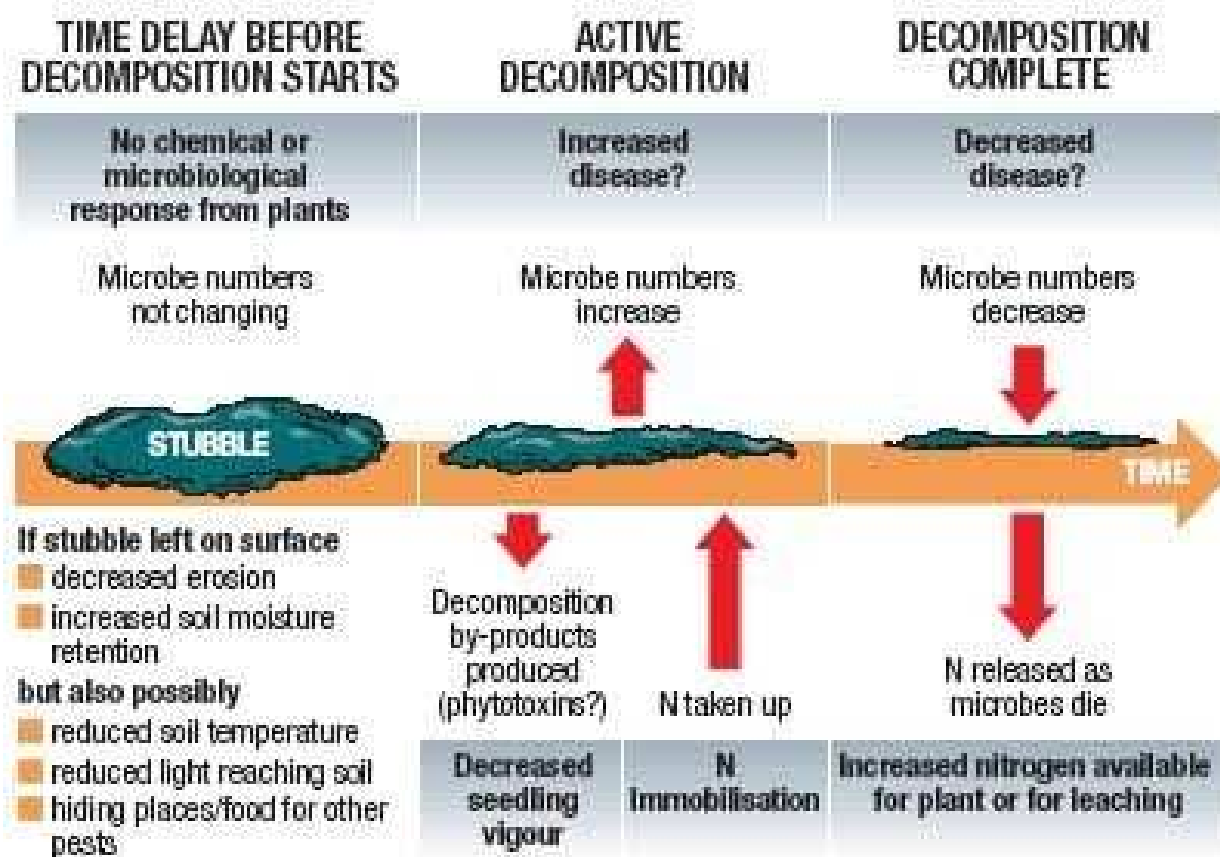
### Advantages of stubble burning:

- It quickly clears the field and is the cheapest alternative.
- Kills weeds, including those resistant to herbicide.
- Kills slugs and other pests.
- Can reduce nitrogen tie-up.

### Effects of Stubble Burning:

- Pollution: Open stubble burning emits large amounts of toxic pollutants in the atmosphere which contain harmful gases like methane (CH<sub>4</sub>), Carbon Monoxide (CO), Volatile organic compound (VOC) and carcinogenic polycyclic aromatic hydrocarbons. They may eventually cause smog.
- Soil Fertility: Burning husk on ground destroys the nutrients in the soil, making it less fertile.

- Heat Penetration: Heat generated by stubble burning penetrates into the soil, leading to the loss of moisture and useful microbes.



#### Alternative solutions that can avoid Stubble Burning:

1. Promote paddy straw-based power plants. It will also create employment opportunities.
2. Incorporation of crop residues in the soil can improve soil moisture and help activate the growth of soil microorganisms for better plant growth.
3. Convert the removed residues into enriched organic manure through composting.
4. New opportunities for industrial use such as extraction of yeast protein can be explored through scientific research.

