CBSE Class 12

Economics

Previous Year Question Paper 2020

Series: HMJ/3 **Set- 1**

Code no. 58/3/1

- Please check that this question paper contains **15** printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains **34** questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minute time has been allotted to read this question paper. The question paper will be distributed at **10.15 a.m.** From **10.15 a.m.** to **10.30 a.m.**, the students will read the question paper only and will not write any answer on the answer script during this period.

ECONOMICS (Theory)

Time Allowed: **3** hours Maximum Marks: 80

General Instructions:

Read the following instructions very carefully and strictly follow them:

1. This question paper comprises two sections **A** and **B. All** questions are **compulsory**.

2. Question numbers **1** – **10** and **18** – **27** are very short-answer questions carrying 1 mark each. They are required to be answered in **one word** or **one sentence** each.

3. Question numbers **11** – **12** and **28** – **29** are short-answer questions carrying **3** marks each. Answers to them should not normally exceed **60** – **80** words each.

4. Question numbers **13** – **15** and **30** – **32** are also short-answer questions carrying **4** marks each. Answers to them should not normally exceed **80** – **100** words each.

5. Question numbers **16** – **17** and **33** – **34** are long answer questions carrying **6** marks each. Answers to them should not normally exceed **100** – **150** words each.

6. Answers should be brief and to the point. Also the above word limit be adhered to as far as possible.

7. There is no overall choice. However, an internal choice has been provided in **2** questions of one mark, **2** questions of three marks, **2** questions of four marks and **2** questions of six marks. Only one of the choices in such questions have to be attempted.

8. In addition to this, separate instructions are given with each section and question, wherever necessary.

SECTION - A

(Macro Economics)

1. Which of the following is not a non-tax revenue receipt ? (Choose the correct alternative) 1 Mark

(A) Goods and Services tax

(B) External grants

(C) Dividends and profits

(D) Disinvestment

Ans: (A) Goods and Services tax

2. Deflationary gap indicates _________ (excess/deficient) demand in an economy. (Fill in the blank with correct answer) 1 Mark

Ans: Deflationary gap indicates deficient demand in an economy.

3. State, whether the following statement is true or false : 1 Mark

''Government budget is an annual statement showing actual receipts and actual payments of the government for the last fiscal year.''

Ans: False

4. Name the components of money supply. 1 Mark

Ans: The components of money supply are:

I. People have currency in the form of notes and coins.

II. Bank demand deposits, such as savings and current accounts

III. Make a bank deposit, such as a fixed deposit or a recurring deposit.

5. If the exchange rate of the home currency rises, the value of exports of the economy is likely to ________ . (Fill in the blank with correct answer) 1 Mark

Ans: If the exchange rate of the home currency rises, the value of exports of the economy is likely to fall.

6. State the meaning of Involuntary Unemployment. 1 Mark

Ans: Involuntary unemployment occurs when all those who are willing and able to work at the current wage rate are unable to find a job.

Or

Average Propensity to Save (APS) is the ratio of ________ and ________ . (Fill in the blanks with correct answer) 1 Mark

Ans: Average Propensity to Save (APS) is the ratio of total savings and total income.

7. State, whether the following statement is true or false : 1 Mark

''The official reserve transactions are taken as the accommodating item in Balance of Payment (BOP).''

Ans: True

8. Under Statutory Liquidity Ratio, commercial banks are required to keep a fraction of _________ in the form of liquid assets. (Choose the correct alternative) 1 Mark

(A) Total deposits

(B) Term deposits

(C) Total demand and term deposits

(D) Current deposits

Ans: (A) Total deposits or (C)Total demand and term deposits (Both correct)

9. Define 'Foreign Exchange Rate'. 1 Mark

Ans: The rate at which one country's money is exchanged for another country's currency is known as the foreign exchange rate.

10. Primary deficit can be zero if _________ . (Fill in the blank with correct alternative) 1 Mark

(A) Fiscal deficit = Interest payments

(B) Fiscal deficit < Interest payments

(C) Fiscal deficit > Interest payments

(D) Revenue deficit < Fiscal deficit

Ans: (A) Fiscal deficit = Interest payments

11. Distinguish between a 'Current account deficit' and a 'Trade deficit'.
3 Marks

Ans: Difference between 'Current account deficit' and a 'Trade deficit' are as follows:

Current Account Deficit	Trade Deficit
The current account is made up of transactions involving products and services as well as transfer payments. A current account deficit occurs when current receipts are less than current payments.	The difference between visible item exports and imports is known as the Trade Balance. A trade deficit occurs when imports surpass exports.
Current Account deficit = Autonomous Current receipts < Autonomous Current payments	Trade deficit = Imports > Exports
Only visible items, invisible items, and unilateral transfers are included.	It only contains visible things.

Or

''Balance of Payment (BOP) is always balanced in the accounting sense.'' Defend or refute the given statement with valid reasons. **3 Marks**

Ans: The BOP account's total revenues are equal to the total payments. Hence, there is neither any surplus nor any deficit in the BOP account. In fact, every credit is credited to the bookkeeping or accounting department. There must be a corresponding 'debit' entry for each entry. Debit what comes in and Credit what goes out is the golden rule of double-entry bookkeeping. All credit accounts must have a total ‘credit balance' that equals the total ‘debit balance.' As a result, the BOP account is always balanced in accounting terms.

Explanation:

Advertisements: This is because each transaction recorded has two elements (debits and credits) that are equal in amount and appear on opposite sides of the balance of payments account. A country's balance of payments must always balance in accounting terms.

12. From the following data, calculate (a) Revenue deficit and (b) Fiscal deficit: **3 Marks**

	Particulars	Amount (in Rs. crores)
(i)	Tax Revenue	1,000
(ii)	Revenue Expenditure	3,821
(iii)	Non-tax Revenue	2,000
(iv)	Recovery of Loans	135
(v)	Capital Expenditure	574
(vi)	Disinvestment	100
(vii)	Interest Payments	1,013

Ans: (a) Calculation of Revenue Deficit:

Revenue Deficit = [(Revenue Expenditure) - {(Tax Revenue) + (Non-Tax Revenue)}]

= 3821 - (1,000+2,000)

= Rs. 821 Crores

(b) Calculation of Revenue Deficit:

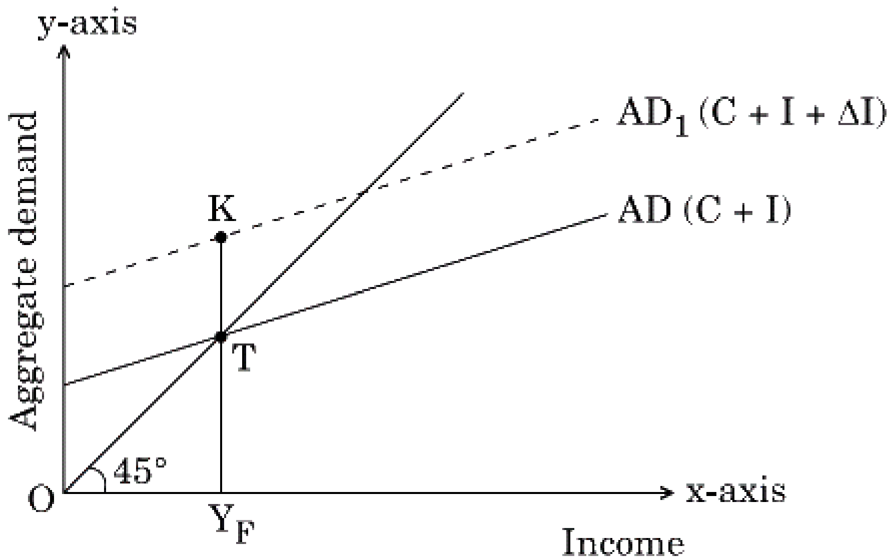
Fiscal Deficit = [{(ii) + (v)} - {(iii) + (i) + (iv) + (vi)}]

= [(3,821 + 574) - (2,000 + 1,000 + 100 + 135)]

= [4,395) - (3,235)]

= Rs. 1160 Crores

13. In the given figure, what does the gap 'KT' represent ? State and discuss any two fiscal measures to correct the situation. 4 Marks



Ans: KT stands for the inflationary gap.

