

VARC Score Maximisation Handout 1

Passage – 1

We often hear about conflicts among different States in India over river waters. Of the 20 major river systems, 14 are already water-stressed; 75% of the population lives in water-stressed regions, a third of whom live in water-scarce areas. Climate change, the demands of rising population and the need for agriculture to keep pace, and increased rate of urbanization and industrialization will exacerbate water stress. According to the Constitution of India, water is a State subject and not that of the Union, except for regulation of inter-State rivers. Key to ensuring balance between competing demands of various stakeholders is a basin-based approach to allocate water amongst constituent regions and States. Allocating fair share of water to them requires assessments based on objective criteria, such as specificities of the river basin, size of dependent population, existing water use and demand, efficiency of use, projected future use, etc. while ensuring the environmental needs of the river and aquifers.

1) Which one of the following statements best reflects the most rational, practical and immediate action required to ensure fair and equitable allocation of water to different stakeholders?

- (a) A national, pragmatic, legal and policy framework for water allocation should be made.
- (b) All river systems of the country should be linked and huge aquifers created.
- (c) Water channels between regions of water surplus and regions of water deficit should be created.
- (d) To mitigate water crisis, water demand of sectors such as agriculture and industry should be reduced.

Passage – 2

More than half of Indian women and almost a quarter of Indian men of working age suffer from anaemia. According to studies, they are anywhere from 5-15% less productive than they could be, as a result thereof. India also has the largest tuberculosis burden in the world, costing 170 million workdays to the country annually. But what is just as important as lost productivity now is lost potential in the future. It is becoming increasingly clear that on many measures of cognitive ability, malnourished Indian children perform, two or three times worse than their adequately nourished peers. For an economy that will be more dependent on highly skilled workers, this poses a significant challenge. And it is one that really should be addressed given India's demographic outlook.

2) Which one the following statements best reflects what is implied by the passage?

- (a) Education system must be strengthened in rural areas.
- (b) Large scale and effective implementation of skill development programme is the need of the hour.
- (c) For economic development, health and nutrition of only skilled workers needs special attention.
- (d) For rapid economic growth as envisaged by us, attention should be paid to health and nutrition of the people.

Passage-3

In India, a majority of farmers are marginal and small, less educated and possess low adaptive capabilities to climate change, perhaps because of credit and other constraints. So, one cannot expect autonomous adaptation to climate change. Even if it was possible, it would not be sufficient to offset losses from climate change. To deal with this, adaptation to climate change is paramount, alongside a fast mitigation response. Another solution is to have a planned or policy-driven adaptation, which would require the government to come up with policy recommendations. Perception is a necessary prerequisite for adaptation. Whether farmers are adapting agricultural practices to climate change depends on whether they perceive it or not. However, this is not always enough for adaptation. It is important how a farmer perceives the risks associated with climate change.

3) Which one of the following statements best reflects the most logical and rational message conveyed by the author of the passage?

- (a) Adaptation to climate change and mitigation response are basically the responsibilities of the government.
- (b) Climate change causes a change in government policies regarding land use patterns in the country.
- (c) Risk perceptions of farmers are important for motivating them for taking adaptation decisions.
- (d) Since mitigation is not possible, governments should come up with policies for quick response to climate change.

Passage – 4

The emissions humans put into the atmosphere now will affect the climate in the middle of the century and onwards. Technological change, meanwhile, could make a future transition away from fossil fuels cheap or it might not, leaving the world with a terrible choice between sharply reducing emissions at huge cost or suffering through the effects of unabated warming. Businesses that do not hedge against the threat of uncertain outcomes fail. The world cannot afford such recklessness on climate change.

4) Which one of the following statements best reflects the crucial message conveyed by the author of the passage?

- (a) Businesses that cause emissions may need to close down or pay for pollution in future.
- (b) The only solution is technological development related to the issues of climate change.
- (c) Waiting to deal with carbon emissions until technology improves is not a wise strategy.
- (d) Since future technological change is uncertain, new industries should be based on renewable energy sources.

