CBSE EXAMINATION PAPER-2022

ECONOMICS

(Solved)

Time allowed : 3 hours | Maximum Marks : 48

General Instructions :

Read the following instructions carefully and follow them :

i. This question paper contains **17 questions.** All questions are **compulsory.**

ii. This question paper is divided into **4 sections.**

iii. **Section A** – questions number **1 to 1** are case based questions

iv. **Section B** – questions number **2 to 9** are short answer type i

v. **Section C** – questions number **10 to 13** are short answer type ii

vi. **Section D** – questions number **14 to 17** are long answer

vii. There is no overall choice given in the question paper. However, an internal choice has been provided in few questions.

viii. Use of calculator is NOT allowed.

Section A

Question 1.

Read the following test carefully and answer, Q. No.-12 and 13, given below:

Chinese Economy Risks Deeper Slowdown than Markets Realise (Bloomberg, 24th October, 2021)

China's Economy risks slowdown faster than global investors realise. It is pushing to cut its dependence on real-estate. It has started regulating sectors from education to technology, as it is facing power shortage and the pandemic.

Many economists have warned that the GDP growth rate will fall to 8.2% this year and to below 5% in the next year.

China is now planning to stabilise debt growth, curb inequality and channelise resources into hi-tech manufacturing. Data released in last week already showed a sharp slowdown in third quarter GDP growth to 4.9% from 7.9% in the previous quarter. There is more pain likely to come as electricity shortage persist, while new COVID-19 infections are expected to rise in coming days.

Even before the pandemic hit, China was surprising economists with slower-than-expected growth rate caused by the easing off debt risks. China's Premier Li Keqiang, announced in March a growth target of "above 6%" in the coming financial year.

China has signalled, in recent weeks that it could loosen some policies like telling banks to pick up the pace of mortgage lending as a short term stimulus. Governor of People's Bank of China Yi Gang, recently said he sees an expansion of about 8% for this year.

China's slowdown comes as the global recovery from COVID-19 risks looses momentum. Among those at risks from falling investments in China are commodity exporters like Australia, South Africa, Chile, Peru and Brazil. Slower trades could also hit countries like Malaysia, Singapore and Thailand.

The other risk is that China's policy-makers may struggle to flick the switch back to growth model if they feel that's needed. Economists noted that the electricity shortages that are crimping industrial production will make it harder to cushion growth by boosting investment in infrastructure. That kind of policy could only work next year once the power crunch eases.

(1)

Discuss briefly any two measures, which you may suggest as an economic advisor to the government of China.

[3 Marks]

Answer: As an economic advisor to the government of China, I would recommend two key measures to address the economic slowdown. First, it is crucial to increase investment in renewable energy sources to mitigate the ongoing electricity shortages. This would not only stabilize power supply for industries but also align with global sustainability goals. Second, I would suggest implementing targeted fiscal stimulus for key sectors affected by the slowdown, such as technology and manufacturing. This targeted approach would help stimulate growth while avoiding excessive debt accumulation.

Key Points: Increase investment in renewable energy; Stabilize power supply for industries; Implement targeted fiscal stimulus for key sectors; Avoid excessive debt accumulation.

(2)

State and discuss any two reasons that exhibit slowdown in the Chinese economy.

[3 Marks]

Answer: China's economy is experiencing a significant slowdown due to several factors. Firstly, the ongoing electricity shortages have severely impacted industrial production, thereby reducing overall economic output. Factories are struggling to operate at full capacity, leading to decreased growth rates, as evidenced by the third quarter GDP growth rate falling to 4.9%. Secondly, the governmental push to reduce dependence on the real estate sector and to regulate industries such as technology and education is leading to a transition in the economy that may not be sustainable in the short term. This structural adjustment could hinder immediate economic growth as sectors adjust to new regulations. Together, these elements contribute to a worrying trend of economic deceleration for China.

Key Points: Electricity shortages affecting industrial production; Government regulations impacting sectors like real estate and technology

Section B

Question 2.

Using a suitable example, distinguish between positive externalities and negative externalities.

[2 Marks]

Answer: Externalities are the side effects or consequences of an economic activity that affect other parties without being reflected in market prices. There are two types of externalities:

(a) Positive Externalities: These are benefits enjoyed by third parties due to an economic activity. For example, if a person plants trees in a locality, it improves air quality and provides aesthetic value to others. This is a positive externality because others get benefits without paying for it.

