



VEDHIK

DAILY NEWS ANALYSIS

07 - OCT - 2022



FOREWORD

We, at Team Vedhik is happy to introduce a new initiative - "Daily Current Affairs_The Hindu" compilations to help you with UPSC Civil Services Examination preparation. We believe this initiative - "Daily Current Affairs_The Hindu" would help students, especially beginners save time and streamline their preparations with regard to Current Affairs. A content page and an Appendix has been added segregating and mapping the content to the syllabus.

It is an appreciable efforts by Vedhik IAS Academy helping aspirants of UPSC Civil Services Examinations. I would like to express my sincere gratitude to Dr. Babu Sebastian, former VC - MG University in extending all support to this endeavour. Finally I also extend my thanks to thank Ms. Shilpa Sasidharan and Mr. Shahul Hameed for their assistance in the preparing the compilations.

We welcome your valuable comments so that further improvement may be made in the forthcoming material. We look forward to feedback, comments and suggestions on how to improve and add value for students. Every care has been taken to avoid typing errors and if any reader comes across any such error, the authors shall feel obliged if they are informed at their Email ID.

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Is India in a bind over its relations with Russia?

PARLEY

On October 1, when India abstained from voting at the United Nations Security Council on a draft resolution against Russia for conducting referendums and annexing four regions of Ukraine, it was a reminder of New Delhi's precarious tightrope walk on ties with Moscow. In the backdrop of the war in Ukraine and in the face of Western sanctions against Russia, India has continued to carry on oil and defence trade with Russia, even as it remains committed to deepening its relations with the West, including the U.S. In a discussion moderated by **Kallol Bhattacharjee**, **Anuradha Chenoy** and **Ashok Kantha** discuss India's choices and actions in a changing geopolitical landscape, especially with regard to China. Edited excerpts:

The war in Ukraine has brought Russia and China closer than before. In this context, how can India safeguard its interests?

Anuradha Chenoy: It's not that the Ukraine war has suddenly brought them together. The proximity has been going on since the end of the Cold War and it has gradually reached a peak now. It is linked to a combination of factors, such as Russia's export of defence equipment, of energy, the two countries' understanding of a multi-polar world, etc. – and also, from the rise of American paranoia about, and phobia towards, China. So, this closeness is not new, but it has increased. I think it is pretty irreversible.

Ashok Kantha: I witnessed linkages between China and Russia being upgraded following Russia's annexation of Crimea in 2014, when the Russians came under great pressure from the West. I was India's Ambassador to China then, and saw first-hand how Russia's attitude in working with China in certain sensitive sectors changed – for instance, in the supply of sophisticated defence systems such as S-400 or Sukhoi Su-35 aircraft, or in accommodating the Belt and Road Initiative, or in accepting a greater role for China in Central Asia. All these developments took place at least partly because Russia needed China more than.

This trend has continued. The joint statement of February 4, 2022 between Chinese President Xi Jinping and Russian President Vladimir Putin predated Russia's invasion of Ukraine. It talked about a partnership "without limits". There is no doubt that after Russia's "special military operation" against Ukraine, strategic collaboration between Russia and China has increased. If Russia is more dependent on China today, that is because it has been subjected to



A destroyed Russian tank in Kyiv. AFP

intense sanctions and other measures by the West. And China, while it has not quite endorsed Russia's invasion of Ukraine and has professed to take a position of neutrality, has been supportive of Russian action in many ways, including by accepting the Russian narrative on the U.S. and the West being the primary cause for what's happening in Europe today, through various actions like the eastward expansion of NATO. I think that narrative is being promoted by China, both externally and internally. So, on the whole, the Chinese have been supportive of Russia. And this has led to greater Russian dependence on China, which, of course, has implications for us.

Both Russia and China have opposed the Quad. So, did the Quad also play a role in bringing Russia and China closer?

AC: India has invested in the Quad, but the Quad is not a military alliance. It focuses on technology, trade, maritime security. But India has been careful to make sure that it's not part of any military alliance with Russia, China or the U.S. And I think Russia has understood that India will engage with other countries of the West. In fact, China also tried to have close relations with the West, but the West did not respond favourably to this. So, both Russia and China are looking to the Global South, of which India is important. I think the small but significant bilateral withdrawal from one point in Galwan recently might have something to do with this. China seems to be recognising that India is capable of being neutral. Of course, it has a very long way to go. But I don't think China can afford to alienate India any longer, given the kind of polarisation in world politics.