#### What needs to be done- Supreme Court's observations?

1. Incentives could be provided to those who are not burning the stubble and disincentives for those who continue the practice.
2. The existing **Minimum Support Price (MSP) Scheme** must be so interpreted as to enable the States concerned to wholly or partly deny the benefit of MSP to those who continue to burn the crop residue.

### **Chhattisgarh Model:**

An innovative experiment has been undertaken by the Chhattisgarh government by setting up gauthans.

- A gauthan is a dedicated five-acre plot, held in common by each village, where all the unused stubble is collected through parali daan (people's donations) and is converted into organic fertiliser by mixing with cow dung and few natural enzymes.
- The scheme also generates employment among rural youth.
- The government supports the transportation of parali from the farm to the nearest gauthan.
- The state has successfully developed 2,000 gauthans.

**Sources: the Hindu.**

### **Principal scientific advisor:**

Prof Ajay K Sood from the Indian Institute of Science (IISc) has been appointed as the new Principal Scientific Adviser (PSA) to the government of India.

He succeeds Prof K Vijayraghavan from the National Centre for Biological Sciences (NCBS), Bengaluru.

#### **About PSA:**

- The office of the PSA, established in 1999, aims to provide advice to the Prime Minister and cabinet on matters related to science, technology and innovation.
- It is currently a Secretary level position.
- First PSA: P. J. Abdul Kalam.



## Charak Shapath:

The Dean of Madurai Medical College was removed on May 1 after a batch of new students were administered an oath in Sanskrit attributed to the ancient Indian sage Maharshi Charaka instead of the traditional Hippocratic Oath in English.

### What is Charaka Shapath?

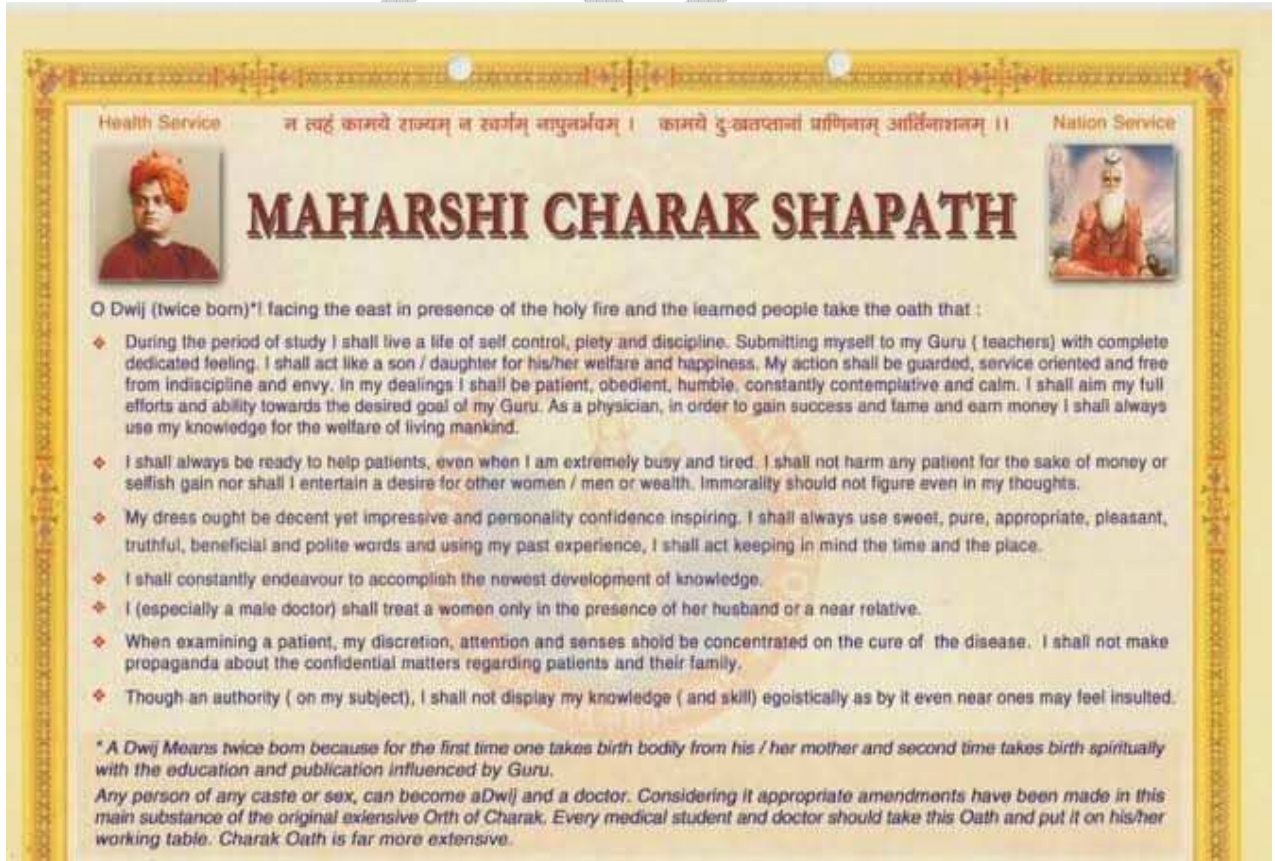
Charaka Shapath or Charaka oath, is a passage from the Charaka Samhita, a text on Indian traditional medicine Ayurveda in Sanskrit, from 1st-2nd centuries AD. It is a guideline, like dos and donts, by a teacher to fresh medical students.

