Roll No. ☐☐☐☐☐☐☐☐

Q.P. Code 58/1/1

ECONOMICS – TERM II

CBSE Class XII Board Examination 2022 (Term 2) — with answers

Time allowed: 2 hours **Maximum Marks: 40**

General Instructions:

1. The paper has 13 questions and all of them must be answered; marks are shown against each question.
2. Five questions carry 2 marks each (short answers of about 30–50 words), five carry 3 marks each (short answers of about 50–80 words) and three carry 5 marks each (long answers of about 80–120 words).
3. There is no overall choice, but a few questions offer an internal choice (OR); answer only one alternative in those.
4. The paper also contains a case/source based question.

QUESTIONS

Q1–5: 2 marks each · Q6–8: 3 marks each · Q9–11: 5 marks each · Q12–13 (source based): 3 marks each.

1. With the help of a suitable example, explain the difference between positive externalities and negative externalities. **2**

ANSWER

Positive externality = an unpaid benefit to others (e.g. a new public park); negative externality = an uncompensated harm to others (e.g. factory smoke / misuse of the park).

Concept: externalities are effects of one person's or firm's activity on others that are not reflected in market prices, so they are not captured in GDP.
Positive externality: one party's activity gives a benefit to others for which the others do not pay. Example: the municipal corporation develops a park; residents of the area enjoy fresh air and recreation without paying for it.
Negative externality: one party's activity causes harm to others for which it is not penalised / does not pay compensation. Example: a factory releases smoke that harms the health of nearby people; or the same park becomes a spot for anti-social activities, making residents feel unsafe.
Key point for marks: benefit without payment vs harm without penalty, plus one example of each.

OR

With the help of a suitable example, explain the difference between stock variables and flow variables.

ANSWER

Stock = measured at a point of time (e.g. wealth, capital); flow = measured over a period of time (e.g. income, investment).

Stock variable: its quantity is measured at a particular point of time, so it has no time dimension. Examples: wealth, capital stock, money supply on 31 March.
Flow variable: its quantity is measured over a period of time (per month, per year), so it has a time dimension. Examples: national income, investment, consumption expenditure.
Link: flows change stocks, e.g. investment (flow) during a year adds to the capital stock.
Common mistake: calling 'money' a flow – the amount of money held is a stock; spending of money is a flow.

2. Give a valid argument to justify the statement: 'People at higher income levels usually have a lower Marginal Propensity to Consume (MPC).' **2**

ANSWER

True – at low income most extra income goes to necessities; as income rises, basic needs are met and a larger part of extra income is saved, so MPC falls.

MPC = $\frac{\Delta C}{\Delta Y}$, the part of additional income spent on consumption.
At low income levels a person spends almost all of any extra income on basic needs (food, clothing, shelter), so MPC is high.
As income rises, basic needs are already satisfied; the urge to consume more grows slowly while the ability and desire to save increase.
So out of each extra rupee, a smaller part is consumed and a larger part is saved – MPC falls (and MPS = 1 − MPC rises) at higher income levels.

3. Mention any two harmful effects of global warming. **2**

ANSWER

(i) Melting of polar ice → rising sea level and coastal flooding; (ii) spread of tropical diseases (any other: extreme weather, loss of species).

Global warming is the gradual rise in the average temperature of the earth's surface due to greenhouse gases (CO_2, methane) from burning fossil fuels and deforestation.
Harmful effects (any two):
1. Melting of polar ice caps and glaciers raises the sea level, causing flooding of coastal areas.
2. Increase in tropical diseases such as malaria and dengue as warmer areas spread.
3. More frequent extreme weather – droughts, heat waves, cyclones – hurting agriculture.
4. Loss of plant and animal species whose habitats are disturbed.

OR

Mention any two advantages of 'sustainable development'.

ANSWER

(i) It reduces environmental problems; (ii) it keeps the possible quality of life of future generations at least as good as today's.

Sustainable development = development that meets the needs of the present generation without reducing the ability of future generations to meet their own needs.
Advantages (any two):
1. It minimises environmental problems such as pollution and depletion of resources.
2. It ensures that future generations can enjoy at least the same average quality of life as the present one.
3. It encourages use of renewable resources (solar, wind) and efficient use of non-renewable ones.
4. It keeps the carrying capacity of the environment intact.

4. For a hypothetical economy, find the equilibrium level of income, given: **2**

(i) Autonomous investment (I_0) = ₹2,500 crore

(ii) Consumption function $C = 1000 + 0.8Y$, where C = consumption and Y = income.

ANSWER

Equilibrium income Y = ₹17,500 crore

At equilibrium: $Y = C + I$

$Y = 1000 + 0.8Y + 2500$

$Y - 0.8Y = 3500$

$0.2Y = 3500 \Rightarrow Y = \frac{3500}{0.2} = 17{,}500$

Equilibrium income = ₹17,500 crore.

