



अग्निपथ योजना



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नौकरियों की नियुक्ति

नियुक्ति प्रक्रिया

होगी।

पात्रता

- आयु सीमा 17.5 से 21 वर्ष

नियुक्ति

- उम्मीदवारों का चयन प्रशिक्षण अवधि सहित चार वर्ष के लिए होगा
- नियुक्ति प्रक्रिया में कोई बदलाव नहीं

VEDHIK

DAILY NEWS ANALYSIS

15 - JUNE - 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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PM lauds unsung heroes of Freedom Struggle

He opens commemorative gallery

SPECIAL CORRESPONDENT
MUMBAI

The indifference towards unsung heroes of India's Freedom Struggle has continued for a long time, Prime Minister Narendra Modi said on Tuesday, remarking that knowingly or unknowingly, there was a tendency to limit India's Independence to just a few incidents.

Mr. Modi, who was speaking at the inauguration of the "Gallery of Revolutionaries" at the Raj Bhavan in Mumbai, said that regardless of social, familial or ideological roles, the goal of all revolutionaries within the country or abroad was the same – India's complete Independence.

'Collective impact'

In a veiled dig at the Congress, the Prime Minister said: "Knowingly or unknowingly, there has been a tendency to limit India's Independence to just a few incidents. Whereas, India's Independence involved the *tapasya* of countless people and the collective impact of many incidents at the local level was national."

The "Gallery of Indian Re-

volutionaries" called *Kranti Gatha* has been created in the British-era bunker discovered below the Governor's residence, Raj Bhavan, in 2016.

It has been curated under the guidance of historian Vikram Sampath, author of a two-volume biography of V.D. Savarkar.

The gallery features exhibits dedicated to freedom fighters from Maharashtra, including Vasudev Balwant Phadke, Lokmanya Tilak, V.D. Savarkar, Anant Laxman Kanhere, Bhikaiji Cama, and Ganesh Pingale.

The Gallery meanwhile drew criticism from the Congress, with Maharashtra Congress spokesperson Sachin Sawant alleging that the mainstream freedom struggle was not reflected in the "Gallery of Revolutionaries". "For years, the Rashtriya Swayamsevak Sangh (RSS) has been trying to undermine mainstream non-violent freedom struggle and reinvent the history of freedom movement (as RSS was not part of it) in order to showcase it through a right-wing prism," said Mr. Sawant.

Beijing is trying to endanger regional peace, says Taipei

Remarks on Taiwan Strait wrong, unacceptable, it says

AGENCE FRANCE-PRESSE
TAIPEI

Taipei on Tuesday condemned China for saying that the Taiwan Strait is not international waters, and accused Beijing of trying to endanger regional peace with its territorial claim over it.

Taiwan lives under the threat of invasion by Beijing, which views the self-ruled democratic island as part of its territory to be re-taken one day, by force if necessary. The narrow waterway

that separates Taiwan and mainland China is a flash-point, with Beijing often reacting angrily to passages by foreign warships.

The U.S. and other countries view the Strait as international waters open to all.

On Monday, Wang Wenbin, a spokesman for China's Foreign Ministry, said "China has sovereignty, sovereign rights and jurisdiction over the Taiwan Strait". "It is a false claim when certain countries call the Taiwan

Strait 'international waters' in order to find a pretext for manipulating issues related to Taiwan and threatening China's sovereignty and security," he added.

Taipei on Tuesday termed Beijing's remarks "wrong" and "unacceptable". "China... blatantly violates Taiwan's sovereignty and damages international maritime order to endanger regional peace and stability," the ruling Democratic Progressive Party said in a statement.

Air India's bid to fully acquire AirAsia India gets CCI approval

Tata group raised holding in AirAsia India to 83.67% in 2020

SPECIAL CORRESPONDENT
NEW DELHI

The Competition Commission of India on Tuesday approved Air India's proposal to acquire the entire shareholding of the Tata group's low-cost subsidiary AirAsia India. This would help pave the way for the consolidation of various airline entities owned by Tata Sons.

"The proposed combination envisages the acquisition of the entire equity share capital of AirAsia (India) Pvt. Ltd. (Air Asia India) by Air India Ltd., an indirect wholly owned subsidiary of Tata Sons Pvt. Ltd. (TSPL)," the CCI said in a statement.

TSPL currently "holds 83.67% of the equity share



capital of AirAsia India," it added. AirAsia India was set up in 2014 as a joint venture (JV) between Tata Sons and Malaysia's AirAsia Berhad. The Tata group raised its stake in the JV to 83.67% in December 2020.

The nod comes almost six months after the government transferred the owner-

ship of Air India and Air India Express to Tata Sons.

Air India's integration with Vistara, Tatas' JV with Singapore Airlines, is, however, likely to take time as negotiations are still underway with the JV partner.

The Competition and Consumer Commission of Singapore had recently expressed concern over the Tatas acquiring Air India as three related entities – Singapore Airlines, Tata Sons and Vistara – have "overlapping passenger routes" between India and the city state, saying it needed to "assess further" whether there was sufficient competition from other unrelated airlines such as IndiGo.

The way to end child marriage

A legalistic approach might become counterproductive if women's schooling or skills are not enhanced



SUNNY JOSE & MOHD IMRAN KHAN

Since child marriage is rampant in India, will increasing the age of marriage of women solve this issue? The increase in age of marriage is claimed to bring substantive benefits at the individual and societal levels. Is this claim true? Data from the recently released National Family Health Survey-5 (NFHS-5), 2019-2021, enables us to examine the facts.

Structural factors

Several empirical studies from South Asia establish a significant association between early marriage and adverse health and educational outcomes of women and their children. Specifically, studies associate early marriage of women with early pregnancy, lower likelihood of accessing ante-natal care, higher risks of maternal morbidity and mortality, poor nutritional status of women and poor nutritional and educational outcomes of children. These studies seem to provide a rather compelling case for increasing the age of marriage of women from 18 to 21 years, as a delayed marriage might offer significant public health dividends.

But a closer reading of the evidence shows that the association between child marriage and adverse health outcomes does not emerge in a vacuum. Rather, it is abetted by structural factors, including social norms, poverty, and women's education. It is because of social norms in many regions and cultures that parents begin preparations for a girl's marriage once she has reached menarche. Equally, a large proportion of child marriages take place primarily because of poverty and the burden of the huge costs of dowry associated with delayed marriages. These factors curtail a girl's opportunities to continue her education. And in turn, the lack of educational opportunities plays an important role in facilitating child marriage.

So, what matters more: the age of marriage or the factors that facilitate child marriage? Stated differently, does a woman's age at marriage matter in itself, independent of educa-



GETTY IMAGES

tion or poverty? It is in this context that the NFHS-5 data become salient. NFHS-5 data show that about 25% of women aged 18-29 years married before the legal marriageable age of 18. The proportion has declined only marginally from NFHS-4 (28%). Expectedly, the prevalence is higher in rural than urban India (28% and 17%, respectively). West Bengal has the highest prevalence (42%), followed by Bihar and Tripura (40% each). Oddly, the decline in child marriage has been paltry at best in these high-prevalence States. At the other end of the spectrum are Goa, Himachal Pradesh and Kerala (6% to 7%).

Education outcomes

If we look at the data community-wise, 39% of child marriages in India take place among Adivasis and Dalits. The share of advantaged social groups is 17% and the remaining share is of Other Backward Classes. In terms of household wealth, 58% of these marriages take place among the poorest wealth groups (bottom 40%), about 40% of them take place among the middle 50% and only 2% of them take place among the top 10% of wealth groups. Only 4% of child marriages in India take place among women who have completed more than 12 years of education. Thus, the data confirm that a significant proportion of child marriages takes place among women with less than 12 years of schooling and households that are socially and economically disadvantaged.