AK: On Ukraine, we have taken a balanced and nuanced position. I don't see any fundamental shift in China's position. It would like to utilise



The fact remains that as a result of Russia's invasion of Ukraine, there have been changes in the geopolitical situation which are not very favourable for us, such as the closer alignment between China and Russia.

ASHOK KANTHA

the Ukraine issue. It would like to drive a wedge between India and the U.S. But it's not willing to accommodate in any substantive manner fundamental concerns such as the situation along the India-China border. So, I don't really see any fundamental shift in China's position in the wake of the Ukraine crisis.

India is going ahead with all the multilateral arrangements that it has with China and Russia, such as BRICS and the SCO (Shanghai Corporation Organisation), while also going ahead with the G20, Quad, etc. Does it help India to maintain such a mixed position?

AK: We have differentiated between our bilateral and multilateral engagements with China. We have made it clear that unless there is restoration of peace and tranquility in broad areas, we cannot return to a normal track in our dealings with China. We don't see China showing any desire to return to the status quo ante. But we have maintained our engagement with China and Russia in settings like the SCO.

To what extent has India benefited from multilateral engagements with Russia and China in BRICS and the SCO in comparison to broader multilateral groupings like the G20?

AC: It's a function of a sophisticated foreign policy to be able to distinguish between bilateral and multilateral engagements. India is a good model for this. The SCO and BRICS, especially the SCO, are regional organisations focusing on energy trade, linkages, etc. These are opportunities for leaders to discuss multiple non-traditional security issues. BRICS came up because major multilateral organisations like the WTO (World Trade Organization) and the IMF (International Monetary Fund) have not given the space that they should to emerging countries or to the Global South. And India has tried consistently to not make any platform either for or anti-West. It is able to operate and even become a bridge between these formations.

Is India hinting at a growing impatience with Russia's war?

AK: There is a discomfort with both Russia's invasion of Ukraine and the fallout of Russian actions, which have hurt our interests in many ways. For instance, the economic fallout, high fuel prices, difficulties in accessing fertilizers and disruptions of global supply chains. There are practical aspects like the procurement of arms and spare parts from Russia for the Indian armed forces that indicate at a legacy aspect to our relationship with Russia. So, this is not something we are going to jettison in a hurry. But at the same time, the fact remains that as a result of Russia's invasion of Ukraine, there have been changes in the geopolitical situation which are not very favourable for us, such as the closer alignment between China and Russia.

AC: I agree broadly that there is clearly discomfort and there has been fairly astute balancing and also small gains, with Russia providing larger amounts of energy at discounted rates. India would be happy to help if there could be a negotiated solution. But (Ukrainian President Volodymyr) Zelenskyy has said he is not willing to talk to Mr. Putin. India also understands the quagmire, what NATO is doing, and because we have direct contacts with the Russian leadership, we have to watch (how the situation unfolds). But so far, the stance has been fairly good.

What lies ahead for Russia, China and India?

AC: I think there will be no Russia-India-China kind of trilateral. Russia can still put pressure regarding the border issue on behalf of India, as it has done earlier. In short, I don't see anything negative as far as Russia and India are concerned with China. We have to keep putting pressure to resolve the border issues.

AK: The assessment in the West, that Russia has become a client state or a vassal state of China, is a little exaggerated. Russia has a sense of history and destiny, so it will continue to insist on its agency in international affairs. At the same time, the fact remains that because of several circumstances coming together, including pressure from the West, Russia's role in Europe is no longer acceptable to the U.S. and Europe. I think Russia will become increasingly dependent on China in practical ways – for instance, as Europe continues to reduce its dependency on oil and gas supplies from Russia.