Two fiscal measures are :

I. **Increase in Taxes:** The government may raise taxes to close the inflationary deficit. This may reduce the purchasing power of the general population, lowering aggregate demand in the economy to bring it in line with aggregate supply.

II. **Reduction in Government Expenditure:** The government may restrict non-developmental spending to help close the inflationary gap. This may reduce people's purchasing power, lowering aggregate demand in the economy to bring it in line with aggregate supply.

For Visually Impaired Candidates :

What is meant by deflationary gap ? State and discuss any two fiscal measures to correct the situation of deflationary gap. 4 Marks

Ans: The term "deflationary gap" refers to a scenario in which aggregate demand is smaller than aggregate supply at full employment.

Two fiscal measures are to control it are:

I. **Decrease in Taxes:** The government may reduce taxes to close the deflationary gap. This may improve people's purchasing power, which in turn may raise aggregate demand in the economy, bringing it to parity with aggregate supply.

II. **Increase in Government Expenditure:** The government may raise spending to close the deflationary gap. This may improve people's purchasing power, which in turn may raise aggregate demand in the economy, bringing it to parity with aggregate supply.

14. ‘‘To boost the falling demand in the economy, the Reserve Bank of India recently reduced Repo rate.’’ Elaborate the rationale behind the steps taken by the Central Bank. 4 Marks

Ans: The repo rate is the interest rate levied by the central bank on secured loans to commercial banks that include collateral. It is raised during times of inflation to restrict commercial banks' loan creation, which reduces the money supply in the economy and It is reduced during deflation to allow commercial banks to create more credit, hence increasing the money supply in the economy.

The rate at which commercial banks hold reserves with the central bank is known as the reverse repo rate. The central bank sets this rate, which it pays to commercial banks as a percentage of the reserves they hold. It is decreased during inflation to reduce commercial bank credit creation, which reduces the money supply in the economy, and it is boosted during deflation to increase commercial bank credit production, which raises the money supply in the economy.

15. Calculate Gross Value Added at Market Price (GVA_{MP}) from the following data : 4 Marks

	Particulars	Amount (in Rs. lakhs)
(i)	Depreciation	20
(ii)	Domestic Sales	200
(iii)	Change in Stock	(–) 10
(iv)	Exports	10
(v)	Single Use Producer Goods	120
(vi)	Net Indirect Taxes	20

Ans: GVA_{MP} = [(ii)+(iii)+(iv)]-(v)

GVA_{MP} = [200+(-)10+10]-120

GVA_{MP} = 200-120

GVA_{MP} = Rs. 80 lakhs

Or

The value of the Nominal Gross National Product (GNP) of an economy was Rs. 2,500 crores in a particular year. The value of GNP of that country during the same year, evaluated at the price of base year was Rs. 3,000 crores.

Calculate the value of GNP deflator of the year in percentage terms. Has the price level risen between the base year and the year under consideration ? 4 Marks

Ans: Given that Nominal GNP = Rs. 2500 crores and Real GNP = Rs. 3000,

$$\text{GNP Deflator} = \frac{\text{Nominal GNP}}{\text{Real GNP}} \times 100$$

$$=\frac{2500}{3000}\times 100$$

=83.33%

No, the price level has reduced from base year to current year by 16.67%.

16. Answer the following questions based on the data given below :

(i) Planned investment = < 100 crore

(ii) C = 50 + 0·5 Y

(a) Determine the equilibrium level of income. 3 Marks

Ans: At equilibrium level of income,

Y = C + I

Y = (50+ 0.5Y) + 100

Y - 0.5Y = 150

$$Y = \frac{150}{0.5}$$

Y = Rs. 300 crores

At Equilibrium level of income =Rs. 300 crores

(b) Calculate the saving and consumption expenditure at equilibrium level of National Income. 3 Marks

Ans: $S = -\overline{C} + (1 - b)Y$

S = - 50 + (1 - 0.5)(300)

S = Rs. 100 crores

Y = C+S

300 = C +100

C = 300 -100

C = Rs. 200 crores

17. Define the problem of double counting in the estimation of National Income. Discuss two approaches to correct the problem of double counting. 6 Marks

Ans: Double counting refers to the practise of counting the value of a product more than once. The value of the final commodities and services generated by all of a country's production units during the year is counted in the computation of national income. Intermediate items are not included in the calculation. The value of intermediate items is taken into account when calculating the value of final goods. Regardless of whether it will be utilised as an intermediate or final good, every manufacturer considers his work to be the final product.

For instance, a company produces raw cotton and sells it to another company for Rs 100. It turns it into cotton yarn and sells it for Rs 200 to another company. The next company makes cotton clothing out of it and sells it for Rs 300. For Rs 400, the last firm sells it to the ultimate consumers for use. So, if we add the sums of 100, 200, 300, and 400, we get Rs 1000. However, this is an example of double counting, as the prior good's value is counted twice. As a result, the real value for computing national income is Rs 250.

The two approaches to correct the problem of double counting are:

I. **Final output method:** Only the worth of the finished goods is included in this technique. The commodities that are ready for immediate consumption or use are known as final goods. By deducting the value of intermediary items from the value of output, the value of the final output is computed.

II. **Value-added method:** When determining national income, the whole sum of the value added by each producing unit of the country should be taken into account. The difference between the value of output and the value of intermediary consumption is known as value added.

Or

Define the following : 6 Marks

(a) Capital Goods

(b) Gross Domestic Product

(c) Flow Variables

(d) Income from property and entrepreneurship

Ans: Definitions:

(a) Capital Goods: Capital goods are tangible assets that a company uses in the manufacturing of products and services that will be used by consumers in the future. Buildings, machinery, equipment, vehicles, and tools are examples of capital goods.

(b) Gross Domestic Product: The market value of all final goods and services generated inside a country's domestic territory throughout a year is known as the Gross Domestic Product (GDP).

(c) Flow Variables: Flow is a measure of the quantity of any economic variable over a period of time. A year, a month, a week, or, for example. They have a sense of time associated with them. For example, monthly salary, annual wheat production, and so forth.

(d) Income from property and entrepreneurship: The money earned in the form of rent, royalties, interest, and profit is referred to as income from property and entrepreneurship. The operational surplus is the sum of these items. Dividends, corporate profit taxes, and undistributed profit are the three types of profit.

SECTION - B

(Indian Economic Development)

18. __________ is one of the taxes eliminated after implementation of the Goods and Services Tax (GST). (Fill in the blank with correct answer) 1 Mark

Ans: Value Added Tax is one of the taxes eliminated after implementation of Goods and Services Tax (GST).

19. _________ and _________ currency notes of old Mahatma Gandhi series were banned as legal tender money on 8th November, 2016. (Choose the correct alternative) **1 Mark**

(A) Rs. 50 and Rs. 100

(B) Rs. 500 and Rs. 1000

(C) Rs. 500 and Rs. 2000

(D) Rs. 500 and Rs. 200

Ans: (B) Rs. 500 and Rs. 1000

20. Fixing of maximum land holding (ownership) for an individual is known as __________ . (Fill in the blank with correct answer) **1 Mark**

Ans: Fixing of maximum land holding (ownership) for an individual is known as land ceiling .

21. Central Pollution Control Board (CPCB) has identified ___________ categories of large and medium industries as polluting industries. (Choose the correct alternative) **1 Mark**

(A) 15

(B) 17

(C) 19

(D) 13

Ans: (B) 17

22. ''Google in India has hired 4000 graduate students.''