Since child marriage is substantially lower among women with a higher level of schooling, it would be interesting to know whether an increase in years of schooling necessarily increases the age at marriage. Expectedly, the average age at marriage in-

creases from 17 years among women who are illiterate and have had up to five years of schooling to 22 years among women who have had more than 12 years of schooling. This indicates that an increase in years of schooling goes hand in hand with an increase in age at marriage. While an increase in education is most likely to delay marriage, the increase in age at marriage may or may not increase women's education.

Since the Prohibition of Child Marriage (Amendment) Bill, 2021, fixes 21 years as the marriageable age for women, we examine whether a mere increase in age at marriage without an increase in education bestows women with better nutritional outcomes. While 27% of illiterate women who married before 18 years are underweight (Body Mass Index below 18.5), the proportion is 24% for illiterate women who married at the age of 21 years. A high proportion (64%) of illiterate women are anaemic, in terms of iron deficiency, irrespective of their difference in age at marriage. In terms of the gap between marriage and first pregnancy, it is surprisingly 2.5 years among the former and 1.6 years among the latter. However, the former give birth to a higher number of children (2.4), on average, than the latter (1.4).

Women with 12 years of schooling married before 18 years and at 21 years have hardly any difference in underweight prevalence (14% and 13%, respectively). In iron deficiency anaemia, the prevalence is only marginally higher (54% among the former than the latter (50%). The gap between marriage and first pregnancy is higher among the former (2.6 years) than among the latter (1.7 years), though the latter have fewer number of children (1 child on average) than

the former (1.6). A cross comparison between women who have had more than 12 years of schooling but were married before 18 years and women with secondary education but married at 21 years also underlines the importance of education. While underweight prevalence is almost equal among both, anaemia is marginally higher among the latter. The broad pattern emerges in other indicators as well.

The way forward

To sum up, the health dividend emanating from women's increased age at marriage is not imminent. Increasing the age of marriage without a commensurate improvement in women's education is least likely to yield better health and nutritional outcomes. Instead, it might adversely impact the poor and illiterate. The fact that about one-fourth of women (18-29 years) in India have married before 18 years despite the law tells us that legally increasing the age of marriage may not fully prevent child marriages. By contrast, much of the benefits can be reaped by ensuring that women complete education at least up to 12 years. The case of Bangladesh shows that improving women's education and imparting modern skills to them that increase their employability reduces child marriage and improves health and nutrition. Also, schemes which ease the financial burden of marriage but the eligibility criteria of which should essentially link to educational attainment in addition to age demand attention. The lessons from Janani Suraksha Yojana and the zeal demonstrated in ending open defecation might provide valid insights here.

Educating women is important for their personal freedom, social well being and contributes to human development. A legalistic approach to increasing the age at marriage will produce positive results only if it leads to an improvement in women's education and skill acquisition for employability. In the absence of an enhancement in women's schooling or skills, a legalistic approach to ending child marriage might become counterproductive.

Sunny Jose is RBI Chair Professor at Council for Social Development, Hyderabad, and Mohd Imran Khan is Assistant Professor of Economics at Narsee Monjee Institute of Management Studies, Mumbai. Views are personal

Malnutrition in India is a worry in a modern scenario

The country's response to its burden of malnutrition and growing anaemia has to be practical and innovative



GAURAV GOGOI

Good nutrition has the power to empower the present and future generations. India's greatest national treasure is its people – especially women and children – but even after 75 years of independence, a majority of them do not get the required diet to meet their nutritional needs. A child's nutritional status is directly linked to their mother. Poor nutrition among pregnant women affects the nutritional status of the child and has a greater chance to affect future generations. Undernourished children are at risk of under-performing in studies and have limited job prospects. This vicious cycle restrains the development of the country, whose workforce, affected mentally and physically, has reduced work capacity.

Marginal improvement

While there has been some progress in tackling malnutrition among children and women over the past decade, the improvement has been modest at best. This is despite declining rates of poverty,

increased self-sufficiency in food production, and the implementation of a range of government programmes. The National Family Health Survey (NFHS-5) has shown marginal improvement in different nutrition indicators, indicating that the pace of progress is slow. Children in several States are more undernourished now than they were five years ago.

Stunting, wasting, anaemia

While there was some reduction in stunting rates (35.5% from 38.4% in NFHS-4) 13 States or Union Territories have seen an increase in stunted children since NFHS-4; this includes Gujarat, Maharashtra, West Bengal and Kerala. (Stunting is defined as low height-for-age.) Malnutrition trends across NFHS surveys show that wasting, the most visible and life-threatening form of malnutrition, has either risen or has remained stagnant over the years (Wasting is defined as low weight-for-height).

India also has the highest prevalence of anaemia in the world (Anaemia is defined as the condition in which the number of red blood cells or the haemoglobin concentration within them is lower than normal). The NFHS-5 survey indicates that more than 57% of women (15-49 years) and over 67% children (six-59 months) suffer from anaemia. My home State, Assam, is among the low-perform-



K.K. MUSTAFAH

ing States, with a huge burden of anaemic cases – 66.4% of women (15-49 years) and 68.4% children (6-59 months) are affected. It is imperative to introspect about these problems, which remain persistent, pervasive, and serious. Anaemia has major consequences in terms of human health and development: it reduces the work capacity of individuals, in turn impacting the economy and overall national growth. Developing countries lose up to 4.05% in GDP per annum due to iron deficiency anaemia; India loses up to 1.18% of GDP annually.

Step up the financing

There is a greater need now to increase investment in women and children's health and nutrition to ensure their sustainable development and improved quality of life. While the Government's focus has been on the consolidation of several programmes to improve out-

comes, there is a need for increased financial commitment. Experts have pointed out that Saksham Anganwadi and the Prime Minister's Overarching Scheme for Holistic Nourishment (POSHAN) 2.0 programme have seen only a marginal increase in budgetary allocation this year (₹20,263 crore from ₹20,105 crore in 2021-22). Additionally, 32% of funds released under POSHAN Abhiyaan to States and Union Territories have not been utilised.

Monitor constituencies too

India must adopt an outcome-oriented approach on nutrition programmes. It is crucial that parliamentarians begin monitoring needs and interventions in their constituencies and raise awareness on the issues, impact, and solutions to address the challenges at the local level. There has to be direct engagement with nutritionally vulnerable groups (this includes the elderly, pregnant women, those with special needs and young children), and contribute toward ensuring last-mile delivery of key nutrition services and interventions. This will ensure greater awareness on the one hand and proper planning and implementation of programmes at the grassroots level on the other, which can then be replicated at the district and national levels.

With basic education and gener-

al awareness, every individual is informed, takes initiatives at the personal level and can become an agent of change. Various studies highlight a strong link between mothers' education and improved access and compliance with nutrition interventions among children. We must ensure our young population has a competitive advantage; nutrition and health are foundational to that outcome.

Other steps

I strongly believe that there should be a process to monitor and evaluate programmes and address systemic and on the ground challenges. As a policymaker, I recommend that a new or existing committee or the relevant standing committees meet and deliberate over effective policy decisions, monitor the implementation of schemes, and review nutritional status across States. The country's response to malnutrition and its growing anaemia burden should be practical and innovative. This is critical to make an India that is malnutrition-free and anaemia-free a reality, and not just an aspiration. Every one is a stakeholder and should contribute towards ending malnutrition and anaemia. We should not become part of a tragedy that is preventable.