To listen to the full interview
Scan the code or go to the link
www.thehindu.com

Domestic ideologies in external settings

National statements made by the world's political leaders during the general debate at every fresh session of the United Nations General Assembly (UNGA) are directed primarily to the international community but take into account domestic political and social constituencies. Naturally, the latter consideration should not outweigh or undercut the primary objective and direction of any statement. This time – it was the 77th UNGA session – the Indian statement was delivered by External Affairs Minister S. Jaishankar on September 24. Mr. Jaishankar deserves to be applauded for the professionalism and precision with which he covered India's positions on international issues. However, his articulation of some areas of the Modi government's domestic agenda raises several deeply troubling questions.

Decoding the Minister's 'formulation'

Praising the "determination, innovation and enterprise of millions of ordinary Indians", Mr. Jaishankar asserted that "They are rejuvenating a society pillaged by centuries of foreign attacks and colonialism". Clearly, his formulation distinguished between "centuries of foreign attacks" and "colonialism". Many in the Assembly chamber, who are unaware of the fierce ideological contestations under way in contemporary India, may have been left wondering at the distinction Mr. Jaishankar was drawing between the two. However, those who follow the ideological divisions in present-day India would have caught on to the distinction he was making.

There is little doubt that Mr. Jaishankar's words "centuries of foreign invasions" could not be a reference to the Kushan and Hun invasions of India in the remote past. So, this formulation were code words for the invasions which began with the Arab attack in Sindh in the eighth century, but more specifically to the incursions



Vivek Katju
is a former diplomat

India's articulation of some areas of the current domestic agenda in the United Nations General Assembly raises several deeply troubling questions

into India beginning with those of Mahmud of Ghazni and later of Mohammad Ghori. The latter's invasion led to the beginning of the establishment of centuries of Muslim rule in India.

Domestic controversies are best avoided

As far as this writer can recall there has never been a disparaging reference made to pre-colonial India in an Indian statement during the general debate, or indeed in any UN forum. The connotation of the word "pillage" is obvious in this context. Therefore, this is perhaps the first time that the basic interpretation of Indian history of the current ruling dispensation has been projected in the UNGA, although in coded language. This is a dangerous path to undertake for domestic controversies are best avoided when national positions which have to be, necessarily rooted in the Constitution, are authoritatively articulated abroad. As a former diplomat, Mr. Jaishankar would be well aware of the Indian diplomatic tradition which has always presented nationally unified positions abroad, particularly at the UN and in multilateral forums.

Mr. Jaishankar went on to say that India's rejuvenation is taking place in a democratic framework and is "reflected in more authentic voices and grounded leadership". This too is a sad, if not insulting, reflection on the choices made by the Indian people in election after election since the first in 1951-52. He obviously overlooked the fact that the Indian Republic introduced adult franchise and that power was exercised only through the representatives chosen by the people. Is it Mr. Jaishankar's position, which he placed before the UNGA, that the people, through many decades, chose representatives who were less "authentic" or "grounded" when all of them came from among the people themselves?

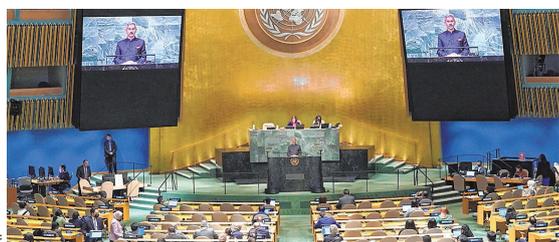
While recalling the five pledges that Prime Minister Narendra Modi has set before the people for the next 25 years, Mr. Jaishankar sought to show how each of them were relevant not only to India but also to the world. As a general proposition it can be logically and validly argued that on some issues, as the Indian population is one-sixth of that of the world, what is good for India is good for the world too. This would be obviously true for the environment; hence, it was appropriate for Mr. Jaishankar to emphasise "the care and concern" for the environment "ingrained in our traditional ethos". But the general proposition cannot be stretched so far as

to deny India's great achievements in the United Nations itself. Recalling Mr. Modi's second pledge, Mr. Jaishankar said "we will liberate ourselves from a colonial mindset". To make this pledge relevant internationally, he added, "Externally, this means reformed multilateralism and more contemporary global governance". It is a strange proposition to put before the UNGA that the Indian "mindset" remains "colonial" and needs to be liberated. It is noteworthy that Mr. Jaishankar did not put any qualifications in the sentence to distinguish between those Indians, for him, who have a "colonial" mindset and those who do not. He would obviously not accept that the ruling Indian dispensation has a "colonial mindset" so perhaps this sentence, as it stands, was a drafting slip but nevertheless it is now unfortunately part of the UN record.