The given statement deals with formal sector/informal sector employment. (Pick the correct type of employment). **1 Mark**

Ans: Formal sector

23. The first Industrial Policy Resolution in Independent India was introduced in the year ___________ . (Choose the correct alternative) **1 Mark**

(A) 1948

(B) 1950

(C) 1954

(D) 1956

Ans: (A) 1948

24. State the meaning of Cooperative Marketing. **1 Mark**

Ans: Cooperative Marketing is a mechanism in which farmers combine their marketable excess crops and divide the sale revenues among themselves.

25. Define 'Human Capital Formation'. **1 Mark**

Ans: The process of adding to the country's stock of skilled and capable people through time is referred to as human capital formation.

Or

Identify the correct sequence of alternatives given in Column II by matching them with their respective years in Column I : **1 Mark**

Column I	Column II

a.	**Jan Dhan Yojana**	**(i)**	**2005**
b.	**Task Force on projections of the Minimum Needs and Effective Consumption Demand**	**(ii)**	**1962**
c.	**Mahatma Gandhi National Rural Employment Guarantee Act**	**(iii)**	**1979**
d.	**Study Group formed by the Planning Commission for Poverty**	**(iv)**	**2014**

Choose the correct alternative from following :

(A) a-(iv), b-(i), c-(ii), d-(iii)

(B) a-(iv), b-(ii), c-(i), d-(iii)

(C) a-(iv), b-(iii), c-(i), d-(ii)

(D) a-(iv), b-(ii), c-(iii), d-(i)

Ans: (C) a-(iv), b-(iii), c-(i), d-(ii)

26. State the meaning of 'Commune'. **1 Mark**

Ans: Commune refers to a collective farming system in China during the Great Proletarian Cultural Revolution, in which people were forced to cultivate farmland.

27. Arrange the following events in chronological order and choose the correct alternative : **1 Mark**

(i) Establishment of People's Republic of China

(ii) Creation of Pakistan

(iii) First Five-Year Plan of India

(iv) First Five-Year Plan of China

Alternatives :

(A) (i), (iv), (ii), (iii)

(B) (iii), (ii), (i), (iv)

(C) (ii), (i), (iii), (iv)

(D) (iv), (iii), (ii), (i)

Ans: (C) (ii), (i), (iii), (iv)

28. ''It is necessary to create employment in the formal sector rather than in the informal sector.'' Defend or refute the given statement with valid arguments. 3 Marks

Ans: Yes, creating jobs in the formal sector rather than the informal sector is vital because:

- Pensions, provident funds (PF), and gratuities, among other social security benefits, are offered in the formal sector.
- Workers and businesses in the formal sector earn more consistently and consistently than those in the informal sector.
- Because the technology utilised in formal sector businesses is updated, creating jobs in the formal sector aids in the eradication of poverty and economic disparities.

Or

State and discuss any two challenges in the Power sector of India. 3 Marks

Ans: The following are some of the issues that India's power sector is now facing:

a. India's installed electricity generation capacity is insufficient to support yearly economic growth of 7%. Between 2000 and 2012, India will require 10000 MW of new capacity to meet rising power demand. At the moment, India can only add 20000 MW per year. Because the plants are not operating effectively, even the installed capacity is underutilised.

b. State Electricity Boards, which distribute electricity, lose more than Rs 500 billion each year. Transmission and distribution losses, incorrect electricity pricing, and other inefficiencies are to blame. The main cause of the losses is the free provision of electricity to farmers. Electricity is also stolen in many parts of the country.

c. Power generators in the private sector have yet to play their part.

d. Power tariffs and power outages are causing widespread public unrest across the country.

e. Thermal power plants, which are India's principal source of electricity, are running out of raw materials and coal.

29. ‘‘Rapid increase in economic growth surely trickles down to the people under the absolutely poor category.’’ Defend or refute the given statement with valid arguments. 3 Marks

Ans: The rapid rise in people's economic growth raises commodity costs, and people will require more money to acquire their things from the store.

A quick increase in economic growth, on the other hand, raises people's demands and product costs at the same time, potentially leading to a rapid deterioration of economic conditions.

This statement is false because:

a. Population growth has resulted in a very low increase in per capita income

b. The Green Revolution has increased regional disparity and the gap between rich and poor farmers.

c. The wealthy have reaped the benefits of economic growth.

30. ‘‘Agriculture sector appears to be adversely affected by the economic reform process.’’ Explain the given statement. 4 Marks

Ans: The agricultural sector was negatively impacted by the reform process in the following ways:

a. During the reform period, public investment in agriculture, particularly in infrastructure such as irrigation and power, was cut.

b. The elimination of fertiliser subsidies has increased the cost of production, putting small and marginal farmers at a disadvantage.

c. Increased international competitiveness as a result of import duty reductions and liberalisation.

d. A shift from food crops to cash crops as a result of agriculture's export-oriented policy resulted in a spike in food-grain prices.

Or

India is often called the 'Outsourcing Destination' of the world. Discuss the prime reasons for this name given to India. 4 Marks

Ans: Outsourcing can help your firm remain ahead of the competition, control costs, improve quality, shorten time to market, and provide creative solutions. By outsourcing to India, you can gain access to all of the following advantages. India has won a name for itself in the outsourcing business by giving high-quality services at a very less cost over the years. India is now one of the world's ten fastest growing economies.

According to a recent survey done in the United States, 82 percent of US–based enterprises chose India as their first and most favoured destination for software outsourcing. Though other outsourcing destinations such as China and the Philippines also provide low-cost services with quick turnaround times, India is the only country with unparalleled quality and the largest pool of competent resources in practically every profession.

31. ''India, China and Pakistan have travelled more than seven decades of developmental path with varied results.'' Explain the given statement with valid arguments. 4 Marks

Ans: ''India, China and Pakistan have travelled more than seven decades of developmental path with varied results.'' The given statement with valid arguments is explained below.

I. Until the late 1970s, all three countries remained at the same low-development level.

II. Over the last three decades, the three countries have progressed at various rates.

a. Over the years, India has had a mediocre performance. Agriculture continues to be the primary source of income for the majority of the population. Infrastructure is poor, and nearly a quarter of the population lives in poverty.
b. Political instability, overdependence on remittances and foreign aid, and erratic agricultural production all contributed to Pakistan's poor performance.
c. China has succeeded in raising the rate of economic growth while focusing on poverty reduction by employing the market system.

32. Discuss briefly the rationale behind choosing 'Self-reliance' as a planning objective for the Indian economy. 4 Marks

Ans: The goal of self-sufficiency was to :

I. **To reduce foreign dependence:** The Indian five-year plans in the early years of the post-independence era emphasised the utilisation of native resources in order to lessen our reliance on foreign countries, with the goal of promoting economic growth and modernisation.

II. **To avoid foreign interference:** It was believed in the post-independence era that our reliance on imported food supplies, foreign technology, and foreign cash would lead to more foreign intervention in our country's policy.

33. 2+4 = 6 Marks

(a) State the meaning of 'Poverty Line'.

Ans: The poverty line is the point on a distribution line that divides the population of a country into poor and non-poor people. It can be calculated based on calorie consumption and monthly per capita expenditure (MPCE).

(b) Define the following :

Ans: Definitions:

(i) Carrying capacity of environment

Ans: Carrying capacity of environment : It means that resource extraction does not exceed resource regeneration, and waste generated does not exceed the environment's absorbing capability.

(ii) Absorptive capacity of environment

Ans: Absorptive capacity of environment : It means the ability of the environment to absorb degradation without causing environmental damage.

34. (a) ''Ujjwala Yojana has been a game changer for rural India.'' State any three conventional fuels being targeted under the LPG cylinder distribution scheme (Ujjwala Yojana). 3 Marks

Ans: Because traditional energy sources pollute the environment, the government has proposed the 'Ujjwala Yojna' as a game changer for rural India, offering free LPG gas cylinders (a cleaner fuel) to rural households.