Passage – 5

Environmental problems cause health problems. Substantial changes in lifestyle can reduce environmental or health problems, but this idea appears almost impossible to adopt. With environmental problems, individual efforts can be perceived as having a negligible effect and therefore lead to inertia. With health, on the other hand, individual choices can make the difference between life and death, literally. And yet, barring a few, there seems to be the same collective lethargy towards making their choices.

5) Which one of the following statements best implies the most rational assumption that can be made from the passage?

- (a) We are likely to spend more money on cure than prevention.
- (b) It is the job of the government to solve our environmental and public health problems.
- (c) Health can be protected even if environmental problems go on unattended.
- (d) Loss of traditional lifestyle and the influence of western values led to some unhealthy way of living.

Passage – 6

Many people are not eating the right food. For some, it is simply a decision to stick with food they enjoy but which is not too healthy. This is leading to an increase in non-communicable diseases. This, in turn, leads to a major burden on our health-care systems that have the potential to derail the economic progress which is essential for the poor to improve their lives. For others, it is about limited access to nutritious food or a lack of affordability, leading to monotonous diets that do not provide the daily nutrients for them to develop fully. Part of the reason nutrition is under threat worldwide is that our food systems are not properly responding to nutritional needs. Somewhere along that long road from farm to fork, there are serious detours taking place.

6) Which one of the following statements best reflects the crux of the passage?

- (a) The scheme of Universal Basic Income should be implemented worldwide as a way of poverty alleviation.
- (b) We must place food-based nutrition at the centre of our policy debate.
- (c) Nutritional status of food should be improved by creating appropriate genetically modified crops.
- (d) Using modern food processing technologies, we must fortify food items with required nutrient elements.

Passage-7

To tackle the problem of pollution in cities, policymakers think that drastic actions like temporary use of odd-even number scheme for vehicles, closing schools, factories, construction activities, and banning the use of certain types of vehicles are a way forward. Even then the air is not clean. Vehicles more than 15 years old comprise one percent of the total, and taking them off the road will not make any difference. Banning certain fuels and car types arbitrarily is not proper. Diesel engines produce more PM 2.5 and less CO₂ than petrol or CNG engines. On the other hand, both diesel and CNG engines produce more NO_x than petrol engines. No one has measured the amount of NO_x that CNG engines are emitting. Arbitrary bans on vehicles that have passed mandated fitness tests and periodic pollution tests are unfair. What is needed is the scientific and reliable information about the source of pollutants on a continuing basis and the technologies that will work to reduce pollution from them.

7) Which one of the following statements best reflects the most logical and rational implication conveyed by the passage?

- (a) Arbitrary curbs on vehicles to reduce pollution are difficult to implement.
- (b) Knee-jerk reactions cannot but an evidence-based approach will be more effective.
- (c) A heavy penalty should be enforced on those driving without periodic pollution tests.
- (d) In the absence of laws to deal with the problem of pollution, the administration tends to make arbitrary decisions.

Passage-8

Good corporate governance structures encourage companies to provide accountability and control. A fundamental reason why corporate governance has moved onto the economic and political agenda worldwide has been the rapid growth in international capital markets. Effective corporate governance enhances access to external financing by firms, leading to greater investment, higher growth, and employment. Investors look to place their funds where the standards of disclosure, of timely and accurate financial reporting, and of equal treatment to all stakeholders are met.

8) Which of the following statements best reflects the logical inference from the passage given above?

- (a) It is an important agenda of the countries around the world to ensure access to good external financing.
- (b) Good corporate governance improves the credibility of the firms.
- (c) International capital markets ensure that the firms maintain good corporate governance.
- (d) Good corporate governance paves the way for robust supply chains.

Passage – 9

Elephants are landscape architects, creating clearings in the forest, preventing overgrowth of certain plant species and allowing space for the regeneration of others, which in turn provide sustenance to other herbivorous animals. Elephants eat plants, fruits, and seeds, propagating the seeds when they defecate in other places as they travel. Elephant dung provides nourishment to plants and animals and acts as a breeding ground for insects. In times of drought, they access water by digging holes which benefits other wildlife.

