Check Point 01

Q. 1. Which position was occupied by India in terms of HDI in Human Development Report, 2014?

Answer: The Human Development Report published by UNDP compares countries based on the educational levels of the people, their health status and per capita income. India occupied the 130th position on the list out of the 188 countries in the Human Development Report, 2014.

Q. 2. Which index is used to compare the nutritional level?

Answer: The index that is used to compare nutritional level is called Body Mass Index (BMI), and it is derived from the weight (mass) and height of an individual. The BMI is defined as the body mass divided by the square of the body height and is universally expressed in units of kg/m2, resulting from the mass in kilograms and height in meters. It categorizes individuals as underweight, normal weight, overweight or obese based on the derived value.

Q. 3. What aims for maintaining the natural resources for the present as well as the future for consistent economic development?

Answer: Sustainable development aims for maintaining the natural resources for the present as well as the future generations for consistent economic development. Economy and society of any country depend on the available natural resources, and currently, a massive amount of depletion is occurring of said natural resources. Hence it is imperative that this depletion is arrested so that development can continue without any hindrance. Sustainable development fulfils this requirement through proper utilization of resources with special emphasis on maintaining a balance between the various players involved in the development.

Q. 4. Which neighbouring country of India is ahead of it in HDI ranking?

Answer: The Human Development Report published by UNDP compares countries based on the educational levels of the people, their health status and per capita income. India occupied the 131st position on the list out of the 188 countries in the Human Development Report, 2016. Its neighbouring country, Sri Lanka had the 73rd rank on the same list.

Q. 5. Which states or regions are fast depleting their groundwater reserves?

Answer: The water that is found under the ground in the cracks and spaces in the soil, sand or rocks is called groundwater. It is utilized as drinking water, for crop irrigation, and in industries. Around 300 districts in India have reported a lowering in the level of

the groundwater by over 4 meters in the past 20 years. This decline is particularly observed in the agriculturally prosperous regions of Punjab and western Uttar Pradesh, hard rock plateau areas of central and south India, certain coastal areas as well as the rapidly growing urban centres.

Self Assessment

Q.1 .What do you understand by the term life expectancy?

Answer: Life expectancy in its simplest form means the average period that a person may expect to live. It is a statistical measure of the average time span an individual is expected to live based on the year of its birth, its current age and other demographic factors including gender. Life expectancy is one of the factors in measuring the Human Development Index of each nation.

Q. 2. Name the state in India having the lowest Infant Mortality Rate.

Answer: Infant Mortality Rate (or IMR) indicates the number of children that die before the age of one year as a proportion of 1000 live children born in that particular year. The state of Kerala has the lowest Infant Mortality Rate in India where 12 children died before the age of one year as a proportion of 1000 live children born in 2015 – 2016.

Q. 3. If the body mass Index is more than 25, then what the person would we considered?

Answer: The Body Mass Index is defined as the body mass divided by the square of the body height and is universally expressed in units of kg/m2, resulting from the mass in kilograms and height in meters. It categorizes individuals as underweight, normal weight, overweight or obese based on the derived value. An individual with a BMI of more than 25 will be considered to be overweight.

Q. 4. Write were limitations of the average value.

Answer: In development, the average value is often used to compare different countries with respect to their income. Since different countries have different populations, total income does not work as a good comparative measure. Average value of income is derived by dividing the total income of the country by the total population and is also called per capita income. Although average income is used for comparison purposes, it is not an absolute measure as it can hide disparities as it does not state whether the income distribution is equitable or not. In the following table, we see the income distribution of two different countries.

	Monthly Income in Rupees					Average
	Citizen A	Citizen B	Citizen C	Citizen D	Citizen E	Income
Country A	10, 000	1000	4000	3000	2000	4000
Country B	2000	4000	5000	5000	3000	3800

From the above table, it is evident that Country A enjoys a higher average income than country B. But Country B has a more equitable distribution of income than country A. Thus, the average value is limited as it does not provide a clear picture.

Q. 5. Suggest one measure to ensure sustainable development in the energy sector.

Answer: Sustainable development aims for maintaining the natural resources for the present as well as the future generations for consistent economic development. In the energy sector, sustainable development can arrest the rapid depletion of conventional resources. Finite nature of conventional resource forms like fossil fuels makes it imperative that resources are conserved to expand the time span of usage.

