Prof. SA Kori, Vice Chancellor address on the occasion of 77th Independence Day

Dear fellow members of the CUAP community,

On the happy occasion of the 77th Independence Day Celebrations, I extend my hearty congratulations and best wishes to you all. This day is the most appropriate occasion to offer our tribute to the great freedom fighters, whose sacrifices paved the way for the emergence of India as an independent nation.

There were many freedom fighters of the nation whom we know like Subhas Chandra Bose, Bhagat Singh, Chandra Shekhar Azad, Mangal Pande, Mahatma Gandhi, Jawaharlal Nehru, Chandra Shekhar Azad, Rani Lakshmi Bai of Jhansi, Saradar Vallabhbhai Patel, Jawar Lal Nehru, Lal Bahadur Shastri, Dadabhai Naoroji, Tanita Tope, Bipin Chandra Pal, Lal Lajpat Rai, Bal Gangadhar Tilak, Asfaq Ulla Khan, Nana Sahib, Sukhdev, Kunvar Singh, Vinayak Damodar Savarkar, C. Rajagopalachari, Ram Prasad Bismil, Begam Hazra Mahal and many more. Although the great leaders and the movements they led are respected, there are many unsung heroes whose contributions are only briefly mentioned in history textbooks. At the cost of their own lives, these brave fighters went beyond their caste, creed, religion, language, gender, and other social limitations to wage a war against the unjust colonial rulers. I take this opportunity to pay homage to such lesser-known heroic sons of this nation: Komaram Bheem, who belonged to the tribal Gond community in Adilabad, Telangana, and who formed a guerilla army with the slogan "Jal Jangal Zameen" - which means "water, forest, land"; Jhalkari Bai, who was born in a Dalit family and who served in Rani Lakshmibai's army: Veerapandiya Kattabomman, the Palayakarar of the Thoothukudi district in Tamil Nadu; Alagumuthu Kone, one of the very first freedom fighters who put up staunch opposition to British colonization in the eighteenth century; Durgavati Devi, one of the very few women who actively participated in the armed revolution against the British; Bhima Nayak, who led an army of tribals in the Indian Rebellion of 1857; V. V. S. Aiyar, an Indian revolutionary from Tamil Nadu; Jatindra Nath Das, or Jatin Das, a revolutionary from Bengal; Kumaraswamy Mudaliar, popularly known as Tirupur Kumaran, who was born in a weaver family, and who took part in the Civil Disobedience movement in 1930; Haipou Jadonang, was a Naga spiritual leader who was one of the first revolutionaries from Manipur; and the Chapekar Brothers from Chinchwad in Pune, who, along with Lala Lajpat Rai, are regarded as the founders of the revolutionary movement in India. This list of the great freedom fighter shows that India's freedom struggle was not confined to a few regions and a few sections of society but was undertaken by different sections of society from different parts of the country. It was truly a national movement.

Many of us know about the 1857 Revolt, but how many of us know about the Royal Indian Navy mutiny or revolt, also called the 1946 Naval Uprising? The Revolt started when Indian Naval personnel began calling themselves the "Indian National Navy" and offered lefthanded salutes to British officers. At some places, A non-commissioned officers (NCOs) in the British Indian Army ignored and defied orders from British superiors. In Madras and Poona, the British garrisons had to face some unrest within the ranks of the Indian Army. Notably, the revolting ships hoisted three flags tied together – those of the Congress, Muslim League, and the Red Flag of the Communist Party of India, signifying the unity among the mutineers. The mutiny, which initially manifested as a hunger strike by Navy personnel, quickly evolved into a widespread movement of Indian citizens against the British Empire. This revolt played a significant role in India's fight for independence.

Another hero we should pay tribute to is Sri Pingali Venkayya, the man behind India's National Flag. Pingali Venkayya imprinted the idea of national pride in India. He is the man who designed the national flag, a symbol that speaks for our nationalistic emotions. Born on 2 August 1876 or 1878 at a village near Machilipatnam in Andhra Pradesh, Pingali Venkayya was someone who grew up to be a man of many talents. During his lifetime, the staunch follower of Gandhian principles, worked as a teacher, author, agriculturist, linguist, and devoted party member. When Venkayya attended the All-India Congress Committee (AICC) session in 1906 in Calcutta, he was inspired to design a flag for the Indian National Congress as he opposed the idea of hoisting the British flag at Congress meetings. In 1916, he published a book entitled "Bharatha Desaniki Oka Jatiya Patakam" in Telugu (transl. "A National Flag

for India") with 30 potential designs for a flag. In 1921, the AICC held its two-day crucial session in Bezawada (now Vijayawada) on March 31 and April 1. When Gandhi asked Venkayya to submit a design for the flag at the session, he did it within three hours. Venkayya had shown Gandhi a rudimentary design of a flag on a Khadi bunting. This first flag was coloured red and green. On Gandhi's suggestion, Venkayya added a white stripe and the spinning wheel. While the flag was not officially adopted by the AICC, which reordered the stripes and changed the red to saffron in 1931, it came to be used across the country. The flag was adopted in its present form during a meeting of the Constituent Assembly on 22 July 1947, just twenty days before India's Independence. And, on 15 August 1947, when India got its Independence, the tricolour became the national flag with a 24-spoked navy-blue Ashoka Chakra replacing the spinning wheel in the centre.