Damaging India's record

What is more disturbing is the proposition that the "liberation from a colonial mindset" damages India's record as a pioneer and leader in the global decolonisation process in the 1950s and the 1960s. Whatever may be the view of the detractors of Jawaharlal Nehru and Indira Gandhi – and there is much in their political and governance records which is worthy of criticism, if not condemnation – it cannot be denied that they were heroes to the anti-colonial leadership in many countries in Africa and elsewhere. India's role in the entire decolonisation process after the Second World War is one which this country can be justifiably proud of. An entire generation of human rights workers in the United States and South Africa were also inspired by Gandhiji and his non-violent anti-colonial struggle.

Is not all this proud record and noble endeavour compromised by Mr. Jaishankar's implication that Indians have a colonial mindset? Worse, does it not give an opportunity to India's detractors to ask India to first get rid of its "colonial mindset" before seeking "reformed multilateralism"? The saying 'Physician, heal thyself' comes to mind. Words, phrases, arguments, exhortations are the tools of diplomacy. They cannot and should not be abandoned to promote domestic ideologies in external settings. Strong statements of a nationalistic flavour may win brownie points and popularity at home – and sometimes they are undoubtedly needed for diplomatic purposes too; however, facts, reason and logic as guides should never be overlooked.



India abstains on Sri Lanka vote at UN Human Rights Council

Meera Srinivasan
COLOMBO

India on Thursday abstained from voting on a resolution on Sri Lanka at the UN Human Rights Council, while observing that Sri Lanka's progress in implementing commitments on the 13th Amendment, meaningful devolution and early provincial elections remains "inadequate".

"Achieving prosperity for all Sri Lankans and realising the legitimate aspirations of Tamils of Sri Lanka for prosperity, dignity and peace are two sides of the same coin," India's Permanent Representative to the UN Ambassador Indra Mani Pande said. As an immediate neighbour, India has "substantively contributed" to the relief, rehabilitation, resettlement and reconstruction process in Sri Lanka after 2009 and more recently provided "unprecedented assistance" to the people of Sri Lanka to face the challenges of the recent economic crisis, he said. India had abstained last year, too.

Further, India has "taken note" of the Sri Lankan government's commitments on the implementa-



Ali Sabry

tion of commitments "in the spirit of the 13th Constitutional Amendment", meaningful devolution and the early conduct of provincial elections, Mr. Pande said, underscoring India's long-standing concern over power devolution in Sri Lanka, an issue that also found mention in the resolution.

Inadequate progress

"We believe that the progress towards the same remains inadequate. Accordingly, we urge the Government of Sri Lanka to work meaningfully towards early implementation of these commitments," the Indian diplomat said.

The resolution titled 'Promoting reconciliation, accountability and human

rights in Sri Lanka' was adopted by the Council after 20 of its 47 members voted in its favour. While 20 countries abstained, seven – including China and Pakistan – voted against it, effectively backing the Sri Lankan government. Prior to the vote, Sri Lanka's Foreign Minister Ali Sabry told the Council that the government "categorically rejects" the "manifestly unhelpful" resolution. He had earlier said the Council was "polarised", and that its resolutions were "all geopolitics".

The government, he said on Thursday, especially opposed the resolution reinforcing the Office of the High Commissioner's capacity to "collect, consolidate, analyse, and preserve" information and evidence pertaining to rights violations, and to "support relevant judicial and other proceedings, including in Member States, with competent jurisdiction".

Impartial investigation

The resolution called upon the Government of Sri Lanka to ensure the prompt, thorough and impartial investigation and, if warranted, prosecution of all al-

leged crimes relating to human rights violations and serious violations of international humanitarian law, including for long-standing emblematic cases, with the full participation of victims and their representatives. It also urged the government to address the ongoing economic crisis, including "by investigating and, where warranted, prosecuting corruption, including where committed by public and former public officials". Mr. Sabry accused the Core Group of nations that tabled the resolution of going beyond its mandate by including economic issues.