The Ujjawala Yojana focuses on three conventional fuels:

(i) Agricultural waste and dried dung

(ii) Firewood

(iii) Coal

(b) ''The Indian Health System needs a stronger dose of public expenditure to cure itself.'' Justify the given statement with valid arguments. 3 Marks

Ans: The argument is defended on the grounds that India's health-care system has progressed at an abnormally slow pace since independence. The Indian health-care system has suffered as a result of low government spending. In comparison to some of the main emerging countries, health expenditure as a proportion of GDP is abysmally low. In the 2014-15 fiscal year, it accounted for roughly 4.7 percent of total GDP. As a result, the Indian health system needs a greater dose of public spending to heal itself.

Or

(a) Why are less women found in regular salaried employment ? **3 Marks**

Ans: Due to the following reasons, Women are found less in regular salaried employment:

I. In India, less educated women work in conventional paying positions, which need skills and a high degree of literacy.

II. Due to social restraints, women in India have limited mobility.

(b) Analyse the recent trends in sectoral distribution of workforce in India : **3 Marks**

Trends in Employment Pattern (Sectorwise), 1993 – 2012 (in %)

Sector	1993 – 94	1999 – 2000	2011 – 12
Primary	64	60.4	48.9
Secondary	16	15.8	24.3
Services	20	23.8	26.8

Ans: According to the data, the share of workers employed in the primary sector has drastically decreased over time. The employment proportion of the secondary industry and the services sector, on the other hand, has risen. While the secondary sector's part of the economy has increased by around 9% in recent years, the services sector's share has increased by about 7%.

CBSE Class 12

Economics

Previous Year Question Paper 2019

Series: BVM/1 **Set- 1**

Code no. 58/1/1

- Please check that this question paper contains **10** printed pages.
- Code number given on the right-hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains **24** questions.
- **Please write down the Serial Number of the question before attempting it.**
- **15** minutes of time has been allotted to read this question paper. The question paper will be distributed at **10.15 a.m**. From **10.15 a.m.** to **10.30 a.m.,** the students will read the question paper only and will not write any answer on the answer script during this period.

ECONOMICS

Time Allowed: **3** hours Maximum Marks: **80**

Instructions:

1. All questions in both sections are compulsory.
2. Marks for questions are indicated against each question.
3. Question No**. 1-4** and **13-16** are very short answer questions carrying **1** mark each. They are required to be answered in one sentence.
4. Question No. **5-6** and **17-18** are short answer questions carrying **3** marks each. Answers to them should not normally exceed **60** words each.

5. Question No. **7-9** and **19-21** are also short answer questions carrying **4** marks each. Answers to them should not normally exceed **70** words each.

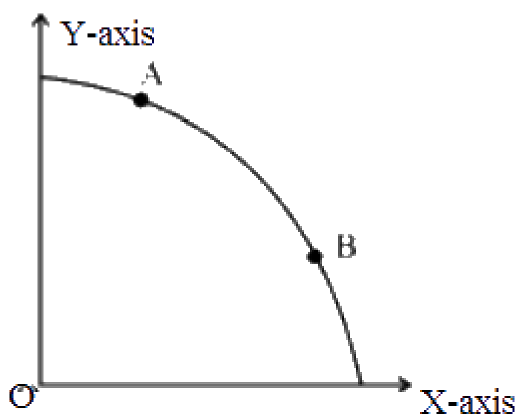
6. Question No. **10-12** and **22-24** are long answer questions carrying **6** marks each. Answers to them should not normally exceed **100** words each.

7. Answers should be brief and to the point and the above word limit be adhered to as far as possible.

SECTION-A

(Micro Economics)

1. In the given figure, the movement on the production possibility curve from point A to point B shows ________. (Choose the correct alternative) 1 Mark



(a) Growth of all the resources in the economy.

(b) Underutilisation of resources.

(c) Production of more units of Good X and less units of Good Y.

(d) Production of more units of Good Y and less units of Good X.

Ans: (c) Production of more units of Good X and less units of Good Y.

2. Average fixed cost curve ________. (Choose the correct alternative) 1 Mark

(a) is a straight line parallel to the X-axis.

(b) is a straight line parallel to the Y-axis.

(c) falls, as more units are produced

(d) rises, as more units are produced

Ans: (c) Falls, as more units are produced.

Or

Which of the following formulas is correct for calculating marginal cost? (Choose the correct alternative) 1 Mark

(a) $MC_N = TFC_n - TFC_{N-1}$

(b) $MC_N = AC_n - AC_{N-1}$

(c) $MC_N = AVC_n - AVC_{N-1}$

(d) $MC_N = TC_n - TC_{N-1}$

Ans: (d) $MC_N = TC_n - TC_{N-1}$

3. The average product curve in the input-output plane, will be ______ (Choose the correct alternative) 1 Mark

(a) as 'S' shaped curve
(b) an inverse 'S' shaped curve
(c) a 'U' shaped curve
(d) an inverse 'U' shaped curve

Ans: (d) an inverse 'U' shaped curve.

4. If the market supply of a commodity X changes due to improvement in technology, the market supply curve will ______. (Fill up the blank) 1 Mark

Ans: If the market supply of a commodity X changes due to improvement in technology, the market supply curve will shift to the right.

Or

If the market supply of a commodity X changes due to a rise in the price of factor input, the market supply curve will _______. (Fill up the blank) 1 Mark

Ans: If the market supply of a commodity X changes due to a rise in the price of factor input, the market supply curve will shift to the left.

5. Identify and discuss the nature of the following newspaper reports in terms of positive or normative economic analysis :

(i) "India jumped 23 points in the World Bank's ease of doing business index to 77th place, highest in 2 years."- The Economic Times

(ii) "Government should further liberalize the business rules." – The Economic Times **3 Marks**

Ans: The nature of the following The Economic Times newspaper reports in terms of positive or normative economic analysis are as follow:

(i) The above statement "India jumped 23 points in the World Bank's ease of doing business index to 77th place, highest in 2 years." comes under positive economics since Positive Economics outlines facts that can be validated by actual data. The aforementioned assertion can be easily proven by existing statistics.

(ii) The above statement "Government should further liberalize the business rules." as it describes opinions and how economic problems should be treated, the statement falls under the category of normative economics. The preceding statement functions as a solution to the aforementioned difficulty.

6. Distinguish between substitute goods and complementary goods, with examples. **3 Marks**

Ans: The differentiation between substitute goods and complementary goods are as follows:

Substitute Goods	**Complementary Goods**
These are goods that can easily be substituted for other goods or that can be replaced.	These are items that are required in tandem to meet a need or that cannot be replaced with one another.
Substitute goods are inherently competitive.	Complementary commodities are in high demand.

The price of a substitute immediately affects the demand for one good.	The price of one good affects the demand for the complementary good in an indirect or inverse manner.
Tea and coffee, Coke and Pepsi	Car and petrol bread and butter

Or

Distinguish between normal goods and inferior goods, with examples. 3 Marks

Ans: The difference between normal goods and inferior goods are:-

Normal Goods	Inferior Goods
It refers to commodities whose demand rises in tandem with rising income or vice versa.	It refers to commodities whose demand falls as income rises or rises as income falls.
For a normal good, there is a direct relationship between income and demand. As a result, the income effect is positive.	An indirect or inverse relationship exists between income and demand for a substandard commodity. As a result, the income effect is negative.
Pure milk, rice, etc.	Toned milk and coarse cereals etc.