With about 95 crore eligible voters, India is the largest democracy in the world. The country has achieved all-round socio-economic progress since its Independence. It has become self-sufficient in agricultural production and is now one of the top industrialized countries in the world and one of the few nations to have gone into outer space to conquer nature for the benefit of the people.

In terms of GDP growth rate, India is one of the fastest-growing markets globally. It toppled massive challenges ever since its independence to become the 5th largest economy in the world. The country witnessed over 10-time growth in GDP in the last 20 years. There has been a 600-time rise in exports from India since Independence. There was also a massive surge in forex reserves. With a 335-time rise since Independence, India's foreign exchange reserves are 4th largest in the world. India's food-grain production witnessed a tremendous 500% rise since Independence. There has been a 7-fold rise in highway construction since 1950-51. India has successfully turned into a power-surplus nation, with a total installed capacity at 3,70,106 GWh. The number of registered vehicles has spiked from just 3 lakhs in 1951 to nearly 32.6 crores in 2022. India is now 3rd largest domestic aviation market. Passenger traffic at airports has increased in the country, witnessing a massive 30-fold growth in four decades. India leads the global milk production. contributing 23% of the global

production. In the last 3 decades, India witnessed over 3 times rise in milk production. It is the third largest producer of eggs globally.

India has seen a phenomenal rise in literacy rate since Independence. Just about 2 in 10 Indians were literate back in 1950. Even though the overall literacy rate in India was quite poor at just over 18%, the female literacy rate was at an abysmally low 8.86%. In 2022, the figures nearly reversed. From a literacy rate of mere 18.3% in 1951 to 77.7% in 2022, India has come a long way in establishing a well-educated nation. And, quite interestingly, girls outshine boys in receiving primary school education. Access to higher education has increased phenomenally. India has 1,043 universities and over 42,000 colleges for its ambitious young population. In 1950, India had only 27 universities and 578 colleges. Student enrolment increased by 11.4% from 2015-16 to 2019-20. In the same period, female enrolment in higher education increased 18.2%.

The trajectory of India's development in health and well-being from 1947 to 2023 showcases a remarkable evolution. The nation's endeavours to tackle some of the deadliest diseases and enhance the quality of life for its citizens reflect a story of transformation and growth. One of the most remarkable accomplishments India has achieved post-independence is the substantial reduction in death rate. In 1947, the average life expectancy for an Indian citizen was a mere 32 years. This figure has risen significantly to an impressive 70.19 years. The infant mortality rate, which stood at 145.6 per 1000 live births in 1947, has seen a remarkable improvement and dropped to 27.695 per 1000 live births in 2023. This splendid improvement underscores the nation's commitment to ensuring a healthier start for its youngest citizens.

Addressing the Lok Sabha on 10 August 2023, Honourable Prime Minister Shri Narendra Modi ji said, "... a time comes in the life of a nation when it breaks free from the old shackles and moves forward with new energy and determination. 'This time period of the 21st century is a time of fulfilling all our aspirations. Whatever is shaped during this time period will impact the country for the next thousand years. Therefore, we have a huge responsibility and we should have a single focus -- development of the country and full dedication to realize the dreams of the countrymen,' he emphasized. PM also said that the strengths of our people and youth can take us to our destination."

India is poised to sustain its growth momentum. India is expected to double its GDP to USD 6 trillion before the end of this decade, making it the world's third largest economy. A very exciting fact is that the country is transitioning from a low middle-income country (LMIC) to an upper middle-income country (UMIC), which will certainly boost both domestic and global demand from manufacturing and services sectors. Industrialization has been the key driver of economic growth and inclusive prosperity. This is evident from the increased employment opportunities, improved working conditions, and optimal resource use.

It is said that the future of humanity hinges on the chip war, the fight for the world's most critical technology. The battle for supremacy in semiconductors is one of the most important stories in geopolitics, national security, and economic prosperity. The US-China chip war revolves around the rivalry between the two economic powers for dominance in semiconductor technology. The US has implemented restrictions to prevent China from gaining a technological advantage, while also investing in domestic chip manufacturing. China, on the other hand, aims to achieve self-sufficiency in semiconductors through its "Made in China 2025" plan. The war has disrupted global semiconductor supply chains and led to a shift in alliances and trade patterns. In this war, semiconductors have emerged as the "new oil." India is pushing itself as an alternative to China. India is aspiring for turning the ongoing war into its advantage. India does not produce semiconductors, but it is trying to manufacture First made in India Chip by December 2024. The use of semiconductor chips can be found in thousands of products such as computers, smartphones, digital cameras, TVs, washing machines refrigerators, LED bulbs, bank ATMs, trains, internet, medical networks, automobiles, aero planes, missiles, satellites, ships and are essential for everyday life. Thus, India has positioned itself as a player in the critical semiconductor technology field with a hugely significant partnership with the US. The expansive new US-India technology

partnership forged during Honourable Prime Minister Shri Narendra Modi ji's recent visit to Washington DC identifies technology as the new geopolitical frontier. A key element of the partnership is the resolve to diversify the global semiconductor supply chain.