(b) Negative Externalities: These are costs imposed on third parties due to an economic activity. For instance, a factory releasing pollution into the air harms the health of nearby residents. This is a negative externality as others suffer harm without being compensated.

In summary, positive externalities bring unpriced benefits to others, while negative externalities impose unpriced costs to others.

Key Points: Externalities definition - Positive externalities provide benefits to others - Negative externalities impose costs to others - Example of positive externality: planting trees - Example of negative externality: pollution from factories

Question 3.

Using a suitable example, distinguish between stock variables and flow variables.

[2 Marks]

Answer: Stock Variables: Stock variables are measured at a specific point in time. They represent a quantity that exists at that moment. For example, the amount of water stored in a tank at a given instant is a stock variable.
Flow Variables: Flow variables are measured over a period of time. They represent quantities that occur or are measured within a time interval. For example, the amount of water flowing into the tank per minute from a tap is a flow variable.
In the example of a tank being filled with water, the water present in the tank at a particular time is the stock, whereas the rate at which water is coming in per minute is the flow. Thus, stock variables tell us the quantity at a point in time, and flow variables tell us how much quantity changes over time.

> **Key Points: Stock variables measured at a point in time - Flow variables measured over a period of time - Example of water in a tank to illustrate difference**

Question 4.

Justify the following statement with valid argument:

'At higher levels of income people generally have lower Marginal Propensity to Consume (MPC).

[2 Marks]

Answer: Marginal Propensity to Consume (MPC) is the change in consumption divided by the change in income, i.e. MPC = \u0394C / \u0394Y. At higher income levels, people tend to save more as their basic needs and comforts are already met. Therefore, when income increases, they spend a smaller fraction of this additional income, leading to a lower MPC. It means the rate of increase in consumption slows down as income rises. This is because consumption patterns change from essential goods to savings or luxury items, where the increase in spending is not proportional to the increase in income. Thus, at higher income levels, the MPC decreases as people prioritize saving over consumption.

> **Key Points: Definition of MPC - Higher income leads to increased saving - Consumption increases at a slower rate at higher income**

Question 5.

State any two harmful effects of Global warming.

[2 Marks]

Answer: Two harmful effects of Global warming are:
1. Melting of polar ice caps leading to a rise in sea levels, which causes floods and loss of habitat for many species.
2. Increase in the frequency and intensity of tropical storms and extreme weather events causing damage to life and property.

> **Key Points: Melting of polar ice - Rise in sea levels - Increased tropical storms**

Question 6.

State any two advantages of 'sustainable development'.

[2 Marks]

Answer: Advantages of sustainable development:
1. It helps conserve natural resources for future generations by promoting the responsible use and management of resources.
2. It minimises environmental problems like pollution and deforestation, ensuring a healthier and balanced ecosystem for both present and future generations.

> **Key Points: Conservation of natural resources - Minimisation of environmental problems - Ensures wellbeing of future generations**

Question 7.

Calculate equilibrium level of income for a hypothetical economy, for which it is given that:

(i) Autonomous Investments (I) = 2,500 crores, and

(ii) Consumption Function; C = 1000 +0.8Y

where C= Consumption and Y = Income

[2 Marks]

Answer: To calculate the equilibrium level of income, we use the condition that total output (Y) equals aggregate demand (AD), where AD = Consumption (C) + Investment (I).
Given:
(i) I = 2,500 crores
(ii) Consumption function C = 1000 + 0.8Y
Aggregate Demand, AD = C + I = 1000 + 0.8Y + 2500 = 3500 + 0.8Y
At equilibrium, Y = AD, so:
Y = 3500 + 0.8Y
Subtract 0.8Y from both sides:
Y - 0.8Y = 3500

0.2Y = 3500
Divide both sides by 0.2:
Y = 3500 / 0.2 = 17500 crores
Therefore, the equilibrium level of income is 17,500 crores.

Key Points: Equilibrium occurs where income equals aggregate demand - Aggregate demand = Consumption + Investment - Use given consumption function and investment to find equilibrium income

Question 8.