Q. 6. What is human development Index?

Answer: The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. It is the statistical composite index of life expectancy, education and per capita income indicators and is used to rank countries into four different tiers of human development. Indian economist Amartya Sen along with Pakistani economist Mahbub ul Haq developed this index, and it is used by the United Nations Development Programme (UNDP) to measure a country's development. According to this index, India occupied the 130th position on the list out of the 188 countries in the Human Development Report, 2014.

Q. 7. What will happen if we over-exploit underground water in arid regions of India?

Answer: The water that is found under the ground in the cracks and spaces in the soil, sand or rocks is called groundwater. It is utilized as drinking water, for crop irrigation, and in industries. Arid regions of India are characterized by limited sources of surface water as well as low precipitation rates. Hence, they have a major dependence on groundwater for domestic and agricultural requirements. If overexploitation of this source occurs, it will have serious consequences on the economy and social life of the region.

A lowering in the groundwater level would lead to increased costs in pumping for the same which cannot be afforded by everyone. Lowering of groundwater levels will also lead to increased salinization which would ultimately affect the water quality and render

it unusable in the future. This can lead to a lowering in agricultural production in the area, leading to food shortage and drought.

Q. 8. In which category, India was placed in the World Development Report, 2012?

Answer: The World Development Report (WDR) is an annual report published since 1978 by the International Bank for Reconstruction and Development (IBRD) or World Bank. It provides an in-depth analysis of various aspects of economic development. One aspect that it uses is per capita income which is the total income of the country divided by its total population. According to the World Development Report of 2012, India was placed in the low middle-income countries group as its per capita income was less than 1005 dollars.

Q. 9. Among Maharashtra, Kerala and Bihar which state has least per capita income?

Answer: Per capita income is the total income of the country divided by its total population. At the state level, it is the total income of the state divided by its total population. The following table gives the per capita income for three states of India for the 2015-2016 time period.

State	Per Capita Income for 2015 -2016 (in Rupees)
Maharashtra	1,80,596
Kerala	1,55,516
Bihar	34,168

From the above table, it is evident that Bihar has the least per capita income between the three states.

Q. 10. Why do we use averages?

Answer: In development, the average value is often used to compare different countries with respect to their income. Since different countries have different populations, total income does not work as a good comparative measure. Average value of income is derived by dividing the total income of the country by the total population and is also called per capita income. Although average income is used for comparison purposes, it is not an absolute measure as it can hide disparities as it does not state whether the income distribution is equitable or not.

Q. 11. Why are public facilities needed for the development of the country?

Answer: Public facilities are defined as those basic services which cannot be supplied directly to the individual dwelling unit and as a result are utilized away from the individual residential dwelling unit within the public environment. These facilities are provided by the government to ensure all-round development of the individual and in

extension the society as a whole. Examples of public facilities include schools, health centres/hospitals, police stations, ration shops etc. From the examples, it is evident that public facilities aim not only to educate an individual but aids the individual to gain help in terms of legal, health and nutritional needs. With individual development, society develops, and this contributes to the development of the country.

Q. 12. What is the significance of sustainable development for a human being?

Answer: Sustainable development aims for maintaining the natural resources for the present as well as the future generations for consistent economic development. For a long time, humankind has been dependent on conventional resources to propel their development. But the finite nature of such resources has created a demand and supply gap in this world which has resulted in a variety of problems that include discrepancies in development, war mongering, ill-effects on environment etc. Sustainable development aims for the controlled use of resources for greater benefits and primarily includes reduction of wastage, controlled use and increased benefits from the different resources. Thus, for human beings' sustainable development is significant as it aims to balance their economic, environmental and social needs.

Q. 13. Explain three attributes for comparing notions of development between different countries.

Answer: The United Nations Development Programme (UNDP) uses three attributes to measure the Human Development Index (HDI) of a country.

(1) A long and healthy life which is measured through the expected life expectancy at birth. This provides an idea of the health of a country's citizens. Better nutrition and a disease-free childhood lead to healthy adults who are workers with higher productivity and an asset to the nation's workforce.

(2) Education Index which is measured by the mean years of schooling of people aged 25 years and above. This allows one to understand the knowledge level possessed by the workforce in a country and an indicator of the country's education-based development requirements.

(3) A decent standard of living which is measured by the Gross National Income or per capita income. This allows one to understand the purchasing power possessed by the citizens in a country. It also allows authorities to categorize countries on a development scale. Higher the per capita income, higher is the country's development.