7. Discuss briefly, using a hypothetical schedule, the relation between marginal utility and total utility. 4 Marks

Ans: The following table can be used to explain the link between marginal and total utility:

Units of Consumption	MU (Units)	TU (Units)
1	10	10
2	8	18
3	6	24
4	4	28
5	2	30

6	0	30
7	-2	28

The above schedule shows the following relationship:

1. TU increases as long as MU is greater than zero (up to 5 units of consumption)
2. When MU decreases, TU increases at a slower rate.
3. When MU is 0, TU is the maximum. When 6 units are used, this occurs.
4. When MU turns negative, TU begins to decline. After 6 units of intake, this occurs.

Or

Discuss briefly, using a hypothetical schedule, the concept of diminishing marginal rate of substitution. 4 Marks

Ans: Concept of Diminishing Marginal rate of substitution:

1. The customer will be prepared to sacrifice fewer units of good Y in exchange for an additional unit of good X, according to the declining marginal rate of substitution assumption.
2. The explanation for the indifference curve's convexity to the origin is the diminishing marginal rate of substitution.

The table below shows various combinations of good X and good Y that give the same level of consumer satisfaction.

Combination	**Goods X (units)**	**Goods Y (units)**	$\mathbf{MRS_{XY} = \frac{\Delta Y}{\Delta Q}}$
A	1	21	-
B	2	15	6Y:1X
C	3	10	5Y:1X
D	4	6	4Y:1X

E	5	3	3Y:1X

According to the following table, consumers are prepared to sacrifice fewer and fewer units of good Y for each additional unit of good X. For example, he is willing to give up 6 units of Y in exchange for the second unit of X. He is willing to sacrifice 5 units of Y for the third unit of X, and so forth.

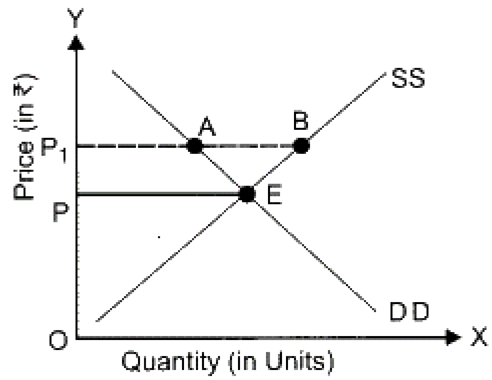
8. Complete the following cost schedule: 4 Marks

Quantity (in Units)	0	1	2	3	4
Total cost (in Rs)	200	---------	----------	--------	490
Total variable cost (in Rs)	0	----------	180	--------	----------
Average variable cost (in Rs)	-	100	---------	80	--------

Ans: The completed cost schedule:

Quantity (in Units)	0	1	2	3	4
Total cost (in Rs)	200	300	380	440	490
Total variable cost (in Rs)	0	100	180	240	290
Average variable cost (in Rs)	-	100	90	80	72.5

9. In the given diagram, OP is the market-determined price, and OP_1 is the price fixed by the government. 4 Marks



(a) Identify whether the diagram represents price ceiling or price flooring.

Ans: The figure depicts the current state of the price floor. Price floors restrain a price from falling down a certain level. As when the price floor is placed up above the equilibrium price, the quantity supplied will surpass the quantity demanded, and surplus supply will result.

(b) Discuss the likely behavior of the market in the given condition.

Ans: To safeguard the interests of a given category of producers, the government sets prices for numerous items that are higher than their equilibrium values. A price floor will only affect the market if it is greater than the free-market equilibrium price. If the floor price is higher than the economic price, there will be an immediate supply surplus. A price floor will also result in a less efficient market and a lower overall economic surplus. The addition of consumer and producer surplus is called an economic surplus. An effective price floor will lift the price of a good, resulting in lower consumer surplus but higher producer surplus.

Or

Suppose the demand and supply equations of a commodity X in a perfectly competitive market are given by:

$Q_d = 1700 - 2P$

$Q_s = 1300 + 3P$

Calculate the value of equilibrium price and equilibrium quantity of the commodity X. **4 Marks**

Ans: For calculating equilibrium price and quantity, put the above equation equal to each other or equilibrium is established when

Qd = Qs

1700-2P = 1300+3P

1700-1300=3P+2P

400=5P

P=400/5=8

P=₹80

Now put the value of price in any of the above equation

Qd = 1700-2P   Qs=1300+3P

=1700-2×80   Or   =1300+3P

=13000+240   =1700 – 160

=1540   =1540

So equilibrium price = ₹ 80
Equilibrium quantity = 1540 units.

10. (a) Define price elasticity of demand. **6 Marks**

Ans: Price elasticity of demand is a measure of how responsive a good's demand is to price changes, and it's calculated by dividing the percentage change in demand by the percentage change in price.

(b) If the price of a commodity rises by 40% and its quantity demanded falls from 150 units to 120 units, calculate the coefficient of price the elasticity of demand for the commodity.

Ans: $Ed=\frac{\text{\% change in quantity demanded}}{\text{\% change in price}}$

$$=(-)\frac{150-130}{150}\times\frac{100}{40}$$

$$=(-)\frac{30}{150}\times\frac{100}{40}$$

$$=(-)\frac{20}{40}=-0.5$$

11. What is meant by "diminishing returns to a factor"? Discuss any two reasons for the operation of diminishing returns to a factor. 6 Marks

Ans: When more units of a variable factor are used with a given amount of fixed factor, diminishing returns to a factor implies that total product (TP) increases at a diminishing rate while the marginal product (MP) declines but remains positive.

The following are the two causes for the operation of decreasing returns to a factor:

- **Scarce Factors:** When certain factors, such as land, which is limited in itself, cannot be increased, the law of diminishing returns applies. It could also happen with other production issues. In some circumstances, for example, labour, particularly technical labour, capital, or even enterprise cannot be grown. As a result, the adjustment of production variables will be disrupted, and output will not be able to increase at the same rate.
- **Lack of perfect substitutes:** Another reason why the rule of diminishing returns does not apply is that there are no ideal substitutes for production inputs. It simply means that one factor of production cannot be replaced by another. There isn't always a substitute for every production factor. The law of decreasing returns will apply in the absence of such a substitute.

Or

"Balance of Payment (BOP) is always balanced in the accounting sense." Defend or refute the given statement with valid reasons. **3 Marks**

Ans: The above assertion "Balance of Payment (BOP) is always balanced in the accounting sense." is defended by the fact that the balance of payment (BOP) is founded on the principles of double-entry bookkeeping. Any deficits or surpluses caused by autonomous transactions are offset by monetary authority surpluses or deficits in accommodating transactions.

12. Elaborate three features of the monopoly form of market. 6 Marks

Ans: Monopoly is a market condition in which there is only one seller, there are no close substitutes for the commodity, and there are entry restrictions. Microsoft and Windows, DeBeers and diamonds, and your local natural gas business are all examples. The following are the three main characteristics of a monopoly market:

1. **Single seller:** When there is just one producer of a product, the distinction between company and industry vanishes, and the firm has complete control over the commodity's supply.
2. **No close substitutes:** There are no close substitutes for the product supplied by a monopolist. As a result, the dominant business is unconcerned about new or current competitors.
3. **Entry Hurdles:** Under monopoly, there are significant barriers to new firms entering the market. As a result, a monopolistic company may manipulate the market and profit abnormally over time.

Or

Distinguish between perfect competition and monopolistic competition on the basis of the following: 6 Marks

(a) Number of sellers

(b) Nature of product

(c) Selling cost

Ans: The differences between perfect and monopolistic competition are:-

Basics	Perfect Competition	Monopolistic Competition
1.Number of Sellers	There are a lot of people that want to sell.	There are also a lot of vendors, although the competition isn't great.
2. Nature of product	This market condition allows homogeneous products to be offered.	Products differ but are near replacements for one another, or there are product differences.

3. Selling	There isn't any room for profit when it comes to selling.	A lot of money is spent on advertising and other things.

SECTION-B

(MACRO – ECONOMICS)

13.Give any two examples of flow concepts. 1 Mark

Ans: National income and investment are two instances of flow concepts.

