1. The mass exodus of migrant labourers and the resulting economic slump have brought in focus the need to create robust institutions that can handle such crises with more deft and compassion. Discuss. (GS Paper 2)

Demand of the question:

It expects students to write about need of robust institution to keep track of migrant labourers to handle crisis times with more deft and compassion.

Introduction:

The COVID-19 crisis for India has also become a humanitarian one involving inter-State migrants on return journeys home racked by pain and suffering and no surety of any income going ahead. For a majority of migrant labourers, migration is either a livelihood accumulation strategy or survival risk reducing strategy whichever way we define the nature of migration.

Body:

Field studies indicate that the lead source States of internal migrants are Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, Andhra Pradesh, Chhattisgarh, Jharkhand, Odisha, Uttarakhand and Tamil Nadu, whereas key destination areas are Delhi, Maharashtra, Gujarat, Haryana, Punjab and Karnataka. According to a UNESCO study, Surat at 58% has the highest percentage of migrant labour population in India, while the percentage of migrant population is 43% for Mumbai and Delhi.

Need of more deft and compassion towards migrant labourers:

- Lack of robust data about migrants in real time: According to the Census of India, 2011, more than 450 million Indians (37%) are internal migrants who change their residence within a country's national borders. About 30% of the migrants are youth aged 15-29 years and another 15 million are children. Women migrants are less represented in regular jobs and more likely to be self-employed than non-migrant women.
- Casual and informal nature of work: Domestic work has emerged as an important occupation for migrant women and girls. Facing relentless bouts of gender discrimination at home, and on the farms as wage workers, these migrant women are forced into various forms of servitude in the domestic spaces of affluent city dwellers.
- Lack of social security benefits: In between migration and settlement for employment and livelihoods, footloose army of migrants are often denied welfare rights in their destination place and imposed debilitating transaction costs in case they decided to negotiate their citizenship rights.
- Second class citizen: Lack voting rights, own home, fear son of soil politicians and casual nature of work make them second class citizen. A long pending issue is portability of migrant workers' voting rights. The Election Commission of

- India is already working, so time has come to empower migrant workers so that they gather better bargaining power and political voice in the system.
- Food and job security: Another urgent issue is portability of the public distribution system (PDS) for migrant labourers and also allowing migrant labourers to use their NREGA job cards in any part of the country. This portability of NREGA will be a great relief, if any migrant labourer is in crisis like the pandemic, he or she can take up NREGA work at the destination site rather than returning home.

Reforms for institutional framework for migrant labourers:

- The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979 is largely a regulatory law failing to incorporate welfare rights of the migrant labourers.
- The most urgent revision is to introduce a National Migrant Workers Commission at the Central level backed up by State level Migrant Workers Commissions. Also, we need to expand the definition of migrant labourer and include next generation skills like IT, mobile repair, financial services related works. Act needs to include provisions for State-supported skill training services for migrant labourers.
- The proposal to establish the Migration Commission must interface with and build upon the National Migrant Information System, set up by National Disaster Management Authority, to create a robust and dynamic database for labour mobility in India.
- The commission must take up the registration of migrants as an urgent task.
 The lack of a unique worker identification number has prevented frequently
 mobile inter-state migrants from accessing existing social welfare mechanisms
 such as the Building and Other Construction Workers board (BOCW). Shramik
 cards used by states for identification of such workers have provided limited
 success. A coordinated single national ID for access to multiple benefits could
 introduce fiscal efficiencies as well.
- Migration Commission should have powers to coordinate among multiple ministries of the government of India. Deliberations of the Working Group on Migration, which submitted its report in 2017, revealed the importance of inter-ministerial coordination in resolving critical issues.
- The Migration Commission must also act as a hub for inter-state negotiations in creating protocols for the safe mobility of labour back to worksites, designing portability features in social welfare and reconciling fiscal issues that arise from portability.
- Other laws relating to workers must be synergised with the Inter-State Migrant Workmen Act. For instance, the Building and Other Construction Workers (Regulation of Employment and Conditions of Services) Act, 1996 should be integrated into the Inter-State Migrant Workmen Act. And it needs to be implemented by the Secretary of the Migrant Workers Commission.
- In this digital age, we must stress more digital administrative techniques such as smart cards and leverage JAM— Jandhan/Aadhaar/mobile payment infrastructure for portability of all.