Gaurav Gogoi is Member of Parliament (Congress party) for Kaliabor, Assam

Cold comfort

Despite the easing of retail inflation, there is no room for complacency

The latest retail inflation numbers point to a slight softening in the pace of price gains, and that should provide policymakers some solace that recent interventions appear to be working. Inflation measured by the Consumer Price Index (CPI), slowed 75 basis points from April's 95-month high of 7.79%, to 7.04% in May. While it is hard to quantify the effect that the RBI's surprise 40 basis points interest rate increase of early May had on prices, the Centre's May 21 decision to cut the excise duty on petrol and diesel by ₹8 and ₹6, respectively, seems to have had an immediate impact. Inflation in the transport and communication category of the CPI slowed by 137 basis points to 9.54% last month. This key category, with a weight of 8.59 that places it behind only cereals and housing, captures the pump prices of the main transportation fuels, making it a crucial indicator of price pressures in the economy. A closer look, however, shows inflation in the category continued to quicken sequentially, even if at a slower pace. Disconcertingly, rural consumers, who have comparatively lower purchasing power than their urban peers and yet are heavily reliant on the fuels for farm operations, experienced a significantly slower softening of only 42 basis points in the year-on-year pace. With the price of the Indian basket of crude oil now having surged by almost 8.5% from April to a 10-year high this month, and the rupee plunging to successive new record lows against the dollar, it would be unwise to drop one's guard especially given the pass-through impact transportation costs have on most other prices.

Food prices, the other driver of retail price gains, offered far less respite with the Consumer Food Price Index (CFPI) inflation slowing by only 34 basis points to 7.97%. City consumers experienced an acceleration in food price gains as urban CFPI inflation quickened 11 basis points to 8.2% last month. Nine of the 12 items on the food and beverages sub-index of the CPI, also quickened sequentially, resulting in the month-on-month inflation accelerating 30 basis points from April's pace. Prices of vegetables and those of meat and fish surged 18.3% and 8.23%, respectively, from their year-earlier levels, adding to the nutritional precarity of low-income households. And even though inflation in edible oils slowed from April's pace, there is no room for complacency given that price gains in the vital cooking medium were still running at 13.3% amid persistent supply concerns in the wake of the Ukraine war and the disruption in sunflower oil imports. May's wholesale price data also provide little comfort, with headline WPI inflation quickening to a fresh high of 15.9%. With the RBI's consumer confidence survey showing an appreciable deterioration in households' expectations of the one-year ahead price level, authorities must stay laser-focused on the battle to tame inflation.

10 lakh persons to get govt. jobs in 18 months, announces Modi

Recruitment likely to focus on vacancies in Railways, armed forces and GST dept.

SPECIAL CORRESPONDENT
NEW DELHI

Prime Minister Narendra Modi on Tuesday announced that his government would be recruiting 10 lakh personnel within the next 18 months, “in a mission mode”, a major drive after recruitment to government jobs was derailed following the COVID-19 pandemic.

In a tweet from his official handle @PMOIndia, early on Tuesday morning, Mr. Modi said: “PM @narendramodi reviewed the status of Human Resources in all departments and ministries and instructed that recruitment of 10 lakh people be done by the government in mission mode in the next 1.5 years.”

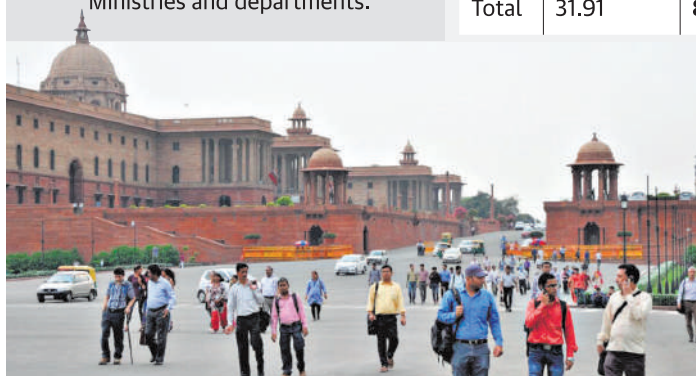
The announcement came on a day when Defence Minister Rajnath Singh and the three Service Chiefs announced the ‘Agnipath’ scheme of recruiting youth between the ages of 17.5 and 21 for a four-year stint in the armed forces with a provision of voluntary retention after this period, based on merit.

Unemployment has emerged as one of the major challenges before the Modi government after two years of the pandemic and its attendant economic woes.

An additional problem

Empty posts | As of March 2020, 8.8 lakh jobs were vacant in the Union government. In 2019, the number of vacant posts was around 9.2 lakh (23% of the sanctioned posts) and in 2018 there were 6.8 lakh such vacancies (17% of sanctioned posts). A look at the group-wise share of vacant posts to the total posts across Union Ministries and departments.

Group	No. of staff in service (IN LAKH)	No. of vacant posts (IN LAKH)	Vacancy as a share of sanctioned posts
A	1.14	0.21	15.9%
B (G)	0.80	0.17	16.4%
B (NG)	1.79	0.81	31%
C	28.12	7.67	21.4%
Total	31.91	8.86	21.7%



■ Unemployment has emerged as one of the major challenges before the Union government due to two years of the pandemic and its economic consequences

Union government employees coming out of North Block after their day's work, in New Delhi.
■ SHANKER CHAKRAVARTY

with regard to recruitment to government jobs has been the frequent leak of examination papers both for departments such as the Railways and for teacher recruitment as well. During the recently concluded Uttar Pradesh election in fact, police lathi-charged protesting students in Prayagraj and in Patna, Bihar, who had been preparing to appear for Railway Recruitment Board exams but were told that because the question paper leaked, the exam had to be cancelled.

While not sharing figures

of which department would be recruiting how many, a senior government official shared that much of the recruitment would be in the Railways, armed forces (‘Agnipath’ and regular recruitment which had been frozen through the pandemic), the Central Paramilitary Forces, Goods and Services Tax (GST) departments, including customs and excise and administrative staff for government-owned banks and insurance companies.

“The recruitment for GST departments, which are revenue generating depart-

ments is important, and for posts which were earlier known as State tax inspectors, recruitment will cover customs and excise as GST pertains to them too. In government-owned insurance firms, while field staff have been recruited regularly, administrative recruitment hasn’t taken place in any significant way for the last 15 years,” the official said.

It is hoped that the setting of a deadline will help recruitments happen fast.

UNEMPLOYMENT DECREASED:
LABOUR SURVEY ▶ PAGE 11

Unemployment has decreased, says latest labour force survey

Data show rate of joblessness fell to 4.2% in 2020-21, compared with 4.8% earlier

SPECIAL CORRESPONDENT
NEW DELHI

The unemployment rate saw a decrease of 0.6% and fell to 4.2% in 2020-21, compared with 4.8% in 2019-20, according to the Periodic Labour Force Survey (PLFS) for 2020-21 released by the Ministry of Statistics and Programme Implementation here on Tuesday.