Sri Lanka's largest Tamil grouping in Parliament, the Tamil National Alliance (TNA), thanked the Core Group for keeping Sri Lanka's rights record on the Human Rights Council's agenda for a decade. "It has helped maintain international oversight on accountability and reconciliation. Although we would like to see more decisive action [on the ground], we know this is the intervention that is possible for the Council," TNA spokesman M.A. Sumanthiran told *The Hindu*.

J&K delimitation orders have acquired ‘force of law’: EC, Home Ministry to SC

The Hindu Bureau
NEW DELHI

The Home Ministry and the Election Commission (EC) have found themselves on the same page in the Supreme Court, with both agreeing that delimitation orders notified in the Gazette, redrawing Assembly and Lok Sabha constituencies in the Union Territory of Jammu and Kashmir following the dilution of Article 370, have acquired the “force of law”.

The government and the top election body were responding to a petition filed by Srinagar residents, Haji Abdul Gani Khan and Mohammad Ayub Mattoo, challenging the constitution of the Delimitation Commission.

‘Singled out’

The petition had also sought a judicial declaration that the increase in the number of Assembly seats from 107 to 114 (including 24 seats in Pakistan-occupied Kashmir) in Jammu and Kashmir was unconsti-



Legal challenge: Members of the Delimitation Commission during their visit to Jammu on April 4. PTI

tutional and *ultra vires* the Jammu and Kashmir Reorganisation Act, 2019.

The plea said that if August 5, 2019 was to unite Jammu and Kashmir with India, then the delimitation process had defeated the “new order” of “One Nation, One Constitution”.

The petitioners had questioned why J&K was “singled out” for delimitation when Article 170 of the Constitution had provided that the next delimitation in the country would only be taken up after 2026.

The EC and the Ministry responded that the petitioners had no jurisdiction even to “comment” on the government’s powers to form the Delimitation Commission.

The Centre derived its powers to form, fix the scope and tenure of the Delimitation Commission under Section 3 of the Delimitation Act of 2002, which is “special legislation”.

With regards the increase in the number of Assembly seats, the EC and the government said the

order of the Delimitation Commission was already notified on May 5, 2022 in the Gazette. This was followed by public sittings in the Union Territory “to afford full opportunity to members of the public to make oral and written submissions to Delimitation Commission”.

Subsequently, following the Gazette notification, the delimitation order had already been brought into effect from May 20, 2022. The delimitation order cannot be “re-agitated” in a court once it had gained finality by publication in the gazette, the affidavits said.

On March 6, 2020, the Centre had issued a notification constituting a Delimitation Commission chaired by former Supreme Court judge, Justice Ranjana P. Desai, for delimitation of Assembly and Parliamentary constituencies in the Union Territory of Jammu and Kashmir and in Assam, Arunachal Pradesh, Manipur and Nagaland.

Govt. releases ₹7,183-crore deficit grant to 14 States

Press Trust of India

NEW DELHI

The Finance Ministry on Thursday released the monthly instalment of revenue deficit grant of ₹7,183 crore to 14 States.

With the release of the seventh instalment for the month of October, the total amount of Revenue Deficit Grants released to the States in the current fiscal has gone up to ₹50,282.92 crore, according to an official statement. The Post Devolution Revenue Deficit Grant is released, based on the recommendation of the 15th Finance Commission, to Andhra Pradesh, Assam, Himachal Pradesh, Kerala, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, Sikkim, Tripura, Uttarakhand and West Bengal.

Services sector growth slows to 6-month low, PMI suggests

Price pressures, intense competition and unfavourable public policies have hurt expansion, S&P Global's India Services Purchasing Managers' Index (PMI) survey for September indicates

The Hindu Bureau
NEW DELHI

India's services sector stuttered in September as new business and output growth grew at the slowest pace since March, as per the S&P Global India Services Purchasing Managers' Index (PMI), which eased to 54.3 from August's robust 57.2 level.

September marked the 14th successive month of services sector growth, but price pressures, increased competition and 'unfavourable public policies slowed momentum, as per the survey-based PMI.

