

LOGICAL REASONING**Passage 1**

Assam and Meghalaya have signed a pact that resolves their interstate boundary dispute for six out of the 12 areas of differences. Recall that Assam has such boundary disputes with most of its neighbouring states that were carved out of undivided Assam. And these disputes have often boiled over into serious clashes. This was exemplified by deadly skirmishes between Assam and Mizoram police forces in July last year that left six Assamese policemen dead.

Keeping these disputes festering has neither been in national nor regional interest. But solving them has been tricky given that diverse ethnic populations of the region steadfastly hold on to their traditional cultural boundaries as opposed to constitutionally defined boundaries. The former date back to colonial times, whereas the states of Nagaland, Meghalaya, Mizoram and Arunachal Pradesh were carved out of Assam only in the 1960s and 70s. In fact, people residing along the Assam-Meghalaya border have long held two voter IDs corresponding to the two states.

Last year Assam and Meghalaya formed three committees each to look into their border dispute and asked locals to choose one of either state. With that process completed, the Survey of India will now demarcate the boundary as per the agreement. While this could become a template for resolving other border disputes in the Northeast, it's true that the Assam-Meghalaya case was a little different – state governments made claims but locals lived side by side. But in the Assam-Mizoram and Assam-Nagaland disputes, there are allegations of encroachment into reserved forest areas of Assam, making resolution difficult. At the heart of the problem is the huge pressure on land combined with cultural sub-nationalism. Nonetheless, all states in the region must make concerted efforts to resolve interstate border disputes. This will not only help develop Northeast and actualise India's Act East policy, but also prevent an adversarial China from fishing in troubled waters.

- Which of the following must be true according to the above passage?
 - People residing along the Assam Meghalaya border are the richest in northeast region.
 - Cultural differences and land disputes are the main issues of disputes in the region.
 - Neither (a) nor (b)
 - Both (a) and (b)
- Which of the following assumption is true in context of the above passage?
 - Border dispute disrupts many developmental projects.
 - Solution of this interstate border dispute is key for development the north east region
 - Both (a) and (b)
 - None of the above.
- Read the following statement carefully and answer accordingly.

While this could become a template for resolving other border disputes in the Northeast, it's true that the Assam-Meghalaya case was a little different – state government made claims but locals lived side by side. But in the Assam-Mizoram and Assam-Nagaland disputes, there are allegations of encroachment into reserved forest areas of Assam, making resolution difficult.

Underlined phrase of the above statement is -

 - Premise
 - Counter premise
 - Additional premise
 - None of the above.
- Which of the following will weaken the main argument of the above passage?
 - Free movement of citizens across the north east region without any stringent security measures will become a serious security concern.
 - The administration defends its actions by criticizing the logic of its opponents.
 - The administration makes an unwarranted assumption about the motives of some of the students.
 - None of the above

5. The argument above is most parallel, in its logical structure, to which of the following?
- (a) It is inaccurate to say that being in cold air can cause a person to catch a cold, since colds are caused by viruses, and viruses flourish in warm, crowded places.
 - (b) It is accurate to say that no airline flies from Halifax to Washington. No single airline offers a direct flight, although some airlines have flights from Halifax to Boston and others have flights from Boston to Washington.
 - (c) It is correct to say that over-fertilization is the primary cause of lawn disease, since fertilizer causes lawn grass to grow rapidly and rapidly growing grass has little resistance to disease.
 - (d) None of the above