Check: C = 1000 + 0.8 × 17,500 = 15,000; C + I = 15,000 + 2,500 = 17,500 = Y ✓

OR

For a hypothetical economy, find the change in income (ΔY), given:

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

(ii) Change in investment (ΔI) = ₹20,000 crore.

ANSWER

ΔY = ₹80,000 crore (multiplier k = 4)

Investment multiplier: $k = \frac{1}{1-MPC} = \frac{1}{1-0.75} = \frac{1}{0.25} = 4$

Also $k = \frac{\Delta Y}{\Delta I} \Rightarrow \Delta Y = k \times \Delta I = 4 \times 20{,}000 = 80{,}000$

Change in income = ₹80,000 crore.

Common mistake: using $\frac{1}{MPC}$ instead of $\frac{1}{1-MPC}$.

5. 'The mix of infrastructure a country needs changes considerably as its income goes up.' Do you agree? Give a suitable argument in support of your answer. **2**

ANSWER

Yes – low-income countries mainly need basic infrastructure (irrigation, transport, power), while richer countries need more service-related infrastructure (power, telecom, IT).

Yes, the statement is correct.

At low income levels the priority is basic infrastructure such as irrigation, transport and power, which supports agriculture and basic consumption.

As the economy develops, most basic consumption needs are met, the share of agriculture falls and services grow, so more service-related infrastructure is needed – for example power, modern transport, telecommunication and IT services.

So the composition of infrastructure requirements shifts as income rises (marked as a whole).

6. For a hypothetical economy the Real GDP is ₹500 crore and the Price Index is 125. Estimate its Nominal GDP. **3**

ANSWER

Nominal GDP = ₹625 crore

Formula: $\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index}} \times 100$, i.e. $\text{Price Index} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$

$125 = \frac{\text{Nominal GDP}}{500} \times 100$

$\text{Nominal GDP} = \frac{125 \times 500}{100} = 625$

Nominal GDP = ₹625 crore.

Check: prices are 25% above base year, so nominal GDP is 25% above real GDP: 500 × 1.25 = 625 ✓

OR

Which of these will NOT be counted in India's National Income? Give a reason for each.

(i) An investor buys shares of Sethi Ltd. on the Bombay Stock Exchange.

(ii) The Indian Embassy in Japan pays salaries to its local (Japanese) staff.

(iii) Depreciation charged by firms on their capital assets.

ANSWER

None of the three is included: (i) mere paper transaction, (ii) factor income paid to non-residents, (iii) depreciation is deducted to get net (national) income.

(i) Purchase of shares is only a transfer of ownership / a financial (paper) claim; no good or service is produced, so there is no value addition. Not included.

(ii) The Indian Embassy is part of India's economic territory, but the local Japanese staff are non-residents of India. Their salaries are factor income paid to non-residents (part of factor income paid abroad), so they are not part of India's National Income. Not included.

(iii) Depreciation (consumption of fixed capital) is the normal wear and tear of capital. National Income is a net concept (NNP at factor cost), so depreciation is subtracted, not added. Not included.

Common mistake in (ii): thinking 'embassy in India's economic territory' means it is included – residency of the worker decides national income.

7. Using any two indicators from the table below (health indicators, 2015-17; sources HDI 2018 and WDI 2018), compare and analyse the health status of India and Sri Lanka. **3**

Indicator	India	China	USA	Sri Lanka
Infant mortality rate (per 1000 live births)	34	8	5.7	7.5
Under-5 mortality rate (per 1000 live births)	39.4	9.3	6.6	8.8
Infants immunised (DTP) in %	88	99	95	99
Govt. health spending as % of GDP	3.9	5.7	16.8	3

ANSWER

Sri Lanka is healthier: IMR 7.5 vs India 34, under-5 mortality 8.8 vs 39.4, DTP immunisation 99% vs 88%; India's health spending (3.9% of GDP) is only slightly higher than Sri Lanka's 3% and too low for its population.

Any two indicators (1½ marks each):

1. Infant Mortality Rate: India 34 per 1000 live births vs Sri Lanka 7.5 – about 4.5 times higher in India, showing poorer maternal and child health care.
2. Under-5 Mortality Rate: India 39.4 vs Sri Lanka 8.8 – more Indian children die before age 5 because of malnutrition and weak access to health services.
3. DTP immunisation: Sri Lanka 99% vs India 88% – Sri Lanka covers almost all infants; in India a smaller share of people use public health services.
4. Government health spending: India 3.9% of GDP vs Sri Lanka 3% – India spends slightly more as a share of GDP, yet its outcomes are worse; given its huge population the spending is far below what is needed.