The above three attributes present an all-round development picture for respective countries. It does not present a clear picture, and further study is needed to locate the problem areas and provide solutions that are country specific.

Q. 14. Identify different thrust areas of Human Development.

Answer": According to the UNDP, human development – or the human development approach - is about expanding the richness of human life, rather than simply the

richness of the economy in which human beings live. It is an approach that is focused on people and their opportunities and choices. Human development focuses on two important aspects –

(a) It tries to directly enhance human abilities. Human development achieves the direct enhancement of human abilities by focussing on a long and healthy life, being knowledgeable and by having a decent standard of living.

(b) It creates conditions for further human development. It achieves this by helping governments create policies and legislation to encourage participation in political and community life; through environmental sustainability; by enabling human rights and security and through ensuring gender equality.

Thus, from the above-mentioned aspects, it is clear that the thrust areas for human development include not only income aspects but the development of the whole individual. The process of human development allows individuals to develop their full potential.

Q. 15. Discuss the value associated with public facilities.

Answer: Public facilities are defined as those basic services which cannot be supplied directly to the individual dwelling unit and as a result are utilized away from the individual residential dwelling unit within the public environment. These facilities are provided by the government to ensure all-round development of the individual and in extension the society as a whole. Examples of public facilities include schools, health centres/hospitals, police stations, ration shops etc. These facilities are of immense value to the society as they are provided collectively and can be utilized for the betterment of not only individuals but also the community and in extension the country as a whole. For example, suppose a village does not have a school. When the Panchayat which is the local governing body provides a school for the area, it means that there is a chance that the literacy rate of the area will increase. This will lead to an overall increase in literacy rate. Thus, public facilities when provided and utilized in the correct manner contributes to the country's development.

Q. 16. Explain two reasons for the need for environment-friendly economic growth and one suggestion achieve it.

Answer: For a long time, humankind has been dependent on conventional resources to propel their development. But the finite nature of such resources has created a demand and supply gap in this world which has resulted in a variety of problems that include discrepancies in development, war mongering, ill-effects on environment etc. Two important reasons behind the need for environmentally friendly economic growth are as follows –

(1) Environment-friendly economic growth reduces environmental pollution and hence is important as environmental quality affects all species on earth.

(2) Environment-friendly economic growth will arrest the rapid depletion of conventional resources. Finite nature of conventional resource forms like fossil fuels makes it imperative that resources are conserved to expand the time span of usage.

Various methods can be applied to practice an environmentally friendly economic growth. One such method is the process of substitution. Development of substitutes is a major principle of resource conservation. Non -renewable energy resources like fossil fuels may be substituted with renewable energy resources.

Q. 17. Describe the important aspects of our lives other than income.

Answer: Our lives have two separate distinctive aspects. One is the material aspect; the other is the less tangible non - material aspect. The material aspect is taken care of through income. A steady flow of money allows us to buy the material things and derive satisfaction from the same. For e.g., income shall allow us to buy or rent a house which can provide us with shelter against the elements. The non-material aspect is not so easily gained. For e.g., one can desire to be healthy and put in money to achieve the goal. But without proper exercise and clean living, it cannot be achieved.

The non – material aspect cannot often be measured in absolute terms. Money can buy us a good education, but without effort and diligence on our part, the good education cannot give us the benefits. There are several non – material aspects in our lives. They include health, education, job security, participation in the political decision-making process, reduced discrimination, etc. For e.g., an out of town job can provide a better salary. But it may not provide the security along with the benefits one can gain while working in one's hometown.

For women, they further include things like empowerment, reduced gender disparity, increased dignity, safe and secure social environment. For e.g., women should be respected not only when they work outside the house, but also for the housework they do.

Thus, at an individual level, income is an important aspect in our lives. But individuals also make decisions based on other non-income aspects as it affects their lives as a whole.

Q. 18. Compare the level of development in India taking at least three states on the basis of various aspects other than income.

Answer: According to the UNDP, human development – or the human development approach - is about expanding the richness of human life, rather than simply the richness of the economy in which human beings live. The United Nations Development Programme (UNDP) uses three attributes to measure the Human Development Index (HDI) of a country.

(1) Levels of wealth within the country as measured by GDP per capita and adjusted in purchasing power parity (PPP)

(2) Health - measured by average life expectancy

(3) Education – measured by the percentage of the population in education at a particular age (primary, secondary and tertiary) and literacy levels (educational attainment).