Passage 2

India's double abstention on both the Russia-moved and Russia-critiquing UN resolutions ensured some daylight between New Delhi and Beijing, which voted for the pro-Russia resolution, but it didn't answer the question whether costs of continued neutrality on Moscow's aggression will outweigh benefits – purely by national interest calculations. Foreign minister S Jaishankar defended India's stance in Parliament. However, while national interest definitely means keeping an eye on Russian supply of arms to India, that dependence, as this newspaper has already argued, works both ways. As the largest buyer of Russian arms, New Delhi too has leverage over Moscow. Therefore, if India did take a principled stance on Russia, it is unlikely the latter will retaliate by making arms supply difficult. After all, despite EU nations sanctioning Russia and actively aiding the Ukrainian resistance, they continue to buy Russian energy and Moscow is happy to supply it. *And Russia needs arms exports even more given the cost of sanctions on its economy. This is a bargaining power India can use diplomatically. But anti Russian view expressed by west should not bother India because western political leaders are opportunist.*

India's primary concern ought to be geopolitical implications of the conflict. Two points need consideration. Given that the Russian military operation hasn't gone according to plan, suppose Moscow ups the offensive ante in awful ways to crush Ukrainian resistance. Will it reflect well on India then to have taken such a cautious position? Will India still sit out another UN resolution? Second, however the Ukraine invasion ends, if Putin is increasingly shunned by most of the democratic world, with which India has much business to conduct, and China continues to be in his corner, what might be the implications for India down the line as geopolitical stances harden all around? New Delhi must keep an eye on Russia's actions in Ukraine as well as America's and China's future responses and be ready to change its mind – in national interest.

6. Read the following statement carefully and answer accordingly?
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- (a) Premise
 - (b) Counter premise
 - (c) Additional premise
 - (d) None of the above

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Underlined phrase of the above statement is -
- (a) Premise
 - (b) Counter premise
 - (c) Conclusion
 - (d) None of the above

8. Which of the following assumption is implicit in context of the above passage?
- (a) Russia is one of the most trustworthy defence partner of India.
 - (b) American defence deal is more valuable than that of Russian.
 - (c) Both (a) and (b)
 - (d) None of the above.
9. Read the phrase in italics carefully and identify the flaw in the argument's reasoning?
- (a) Makes a attack on the character of the opponent
 - (b) Draws a conclusion that is stronger than what is warranted by the evidence presented
 - (c) Offers as evidence considerations that have no relevance to the argument's conclusion
 - (d) None of the above
10. The flawed pattern of reasoning in the argument above is most similar to that in which one of the following?
- (a) The rules stipulate the participants in the contest be judged on both form and accuracy. The eventual winner was judged highest in neither category, so there must be a third criterion that judges were free to invoke.
 - (b) The store's competitors claim that the store in selling off the shirts at those prices, neither made any profit nor broke even. Consequently, the store's customers must have been able to buy shirts there at less than the store's cost.
 - (c) If the census is to be believed, the percentage of men who are married is higher than the percentage of women who are married. Thus, the census must show a higher number of men than of women overall.
 - (d) none of the above.

Passage 3

Vice President M Venkaiah Naidu on Saturday expressed disapproval of English as a medium of instruction while inaugurating the South Asia Institute of Peace and Reconciliation in Haridwar. He was articulating a widely held view among India's political class. The problem with this argument is that it frames the issue in a false binary. It's not a case of English versus other Indian languages. Both are indispensable. English thrives because of a utilitarian value. It opens the door to a rapidly expanding universe of knowledge, whose production is global in nature.

What does the data say? GoI's annual data on schoolchildren shows that English medium enrolment is growing fast. To illustrate, UDISE Report of 2019-20 put out granular data on 265 million schoolchildren. The highlight was that about 26% of children are in English medium schools, next only to the 42% in Hindi medium. The trend over time shows that the English medium is set to be dominant in the future. Over a five-year period, Haryana and Telangana witnessed the sharpest increase in the relative proportion of children enrolled in English medium schools. In all, at least seven states have already seen English medium enrolment exceed the medium of instruction in the local language.

Parents have a practical reason to choose English medium instruction. As the National Education Policy 2020 observed, Indian languages have suffered because of an inadequacy of learning material and dictionaries. The problem is compounded by a shortage of skilled instructors. Therefore, the growth in English medium instruction is being driven by aspiration, not a colonial mentality. It offers Indian children an opportunity to tap into a vast pool of knowledge and easily fit into global commerce. Many countries, including Japan and China, are actively promoting teaching of English in their curriculum to equip their students with a tool to thrive in a knowledge economy.