14. Define the term 'tax'. 1 Mark

Ans: A tax is a mandatory payment made by individuals or businesses to the government in order for it to satisfy its expenses. There are direct and indirect taxes, as well as progressive and regressive taxes, value-added and particular taxes.

15. Suppose in a hypothetical economy, the income rises from ₹ 5,000 crores to ₹ 6,000 crores. As a result, the consumption expenditure rises from ₹ 4,000 crores to ₹ 4,600 crores. Marginal propensity to consume in such a case would be. (Choose the correct alternative) 1 Mark

(a) 0.8

(b) 0.4

(c) 0.2

(d) 0.6

Ans: (d) 0.6

Initial income = ₹ 5,000 crores

New income = ₹ 6,000 crores

Change in income (ΔY) = 6000 – 5000 = ₹ 1,000 crore

Initial consumption = ₹ 4,000 crore

New consumption = ₹ 4,600 crore

Change in consumption = 4600 – 4000 (ΔC) = ₹ 600 crore

Marginal propensity to consume

$$MPC = \frac{\text{change in consmption}}{\text{change in income}}$$

$$MPC = \frac{\Delta C}{\Delta Y}$$

$$MPC = \frac{600}{1000}$$

$$MPC = 0.6$$

16. What is meant by primary deficit? 1 Mark

Ans: The primary deficit is the difference between the government's fiscal deficit and interest payments.

Primary deficit = Fiscal deficit – Interest payment

Or

What is meant by fiscal deficit? 1 Mark

Ans: The fiscal deficit is the difference between total spending and the sum of income and total capital receipts minus borrowings.

17. Define the problem of double counting in the computation of national income. State any two approaches to correct the problem of double counting. 3 Marks

Ans: Double Counting: When computing the national income, double-counting implies counting the value of the same commodity more than once.

There are two techniques to avoid duplicate counting:

1. Only consider the worth of finished goods: The worth of intermediary products is not taken into account in this technique. To calculate national income, just the value of final items should be included.
2. Adopt the value-added approach: In this technique, the total value contributed by each manufacturing unit is taken into account when calculating national revenue.

Or

"Gross Domestic Product (GDP) does not give us a clear indication of the economic welfare of a country." Defend or refute the given statement with valid reason. 3 Marks

Ans: I defend this statement. Welfare refers to a sense of material well-being among the people. In the economy, there are transactions that result in welfare but cannot be assessed in monetary terms. These transactions are not taken into account when computing GDP.

As a result, there are additional aspects to consider. There are a few other factors that aren't taken into account when calculating GDP yet have an impact on wellbeing.

1. **GDP distribution:** GDP does not take into account changes in income distribution inequities. As a result, people's well-being may not increase at the same rate as GDP.
2. **Non-Monetary Transactions:** Due to a lack of data, GDP does not account for non-monetary transactions. However, such exchanges benefit society.
3. **Externalities:** Negative and positive externalities are not taken into account. Externalities that are negative lower well being whereas those that are good boost it.
4. **Some goods may have a detrimental impact:** Gross domestic product (GDP) comprises all final products, whether grain or liquor. Grain adds to well-being, whereas alcohol is harmful to one's health.

18. If in an economy: Change in initial Investments (I) = Rs. 500 crores Marginal Propensity to Save (MPS) = 0.2 Find the values of the following: 3 Marks

(a) Investment multiplier (k)

Ans: Investment multiplier (k)

$$\text{Investment multiplier } = \frac{1}{\text{MPS}}$$

$$\text{Investment multiplier } = \frac{1}{0.2}$$

Investment multiplier = 5

(b) Change in final income (Y)

Ans: Change in final income (Δ y)

Change in final income = Investment multiplier x Change in initial Investments

Change in final income = 5*500 Change in final income = 2500.

19. How are capital receipts different from revenue receipts? Discuss briefly.
4 Marks

Ans: Differences between capital receipts and revenue receipts are:-

Basis	Capital Receipts	Revenue Receipts
Meaning	The income created by the business's investment and financing activities is referred to as capital receipts.	The income earned by the business's running activities is referred to as revenue receipts.
Nature	Non-Recurring	Recurring
Term	Long Term	Short Term
Shown in	Balance Sheet	Income Statement
Value of asset or liability	Increases the value of an obligation while decreasing the value of an asset.	Increases or decreases the asset or liability's value.

Examples	Borrowings, disinvestment receipts, and so on.	Income tax, profits from public corporations, dividends, fees, and fines, and so on.

20. State and discuss the components of Aggregate Demand in a two-sector economy. 4 Marks

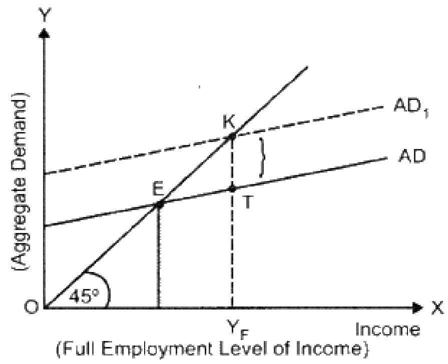
Ans: Aggregate demand is the sum of people's plans to spend on various goods and services produced in an economy over the course of a single accounting year, corresponding to various levels of income.

The following are the components of aggregate demand in a two-sector economy:

- **Private Consumption Expenditure:** The total expenditure that all households in an economy are willing to pay on the acquisition of various products and services for their personal consumption in a certain period of time is known as private consumption expenditure. Consumption is influenced by a variety of factors, including the cost of the commodity, one's income level, the cost of connected commodities, and so on. This is largely controlled by the household's disposable income.
- **Private investment Expenditure:** The addition to the capital stock or the spending incurred by private investors over a period of time to construct new capital assets for a country, such as plants or machinery, is referred to as a private investment expenditure. The marginal efficiency of capital and the rate of interest determine investment demand.

Or

In the given figure, what does the gap "KT" represent? State any two fiscal measures to correct the situation. 4 Marks



Ans: ‘Deficient Demand' is represented by the vertical gap ‘K T'. When aggregate demand in an economy falls short of aggregate supply at full employment, the demand is said to be deficient demand.

The following are fiscal methods to address deficient demand :

1. **Tax reduction:** The revenue will be reduced. The government's policy is expressed in terms of taxation. During deflation, the government will levy reduced taxes in order to enhance people's purchasing power. The government must increase liquidity in the economy to regulate insufficient demand.
2. **Increased government spending:** The government must spend a significant amount of money on public works such as roads, buildings, and other infrastructure, hence raising people's money income and their demand for products and services.

21. Discuss the working of the adjustment mechanism in the following situations: 4 Marks

(a) Aggregate demand is greater than aggregate supply.

(b) Ex Ante Investment is lesser than Ex Ante Savings.

Ans: (a) Aggregate demand is greater than aggregate supply: When AD > AS it indicates that consumers intend to purchase more products and services than producers intend to produce. As a result, inventories begin to decline and eventually fall below the desired level. Producers increase production to bring inventories back to the desired level. This boosts the revenue level, which continues to rise until the AD and AS are equal again.

(b) Ex Ante Investment is lesser than Ex Ante Savings: When projected savings are more than planned investment, it indicates that households are not consuming as much as firms anticipated. This will result in the accumulation of unwanted goods. To clear the unwanted increase in inventory, businesses cut production, resulting in a drop in income and, as a result, a reduction in savings until planned savings and planned investments are equal.

22. (a) Define "Trade surplus". How is it different from "Current account surplus"?

Ans: The Economic Times In the light of the above report, the impact of the situation on Indian Imports will be like:

In a country's balance of payment account, a trade surplus is defined as the difference between the value of visible item exports and the value of visible item imports. The excess of revenues from the value of the visible item, invisible item, and unilateral transfer exports overpayment of the value of the visible item, invisible item, and unilateral transfer imports is referred to as the current account surplus. In comparison to a trade surplus, it is a broader term.