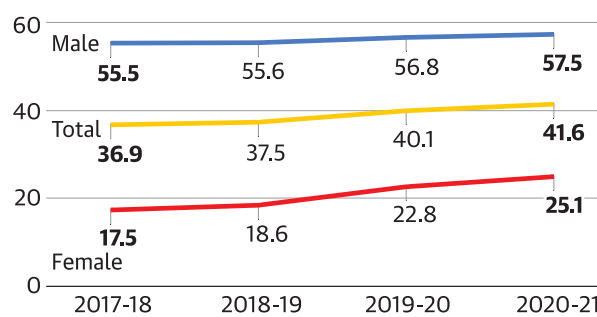
This means that only 4.2% of adults who looked for jobs could not get any work in rural and urban areas of the country in 2020-21.

Rural areas recorded an unemployment rate of 3.3% and urban areas 6.7%.

The National Statistical Office (NSO) uses “rotational panel sampling design” in urban areas to assess the labour force participation rate (LFPR), worker population ratio (WPR) and the unemployment rate, and visits select households in urban areas four times. There was, however, no revisit for the rural samples.

The sample size for the first visit during July 2020-June 2021 in rural and urban

Looking for work | The labour force participation rate (LFPR) has continued to improve further in 2020-21, according to the latest Periodic Labour Force Survey. The graph shows LFPR over years across genders



areas was 12,800 first-stage sampling units (FSU) in 7,024 villages and 5,776 urban frame survey blocks.

First-stage sampling

Out of this, 12,562 FSUs (6,930 villages and 5,632 urban blocks) were surveyed for canvassing the PLFS schedule.

“The number of households surveyed was 1,00,344 (55,389 in rural areas and 44,955 in urban areas) and number of persons surveyed was 4,10,818 (2,36,279 in ru-

ral areas and 1,74,539 in urban areas),” the Ministry said in a release.

The LFPR, the percentage of persons in the labour force (that is, working or seeking work or available for work) in the population, was 41.6% during 2020-21. It was 40.1% in the previous year. The WPR was 39.8%, an increase from 38.2% of the previous year. The WPR is defined as the percentage of employed persons in the population.

Migrants are defined in

the survey as a household member whose last usual place of residence, at any time in the past, was different from the present place of enumeration. The migration rate, according to the survey, is 28.9%. The migration rate among women was 48% and 47.8% in rural and urban areas, respectively.

Rural jobs

Experts point out that a second visit to the households in rural areas could have provided a bigger and larger picture of unemployment, which did not happen in the survey.

“Overall, the report suggests shifting the government’s policy directions as it has become more rural-centric. Creation of rural jobs other than in the agricultural sector and MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) could be priorities for the government at the Union and State levels,” Sridhar Kundu, senior research analyst at the Indian School of Business, said.

RBI may raise rates to 5.9% by year end: Fitch

‘Rates may rise to 6.15% by end-2023’

PRESS TRUST OF INDIA
NEW DELHI

Fitch Ratings on Tuesday said the Reserve Bank was likely to raise interest rates further to 5.9% by December 2022, on deteriorating inflation outlook.

In its update to the Global Economic Outlook, Fitch said India’s economy faced a worsening external environment, elevated commodity prices and tighter global monetary policy. “Given the deteriorating outlook for inflation, we now expect the RBI to lift rates further to 5.9% by December 2022 and to 6.15% by the end of 2023 (versus a previous forecast of 5%) and to be unchanged in 2024,” Fitch said.

“Inflation has risen to an eight-year high and broa-

 Fitch expects GDP to grow 7.8% in FY23, lower than its previous forecast of 8.5%

dens across more CPI categories, posing a severe challenge to consumers. In the past three months, food inflation has increased by an average of 7.3% year-on-year, while healthcare bills are rising at a similar pace.”

Growth in April-June is likely to improve on a rebound in consumption as COVID-19 cases had subsided towards end-March.

“We now expect the economy to grow by 7.8% this year (2022-2023), revised down from our previous forecast of 8.5%,” the rating agency said.

WPI inflation quickens to record 15.9%

VIKAS DHOOT

NEW DELHI

Inflation in India's wholesale prices quickened to a new record high of 15.9% in May, from April's 15.1%, official data released on Tuesday show. This is the 14th month in a row that WPI inflation has stayed above the 10% mark. Inflation in May 2021 was 13.1%.

Fuel and power inflation accelerated further to 40.6%, from 38.7% in April and 31.8% in March. Inflation based on the WPI Food Index, which had eased to 8.9% in April from 9.3% in March, rebounded to 10.9% in May. Retail inflation had eased slightly to 7.04% in May from 7.79% in April as per data released on Monday.

CONTINUED ON ► PAGE 10

WPI inflation quickens to record 15.9%

But the further uptick in WPI inflation, in contrast to the consumer price trends, could warrant greater circumspection from the monetary policy perspective, as producers would eventually pass on higher costs to consumers, economists said. May's "inordinately high" wholesale inflation was signalling continued upward pressure on retail inflation in the next few months, cautioned D.K. Srivastava, chief policy advisor, EY India.

Inflation in primary articles also gained momentum, rising to 19.7% from April's 15.5%. LPG inflation shot up from 38.5% in April to 47.7% in May. While diesel inflation eased only marginally from 66.1% in April to 65.2% in May, petrol inflation dropped slightly from 60.6% in April to 58.8% in May. The government had pared excise duties on petrol and diesel on May 21.

"The high rate of inflation in May is primarily due to rise in prices of mineral oils, crude petroleum & natural gas, food articles, basic metals, non-food articles, chemicals & chemical pro-

ducts and food products compared to the previous year," the Commerce and Industry Ministry said.

CARE Ratings' Rajani Sinha attributed the record wholesale inflation to the spike in food and energy prices. "Vegetables and cereals prices surged due to heatwave-led disruptions and have pushed up primary food inflation, while elevated crude oil prices, LPG price hikes and electricity tariff revisions contributed to the rise in fuel and power inflation," she said. The WPI for this March was also revised upwards, reflecting an inflation rate of 14.63% instead of the 14.5% earlier estimated by the Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade. "The rise in global crude oil prices is expected to put upward pressure on the headline WPI print for June 2022, even as the weakening of the Rupee is likely to augment the landed cost of imports. We expect the wholesale price inflation to remain elevated at -15%-16% in June," chief economist, ICRA, Aditi Nayar said.

In reversal, Joe Biden to visit Saudi Arabia, interact with MBS

President will also hold a virtual summit with PM Modi and leaders of UAE, Israel

SRIRAM LAKSHMAN
WASHINGTON

U.S. President Joe Biden will travel to Saudi Arabia as part of a larger trip to West Asia in July and his visit will involve an interaction with Crown Prince Mohammad bin Salman (MBS), who, according to U.S. intelligence agencies, was the mastermind behind the brutal murder of *Washington Post* columnist Jamal Khashoggi in 2018. During his presidential campaign, Mr. Biden had vowed to isolate Saudi Arabia over the killing and make it “pay”.

Mr. Biden’s trip will comprise a visit to Israel, the West Bank and Jeddah (Saudi Arabia), on July 13-16, during which time he will also hold a virtual summit level meeting with Prime Minister Narendra Modi, Israeli Prime Minister Naftali Bennett and the UAE’s President, Mohammed bin Zayed, as part of the I2-U2 (India, Israel, the U.S. and the UAE) country grouping.

In West Asia, the U.S. is engaged in partnerships that include a mixture of countries in the region and those outside, a continuation of the Trump administration’s effort to help build Israel’s links to other countries. The Israel leg of Mr. Biden’s trip, according to a senior administration official, who did not want to be named, was to not just “reaffirm” the U.S.’s “ironclad” commitment to Israel’s security but also deepen areas of cooperation across sectors, and enhance Israel’s integration with regional countries, such as in groups that include countries from outside West Asia.