The popularity of English medium instruction doesn't hinder Indian languages. Here, governments have to accept the responsibility of shortcomings in pedagogical material. This gap can be plugged and governments should not just piggyback on tools introduced by Big Tech firms. A lot more research and development on pedagogical tools need to be done by GoI and states. Indians are uniquely placed to be multilingual, which has positive cognitive effects. Given this, education reforms need clear-headed thinking and not romanticism. English medium instruction is an advantage that needs to be built on.

11. Which of the following must be true according to the above passage?
 - (a) India language has suffered because of lack of awareness among masses.
 - (b) English as a medium of education is the need of the hour.
 - (c) It seems India language will take over English language in terms of popularity in near future.
 - (d) None of the above.

12. Which of inferences can be drawn from the above passage?
 - (a) English language will take over Indian language in terms of popularity in near future.
 - (b) Student educated in English medium will get priority over other students.
 - (c) Both (a) and (b)
 - (d) None of the above

13. Which of the following will weaken the main point of the passage?
 - (a) Indian culture is taking a step behind as educated persons in English are turning towards other cultures.
 - (b) Although English, as a language hugely empowers people, there have always been concerns of it becoming a threat to many of the local native languages as a lot of people across the globe have started to concentrate only on the advantages of English and have abandoned their native tongues.
 - (c) Both (a) and (b)
 - (d) None of the above.

14. Which of the following will strengthen the main point of the passage?
 - (a) A number of websites use English as their main language.
 - (b) Helps when you are watching global channels.
 - (c) Speaking English is very important for students who wish to study in countries where English is a native language.
 - (d) All of the above.

15. How the main argument proceeds in the above passage?
 - (a) By providing evidences and advices to improve to nurture a language thereby reaping its fruits on multiple front.
 - (b) questioning whether the methods recommended would work in practice
 - (c) presenting evidence that the proposed solution would have damaging unforeseen consequences
 - (d) none of the above.

Passage 4

In an editorial published in the journal Science Advances on Friday, researchers Thomas E Lovejoy and Carlos Nobre have said that while 2019 was not the worst year for fire or deforestation in the Amazon—the world’s largest tropical rainforest —“the precious Amazon is teetering on the edge of functional destruction and, with it, so are we.”

When the Amazon rainforest reaches its tipping point, which is to say when the level of deforestation has led to there not being enough water for recycling and as result, moisture to induce rainfall, the rainforests will be unable to sustain themselves. This will lead to a situation when the trees, and in turn, the forest will start to “dieback”. In other words, some trees and eventually the forests will reach the physiological limits of dryness probably induced by droughts and heat stress. Because of this dehydration, the affected trees will begin to die from the tip of their leaves or roots backward.

According to a report in The New York Times, the first time that an Amazon dieback scenario was suggested was in 2000 by Peter M Cox who published his findings of running large-scale computer simulations that showed how forests were affected by a changing climate scenario throughout the 21st century. As per Cox’s analysis, forests would continue to take up carbon until about 2050, post which, warmer temperatures and water-related stress could cause dieback of the Amazon rainforest. Essentially this means that instead of being a carbon sink, the rainforest would start emitting carbon.