Conclusion: on health indicators Sri Lanka is ahead of India.

8. With the help of a hypothetical numerical example, explain how the investment multiplier works in an economy. **3**

ANSWER

With MPC = 0.5, k = 2: an extra investment of ₹4,000 crore raises income by ₹8,000 crore through successive rounds of spending.

Idea: one person's spending is another person's income. Extra investment raises income; a part of this income (MPC) is spent again, creating more income in the next round, and so on.

Suppose ΔI = ₹4,000 crore and MPC = 0.5.

Round	ΔI	ΔY	ΔC	ΔS
1	4000	4000	2000	2000
2	–	2000	1000	1000
3	–	1000	500	500
4	–	500	250	250
⋮		⋮	⋮	⋮
Total	4000	8000	4000	4000

(all figures in ₹ crore)

Working: $k = \frac{1}{1-MPC} = \frac{1}{1-0.5} = 2$; $\Delta Y = k \times \Delta I = 2 \times 4000 = 8000$

The process stops when total extra saving (₹4,000 crore) equals the extra investment.

So income rises by ₹8,000 crore – a multiple of the initial investment.

9. (i) Using the data below, find Gross National Product at Factor Cost (GNP_{FC}). (3 marks) **5**

S. No.	Item	₹ crore
(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

(ii) Explain the difference between rent and royalty. (2 marks)

ANSWER

(i) GNPFC = ₹17,580 crore; (ii) rent = income for letting out land/buildings; royalty = income for allowing use of intellectual property rights or sub-soil assets.

(i) Income method: $GNP_{FC} = \text{COE} + \text{Rent \& Interest} + \text{Profits} + \text{Mixed income} + \text{Depreciation} + \text{NFIA}$

$= 12{,}000 + 1{,}800 + 1{,}500 + 1{,}300 + 1{,}100 + (-120)$

NDP at FC = 16,600; GDP at FC = 16,600 + 1,100 = 17,700; GNP at FC = 17,700 − 120 = ₹17,580 crore.

Indirect taxes (1,120) and subsidies (210) are NOT used – they convert market price to factor cost, and we are already at factor cost.

Common mistake: forgetting depreciation (needed for 'gross') or adding net indirect taxes.

(ii) Rent: factor income received by the owner for letting others use land, buildings or other property. Royalty: income received for allowing others to use intellectual property rights (patents, copyrights, trademarks) or rights over sub-soil assets such as mines.

OR

(i) Using the data below, find Net Value Added at Factor Cost (NVA_{FC}). (3 marks)

S. No.	Item	₹ '000
(i)	Sale of rice in the market	580
(ii)	Purchase of tractor and thresher	400
(iii)	Procurement of rice by the government	20
(iv)	Self-consumption of rice during the year	15
(v)	Running and maintenance expenses of tractor and thresher	20
(vi)	Fertiliser subsidies received from the government	3

(ii) Explain the difference between 'value of output' and 'value addition'. (2 marks)

ANSWER

(i) NVAFC = ₹598 thousand; (ii) value of output = money value of all goods produced (incl. change in stock and self-consumption); value added = value of output − intermediate consumption.

(i) Value of output = sale of rice + rice procured by government + self-consumed rice = 580 + 20 + 15 = 615

Less intermediate consumption (running and maintenance of tractor and thresher) = 20

Value added at market price = 615 − 20 = 595

Add subsidy (factor cost = market price + subsidy) = 595 + 3 = 598

$NVA_{FC} = (i) + (iii) + (iv) - (v) + (vi) = 580 + 20 + 15 - 20 + 3 = ₹598$ thousand

Purchase of tractor and thresher (400) is capital (investment) expenditure, not intermediate consumption, so it is not subtracted. No depreciation figure is given, so nothing is deducted for it.

(ii) Value of output: money value of all goods and services produced by a unit during a year, including change in stock and output kept for self-consumption (= sales + change in stock).

Value added: value of output minus the value of intermediate consumption; it shows the unit's own contribution to production and avoids double counting.

10. Since the Covid lockdown of March 2020, India has faced the problem of deficient demand. Name and explain any two monetary policy measures that can be used to correct deficient demand. **5**

ANSWER

(i) Lower the bank rate / repo rate → cheaper loans → more borrowing and spending; (ii) buy government securities in the open market → more money with public and banks → AD rises (also: lower CRR/SLR).

Deficient demand: aggregate demand is less than aggregate supply at full-employment output, causing deflationary gap and unemployment. The central bank (RBI) must raise AD by increasing the availability and lowering the cost of credit.