### What is Hippocratic Oath?

It is an oath of ethics taken by physicians and has been widely used. It is attributed to the Greek physician Hippocrates. It was written in Greek in the 4th-5th centuries BC.

### What's the issue?

The oath was administered in Sanskrit. It had triggered a controversy, coming as it did amidst an already brewing language row and Tamil Nadu's tensions with the Centre.



Health Service न स्वर्हं कामये राज्यम् न स्वर्गम् नापुनर्भवम् । कामये दुःखतप्तानां प्राणिनाम् आर्तिनाशनम् ॥ Nation Service

## MAHARSHI CHARAK SHAPATH

O Dwij (twice born)\*1 facing the east in presence of the holy fire and the learned people take the oath that :

- ◆ During the period of study I shall live a life of self control, piety and discipline. Submitting myself to my Guru ( teachers) with complete dedicated feeling. I shall act like a son / daughter for his/her welfare and happiness. My action shall be guarded, service oriented and free from indiscipline and envy. In my dealings I shall be patient, obedient, humble, constantly contemplative and calm. I shall aim my full efforts and ability towards the desired goal of my Guru. As a physician, in order to gain success and fame and earn money I shall always use my knowledge for the welfare of living mankind.
- ◆ I shall always be ready to help patients, even when I am extremely busy and tired. I shall not harm any patient for the sake of money or selfish gain nor shall I entertain a desire for other women / men or wealth. Immorality should not figure even in my thoughts.
- ◆ My dress ought to be decent yet impressive and personality confidence inspiring. I shall always use sweet, pure, appropriate, pleasant, truthful, beneficial and polite words and using my past experience, I shall act keeping in mind the time and the place.
- ◆ I shall constantly endeavour to accomplish the newest development of knowledge.
- ◆ I (especially a male doctor) shall treat a women only in the presence of her husband or a near relative.
- ◆ When examining a patient, my discretion, attention and senses should be concentrated on the cure of the disease. I shall not make propaganda about the confidential matters regarding patients and their family.
- ◆ Though an authority ( on my subject), I shall not display my knowledge ( and skill) egoistically as by it even near ones may feel insulted.

\* A Dwij Means twice born because for the first time one takes birth bodily from his / her mother and second time takes birth spiritually with the education and publication influenced by Guru.

Any person of any caste or sex, can become aDwij and a doctor. Considering it appropriate amendments have been made in this main substance of the original extensive Orth of Charak. Every medical student and doctor should take this Oath and put it on his/her working table. Charak Oath is far more extensive.

## Transnistria:

- Transnistria is a tiny breakaway region of Moldova.
- It lies between Moldova to its west and Ukraine towards its east.
- It now risks being dragged into the Russia-Ukraine war because of reports of a series of explosions in its territory.
- Often described as a “remnant of the Soviet Union”, Transnistria declared independence like Moldova did soon after the break-up of the Soviet Union.
- Transnistria is not recognised as independent even by Russia and its economy is dependent on Russia for subsidies and free gas. Most Transnistrians have dual citizenship of Russia and Transnistria or triple citizenship of Moldova, Transnistria, and Russia.



## PK2:

- Researchers at IIT Mandi have identified a drug molecule that can be used to treat diabetes.
- The molecule, called PK2, is able to trigger the release of insulin by the pancreas, and can potentially be used as an orally administered medicine for diabetes.

### **Koilastila Gas field:**

- It was discovered recently in Bangladesh.
- It has the capacity to produce 20 million cubic feet of gas per day (MMCFD).

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