16. Which of the following can be inferred from the passage above?
- (a) The changing climate scenarios are affecting Amazon's biodiversity
 - (b) The moisture produced from the rainforest benefits the South American countries
 - (c) The Amazon rainforest is in serious danger of destruction
 - (d) None of the above
17. Based on your reading of the passage, what do you think the author means by the term 'dieback'?
- (a) Forest fires destroy the biodiversity of the Amazon rainforest
 - (b) Because of dehydration, the affected trees die from the tip of their leaves or roots backwards.
 - (c) Global warming has resulted in increased carbon levels in our atmosphere
 - (d) Both (a) and (b)
18. According to the Author, in which situation will the rainforest 'instead of being a carbon sink, would start emitting carbon'?
- (a) Incessant deforestation
 - (b) Climate change
 - (c) Forest fires
 - (d) Dieback of the Amazon rainforest
19. According to the passage, what is the way forward from this destruction?
- (a) Immediate reforestation
 - (b) Reduction in the emissions of greenhouse gases
 - (c) Both (a) and (b)
 - (d) Not mentioned
20. Which alternative applies to the following Statement and Assumption?
- Statement: It is important to spread awareness about destruction in the Amazon rainforest.
- Assumptions:
- I. It is a repository of the world's largest biodiversity
 - II. Land clearing projects are important for the development
 - III. The moisture of the Amazon is crucial for the continental climate system
- (a) Only I is implicit
 - (b) Only I and III are implicit
 - (c) Only II is implicit
 - (d) Only II and III are implicit

Passage 5

A study by a premier social sciences research institute reinforces what policymakers and media have been talking about the past few years—that India is going through a deep agrarian crisis. The Centre for Study of Developing Societies (CSDS), based in Delhi, found that given an option majority of farmers in the country would prefer to take up some other work. Poor income, bleak future, and stress are the main reasons why they want to give up farming. Around 18 percent of respondents surveyed said it was because of family pressure that they are continuing with farming. The survey of 5,000 farm households across 18 states says that 76 percent of farmers would prefer to do some work other than farming. Sixty-one percent of these farmers would prefer to be employed in cities because of better education, health, and employment avenues there. A high percentage of farmers complained of repeated losses; 70 percent of respondents said their crops were destroyed because of unseasonal rains, drought, floods, and pest attacks.

The report says that the benefits of government schemes and policies are being mostly given to big farmers having landholding of 10 acres (4.05 hectares) and above. Only 10 percent of poor and small farmers with average land holding of 1-4 acres (0.4 to 1.6 hA. have benefited from government schemes and subsidies. The farmers blamed the state and Central governments for their present condition as 74 percent of those interviewed alleged they do not get any farming-related information from officials of the agriculture department.

21. Which of the following conveys the main point expressed in the passage?
- (a) The rise in agrarian crisis are forcing farmers to switch to other professions
 - (b) The small farmers are not aware of the government schemes and policies
 - (c) The various political parties are not representing the issues of farmers
 - (d) The report shows a rise in suicide rates of farmers
22. Which of the following statements cannot be inferred from the passage above?
- (a) The cause for the agrarian crisis is climate change
 - (b) Most farmers say that they continue farming because of family pressure
 - (c) Most farmers want to migrate to urban settlements
 - (d) The farmers blame State and Central governments for their present condition
23. According to the Author, the government schemes and policies are not benefiting the majority of farmers because:
- (a) Farmers are satisfied with the Minimum Support Price (MSP) offered by the government
 - (b) These schemes are only given to big farmers having landholding of 10 acres or above
 - (c) 74% of the farmers complain that they do not get any farming-related information from officials of the agriculture department
 - (d) Both (b) and (c)
24. Which of the following are the main reasons farmers want to give up their profession?
- (a) Repeated losses
 - (b) Unexpected weather conditions
 - (c) Negligence by government officials
 - (d) All of the above
25. Which of the following is an implicit assumption in the observation that farmers want to migrate to big cities?
- I. Big cities offer a better education, health, and employment opportunities
 - II. Farming has become a perilous profession
 - III. Farmers want to revamp their lifestyles
 - IV. None of the above
- (a) Only IV
 - (b) Both II and III
 - (c) Both I and II
 - (d) Only I