The moderation in growth also dampened job



Price grip: Transport, information and communication posted the sharpest upturn in user charges. R. RAGU

creation from August. Yet, business confidence continued to revive, with sentiment last month at its highest level in more than seven-and-a-half years.

Input cost inflation re-

mained close to August levels while selling price increases slowed to the lowest pace since March. Transport, information and communication posted the sharpest upturn in

user charges levied by firms, while consumer services reported the biggest spike in cost burdens owing to higher energy, food, labour and material costs.

"Weak external demand weighed on overall sales, with international orders declining further... monthly contractions have been recorded in each month since the onset of COVID," S&P Global said.

"The steep depreciation of the rupee... presents additional challenges" including risks of imported inflation and higher interest rates, warned Pollyanna De Lima, economics associate director at S&P Global Market Intelligence.

Supply constraints dented coal-biomass mixing, says Minister

Jacob Koshy

NEW DELHI

India's thermal power plant operators were unable to comply with norms that required them to mix coal with a certain proportion of biomass because of inadequate supply chains, Union Power Minister R.K. Singh said on Thursday.

The proceedings of an inter-ministerial meeting of the Environment, Agriculture and Power Ministries on Monday expressed concern over several operators not meeting the target of replacing 5% of their coal with biomass.

Biomass pellets have the same calorific value as coal and mixing them with coal saves consumption and cuts emissions.

“Supply chains have to be built up. You cannot co-fire biomass by itself and you have to torrefy it, facilities for which are coming

Several power plant operators have not met the target of replacing 5% of their coal with biomass

up,” said Mr. Singh at a press conference to announce a meeting of the International Solar Alliance, scheduled here, later this month.

As *The Hindu* had reported, in 2020-21, only eight power plants had co-fired biomass pellets, and this number had risen to 39 as of Monday.

To put that number in perspective, India has around 180 thermal power plants.

As of Monday, 83,066 tonnes of biomass have been co-fired in 39 thermal power plants across the country and has generated close to 55,390 MW of power.

World Bank pares India FY23 growth projection to 6.5%

Indian economy's expansion is expected to speed up to 7% in the next fiscal year, before settling back down to 6.1% in FY24-25

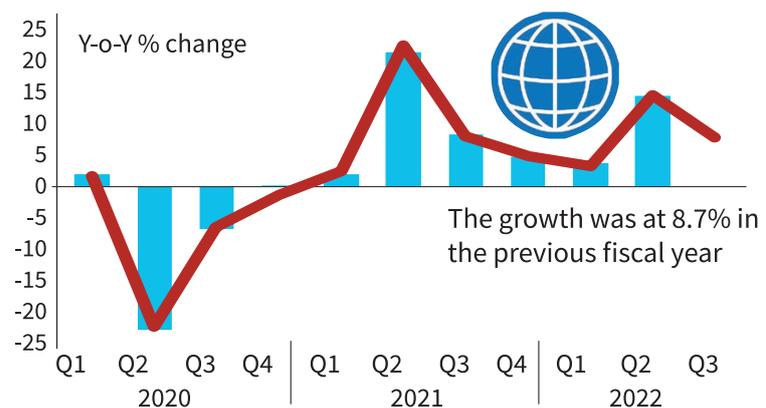
Sriram Lakshman
WASHINGTON DC

The World Bank has trimmed its estimate for India's growth in the current fiscal year (FY22-23) to 6.5%, one percentage point lower than its previous projection in June and compared with the last fiscal year's 8.7% pace.

The estimate for the current year was revised due to 'persistent pressures'. The Indian economy is expected to speed up to 7% in the next fiscal year, before settling back down to 6.1% in FY24-25. The estimates were released as part of the Bank's twice yearly South Asia Economic Focus, titled "Coping with shocks:

A slowdown in growth

The chart shows the World Bank's nowcast for quarterly GDP growth. It estimates that India's GDP will grow 6.5% in FY22-23, 1 percentage point lower than the previous estimate



Migration and the road to resilience", ahead of the World Bank IMF annual meetings.

With Sri Lanka's economic crisis, the devastating floods in Pakistan, and

recovery from the pandemic impacted by the war in Ukraine, recovery in the region will be uneven.