1. Reduce bank rate / repo rate: the central bank lowers the rate at which it lends to commercial banks. Banks' cost of funds falls, so they cut lending rates. Cheaper loans encourage households and firms to borrow more for consumption and investment → AD rises.

2. Open market operations – purchase of securities: the central bank buys government securities from the market. It pays money to banks/public, so their cash and lending capacity rise. More credit and purchasing power increase AD.

Other valid measures: lower CRR or SLR (more loanable funds), lower margin requirements (more credit per unit of security).

Each measure: name (1 mark) + mechanism up to the effect on AD (1½ marks).

11. (a) (i) 'The Government of India has recently taken important steps to revive and popularise the Indian System of Medicine (ISM).' Do you agree? Support your answer with valid reasons. **5**

ANSWER

Yes – ISM is effective, safe and inexpensive, and the government is promoting it through AYUSH and a framework for research in ISM.

Yes, the statement is true.
Indian Systems of Medicine (Ayurveda, Yoga, Unani, Siddha, Homoeopathy, etc.) have great potential to meet a large part of the country's health-care needs because they are effective, safe and low-cost.
Under AYUSH the government has emphasised preventive health care, and it has recently built a framework to promote research in ISM.
(Marked as a whole; any other valid reason is accepted.)

(b) (ii) 'Casualisation of the workforce has become a long-lasting problem of the Indian economy.' Justify this statement with valid arguments.

ANSWER

True – organised-sector jobs grow slowly, construction and allied services demand casual labour, and small/marginal farmers with low earnings turn into casual wage workers.

Casualisation means a rising share of casual wage labourers (no regular job, no social security) in the workforce.
Reasons it persists:
1. Employment in the organised (formal) sector has grown very slowly, so most new workers cannot find regular salaried jobs.
2. Fast growth of construction and related services has raised the demand for daily-wage casual labour.
3. Self-employed small and marginal farmers earn little from agriculture and are moving into casual work.
Result: workers remain without job security or social security, and incomes stay low and uncertain – hence a perennial problem.

12. *Read the source (based on a Bloomberg report of 24 October 2021) and answer Q12 and Q13.* **3**

In summary: China's economy is slowing faster than investors expect. It is cutting its dependence on real estate, tightening regulation of sectors from education to technology, and facing power shortages and the pandemic. Third-quarter GDP growth dropped to 4.9% from 7.9% in the previous quarter; growth is expected near 8.2% this year and below 5% next year. China plans to stabilise debt growth, reduce inequality and move resources into hi-tech manufacturing, and has hinted that banks may speed up mortgage lending as a short-term stimulus. Falling investment in China threatens commodity exporters such as Australia, South Africa, Chile, Peru and Brazil, and slower trade may hurt Malaysia, Singapore and Thailand. Electricity shortages are cutting industrial output, which makes infrastructure-led stimulus hard until the power crunch eases.

State and discuss any two reasons that show the slowdown of the Chinese economy.

ANSWER

(i) Falling investment (and weaker demand linked to commodity exporters/trade partners); (ii) electricity shortages cutting industrial production and blocking infrastructure-led growth (also: cut in real-estate dependence, tighter regulation, COVID).

Any two reasons (1½ marks each):

1. Fall in investment: investment in China is expected to fall, which also reduces trade with commodity-exporting countries such as Australia, Brazil and Chile; lower investment means lower aggregate demand and growth.
2. Electricity/power shortage: shortages are crimping industrial production; because power is scarce, the government cannot easily boost growth by investing in infrastructure.
3. Reduced reliance on real estate and new regulation of education and technology sectors slow down activity in these large sectors.
4. New COVID-19 infections are expected to rise, disrupting production.

Evidence of slowdown: Q3 growth dropped from 7.9% to 4.9%.

13. *Based on the same source (China's 2021 slowdown).* **3**

As an economic adviser to the Government of China, briefly discuss any two measures you would suggest.

ANSWER

(i) Ask banks to speed up mortgage/credit lending as a short-term stimulus; (ii) diversify away from real estate towards hi-tech manufacturing with sensible regulation (also: fix power supply, then infrastructure investment).

Any two measures (1½ marks each):

1. Easy credit as short-term stimulus: direct banks to pick up the pace of mortgage and other lending so that housing demand and spending revive.
2. Restructure the economy: reduce dependence on real estate gradually and channel resources into hi-tech manufacturing, while regulating sectors (education, technology) in a way that does not choke growth.
3. Solve the power shortage first (more generation, better distribution) so that industrial output recovers; then boost infrastructure investment.
4. Stabilise debt growth and curb inequality to support stable long-run demand.

— END —

Questions restated from the CBSE Class XII Board Examination 2022 (set 58/1/1) for practice. Reading passages and map items are described, not reproduced.