9) Which one of the following statements best reflects the most logical and rational inference that can be drawn from the passage?

- (a) The home range of elephants needs to be a vast area of rich biodiversity.
- (b) Elephants are the keystone species and they benefit the biodiversity.
- (c) Rich biodiversity cannot be maintained in the forests without the presence of elephants.
- (d) Elephants are capable of regenerating forests with species as per their requirement.

Passage – 10

In India, the segregation of municipal waste at source is rare. Recycling is mostly with the informal sector. More than three-fourths of the municipal budget goes into collection and transportation, which leaves very little for processing/resource recovery and disposal. Where does waste-to-energy fit into all this? Ideally, it fits in the chain after segregation (between wet waste and rest), collection, recycling, and before getting to the landfill. Which technology is most appropriate in converting waste to energy depends on what is in the waste (that is biodegradable versus non-biodegradable component) and its calorific value. The biodegradable component of India's municipal solid waste is a little over 50 per cent, and biomethanation offers a major solution for processing this.

10) Based on the above passage, the following assumptions have been made:

- i. Collection, processing and segregation of municipal waste should be with government agencies.
- ii. Resource recovery and recycling require technological inputs that can be best handled by private sector enterprises.

Which of the assumptions given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

11) Which one of the following statements best reflects the crux of the passage?

- (a) Generation of energy from municipal solid waste is inexpensive.
- (b) Biomethanation is the most ideal way of generating energy from municipal solid waste.
- (c) Segregation of municipal solid waste is the first step in ensuring the success of waste-to energy plants.
- (d) The biodegradable component of India's municipal solid waste is not adequate to provide energy from waste efficiently/effectively.

Passage – 11

There is a claim that organic farming is inherently safer and healthier. The reality is that because the organic farming industry is still young and not well-regulated in India, farmers and consumers, alike, are not only confused about what products are best for them, but sometimes use products in ways that could harm them as well. For example, since organic fertilizers are difficult to obtain on a large scale in India, farmers often use farmyard manure, which may contain toxic chemicals and heavy metals. Certain plant sprays, such as Datura flower and leaf spray, have an element called atropine. If it is not applied in the right dose, it can act on the nervous system of the consumer. Unfortunately, how much and when to use it are not well-researched or regulated issues.

12) Based on the above passage, the following assumptions have been made:

- i. Organic farming is inherently unsafe for both farmers and consumers.
- ii. Farmers and consumers need to be educated about eco-friendly food.

Which of the assumptions given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

13) Which one of the following statements best reflects the most logical, rational and practical message conveyed by the author of the passage?

- (a) In India, organic farming should not be promoted as a substitute for conventional farming.
- (b) There are no safe organic alternatives to chemical fertilizers.
- (c) In India, farmers need to be guided and helped to make their organic farming sustainable.
- (d) The aim of organic farming should not be to generate huge profits as there is still no global market for its products.

Passage – 12

Food consumption patterns have changed substantially in India over the past few decades. This has resulted in the disappearance of many nutritious foods such as millets. While food grain production has increased over five times since independence, it has not sufficiently addressed the issue of malnutrition. For long, the agriculture sector focused on increasing food production, particularly staples, which led to lower production and consumption of indigenous traditional crops/grains, fruits, and other vegetables, impacting food and nutrition security in the process. Further, intensive, monoculture agriculture practices can perpetuate the food and nutrition security problem by degrading the quality of land, water, and food derived through them.

14) Based on the above passage, the following assumptions have been made:

1. To implement the Sustainable Development Goals and to achieve zero-hunger goal, monoculture agriculture practices are inevitable even if they do not address malnutrition.
2. Dependence on a few crops has negative consequences for human health and the ecosystem.
3. Government policies regarding food planning need to incorporate nutritional security.
4. For the present monoculture agriculture practices, farmers receive subsidies in various ways and government offers remunerative prices for grains and therefore they do not tend to consider crop diversity.

15) Which of the above assumptions are valid?

- (a) 1, 2 and 4 only
- (b) 2 and 3 only
- (c) 3 and 4 only
- (d) 1, 2, 3 and 4