CONTINUED ON
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World Bank pares FY23 growth projection to 6.5%

The economies that are more services-led are expected to “maintain a reasonable recovery trend despite headwinds”.

Afghanistan, Sri Lanka and Pakistan are more at risk and will see poverty increase in 2022. The slowing in India’s growth during the current fiscal year, relative to the previous one, was because most of the COVID recovery happened last year, the report said. The impact of the Russia-Ukraine war, global monetary tightening, high commodity prices and interest rates impacting domestic demand, contributing to this slowing.

Manufacturing and services have been expanding in India since January, and growing at a rate faster than the rest of the world. With a relaxing of COVID restrictions, economic activity had picked up, as had demand in contact-intensive sectors.

Output had grown at an estimated 13.5% (year on year) in the April -June period this year, a contraction however, relative to the preceding quarter. Services and construction had expanded the fastest on the production side, the report said, and private demand had grown year on year, but this was largely due to a low base effect from the second quarter of 2021 when the economy was reeling under the delta wave of COVID.

‘Can read, talk’: Vyommitra’s skills get a lift-off with digital grey matter

Tiki Rajwi

THIRUVANANTHAPURAM

Vyommitra, the humanoid designed and developed by the Indian Space Research Organisation (ISRO) to fly aboard unmanned test missions ahead of the Gaganyaan human space-flight mission, is undergoing pre-flight ground tests at the ISRO Inertial Systems Unit (IISU) here.

Over the past few months, the IISU has successfully integrated it with a computer “brain”, which enables it to “read” control panels aboard the unmanned test flights and communicate with the ISRO ground stations, IISU Director Sam Dayala Dev told *The Hindu*.

The ISRO and the IISU were in the news when they unveiled Vyommitra, a “female” robot astronaut, in 2020. Vyommitra is a half-humanoid lacking lower limbs. The IISU was responsible for the design,



The AI-enabled robot is designed to fly aboard a rocket, withstanding vibrations and shock during the flight.

development, and integration of the robot, while the Vikram Sarabhai Space Centre (VSSC) at Thumba here developed its fingers.

The AI-enabled robot is designed to fly aboard a rocket, withstanding vibrations and shock during the flight, he said. It has been designed to resemble a human with facial expressions and speech and sight capabilities, he said.

“It has a certain level of intelligence. What we in-

tend is that it should operate and read the display panels and communicate back to us using its own voice,” Mr. Dev said. Vyommitra will fly aboard the first unmanned test flight ahead of the manned Gaganyaan flight expected in 2024.

The IISU, which designs and develops navigational systems for ISRO launch vehicles, had special teams working on the humanoid over the past several

months. In the meantime, Vyommitra is set to get a digital twin. The “twin” will undergo computer simulations where the control systems are tested for microgravity conditions. The twin will be developed in collaboration with academic institutions such as the IITs.

In September, Minister of State for Science and Technology Jitendra Singh indicated that the first unmanned test-flight of the Gaganyaan mission would take place this year. The Gaganyaan programme would demonstrate human spaceflight by sending a crew to a 400-km low earth orbit and bringing them back safely.



Watch | Vyommitra, ISRO's newly introduced half-humanoid
trib.al/YWgHCNX

General Studies Paper I	
A	History of Indian culture will cover the salient aspects of art forms, literature and architecture from ancient to modern times;
B	Modern Indian history from about the middle of the eighteenth century until the present-significant events, personalities, issues;
C	Freedom struggle-its various stages and important contributors / contributions from different parts of the country;
D	Post-independence consolidation and reorganization within the country;
E	History of the world will include events from 18 th century such as industrial revolution, world wars, re-drawing of national boundaries, colonization, decolonization,
F	Political philosophies like communism, capitalism, socialism etc.-their forms and effect on the society
G	Salient features of Indian Society, Diversity of India;
H	Effects of globalization on Indian society;
I	Role of women and women's organization;
J	Social empowerment, communalism, regionalism & secularism
K	Salient features of world's physical geography;
L	Geographical features and their location- changes in critical geographical features (including water bodies and ice-caps) and in flora and fauna and the effects of such changes;
M	Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc.
N	Distribution of key natural resources across the world (including South Asia and the Indian subcontinent);
O	Factors responsible for the location of primary, secondary, and tertiary sector industries in various parts of the world (including India);
P	Population and associated issues;
Q	Urbanization, their problems and their remedies
General Studies Paper II	
A	India and its neighbourhood- relations;
B	Important International institutions, agencies and fora- their structure, mandate;
C	Effect of policies and politics of developed and developing countries on India's interests;
D	Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.
E	Indian Constitution, historical underpinnings, evolution, features, amendments, significant provisions and basic structure;
F	Comparison of the Indian Constitutional scheme with other countries;
G	Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein; Inclusive growth and issues arising from it;
H	Parliament and State Legislatures - structure, functioning, conduct of business, powers & privileges and issues arising out of these;
I	Structure, organization and functioning of the executive and the judiciary, Ministries and Departments;