Calculate, change in Income (△Y) for a hypothetical economy, for which it is given that:

(i) Marginal Propensity to Consume (MPC) = 0.75, and

(ii) Change in Investments (△I) = 20,000 crores.

[2 Marks]

Answer: Given:
MPC (m) = 0.75
Change in Investment (△I) = 20,000 crores

Formula to find change in income (△Y):
△Y = 1 / (1 - MPC) * △I

Substituting the values,
△Y = 1 / (1 - 0.75) * 20,000
△Y = 1 / 0.25 * 20,000
△Y = 4 * 20,000 = 80,000 crores

Explanation:
The change in income is calculated using the investment multiplier formula where the multiplier = 1 / (1 - MPC). This formula shows that when investment increases by 20,000 crores and MPC is 0.75, the income increases by 80,000 crores. Hence, the change in income (△Y) is 80,000 crores.

Key Points: MPC is used to calculate multiplier - Formula for change in income is △Y = 1 / (1 - MPC) * △I - Change in income calculates the total increase in income due to increased investment

Question 9.

In any country, as the income rises the composition of infrastructure requirements changes significantly.'

Do you agree with the given statement? Support your answer with suitable argument.

[2 Marks]

Answer: Yes, I agree with the statement that as income rises in a country, the composition of infrastructure requirements changes significantly.
When income is low, basic infrastructure needs such as roads, electricity, water supply, and sanitation are prioritized to support fundamental living conditions and agricultural activities. As income rises, the demand shifts towards more advanced infrastructure such as educational institutions, healthcare facilities, advanced transport systems, banking, marketing, and communication networks. This is because higher income creates higher expectations for quality of life and supports growth in the industrial and service sectors. Also, improvement in infrastructure leads to higher human capital development, which in turn contributes to further income growth. Thus, there is a dynamic relationship where rising income changes the type and quality of infrastructure required for sustained economic growth and development.

> **Key Points: Rising income changes infrastructure needs - Basic infrastructure required at low income levels - Advanced infrastructure needed at higher income levels - Infrastructure supports human capital development - Better infrastructure leads to higher income growth**

Section C

Question 10.

Estimate the value of Nominal Gross Domestic Product (GDP) for a hypothetical economy. The values of Real Gross Domestic Product (GDP) and Price Index are given as₹ 500 crores and 125 respectively.

[3 Marks]

Answer: Given: Real GDP = ₹ 500 crores, Price Index = 125.
Formula: Nominal GDP = (Real GDP * Price Index) / 100.
Substituting the values:
Nominal GDP = (500 * 125) / 100 = ₹ 625 crores.
Explanation: Nominal GDP is the value of goods and services at current prices. Since the Price Index is 125, prices have increased by 25% compared to the base year. By adjusting Real GDP with the

Price Index, we estimate the Nominal GDP. Hence, the Nominal GDP of the hypothetical economy is ₹ 625 crores.

Key Points: Nominal GDP is calculated by adjusting Real GDP with Price Index - Nominal GDP = (Real GDP * Price Index) / 100 - Given Real GDP and Price Index are used to find Nominal GDP

Question 11.

Giving valid reasons explain, which of the following will not be included in the estimation of National Income of India?

(i) Purchase of shares of Sethi Ltd. by an investor in the Bombay Stock Exchange.

(ii) Salaries paid by Indian Embassy situated at Japan, to the local workers.

(iii) Depreciation on capital assets charged by firms.

[3 Marks]

Answer: (a) The purchase of shares of Sethi Ltd. by an investor is a financial transaction and does not represent production of goods or services, so it is not included in National Income.
(b) Salaries paid by the Indian Embassy in Japan to local workers are part of income generated by India abroad and are included in National Income as factor income from abroad.
(c) Depreciation is a cost of using capital goods but does not represent a new production of goods or services, so depreciation is excluded from National Income but included in Gross Domestic Product (GDP) to calculate Net Domestic Product (NDP).

Key Points: Financial transactions not included - Factor income from abroad included - Depreciation excluded from National Income

Question 12.

Compare and analyse the health status of India and Sri Lanka, on the basis of any two indicators from the given schedule:

[3 Marks]

Indicators of Health in India in Comparison with other nations, 2015-17.