“And in this regard, the President will hold a virtual summit with the I2-U2 heads



Poll pitch: During his presidential campaign, Biden had vowed to isolate Saudi Arabia over the killing of Jamal Khashoggi.

of state for discussions of the food security crisis, and other areas of cooperation across hemispheres, where the UAE and Israel serve as important innovation hubs,” the official told reporters on a briefing call on Monday. There will also be “side meeting and engagements” which will be announced later.

The President’s trip to Jeddah, Saudi Arabia, which will follow visits to Israel and the West Bank, is centred around a meeting of the Gulf Cooperation Council plus three (GCC + 3). The GCC is an economic and political alliance of six West Asian countries.

“So yes, we can expect the President to see the Crown Prince,” the official said.

On Wednesday, the administration official defended the move saying the engagement with Saudi Arabia had helped yield results – notably a truce to a conflict between a Saudi-led coalition and rebels in Yemen, and an agreement by Saudi Arabia and other OPEC+ states to increase output of oil by 50%, ahead of schedule. Petrol prices in the U.S. and elsewhere have been soaring, and while there has been opposition to Mr. Biden’s visit to the Kingdom from law-

makers, some have suggested he use the relationship to further U.S. interests.

“From the earliest days of our administration, we made clear that U.S. policy demanded recalibration and relations with this important country but not a rupture,” the official said on Monday.

Last week, members of Congress wrote to Mr. Biden asking him to “further recalibrate” the bilateral relationship so it serves American interests. The administration official said Crown Prince Mohammed had played “a critical role” in extending, beyond its initial two months, an April truce with Houthi rebels in Yemen.

makers, some have suggested he use the relationship to further U.S. interests.

“Whereas a year and a half ago, it was the United States that was isolated internationally on this important issue,” the official said.

India, Pakistan and Libya had abstained during the vote, while Russia and China had voted against the resolution.

In the West Bank, Mr. Biden will consult with the Palestinian Authority and “reiterate his strong support for a two-state solution, with equal measures of security, freedom and opportunity for the Palestinian people”, White House Press Secretary Karine Jean-Pierre said in a statement.

The administration official said the visit will reinvigorate the U.S.-Palestinian Authority (PA) dialogue and renew the dialogue between the PA and regional countries, especially Israel.

“Of course, when we entered office nearly a year and a half ago, ties between the U.S. government and the Palestinians had been nearly severed,” the administration official said, adding that the administration was now regularly engaging the Palestinian leadership and had, since last year, provided more than half a billion dollars in support for Palestinians since last April.

The Trump administration had slashed more than \$500 million in bilateral aid for the West Bank and Gaza and funding for the UN agency for Palestinian refugees. It had also, controversially, recognised Jerusalem as the capital of Israel and moved the U.S. Embassy there.

France's Total to buy 25% stake in Adani green hydrogen unit

ANIL-TotalEnergies JV eyes \$50 bn green hydrogen investment over 10 years

SPECIAL CORRESPONDENT
AHMEDABAD

The Adani group said on Tuesday it had tied up with French energy major TotalEnergies SE to jointly create the 'world's largest green hydrogen ecosystem' in Gujarat's Kutch region.

As part of the tie-up, TotalEnergies would acquire a 25% stake in Adani New Industries Ltd. (ANIL), a unit of Adani Enterprises Ltd. (AEL). The joint venture aims to invest \$50 billion over the next 10 years to set up the green hydrogen ecosystem, AEL and TotalEnergies said in a joint statement.

"In our journey to be the world's largest Green H2



Going green: TotalEnergies aims to use the JV to decarbonise the hydrogen used in its European refineries. ■ REUTERS

player, the partnership with @TotalEnergies will fundamentally shape market demand," Adani group chairman Gautam Adani posted

on Twitter. "Our ability to produce the world's least expensive electron will lead to us producing the world's least expensive Green H2,"

he tweeted.

"TotalEnergies' entry into ANIL is a major milestone in implementing our renewable and low carbon hydrogen strategy, where we want to not only decarbonise the hydrogen used in our European refineries by 2030, but also pioneer the mass production of green hydrogen to meet demand, as the market will take off by the end of this decade." TotalEnergies chairman and CEO Patrick Pouyanne was cited in the statement as saying.

In the primary phase, ANIL will develop green hydrogen production capacity of 1 million tons per annum at Mundra before 2030.

EXPLAINER

Can the new Google chatbot be sentient?

Is there a possibility of future Artificial Intelligence technologies becoming 'conscious'?

TV.VENKATESWARAN

The story so far: Blake Lemoine, a U.S. military veteran, identifies himself as a priest, an ex-convict and an Artificial Intelligence (AI) researcher. He was engaged by Google to test for bias/hate speech in the Language Model for Dialogue Applications (LaMDA), Google's nextGen conversational agent. He was sent away on paid leave after claiming that the updated software is now sentient. He claims that the neural network with deep learning capacity has the consciousness of a child of seven or eight years old. He argues that consent from the software must be obtained before experiments are run on it. Google and many tech experts have dismissed the claim. However, this episode, which came on the heels of Google firing Timnit Gebru over her warnings on their unethical AI, has caused ripples in social media.

Is AI technology here?

AI technology appears futuristic. However, Facebook's facial recognition software which identifies faces in the photos we post, the voice recognition software that translates commands we bark at Alexa, and the Google Translate app are all examples of AI tech already around us.

Inspired by the mathematician Alan Turing's answer to the question 'Can a machine think?', AI tech today aims to satisfy the Turing test to qualify as 'intelligent'. Turing was the designer and builder of the world's first computer, ENIGMA, which was used to break the German codes during the Second World War. To test if a machine 'thinks', Turing devised a practical solution. Place a computer in a closed room and a human in another. If an interrogator interacting with the machine and the human cannot discriminate between them, then Turing said that the computer should be construed as 'intelligent'. We use the reverse Turing test, CAPTCHA, to limit technology access to humans and keep the bots at bay.

Which were the first chatbots to be devised?

As electronics improved and first-generation computers came about, Joseph Weizenbaum of the MIT Artificial Intelligence Laboratory

built ELIZA, a computer programme with which users could chat. ALICE (Artificial Linguistic Internet Computer Entity), another early chatbot developed by Richard Wallace, was capable of simulating human interaction. In the 1930s, linguist George Kingsley Zipf analysed the typical human speech and found that most of the utterances began with 2,000 words. Using this information, Wallace theorised that the bulk of commonplace chitchat in everyday interaction was limited. He found that just about 40,000 responses were enough to respond to 95% of what people chatted about. With assistance from about 500 volunteers, Wallace continuously improved ALICE's responses repertoire by analysing user chats, making the fake conversions look real. The software won the Loebner Prize as "the most human computer" at the Turing Test contests in 2000, 2001, and 2004.

What is a neural network?

A neural network is an AI tech that attempts to mimic the web of neurons in the brain to learn and behave like humans. Early efforts in building neural networks targeted image recognition. The artificial neural network (ANN) needs to be trained like a dog before being commanded. For example, during the image recognition training, thousands of specific cat images are broken down to pixels and fed into the ANN. Using complex algorithms, the ANN's mathematical system extracts particular characteristics like the line that curves from right to left at a certain angle, edges or several lines that merge to form a larger shape from each cat image. The software learns to recognise the key patterns that delineate what a general 'cat' looks like from these parameters.