J	Separation of powers between various organs dispute redressal mechanisms and institutions;
K	Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional bodies;
L	Statutory, regulatory and various quasi-judicial bodies;
M	Mechanisms, laws, institutions and bodies constituted for the protection and betterment of these vulnerable sections;
N	Salient features of the Representation of People's Act;
O	Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential;
P	Citizens charters, transparency & accountability and institutional and other measures;
Q	Issues relating to poverty and hunger,
R	Welfare schemes for vulnerable sections of the population by the Centre and States, Performance of these schemes;
S	Issues relating to development and management of social sector / services relating to education and human resources;
T	Issues relating to development and management of social sector / services relating to health
General Studies Paper III	
A	Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment;
B	Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth;
C	Inclusive growth and issues arising from it;
D	Infrastructure Energy, Ports, Roads, Airports, Railways etc. Government budgeting;
E	Land reforms in India
F	Major crops, cropping patterns in various parts of the country, different types of irrigation and irrigation systems;
G	Storage, transport and marketing of agricultural produce and issues and related constraints;
H	e-technology in the aid of farmers; Technology Missions; Economics of Animal-Rearing.
I	Issues of buffer stocks and food security, Public Distribution System- objectives, functioning, limitations, revamping;
J	Food processing and related industries in India – scope and significance, location, upstream and downstream requirements, supply chain management;
K	Issues related to direct and indirect farm subsidies and minimum support prices
L	Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology;
M	Indigenization of technology and developing new technology;
N	Developments and their applications and effects in everyday life;
O	Issues relating to intellectual property rights
P	Conservation, environmental pollution and degradation, environmental impact assessment
Q	Disaster and disaster management
R	Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security;
S	Money-laundering and its prevention;

T	Various forces and their mandate;
U	Security challenges and their management in border areas;
V	Linkages of organized crime with terrorism;
W	Role of external state and non-state actors in creating challenges to internal security;
X	Linkages between development and spread of extremism.
General Studies Paper IV	
A	Ethics and Human Interface: Essence, determinants and consequences of Ethics in human actions;
B	Dimensions of ethics;
C	Ethics in private and public relationships. Human Values - lessons from the lives and teachings of great leaders, reformers and administrators;
D	Role of family, society and educational institutions in inculcating values.
E	Attitude: Content, structure, function; its influence and relation with thought and behaviour;
F	Moral and political attitudes;
G	Social influence and persuasion.
H	Aptitude and foundational values for Civil Service , integrity, impartiality and non-partisanship, objectivity, dedication to public service, empathy, tolerance and compassion towards the weaker sections.
I	Emotional intelligence-concepts, and their utilities and application in administration and governance.
J	Contributions of moral thinkers and philosophers from India and world.
K	Public/Civil service values and Ethics in Public administration: Status and problems;
L	Ethical concerns and dilemmas in government and private institutions;
M	Laws, rules, regulations and conscience as
N	sources of ethical guidance;
O	Accountability and ethical governance; strengthening of ethical and moral values in governance; ethical issues in international relations and funding;
P	Corporate governance.
Q	Probity in Governance: Concept of public service;
R	Philosophical basis of governance and probity;
S	Information sharing and transparency in government, Right to Information, Codes of Ethics, Codes of Conduct, Citizen's Charters, Work culture, Quality of service delivery, Utilization of public funds, challenges of corruption.
T	Case Studies on above issues.