(b) "Indian Rupee (₹) plunged to an all-time low of ₹ 74.48 against the US Dollar ($)". -The Economic Times In the light of the above report, discuss the impact of the situation on Indian Imports.

Ans: "Indian Rupee (₹) plunged to an all-time low of ₹ 74.48 against the US Dollar ($)". The preceding phrase implies that the Indian currency has depreciated against the US dollar ($). The reduction in the value of the rupee in terms of foreign money is referred to as depreciation. To purchase a unit of foreign currency, more rupees are now necessary. This will raise the cost of imported items in India. Imports are projected to fall as a result.

23. (a) State any two components of the M1 measure of the money supply.

Ans: M1 consists of currency, demand deposits, and other deposits.

M1 = C + OD + DD

Where, C = Currency held by the public

OD = Other deposits

DD = Demand deposits held by commercial banks.

Coins and banknotes are examples of currency. It's also known as fiat money. Fiat money is a legal tender that is accepted as money by the government. It only includes money held outside the bank, i.e. with the general public, and excludes money held in the bank.A demand deposit is a bank deposit that can be withdrawn by the user whenever they choose. Chequable deposits is another name for it.

(b) Elaborate any two instruments of Credit Control, as exercised by the Reserve Bank of India.

Ans: The following are two credit control instruments:

1. **Bank Rate Policy:** The rate at which the Central Bank loans money to commercial banks is known as the bank rate. The Central Bank influences the money supply in the economy by changing the bank rate.The Central Bank lowers the bank rate when credit is to be increased.Because borrowing from the Central Bank is now less expensive than before, banks are encouraged to hold a modest amount of their deposits as reserves.

   As a result, banks are allocating a larger amount of their funds to lending to borrowers or investors. As a result, the money supply expands. During a period of deflation, the bank rate is reduced. During times of inflation, the RBI controls credit in the economy.

2. **Open Market Operations:** The Central Bank buys and sells government securities from and to the public and banks through open market operations. When the Central Bank purchases government securities, it adds to the economy's cash holdings. When the central bank sells government assets, it withdraws cash balances from the economy, resulting in higher deposits with commercial banks and thus more credit flow. Deposits with commercial banks fall when cash balances fall, and credit flow falls as a result.

Or

Define Credit Multiplier. What role does it play in determining the credit creation power of the banking system? Use a numerical illustration to explain. **6 Marks**

Ans: With each initial deposit, the credit multiplier measures the amount of money that banks can create in the form of deposits.

Role of credit multiplier in determining the credit creation power of the banking system:-

1. Credit production by commercial banks is influenced by the credit multiplier, which is in turn influenced by LRR.
2. The higher the credit multiplier, the more overall credit will be created, and vice versa.

Consider the following numerical example: Suppose the initial deposit is \$1,000 and the LRR is 10%. Banks will set aside 10% of the total, or \$100, as a reserve and lend the remaining 900 to borrowers. The money will be spent by the borrowers. It is estimated that 900 will be returned to the banks. The bank will hold 10% of the 900, i.e. 90, as a reserve and lend the remaining 810.

$$\text{Momey multiplier}=\frac{1}{\text{LLR}}$$

= 1/10=0.1

The total deposit will be = Initial deposit × money multiplier

= 1000×10

= ₹ 10,000

24.Given the following data, find the missing value of Government Final Consumption Expenditure' and Mixed-Income of Self Employed. 6 Marks

S.No	Particulars	Amount (in Crores)
(i)	National Income	71,000
(ii)	Gross Domestic Capital Formation	10,000

(iii)	**Government Final Consumption Expenditure**	**?**
(iv)	**Mixed Income of Self-Employed**	**?**
(v)	**Net Factor Income from Abroad**	**1,000**
(vi)	**Net Indirect Taxes**	**2,000**
(vii)	**Profits**	**1,200**
(viii)	**Wages and Salaries**	**15,000**
(ix)	**Net Exports**	**5,000**
(x)	**Private Final Consumption Expenditure**	**40,000**
(xi)	**Consumption of Fixed Capital**	**3,000**
(xii)	**Operating Surplus**	**30,000**

Ans: Mixed - income of self - employed

=(i) - [(viii) + (xii) + (v)]

= 71,000 - [15,000 + 30,000 + 1000]

= ₹ 2,500 crores

Government final consumption expenditure

=(i) - [(x) + (ii) + (v) + (ix)] + (vi) + (xi)

= 71,000 – [40,000 + 10,000 + 1000 + 5000] + 2,000 + 3000

= ₹ 20,000 crores.

CBSE
Class XII Economics
All India Board Paper Set 1 – 2018

Time: 3 hrs. **Max. Marks: 80**

Note:
- Please check that this question paper contains 11 printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains 24 questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minutes time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

General Instructions:

(i) **All** questions in both the sections are compulsory.

(ii) Marks for questions are indicated against each question.

(iii) Questions No. **1 – 4** and **13 – 16** are very short-answer questions carrying **1** mark each. They are required to be answered in one sentence.

(iv) Questions No. **5 – 6** and **17 – 18** are short answer questions carrying **3** marks each. Answers to them should normally not exceed **60** words each.

(v) Questions No. **7 – 9** and **19 – 21** are also short answer questions carrying **4** marks each. Answers to them should normally not exceed **70** words each.

(vi) Question number **10 – 12** and **22 – 24** are long-answer questions carrying **6** marks each. Answers to them should normally not exceed **100** words each.

(vii) Answers should be brief and to the point and the above word limits should be adhered to as far as possible.

SECTION A

1. What do you mean by the problem of scarcity? (1)

2. Define cost. (1)

3. When average cost falls, marginal cost (1)
(Choose the correct alternative)
(a) Falls
(b) Rises
(c) May fall or may rise

(d) Neither falls nor rises

4. When marginal product rises, total product (1)
(Choose the correct alternative)
(a) Fall
(b) Rises
(c) Can rise or can fall
(d) Remains constant

5. Distinguish between microeconomics and macroeconomics. Give an example of each. (3)

OR

What does production possibilities curve show? Can it shift? When?

6. State any three determinants of individual demand other than own price of the good. (3)

7. Comment upon the shape of the demand curve if the price of a commodity rises by 10% and there is no change in its quantity demanded. (4)

8. What is revenue in microeconomics? State the relation between marginal revenue and average revenue under perfect competition, using suitable diagram or schedule. (4)

OR

Define supply. Distinguish between "increases in supply" and "extension in supply".

9. What is 'price floor'? Explain its implications. (4)

10. A consumer consumes only two goods X and Y. Explain the conditions of consumer's equilibrium using utility analysis. (6)

OR

State and explain three properties of indifference curves.

11. Explain the law of variable proportions with the help of total product curve. Use diagram. (6)

12. State and discuss four characteristics of perfect competition. (6)

SECTION B

13. With a rise in real national income, welfare of the people (1)
(Choose the correct alternative)
(a) Rises
(b) Falls
(c) Remains unchanged
(d) None of the above

14. If 'legal reserve ratio' is 20%, what will be the value of money multiplier? (1)

15. Which of the following is not the function of the central bank?
(Choose the correct alternatives)
(a) Banking facilities to government
(b) Banking facilities to public
(c) Lending to government
(d) Lending to commercial banks (1)

16. If the value of average propensity to consume is given as 0.75, the value of average propensity to save would be ____________. (1)

17. Which among the following are capital goods and which are consumer goods and why?(3)
(a) A car used as a taxi
(b) Refrigerator in a hotel
(c) Air-conditioner in a house

OR

Define intermediate consumption and explain it with an example. How is it different from final consumption?