Early machine learning software needed human assistance. The training images had to be labelled as 'cats', 'dogs' and so on by humans before being fed into the system. In contrast, access to big data and a powerful processor is enough for the emerging deep learning softwares. The App learns by itself, unsupervised by humans, by sorting and sifting through the massive data and finding the hidden patterns.

What is LaMDA?

LaMDA is short for 'Language Model for

Dialogue Applications', Google's modern conversational agent enabled with a neural network capable of deep learning. Instead of images of cats and dogs, the algorithm is trained using 1.56 trillion words of public dialogue data and web text on diverse topics. The neural network built on Google's open-source neural network, Transformer, extracted more than 137 billion parameters from this massive database of language data. The chatbot is not yet public, but users are permitted to interact with it. Google claims that LaMDA can make sense of nuanced conversation and engage in a fluid and natural conversation. The LaMDA 0.1 was unveiled at Google's annual developer conference in May 2021, and the LaMDA 0.2 in 2022.

How is LaMDA different from other chatbots?

Chatbots like 'Ask Disha' of the Indian Railway Catering and Tourism Corporation Limited (IRCTC) are routinely used for customer engagement. The repertoire of topics and chat responses is narrow. The dialogue is predefined and often goal-directed. For instance, try chatting about the weather with Ask Disha or about the Ukrainian crisis with the Amazon chat app. LaMDA is Google's answer to the quest for developing a non-goal directed chatbot that dialogues on various subjects. The chatbot would respond the way a family might when they chat over the dinner table; topics meandering from the taste of the food to price rise to bemoaning war in Ukraine. Such advanced conversational agents could revolutionise customer interaction and help AI-enabled internet search, Google hopes.

How intelligent are AI's?

The Turing test is a powerful motivator for developing practical AI tools. However, scholars, such as philosopher John Searle, use the 'Chinese Room Argument' to demonstrate that passing the Turing test is inadequate to qualify as intelligent.

Once I used Google Translate to read WhatsApp messages in French from a conference organiser in France and in turn replied back to her in French. For some time, she was fooled into thinking that I could speak French. I would have passed the



'Turing test', but no sane person would claim that I know French. This is an example of the Chinese room experiment. The imitation game goes only so far.

Further scholars point out that AI tech uses a false analogy of learning. A baby learns a language from close interaction with caregivers and not by ploughing through a massive amount of language data. Moreover, whether intelligence is the same as sentience is a moot question. However, the seemingly human-like conversational agents rely on pattern recognition, not empathy, wit, candour or intent.

Is the technology dangerous?

The challenges of AI metamorphosing into sentient are far in the future; however, unethical AI perpetuating historical bias and echoing hate speech are the real dangers to watch for. Imagine an AI software trained with past data to select the most suitable candidates from applicants for a supervisory role. Women and marginalised communities hardly would have held such positions in the past, not because they were unqualified, but because they were discriminated against. While we imagine the machine to have no bias, AI software learning from historical data could inadvertently perpetuate discrimination.

T.V. Venkateswaran is Scientist F at Vignyan Prasar, Dept of Science and Technology

THE GIST

■ LaMDA, Google's modern conversational agent is enabled with a neural network capable of deep learning. LaMDA is Google's answer to the quest for developing a non-goal directed chatbot that dialogues on various subjects. Such advanced software could revolutionise customer interaction and help AI-enabled internet search.

■ With access to big data and a powerful processor, deep learning softwares can learn by itself, unsupervised by humans, by sorting and sifting through massive data and finding hidden patterns. Google claims that LaMDA can make sense of nuanced conversation and engage in a natural conversation. However, these seemingly human-like agents rely on pattern recognition, not empathy, wit, candour or intent.

■ The challenges of AI metamorphosing into sentient are far in the future; however, unethical AI perpetuating historical bias and echoing hate speech are the real dangers to watch for.

Switch mulls ₹1,000-cr. e-bus unit

EV firm looks to raise £200 million in the short term

N.ANAND
CHENNAI

Switch Mobility Ltd., the electric-vehicle arm of Ashok Leyland Ltd. (ALL), is planning to set up a green-field unit at a cost of about ₹1,000 crore to make electric buses, said a top official.

“Currently, we are evaluating different sites to make e-buses,” Mahesh Babu, director & CEO, Switch Mobility India, said in an interview.

“The plant will come up in the vicinity of one of ALL’s existing facilities.”

Stating that the company was preparing multiple blueprints based on the EV policies of different States, he said a final decision would be taken in the next 4-6 weeks. The new facility would have an initial, annual production capacity of 2,500 buses. It could be dou-



Green journey: Mahesh Babu, left and Dheeraj Hinduja with EiV 12 electric buses. ■ SPECIAL ARRANGEMENT

bled based on demand.

On Tuesday, Switch Mobility rolled out its maiden electric bus platform ‘Switch EiV 12’ for the Indian market. The buses are currently made at ALL’s Ennore facility.

“Right now, Switch has an order book of 600 e-buses,” said ALL Chairman Dheeraj Hinduja.

“In the first three months of the current fiscal, we have bagged orders for 600 buses and might end the year with around 1,000 buses,” Mr. Babu said. On fund raising, Mr. Babu said the firm needed about £200 million for 2-3 years and another £100 million for 3-5 years. Thereafter, the firm might tap the capital markets, he said.

Elderly lack financial, social security: study

52% of those surveyed reported inadequate income; 40% said they did not feel financially secure

SPECIAL CORRESPONDENT
NEW DELHI

A national survey carried out by HelpAge India has shown that 47% of elderly people are economically dependent on their families for income and 34% relied on pensions and cash transfers, while 40% of the surveyed people have expressed a desire to work “as long as possible”, highlighting the need to pay greater attention to social security of senior citizens in the country.

The report, released by Social Justice and Empowerment Ministry Secretary R. Subrahmanyam on the eve of World Elder Abuse Awareness Day, was based on a sur-



Hand of support: Financial planning and social security need greater attention, says HelpAge India. ■ GETTY IMAGES/ISTOCK

vey conducted by the non-governmental organisation with the involvement of 4,399 senior citizens and 2,200 caregivers across 22 cities.

The report said that 52% of the elderly surveyed reported inadequate income; 40% said they did not feel financially secure; 57% said their expenditure was in ex-

cess of their savings; and 45% said the pension amount was not enough for survival.

“This suggests both financial planning for later years and social security needs much greater attention,” HelpAge India said in a statement, adding that it had been advocating for a universal pension of ₹3,000 a month.

The survey also found that 71% of senior citizens were not working, while 36% were willing to work and 40% wanted to work “as long as possible”. As much as 30% of the elders were willing to volunteer their time for various social causes.

“One good news is that 87% elders reported there is availability of healthcare facilities nearby, however 78% elders mentioned unavailability of app-based online healthcare facilities and a significant 67% elderly reported they do not have any health insurance at this critical stage in their lives and only 13% are covered under government insurance schemes,” HelpAge India said.

The report highlighted the way elder abuse is perceived and reported – 59% of elders felt that elder abuse was “prevalent” in society, but 10% reported being victims themselves.

New plan to save jumbos from train hits

Geographical patterns to be analysed; measures that can be implemented by Railways to be proposed

JACOB KOSHY
NEW DELHI

With 186 elephants officially reported to have been killed in collisions with trains in the past decade, the Environment and Railway Ministries are exploring a project to minimise the number of such accidents.

While piecemeal measures have been taken in States, the latest initiative is to analyse patterns geographically and propose measures that the Railways can feasibly implement.