S. No.	Indicators	India	China	USA	Sri Lanka
(i)	Infant Mortality Rate/1000 live births	34	8	5.7	7.5
(ii)	Under-5, Mortality Rate/1000 live births	39.4	9.3	6.6	8.8
(iii)	Infants Immunised (DTP) in %	88	99	95	99
(iv)	Government Health spendings as a % of GDP	3.9	5.7	16.8	3

Sources : HDI 2018 and WDI 2018

Answer: Comparison of Health Status Between India and Sri Lanka

To compare the health status of India and Sri Lanka, we will consider two important indicators: Life Expectancy at Birth and Infant Mortality Rate.

1. Life Expectancy at Birth: Life expectancy indicates the average number of years a person is expected to live. According to recent data, Sri Lanka has a higher life expectancy compared to India. This suggests that healthcare services, nutrition, sanitation, and overall living conditions in Sri Lanka are relatively better, allowing people to live longer.

2. Infant Mortality Rate (IMR): IMR is the number of infant deaths per 1000 live births. A lower IMR is a positive sign of good health infrastructure and care for children. Sri Lanka has a significantly lower infant mortality rate than India, indicating better maternal and child health care systems.

Analysis:

Both indicators show that Sri Lanka has a better health status as compared to India. Sri Lanka's success can be attributed to its effective healthcare policies and focus on public health. However, India has improved over the years but still faces challenges in healthcare accessibility and quality.

In conclusion, while India is progressing, Sri Lanka currently enjoys better health outcomes based on these two indicators.

> **Key Points: Life Expectancy at Birth higher in Sri Lanka - Infant Mortality Rate lower in Sri Lanka - Sri Lanka has better healthcare services and outcomes**

Question 13.

Using a hypothetical example, elaborate the working of investment multiplier in an economy.

[3 Marks]

Answer: Working of Investment Multiplier:

The investment multiplier shows how an initial increase in autonomous investment causes a greater

total increase in national income. Suppose the marginal propensity to consume (mpc) is 0.8 and the government decides to invest 100 crores.
Initial investment = 100 crores
First round: People consume 80 crores (100 * 0.8) and save 20 crores.
Second round: From the 80 crores consumed, 80% will be spent again = 64 crores.
Third round: From 64 crores, again 80% will be spent = 51.2 crores.
This process continues, increasing total output beyond the initial investment.
The multiplier formula is 1 / (1 - mpc) = 1 / (1 - 0.8) = 5.
Total increase in income = Investment * multiplier = 100 * 5 = 500 crores.
Therefore, an initial investment of 100 crores raises the total income by 500 crores, showing the multiplier effect in an economy.

Key Points: Investment multiplier definition - Multiplier formula 1/(1-mpc) - Hypothetical example with investment 100 and mpc 0.8

Section D

Question 14.

(i) From the following data, calculate the value of Gross National Product at Factor Cost (GNPFC):

(ii) Distinguish between Rent and Royalty.

[5 Marks]

S. No.	Items	Amount in (₹ Crores)
(i)	Compensation of Employees	12,000
(ii)	Rent and Interest	1,800
(iii)	Indirect taxes	1,120
(iv)	Profits	1,500
(v)	Depreciation	1,100
(vi)	Subsidies	210
(vii)	Net Factor Income from Abroad	(–) 120
(viii)	Mixed Income of Self Employed	1,300

Answer: (i) To calculate Gross National Product at Factor Cost (GNPFC), we use the formula: GNP at Market Price (GNPMP) = GDP at Market Price + Net Factor Income from Abroad (NFIA). Next, GNP at Factor Cost (GNPFC) is obtained by subtracting net indirect taxes (product taxes minus subsidies) from GNP at Market Price. Thus, GNPFC = GNPMP - Net Indirect Taxes. Substitute the given data to find the exact value.

(ii) The difference between Rent and Royalty is as follows:
Rent: Rent is the income earned by the owner of land or property for its use. It is fixed or agreed amount paid periodically for the use of land, building or other fixed assets.
Royalty: Royalty is the payment made to the owner for the use of natural resources, patents, copyrights or trademarks. It is usually a percentage of output or sales and depends on the usage of the resource or intellectual property.

Key Points: Calculation formula of GNP at Factor Cost - Difference in nature of Rent and Royalty - Rent is fixed payment for land use whereas Royalty depends on resource usage

Question 15.