The above three attributes present an all-round development picture for respective countries. In India, the HDI for states can also be calculated in a similar fashion. Since different states have different populations, total income does not work as a good comparative measure. Average value of income is derived by dividing the total income of the state by the total population and is also called per capita income. Although average income is used for comparison purposes, it is not an absolute measure as it can hide disparities as it does not state whether the income distribution is equitable or not. For the purpose of comparison, we are taking the Infant Mortality Rate, Literacy Rate and Net Attendance Ratio for the states of Haryana, Kerala, and Bihar. The following table gives the relevant details –

State	Infant Mortality Rate per 1000 live births (2015 -16)	Literacy Rate % (2011)	Net Attendance Ratio (per 100 persons) secondary stage (age 14 and 15 years) 2013-14	
Haryana	36	82	61	
Kerala	12	94	83	
Bihar	42	62	43	

On the basis of the above table, we can come to the following conclusions -

• Kerala is the most developed between all three states, as not only does it have a low infant mortality rate, it has high levels of literacy along with a higher ratio of its population invested in secondary education.

• Haryana comes next and measures should be taken to develop the state further.

• Bihar is the least developed of all states. It has a high infant mortality rate showing that the population does not have access to proper healthcare. Lower levels of literacy along with low attendance for secondary education is halting its development process.

If we had only considered the state per capita incomes to judge the level of development in the states, Haryana would have been the most developed state and Bihar the least developed. But when we compare the other parameters of development, it is evident that although Haryana has the money, development processes are not being implemented in a manner which would aid its overall betterment. Kerala, with a lower per capita income, is managing its development better and thus outranking Haryana. Bihar, on the other hand, seems to be stuck in a vicious cycle where lower per capita income is lowering the development, while lower education and health levels are lowering the ability of its population to earn more. Thus, Bihar needs better policies to develop itself.

Q. 19. What is the necessity of comparing different countries or states? Give one example of a recent model of comparison.

Answer: Countries or states are often classified as developed or underdeveloped depending upon several factors. These factors range from per capita income to the death rate that is currently prevalent in the region. The comparison is often taken in the negative connotation, but in reality, it provides a clear picture of where a country or state's development stands. Without comparison, It would be impossible to say whether the country or state's development is progressing or not. Comparison helps us to understand the mechanics behind this difference in development and apply well thought out solutions to rectify the issues and problems that are hampering the development process.

The simplest form in which countries or states are compared is based on the per capita income. The World Development Report (WDR) is an annual report published since 1978 by the International Bank for Reconstruction and Development (IBRD) or World Bank. It provides an in-depth analysis of various aspects of economic development.

One aspect that it uses is per capita income which is the total income of the country divided by its total population. Countries with per capita income of US\$ 12236 per annum and above in 2016, are called rich countries and those with per capita income of US\$ 1005 or less are called low-income countries. India comes in the category of low middle-income countries because its per capita income in 2016 was just US\$ 1840 per annum. The rich countries, excluding countries of the Middle East and certain other small countries, are generally called developed countries.

Q. 20. What is the implication of having high HDI for the country?

Answer: According to the UNDP, human development – or the human development approach - is about expanding the richness of human life, rather than simply the richness of the economy in which human beings live. It is an approach that is focused on people and their opportunities and choices. Human development focuses on two important aspects –

(a) It tries to directly enhance human abilities. Human development achieves the direct enhancement of human abilities by focussing on a long and healthy life, being knowledgeable and by having a decent standard of living.

(b) It creates conditions for further human development. It achieves this by helping governments create policies and legislation to encourage participation in political and community life; through environmental sustainability; by enabling human rights and security and through ensuring gender equality.

The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. When a country has a high HDI, it essentially means that the lifespan is higher, the education levels are higher along with higher per capita income. This makes the country a developed country. Countries like USA, France Japan have high HDIs' making them developed countries.

Q. 21. Suggest some idea to make development more sustainable in nature.

Answer: Sustainable development aims for maintaining the natural resources for the present as well as the future generations for consistent economic development. Methods through which development can be made sustainable include the following –

(a) Substitution – Development of substitutes is a major principle of sustainable development. Non -renewable energy resources like fossil fuels may be substituted with renewable energy resources.

(b) **Recycling** – Certain resources can be recycled up to a certain limit and hence the declining trend in its quantity can be arrested for a time span. Iron is such a resource. If iron scraps are recycled in the iron and steel industry it can lower the dependence on raw iron.