Conclusion:

Migrant labourers are a formidable force in India's economic life. The government must look beyond the lure of political gestures that pacify hurt migrants and those voters outraged on their behalf. Instead, a Migration Commission is an opportunity to craft a well-planned long-term system to manage labour mobility in India.

2. What are the emerging geopolitical challenges for India during the ongoing COVID-19 pandemic? How its India handling it? Examine. (GS Paper 2, IR/ GS Paper 3, IS)

Demand of the question:

It expects students to write about the emerging geopolitical challenges for India during the ongoing COVID-19 pandemic along with the way of dealing these challenges and solutions to it in near term.

Introduction:

COVID-19 pandemic was a strategic surprise for rich and poor nations alike. The world still remains in the 'fog of war' phase; that the crisis will play out over a long time. It will accelerate the combination of forces that were already transforming international order and forces India to deal with challenges of emerging geopolitical environment.

Body:

Emerging geopolitical challenges during pandemic of COVID-19: Chinese assertion:

- China's strategy focussed on disinformation campaign designed to obfuscate its role in spreading the pandemic, control the public narrative and stoke domestic nationalism. Thus, China peddles the tale that the source of the corona virus could be the US or Italy and the exemplary actions of the CCP leadership have been instrumental in rapidly bringing the pandemic under control, while democratic Western nations are still floundering, thereby highlighting the superiority of its own political system.
- China's current belligerence on the LAC and increased physical tussles between Indian and Chinese soldiers rightly explained as reflection of endeavour to boost domestic nationalism.
- China's increasing use of wolf-warrior diplomacy as response to growing Chinese criticism is evidenced not only in combative words but aggressive actions. For example, in early April, a Chinese coastguard ship allegedly sank a Vietnamese fishing trawler near the Paracel Islands. When Vietnam protested, the Chinese foreign ministry responded by saying Vietnam's claims to the area are illegal.

US retreat and Dynamics of Indo-Pacific:

- US has indicated retreat from world affairs with "leading from behind" of Obama times to President Trump's "America first" and during the current crisis, the U.S.'s efforts at cornering supplies of scarce medical equipment and medicines and acquiring biotech companies engaged in research and development in allied states, show that this may mean "America alone".
- Moreover, even as countries were losing trust in the U.S.'s leadership, its bungled response at home to the pandemic indicates that countries are also losing trust in the U.S.'s competence. The U.S. still remains the largest economy and the largest military power but has lost the will and ability to lead. This mood is unlikely to change, whatever the outcome of the election later this year.
- US retreat has become geopolitical challenge for India at multiple locations like Indo-pacific, Afghanistan and Central Asia.
- US continue to provide only verbal service to the increased Chinese expansion in South China Sea. ASIAN response remains fractured to Chinese pressure due to interlinked economies with China.
- Initiative of QUAD is yet to realise its full potential. China's increasing footprint in the Indian Ocean remains concern for India.

Instability in India's west and Afghanistan:

- Pakistan continues to indulge in cross border terrorism despite of global health crisis. Recent mischief in Sopore and Kupwara underlines it.
- In Afghanistan, the peace process was already facing the difficult transition to intra-Afghan negotiations and a US drawdown. Travel restrictions and political opportunism will make the process of negotiation difficult, adding to the difficulties of finding a sustainable peace.
- Pakistan will gain upper hand in the post American Afghanistan as Pakistan has always supported Taliban overtly and covertly threatens India's interest in the region.
- Iran is unlikely to wilt under sustained US pressure; in fact it may be tempted
 to increase its activities as the US elections draw near. The successful launch
 of Iran's first military satellite on April 22, 2020 is indicative of this.
- Tumbling oil prices and increased US-Iran tensions: India relies both for energy and remittances from its eight million strong diaspora in west Asia, which in turn could face displacement from their jobs in the region.
- Rapidly changing geopolitical situation in Islamic world continues to be challenge for India at both humanitarian and economic level.