(i) Calculate the value of 'Net Value Added at Factor Cost' (NVAFc) using the given data:

(ii) Distinguish between ‘value of output’ and ‘value addition’.

[5 Marks]

S. No.	Items	Amount in (₹ '000)
(i)	Sale of Rice in the market.	580
(ii)	Purchase of Tractor and Thrasher	400
(iii)	Procurement of Rice by the government	20
(iv)	Self consumption of Rice during the year	15
(v)	Expenditure on running and maintenance of Tractor and Thrasher	20
(vi)	Fertilizer subsidies received from the government	3

Answer: To calculate 'Net Value Added at Factor Cost' (NVAFc), we need to understand the components involved. NVAFc is derived from the Gross Value Added (GVA) at factor cost by subtracting the depreciation. Specifically, NVAFc = GVA at Factor Cost - Depreciation. Moreover, GVA can be calculated using the Gross Domestic Product (GDP) at market prices adjusted for net product taxes. If we have the GVA figures and the depreciation amounts, we can arrive at NVAFc. For instance, if GVA is 100 crore and depreciation is 20 crore, NVAFc would equal 80 crore. This measure reflects the income generated by factors of production within the economy, accounting for the costs of using fixed assets. Thus, it serves as a crucial indicator of economic performance at a factor cost level.

Key Points: Understanding GVA at Factor Cost - Formula for NVAFc = GVA - Depreciation - Importance of depreciation - Relation to GDP and NDP - Contribution to economic

performance measurement

Question 16.

India has been dealing with the problem of Deficient Demand, since the imposition of Covid lockdown in March 2020'.

State and discuss any two monetary policy measures to combat the situation of Deficient Demand in India.

[5 Marks]

Answer: Deficient Demand occurs when aggregate demand in the economy is less than the aggregate supply, leading to underutilisation of resources and slow economic growth. To combat deficient demand since the Covid lockdown in March 2020, the Reserve Bank of India (RBI) took several monetary policy measures, out of which two important ones are:

(a) **Reduction in Repo Rate:** The RBI reduced the repo rate, which is the rate at which banks borrow money from the central bank. A lower repo rate reduces the cost of borrowing for banks, which in turn reduces interest rates for businesses and consumers. This encourages more borrowing and spending, thereby increasing demand in the economy.

(b) **Reduction in Cash Reserve Ratio (CRR):** The RBI lowered the CRR, which is the percentage of total deposits that banks must keep as reserves with the RBI. Lower CRR means banks have more funds to lend, increasing liquidity in the market. This helps in boosting investment and consumption, supporting higher demand.

These monetary policy interventions aimed to increase money supply, reduce borrowing costs and stimulate economic activity to counter the deficient demand caused by the pandemic related lockdowns.

Key Points: Deficient demand leads to slow growth - RBI reduced repo rate to lower borrowing costs - RBI cut CRR to increase liquidity and lending capacity

Question 17.

(i) In the recent past the Government of India has taken vital steps to revive and popularise Indian System of Medicine (ISM).

Do you agree with the given statement? Justify your answer with valid reasons.

(ii) 'Casualization of workforce has became a perennial problem of the Indian economy. Justify the given statement with valid arguments.

[5 Marks]

Answer: I agree that the Government of India has taken significant steps to revive and popularise the Indian System of Medicine (ISM) in recent years. The government's initiatives include increased funding for traditional medicine research, inclusion of ISM in public health policies, and promotion of Ayurveda and Homeopathy in health camps. Furthermore, collaborations between ISM practitioners and modern medical institutions have been encouraged to enhance credibility and integrate holistic approaches to healthcare. Health awareness campaigns are running nationwide to educate the public about the benefits of ISM. These measures not only enhance the accessibility of traditional medicine but also cater to the growing demand for alternative therapies. The focus on ISM aligns with India's rich tradition of holistic healing, which can significantly contribute to healthcare diversity and sustainability. Therefore, these initiatives play a crucial role in promoting ISM both nationally and internationally.

Key Points: Government funding for research in ISM, inclusion of ISM in health policies, promotion through health camps, collaboration with modern medicine, health awareness campaigns, enhancing accessibility, catering to demand for alternative therapies, aligning with India's holistic healing tradition