India has recognized the significance of Artificial Intelligence (AI) practices and efforts in addressing societal needs in areas such as healthcare, education, agriculture, smart cities and infrastructure, including smart mobility and transportation using such dynamic data.

According to Henry Kissinger et.al:

AI is an enabler of many industries and facets of human life: scientific research, education, manufacturing, logistics, transportation, defense, law enforcement, politics, advertising, art, culture, and more. The characteristics of AI -- including its capacities to learn, evolve, and surprise -- will disrupt and transform them all. The outcome will be the alteration of human identity and the human experience of reality at levels not experienced since the dawn of the modern age.

To ensure individuals are equipped with the necessary skills to thrive in the future, it is crucial to establish a strong synergy between education and skilling initiatives. There is a mismatch between Education/Skilling and Industry. According to the World Economic Forum's "Future Jobs" report, by 2025, 85 million jobs may be displaced by automation in India, However, at the same time, 97 million new jobs may emerge, which will require different skills sets. The existing system are not in consonance to this transition, leading to a mismatch between the skills acquired through formal education and the skills required by the industry.

Looking at the need of the future CUAP focus on AI, our university started Master's in Artificial Intelligence and Data Science, and the response is quite encouraging. In addition,

the University proposes to start a mandatory 4-credit course named "Introduction to Artificial Intelligence and Python Programming" for both UG and PG programmes in the Academic Year 2023-24.

According to NEP2020, "A holistic and multidisciplinary education, as described so beautifully in India 's past, is indeed what is needed for the education of India to lead the country into the 21st century." In order to make its various academic programmes holistic and multidisciplinary, the University proposes to start in the Academic Year 2023-24 a mandatory add -on course names "Building Mathematical Ability," which comprises four units: Mathematics, Statistics, Commercial Mathematics, and Financial Literacy.

NEP 2020 states, "India is a treasure trove of culture, developed over thousands of years and manifested in the form of arts, works of literature, customs, traditions, linguistic expressions, artefacts, heritage sites, and more.... Language, of course, is inextricably linked to art and culture.... Teaching and learning of Indian languages need to be integrated with school and higher education at every level." In accordance with NEP2020's recommendation, the University has started a course in Sanskrit for both students and faculty. University proposes to start some more branches of Indian Knowledge System.

The University is well aware of the need to establish a strong synergy between education and skilling initiatives, not only imparting knowledge to the students but also training them in advanced skills. In addition to its present Computer Laboratory, the University will soon start a Cyber Forensic Laboratory and train its students in Cyber Security. CUAP always look forward for the overall growth of a students and students may not realize the usefulness of what appears to be useless knowledge at this point of time. In due course of time, you will realize its significance.

I am very happy that many of our students have won laurels in several curricular and cocurricular programmes, my hearty congratulations and best wishes to them. Dear fellow members of the CUAP community, here is a suggestion for you. A December 2020 survey of 2000 Indian urban smartphone users revealed that, on average, users spent 6-9 hours on their

smartphones every day. About 74 per cent said they get moody and irritable when they stop using their mobile phones. While 73 per cent said they "feel compelled" to check their smartphones continually. In the same report, 70 per cent agreed that if their usage continues at the current rate or grows, it is likely to impact their mental or physical health. Seventy-four per cent of respondents agreed that it is vital for them to have a life separate from their mobile phones, and 73 per cent agreed that they would be happier if they spent less time on their smartphones. It is high time we took back our time, attention, and control over data. In this context, I am reminded of a word coined by Nandan Nilekani and Tanuj Bhojwani written a book, The Art of B*itfulness*, means a combination of the words *bit* and *mindful. Bitfulness* means being effortlessly mindful abou t the time we spend on our devices.

I am happy that the CUAP faculty, staff, and students so enthusiastically participated in the various programmes organized on our campus, especially the events organized to celebrate India's G-20 Presidency. My hearty congratulations and best wishes to them!

My dear fellow countrymen,

Let us all rededicate ourselves to the service of this great nation. Let us always remind ourselves of what Honourable Prime Minister Shri Narendra Modi ji said, "India is the world's most youthful nation. A nation with such youth power cannot dream small. We cannot commit this crime. We should dream big; we should enable the youth to dream big and we should give them an opportunity to realize their dreams."

Thank you.

Jai Hind!