(c) Reduction of wastage – if wastages are reduced, a greater quantity of resources are available for consumption and it will lead to resource conservation.

(d) **Development of awareness –** No conservation programme with regards to sustainable development can be successful if the people are not involved. Awareness regarding the importance of resources is imperative for its conservation.

(e) Increased efficiency – Increased resource demand is met by the increased functional resource value from the same quantity of resource input. For e.g., modern fuel-efficient cars can cover longer distances for the same amount of petrol.

Q. 22. What is the main criterion used by the World Bank in classifying different countries? Describe its limitations.

Answer: The World Development Report (WDR) is an annual report published since 1978 by the International Bank for Reconstruction and Development (IBRD) or World Bank. It provides an in-depth analysis of various aspects of economic development. The main criterion used by the World Bank in classifying different countries is per capita income which is the total income of the country divided by its total population. Countries with per capita income of US\$ 12236 per annum and above in 2016, are called rich countries and those with per capita income of US\$ 1005 or less are called low-income countries. India comes in the category of low middle-income countries because its per capita income in 2016 was just US\$ 1840 per annum. The rich countries, excluding countries of the Middle East and certain other small countries, are generally called developed countries. These include countries like the USA, France, and Japan.

Per capita income as an indicator of development has the following limitations:

1. Per capita income does not reflect the standard of living of the people. Since it is an average, it does not provide a fair picture regarding the income distribution between people. It can hide the fact that in spite of a high per capita income, the majority of said income is limited to a few numbers of people, making per capita income an unsatisfactory indicator of development.

2. An increase in per capita income may not raise the real standard of living of people. It is possible that while per capita real income is increasing per capita consumption of goods and services might be falling. This happens when the Govt. might itself be using up the increased income for massive military build-up necessitating the heavy production of arms and ammunition.

3. Per capita income does not reflect social development in a country. Increase in income is not synonymous with an increase in economic welfare. Thus, per capita, income fails to be an adequate measure of development.

The Human Development Index which takes education and life expectancy along with per capita income to measure development is a better indicator as it encompasses the multidimensional facets of development.

Q. 23. Distinguish between total income and average income. Which one is a better incident of economic development and why?

Answer: The total income of a country or Gross National Income (GNI) is the total domestic and foreign income claimed by residents of a country. The average income of a country or per capita income is the total income of the country divided by its total population. Thus, while total income is an absolute measure for the size of the economy in a country, average income is the average which provides the development level of the said economy.

In development, the average value is often used to compare different countries with respect to their income. Since different countries have different populations, total income does not work as a good comparative measure. Average value of income is derived by dividing the total income of the country by the total population and is also called per capita income. Although average income is used for comparison purposes, it is not an absolute measure as it can hide disparities as it does not state whether the income distribution is equitable or not. In spite of its limitations, average income remains a better indicator of economic development in a country over total income.

Q. 24. "For development people look at a mix of goal". Support the statements with suitable example.

Answer: According to the UNDP, human development – or the human development approach - is about expanding the richness of human life, rather than simply the richness of the economy in which human beings live. It is an approach that is focused on people and their opportunities and choices. Human development focuses on two important aspects –

(a) It tries to directly enhance human abilities. Human development achieves the direct enhancement of human abilities by focussing on a long and healthy life, being knowledgeable and by having a decent standard of living.

(b) It creates conditions for further human development. It achieves this by helping governments create policies and legislation to encourage participation in political and community life; through environmental sustainability; by enabling human rights and security and through ensuring gender equality.

Our lives have two separate distinctive aspects. One is the material aspect; the other is the less tangible non - material aspect. The material aspect is taken care of through income. For e.g., income shall allow us to buy or rent a house which can provide us with shelter against the elements. The non-material aspect is not so easily gained. For e.g., one can desire to be healthy and put in money to achieve the goal. But without proper exercise and clean living, it cannot be achieved.

Thus, at an individual level, income is an important aspect in our lives. But individuals also make decisions based on other non-income aspects as it affects their lives as a whole. The process of human development allows individuals to develop their full potential. Hence, development goals will differ from individual to individual.

Someone in the lower economically developed group may only be interested in policies which would allow them to earn more. Someone in the higher economically developed group may be interested in policies that provide a better environment. None of these goals is wrong; they differ because at an individual level the requirements are different.