Even though, this is also a time of opportunity for India to push reforms in international order and to gain place of responsible power.

Prime Minister underlined that COVID-19 had shown us the limitations of the
existing international system at G-20 virtual summit. A purely economic
agenda had defined globalization so far, and we had cooperated more to
balance competing individual interests, rather than advance the collective

- interests of all human kind. He called for a new template of globalization, based on fairness, equality and humanity in the post-COVID world.
- India's handling of emerging geopolitical challenges indicates India's belief in idea of global problems demand global responses. India's export of hydroxychloroquine drug to the various countries, rescue operation of stranded population of neighbouring countries from china, belief in strengthening independent WHO to deal with contagion.
- India has responded both at military and diplomatic level to Chinese adventure in the eastern ladakh and Sikkim and continues to build robust border infrastructure.
- Zero tolerance to terrorism remains India's stated policy to cross border terrorism and India repeatedly called out bluff of nuclear overhang of Pakistan. India remains committed to deal with every stakeholder in the Afghanistan to secure its interests.
- India's new alliance with France in Indian Ocean patrols and exercises and increasing strategic closeness with Australia indicates India's proactive geopolitical stance in indo-pacific.
- India has shown world that it is committed to fight pandemic in more responsible manner even at the cost of economic loss.

However, India's External Affairs Minister had observed that the real obstacle to the rise of India is not any more the barriers of the world, but the dogmas of Delhi. Traditional Indian strategic mindset of an inward looking third world nation concerned more with securing its borders than with shaping the regional and global environment in its favour remains concern. A multi-polar order inevitably calls for strategic coordination, or balancing, to prevent one pole overwhelming the others, one by one.

Conclusion:

A vaccine for the novel corona virus, possibly by end-2020, will help deal with the global health crisis but these unfolding trends have now been aggravated by the more pernicious panic virus. Rising nationalism and protectionist responses will prolong the economic recession into a depression, sharpening inequalities and polarisations. Greater unpredictability and more turbulent times lie ahead.

3. With favourable tropical geography, huge domestic demand, and high export potential, India can be a world leader in the field of tapping and utilising solar energy. Do you agree? What are the challenges? Discuss. (GS Paper 3, Energy)

Demand of the question:

It expects students to write about the potential of India in the field of solar energy and challenges to realise such potential along with steps need to be taken in that direction.

Introduction:

India has decided to phase out fossil-based energy generation and adopt green energy. This has been instrumental in laying a path to transition towards sustainable energy. The growing need of energy perfectly aligns with the country's green energy transition initiatives especially solar power, to satisfy future energy demands while reducing carbon footprints and burden on the country's foreign currency reserves.

Body:

Potential of India to be world leader in solar power:

- Favourable tropical geography: Indian geography allows many regions to receive a vast amount of solar radiation throughout the year. Forecasting done throughout the country based on satellite and then authenticated by ground data shows that 500000 TWh of electrical energy is being received by India's lands, with most regions receiving 4–7 kWh/m2/day. The maximum global horizontal irradiance is received in the states of Rajasthan and Gujarat.
- Energy demand: India's per capita energy consumption currently stands close to one-third of the world average. India is running renewable energy initiatives in a big way and has emerged as the second most attractive market for renewable energy equipment in the world.
- Export potential: India already exports electricity to Bangladesh and Nepal and plans to export energy to Nepal. Prospects of common electricity market in south Asia aids India's aspiration to become world leader in solar power.
- Ambitious target: India has already achieved cumulative 35 GW of solar electric generation capacity as of January, 2020 with another 40 GW of solar power being at different stages of bidding and installation. The transition of the energy landscape in India is inevitable with the share of renewable energy going up rapidly. India set ambitious targets for itself to achieve 100 GW of solar power by 2022.
- Rate of growth: India has already overtaken the US and has become the second largest solar power market in the world (in terms of solar power installations).
 The country currently stands with ~35 GW of grid-connected solar power capacity as compared to 9 GW in 2015.
- Job potential: The sector also has immense potential to create new jobs; 1 GW of Solar manufacturing facility generates approximately 4000 direct and indirect jobs. In addition solar deployment, operation and maintenance creates additional recurring jobs in the sector. India's solar story is largely built over imported products.
- International initiative: With the headquarters of International Solar Alliance, India is all set to become a global leader in solar energy. ISA aims to pave the way for future solar generation, storage and technologies for Member countries' needs by mobilizing over US\$ 1000 billion by 2030. Achievement of ISA's objectives will also strengthen the climate action in Member countries, helping them fulfil the commitments expressed in their NDCs.
- Financial mechanism: In 2019, ISA has taken up the role of an 'enabler' by institutionalizing 30 Fellowships from the Member countries with a premier institution (IIT Delhi) in the host country, and training 200 Master Trainers from

ISA Member countries; of a 'facilitator' by getting the lines of credit worth US\$ 2 Billion from EXIM Bank of India and US\$ 1.5 Billion from Agence Française de Development (AfD), France.

Challenges for solar power:

- Renewable energy cannot completely replace fossil based energy generation because of obvious reasons like sun's energy not being available 24 hours a day, solar generation being highly unpredictable and technological innovations yet to develop an efficient storage solution. Though tech advancements are underway for storage, which has the potential to revolutionise this sector globally, till then dependence on fossils can be reduced by gradually increasing the share of renewable.
- Storage infrastructure: China has already identified energy storage opportunity and is marching ahead of India to establish large manufacturing clusters to offer storage solutions. Solar power can replace fossil-based generation only if efficient and cost-effective mass scale storage solutions are developed in India.
- Challenges of rooftop solar target: Rooftop deployment has not picked up a significant pace. Relatively lower growth in rooftop segment is seen due to the lack of suitable policy initiatives.
- Pricing: The current solar tariffs in India, which are between Rs 2.50-2.87 per kilowatt hour (kWh), have stabilised at rates 20-30 per cent below the cost of existing thermal power in India and up to half the price of new coal-fired power, according to a latest study. As per current market conditions tariffs below Rs 2.50 per kWh are financially not viable in India's solar sector.
- Dependence on China: Global supply chains of solar equipment are affected due to COVID-19 crisis. India imports about 80 percent of its solar cells and modules from China along with other equipment like inverters, prefabricated structures and raw materials. Developers of solar projects in India are concerned about project delays due to initial slowdown of manufacturing in China followed by lockdown in India.
- Despite of must run status to renewable energy, states like Punjab and Uttar Pradesh have stated that they are unable to procure Renewable Energy. States like Madhya Pradesh and Andhra Pradesh have mentioned their inability to pay to the generators as they are unable to collect dues from the consumers.

India, in order to become a world leader in solar power, cannot just rely on large scale solar deployment by importing solar equipment. There is an immediate necessity to develop the entire value chain ecosystem to become competitive and achieve sustainable growth in the long run. Focus on last mile connectivity in remote areas where developing transmission infrastructure is a challenge through small solar installations or solar community grids by using a domestically manufactured product with small power inverters or batteries in every home may be helpful to ensure power for all in countries like India. This will also help reduce time and cost for developing transmission infrastructure. Flexible financing options for individuals to install rooftop solar installations would also support a faster adoption of clean energy.

Conclusion:

Despite of pandemic generated issues like cash flow crunch, recovery of payments from distribution companies, working capital requirement, workforce availability and mainly supply chain disruptions, positive approach of government will help solar sector to cop up with situation. Rather current pandemic could act as a trigger for the Indian government, the solar industry and associated stakeholders to chart the right roadmap for achieving India's solar energy potential.