The Wildlife Institute of India (WII), Dehradun, an autonomous body, and the Environment Ministry have had an initial round of discussions with Railway officials, said S.P. Yadav of the National Tiger Conservation Authority.

Bilal Habib, a scientist at the WII and one of the leaders of the project, said a draft document was expected to



Fatal hit: Assam, West Bengal and Uttarakhand saw most number of elephants killed in train accidents. A file photo of two elephants killed after being hit by a train at Moraghat.

be readied in July. A preliminary analysis showed the States with the highest elephant numbers were not always the ones with the most deaths. Assam, West Bengal and Uttarakhand were hilly States that saw the most number of casualties, Mr. Habib said. Slopes were a

tricky terrain for elephants and when the animals attempted to cross railway lines, they lingered longer near or on tracks resulting in collisions. "An elephant is the only mammal with six toes, one of which is exclusively for gripping slopes. Due to this, they take more

time to descend slopes and when tracks are located at such locations, they tend to result in accidents," Mr. Habib said.

Creating underpasses or dedicated elephant passes near existing lines are not always feasible for the Railways, given the expenses, as

it required as much as 20 km of pathway on either side of the track.

Mr. Yadav cited instances of elephants refusing to abandon their young were they to get trapped on the lines, resulting in casualties.

In response to questions raised in Parliament on such collisions, the government said that it had put in place measures, such as providing fencing at selected locations, erecting signage boards to warn locomotive pilots about identified elephant corridors, sensitising train crew and stationmasters on a regular basis, clearing vegetation on the sides of the track within railway land, deputing a Forest Department staffer in Railway control offices to liaison with Railway, and have the Forest Department engage elephant trackers for timely action by alerting stationmasters and locomotive pilots.

The 'C' factor in the Russia-Ukraine war

There is little clarity about the extent to which both sides have used cyberweapons — there could be underlying reasons



M.K. NARAYANAN

Well into the second 100 days of the Russia-Ukraine conflict, the world is awash with speculation about reasons for the so-called failure of the Russian armed forces to deal a decisive blow against a much smaller Ukrainian army. This may appear to be a one-sided viewpoint, but Russia is yet to achieve what can be termed as a decisive victory in any sector of the current conflict.

Analysing Russia's response

Several reasons have been adduced by experts in the West for the lacklustre performance of the Russian army. Frequently mentioned are: lack of motivation and the poor morale of the Russian forces sent to Ukraine, many of whom were conscripts who had little desire to participate in a bloody conflict; absence of trust between the higher and the middle/lower rungs of the Russian armed forces, leading to a hiatus at the operational level; Russian weaponry being outdated and ineffective to fight an informationalised war under modern conditions, such as the one that Ukraine was waging at present with generous help from the North Atlantic Treaty Organization (NATO) and western powers.

Admittedly, Russian commanders have also proved inept in devising plans and taking appropriate decisions in battlefield conditions against a determined enemy. Viewed against the perspective when the conflict started, that Ukraine would capitulate within a matter of weeks, all this has contributed to a feeling in the West that Russia's armed forces are overrated, and that the threat they pose to the democratic West is greatly exaggerated.

A word of caution is, however, called for. Russia's spending on its military over several decades has been far higher than that of every other country in Europe, including the two most highly militarised countries, viz., the United Kingdom and France. Russia's armed arsenal which has been on public display on several occasions in the recent past, can hardly be written off, even if questions are now being raised about the invincibility of Russia's armed forces. The reality is that much of Russia's advanced weaponry has not been employed in the Ukraine conflict — for reasons best known to the Kremlin — and, hence, the West should not read the 'tea leaves' wrongly, and write off Russia's military strength, lest it encourages misguided elements to embark on any hazardous 'misadventure'.

The role of 'cyber'

Reasons for Russia's lacklustre performance need to be found elsewhere. Given that cyber is often touted as the Fifth Dimension of warfare, it may be worthwhile to examine whether this indeed is the first major conflict in which 'cyber' is playing a crucial role, allowing a weaker nation with cyber capabilities to use it to its advantage. Public memory tends to be short, for it was only a decade ago that a distinguished President of the United States, Barack Obama, had warned that in the event of a conflict or otherwise, cyberattacks would plunge 'entire cities into darkness'.

A former Chief of the National Security Agency of the U.S., which has responsibility for cyber in the military domain, in his memoirs had said that although cyberspace is a man-made domain, it had become critical to military operations on land, sea, air and in space. A former U.S. Secretary of Defence a few years ago, even talked of a possible 'cyber Pearl Harbour to paralyze nations and create a profound sense of vulnerability'. Likewise, some years ago, the U.S. intelligence community had put out a warning that their nation was un-



GETTY IMAGES/ISTOCKPHOTO

der threat as North Korean operatives were in a position to pre-position 'cyber munitions' inside America's critical infrastructure, and detonate them in the event of a conflict. Today, the West regularly portrays Russians using cyber-tactics to destroy nations.

The Russian military oligarchy is indeed among the world leaders in digital disruption and cyber-methodology, and one could have reasonably presumed that even before the conflict commenced, Russia would have swamped Ukraine with an avalanche of digital attacks. Ukraine, for its part, has its own digital army, including a corps of digital weapons. Several weeks into the war, however, there is little clarity as to the extent to which both sides have deployed cyberweapons.

Earlier attacks

There are several publicised instances earlier, of alleged Russian operatives waging a cyberwar against Ukraine. An instance that captured public imagination some years ago was Russia's cyberattack on Ukraine's electric grid, leaving many parts of the country without power for several days, in the midst of a grim winter. Ukrainian cyber security experts have also claimed to have prevented a major cyber operation — linked to the Kremlin — to derail the Ukrainian presidential election some years ago. These were, however, only the tip of the iceberg of Russia's cyber offensive capabilities, *vis-à-vis* Ukraine.

Both sides now possess and use malware such as data-wipers which have proved highly effective. On the day the Russian invasion of Ukraine began, Russian

cyber units are believed to have successfully deployed destructive malware against several Ukrainian military targets. The Ukrainian Satellite Internet Provider, for instance, was the target of one such cyberattack, leading to widespread communications outages. A series of distributed denial-of-service (DDoS) attacks against Ukrainian banking and defence websites occurred simultaneously. In addition, Wiper malware was introduced into several Ukraine Government networks, while the websites of the Ukrainian Defence Ministry and military targets faced a series of DDoS and phishing attacks.

But no Armageddon

None of these, however, is tantamount to what can be described as large-scale cyberattacks. As far as the conduct of the war is concerned, the string of small-scale cyberattacks cannot be said to have had any material impact on the conduct or outcome of the conflict. Hence, the cardinal question is why given that Ukraine has put up such a heroic defence — and to a considerable extent stalled the Russian offensive — Russia has not embarked on a massive all-out cyber-offensive.

It is very likely, and possibly a fact, that there are major difficulties in planning and executing massive cyberattacks on a short timeline to ensure higher efficacy of kinetic attacks. If that be the case, then much of the speculation that cyberattacks in the event of a war provide a perpetrator the capability to enact another 'Pearl Harbour' seems highly unrealistic. The fact that both Russia and Ukraine, which have powerful armies of cyber-specialists, more so hackers (Ukraine even tried to create an international army of hackers to target critical Russian systems), have not succeeded in causing a cyber Armageddon can possibly be seen as a reprieve. But there are possibly other underlying reasons. There has always been a view among cyber experts that 'Cyber Space is not a war zone', and that

it is fundamentally a civilian space — but without doubt leading to a 'new exciting age in human experience, exploration and development'. Thus, it would seem that for all its potential to disrupt civilian targets such as power grids, hospitals, banks and industries, cyber-power is yet to achieve its so-called threat potential in terms of decisive impacts in battlefield situations. As of now, cyberattacks have an impact that is well below the threshold of what a nuclear war, even a limited one, could produce.