Passage 6

Thirteen Indian insurance companies have come together to use a blockchain-like technology to create a central repository of policyholder data, so that insurers need not repeat the registration procedure for multiple policies. "When the same records are available to a number of life insurance companies in a chain, the cost incurred by them is lower compared to what it is when they were all separately conducting tests and storing records," said Akshay Dhanak, vice-president, business systems & technology at HDFC Life Insurance. A whole lot of work has to be done in know-your-customer, medical underwriting, financial underwriting, etc, when a customer buys insurance, he said. Duplication of these procedures can be avoided by having the entire data set on blockchain. Blockchain is like a digital ledger used to store information of all cryptocurrency transactions. In this particular case, it takes the form of a distributed and decentralized method of storing information based on mutual agreement of members.

PwC's Global Fintech Report 2017 expects 77 per cent of financial technology institutions to adopt blockchain as a process by 2020, with payments, fund transfer and digital identity management being the top areas of usage. "Any new concept needs to progress sequentially," said Mohit Rochlani, chief operating officer, IndiaFirst Life Insurance. "Any collaboration is taken apprehensively across industries because it constitutes data sharing as well as process sharing. There are also regulatory concerns regarding data privacy that need to be addressed." Once the procedure evolves, he said, it would be advantageous in cost reduction and improving

efficiency. Global advisory firm EY will be facilitating the Indian insurer consortium through partnerships with multiple technology partners. "We are using multiple platforms like Hyper Ledger, MultiChain and Corda, among others. Each platform has its own benefits and limitations in terms of volume of transactions that they can handle and interoperability (that they offer)," said Sachin Seth, technology partner at EY. Interoperability with other insurance companies — apart from banks, medical centres, among others — would be the eventual goal, he said. The blockchain system will just hold the data, while the policyholders will remain free to pull their data out of the system at will. The change in financial overheads due to the new technology is yet to be seen. But the members are confident that greater transparency and reduced duplication would be beneficial for everyone involved. The 13-member consortium hopes others would also come on board. "Considering that it's a very small group of insurance companies here in India. It will be a challenge if more than one standard for blockchain exists. We hope other companies will also join us gradually. Blockchain will detect multiple fraudulent claims efficiently compared to those of companies that might not have access to this platform," said Pankaj Pandey, chief information officer, IDBI Federal Life Insurance. KPMG has noted that one of the most disruptive applications of blockchain would be the development of "smart contracts", which would streamline verification and authentication of details across all member parties simultaneously. This would reduce costs.

26. What is the main point of the passage?
- (a) Failure of insurance companies to provide proper facilities to the customers.
 - (b) Implementation of an impractical technology by insurance companies.
 - (c) Establishment of a system that shares data of policy holders and its consequences.
 - (d) Ensuring proper security of data of the policy holders.
27. What would the technology mean for the insurance companies?
- (a) Less tedious and more cost efficient work
 - (b) More skills required to handle database and acquire data about policy holders
 - (c) More efforts to collect data about the policy holders
 - (d) Inability to recognize fraudulent cases
28. Why would the process be seen apprehensively in the country?
- (a) It would need a lot of finance invested on the process.
 - (b) The processes involved would be more risky and complex, like data sharing.
 - (c) It would lead to the domination of some company over another.
 - (d) It would reduce the transparency of the whole process.
29. Which of the following can be inferred from the passage?
- (a) The process would lead to more benefits for the insurance companies but lesser for the policy holders.
 - (b) It would increase cases of duplication and lead to more complexities.
 - (c) The cost reduction factor cannot support the whole implementation process of this technology.
 - (d) It would be beneficial for the customers as well as they would not have to register or perform tests multiple times.
30. What is the inference that can be made about the cost involved in the process?
- (a) The process would involve a huge amount to be spent on its implementation as it is a new technology.
 - (b) The cost has not yet been calculated so nothing can be inferred as such.
 - (c) The process would be feasible if the cost is shared between companies.
 - (d) Maintaining such huge volumes of data would require more technology so the process to be implemented finally would take time.