The West's line

Meanwhile, the West is currently busy floating some 'red herrings', viz., that Moscow is possibly considering raising the stakes further given that the offensive in Ukraine has stalled. Implicit in this warning is that Moscow may be planning to embark on a nuclear conflict. The West believes that Russia could in such a situation, possibly employ tactical/battlefield nuclear weapons to drive home to Ukrainian defenders the high price of resistance to Russia's offensive. It is not for the first time that the West is peddling such a view, for it has from time to time observed that Russia is a firm believer in 'the value of nuclear weapons as a tool of statecraft'; and that a show-down in Ukraine, employing low-yield nuclear weapons, would help send a clear message not only to Ukraine but also to NATO and the United States as well, in regard to the extent of Russia's determination not to allow any further extension of NATO to the east.

Conjuring up such a scenario with little evidence to support this argument could be dangerous. It could well turn into a self-fulfilling prophecy. There are inherent dangers attached to all such speculation.

M.K. Narayanan, a former Director, Intelligence Bureau, a former National Security Adviser and a former Governor of West Bengal, is currently Executive Chairman of CyQureX Pvt. Ltd., a U.K.-U.S.A. cyber security joint venture

Centre clears *Agnipath* scheme

'Agniveers' can apply for regular employment after 4 years and may get priority

SPECIAL CORRESPONDENT
NEW DELHI

Defence Minister Rajnath Singh on Tuesday announced the 'Agnipath' scheme for recruitment of youth in the armed forces for four years. The process of recruitment will commence in 90 days with a planned intake of 46,000 young men and women this year. This will be the only form of recruitment of soldiers into the three defence services from now.

Mr. Singh said the scheme was aimed at strengthening national security and for providing an opportunity to the youth to serve in the armed forces. Recruits under the scheme will be known as 'Agniveers'. After completing the four-year service, they can apply for regular employment in the armed forces. They may be given priority over others for various jobs in other government departments.

The move is expected to decrease the average age profile of armed forces personnel from the current 32



Defence Minister Rajnath Singh announcing the rollout of the 'Agnipath' scheme on Tuesday. ■ SHIV KUMAR PUSHPAKAR

to 24-26 years over a period of time, Lieutenant-General Anil Puri, Additional Secretary, Department of Military Affairs, said. Enrolment to all three services will be through a centralised online system, with special rallies and campus interviews at recognised technical institutes such as the Industrial Training Institutes, and the National Skills Qualifications Framework, Lt. Gen. Puri said. Recruitment will be carried out on an "All India All Class" basis with the eligibility age ranging from 17.5

to 21, with medical and physical fitness standards in accordance with existing norms.

The 'Agniveers' will receive an annual package of ₹4.76 lakh in the first year to ₹6.92 lakh in the fourth year, apart from risk and hardship and other allowances as applicable. Under the 'Seva Nidhi' package, they will receive about ₹11.71 lakh, including contribution and interest, on completion of service. The recruits will have to contribute 30% of their monthly emoluments

to Seva Nidhi, with a matching contribution made by the government. There will be no entitlement to gratuity and pension benefits under the scheme. However, the 'Agniveers' will be provided a non-contributory life insurance cover of ₹48 lakh during their service.

Total budget allocation for defence for 2022-23 is ₹5.25 lakh crore, of which revenue allocation is ₹2.33 lakh crore, capital allocation is ₹1.52 lakh crore, and defence pensions add up to ₹1.19 lakh crore.

INTERVIEW | SHYAM SARAN

India must insist on return to *status quo* on border in talks with China

Former National Security Advisory Board Chairman says multiple rounds of talks prove Chinese encroachment occurred in 2020, regardless of govt. statements

SUHASINI HAIDAR

Two years after the Galwan clashes on June 15-16, 2020, where 20 Indian soldiers and at least four Chinese soldiers (according to official figures but possibly more) were killed, the government says it has still not ascertained why China amassed its troops in such large numbers on the border, despite 15 rounds of military talks at the Line of Actual Control (LAC). Former Chairman of the National Security Advisory Board (NSAB) and author of the new book *How China Sees India and the World*, **Shyam Saran** says that New Delhi must continue to push for a return to the situation prior to April 2020, when Chinese transgressions were first detected. Excerpts:

It has been two years since the clashes in Galwan, the worst casualties in decades. Why do you think the Galwan clash and all that followed has happened?

■ [Prior to 2020] The India-China border was seen as kind of a model of how two

countries had enough maturity to deal with a disputed border, maintained peace and tranquillity at the border and allowed the relationship in other areas to flourish. What Galwan [clash] represented was a departure from that particular trend that we had in the past decades. Why

did this happen? One is that China's view of power is very hierarchical, it is very sensitive to the balance of power amongst major powers. I think in the context of the growing asymmetry of power between India and China, China's sensitivity to Indian concerns has diminished. China thought it could do this and get away with it.

Secondly, over the last decade or so, while there has been very major improvement of infrastructure on the Chinese side of the border, India, which was lagging behind, actually began to catch up. Unlike the past where Indian patrols and Chinese patrols had infrequent encounters, there is now big increase in the number of



China's sensitivity to Indian concerns has diminished. China thought it could do this and get away with it

times they encounter each other along the LAC in Ladakh.

It is also two years since Prime Minister Narendra

Modi said that China has not entered or is holding any Indian territory. How does China view India's responses? Is it better to be more discreet and deal with China bilaterally?

■ The fact that we have had what about [15] rounds of talks between India and China on the situation on the border, would indicate that there has been in fact, encroachment on the Indian side or the border... otherwise, what are we talking about? If Indian patrols are not being allowed to go to areas which they have been patrolling in the past, is that not a change in the material situation on the border? Whatever may be the state-

ments made, the fact is that we are dealing with a situation where China has advanced territorially in areas which we have been claiming as our own, and exercising jurisdiction over. Whether or not it is a good policy to remain low key on this issue, that is a matter of debate. Perhaps you can explain this by pointing to the fact that we are engaged in a series of consultations or negotiations with the Chinese side, on trying to, you know, get back to the *status quo ante*.

Is a return to *status quo ante* April 2020 at the LAC still a possibility?

■ I think [*status quo ante*] should be an objective, be-

cause China has made a material change in the *status quo*, which both sides had agreed repeatedly that they will not unilaterally try to alter. So I think the Indian side is fully justified in asserting that if relations have to come back on track, this is what is needed. Making that stand on the Indian side is important.

External Affairs Minister Jaishankar has pointed to the 1987 Sumdorong Chu stand-off indicating that this stand-off may take as much time – seven or eight years to resolve. Do you agree?

■ Mr. Jaishankar is right that it took a fairly long time for us to be able to resolve the

Sumdorong issue. But in the case of Doklam, we were actually able to defuse this within a shorter period of time. And I relate that to the overall, geopolitical situation. Now, could there be another similar kind of a geopolitical situation which may arise in the foreseeable future, where China once again, sees it in its interest to bring down the temperature on this front [with India], particularly in the wake of the ongoing Ukraine war? Possibly. For that reason, I think it is important for us to keep asserting our stand that in order to get the relationship back on track, we need to go back to the *status quo*.

(Full interview on bit.ly/ChinaIndiaBorder)

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.