18. If a consumption function of a hypothetical economy is given as
C = 100 + 0.6 Y, then
(i) What will be the values of marginal propensity to Consume and marginal propensity to save for the economy?
(ii) Write the corresponding saving functions. (3)

19. Discuss the meaning of any two methods of controlling credit which may be adopted by the central bank. (4)

OR

Explain the 'bank of issue' function of the central bank.

20. Explain the national income determination in an economy using saving and investment approach. Use diagram. (4)

21. What is investment multiplier? Explain its working using a suitable numerical example.(4)

22. Explain the distinction between the following : (6)
(a) Revenue expenditure and Capital expenditure in a government budget
(b) Primary deficit and Fiscal deficit

OR

Explain the distinction between Revenue receipts and Capital receipts in a government budget. Given their components.

23. Define fixed exchange rate. How is the exchange rate determined in a flexible exchange rate system? (2,4)

24. Calculate (a) Gross domestic product at market price, and (b) National income: (3,3)

		(₹ in crores)
(i)	Government final consumption expenditure	4,000
(ii)	Private final consumption expenditure	3,500
(iii)	Gross domestic capital formation	1,100
(iv)	Net exports	500
(v)	Net factor income from abroad	100
(vi)	Net indirect taxes	300
(vii)	Subsidies	40
(viii)	Change in stock	80
(ix)	Consumption of fixed capital	120

CBSE
Class XII Economics (Re-exam)
All India Board Paper Set 1 – 2018 Solution

SECTION A

1. Problem of scarcity means the situation wherein demand for resources is greater than the availability of resources in an economy.

2. Cost refers to the expenditure incurred by a producer on factors of production such as purchase of plant and machinery and cost of hiring labour.

3. **Option c is the correct answer.** When average cost falls, marginal cost ***may fall or may rise***.

4. **Option b is the correct answer.** When marginal product rises, total product ***rises***.

5. Difference between Microeconomics and Macroeconomics

Microeconomics	**Macroeconomics**
Studies the behaviour of individuals.	Studies the behaviour of the economy as a whole.
Deals with the determination of prices and quantities of goods and services in the individual market.	Deals with the determination of the aggregate price level and the quantities of goods and services in an economy.
Example-Individual demand, individual supply, rent, wages, profit and price are main variables.	***Example***-Inflation, aggregate demand, aggregate supply and employment level are main variables.

OR

A production possibility curve is a curve indicating various possibilities of two goods which can be produced by using available resources and the given level of technology. It shows that all the available resources and technology are optimally utilised if a country is producing maximum goods and services.

Yes, a production possibility curve can shift. It can shift under following scenarios.

i. ***When there is a change in availability of resources***- Production Possibility Curve (PPC) shifts to the right when there is an increase in availability of resources. On the other hand, when there is a decrease in availability of resources, Production Possibility Curve (PPC) shifts to the left.

ii. ***When there is a change in technology level***- Production Possibility Curve (PPC) shifts to the right when there is an advancement of technology. In case of deterioration of technology, PPC shifts to the left.

6. The following are the determinants of individual demand:

i. ***Income of the consumer***: Income of the consumer affects the demand for a commodity. How the income of the consumer affects the demand depends on the type of good.

a. Normal goods: For normal goods, as the income of the consumer increases, the demand increases and *vice versa*.

b. Inferior goods: In case of inferior goods, with an increase in income, the demand decreases and *vice versa*.

ii. ***Future expectations***: Future expectations about the price and availability of the commodity also affect the demand for the commodity. For instance, if the consumer expects that there would be a shortage of the commodity in the future, then he will increase the demand even at the existing price.

iii. **Consumers' tastes and preferences:** Assume that other things remaining constant, if a consumer has more preference for a good than other goods, then the demand for those goods will increase. On the other hand, if a consumer has no preference for a good than other goods, then the demand for those goods will decrease.

7. Given:

Change in the price of the commodity = 10%

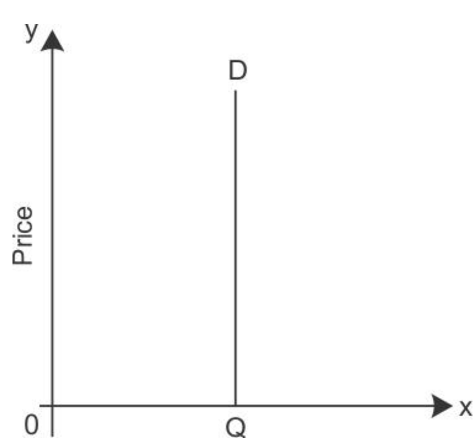
Change in the quantity demanded = 0

$$E_d = \frac{Percentage\ change\ in\ quantity\ demanded}{Percentage\ change\ in\ price}$$

$$E_d = \frac{0}{10}$$

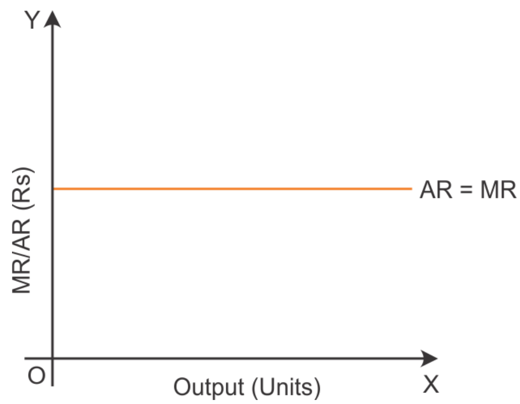
$$\therefore E_d = 0$$

When the demand for a good does not change with the change in the price of that good, it is said to be perfectly inelastic, i.e. $E_d = 0$. Thus, demand curve in the given case will ***be parallel to y-axis.***



8. In microeconomics, revenue of a firm refers to the money received from the sale of a given output. It is measured by considering the price of goods and the total quantity sold in the market.

Relationship between MR and AR under Perfect Competition



Marginal revenue is the revenue which is generated by selling an additional unit of a commodity. It is the change in total revenue when an additional unit of a commodity is sold in the market.

MRn = TRn – TRn-1

Average revenue is calculated by considering the total revenue and the quantity sold.

$$AR = \frac{TR}{Q}$$

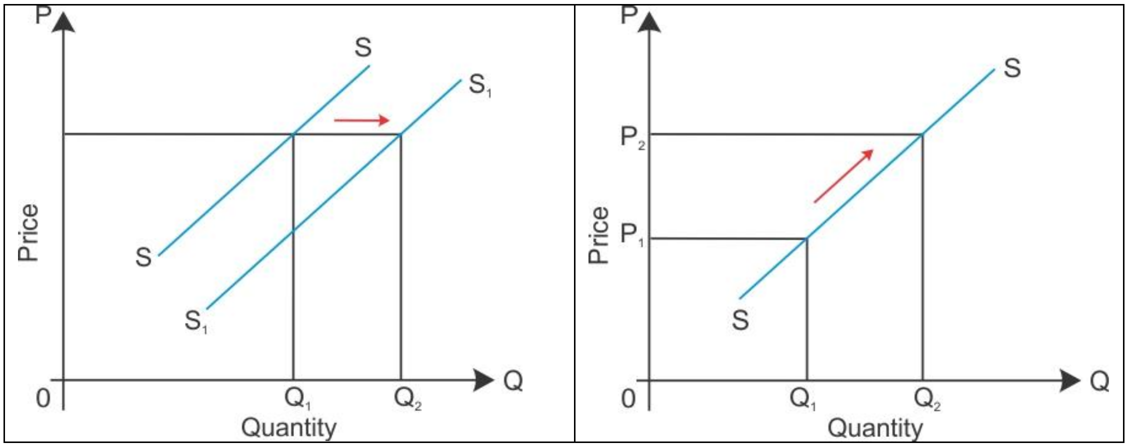
Under the perfect competition market, AR is equal to MR at all levels of output. Hence, the MR curve is a straight horizontal line which is parallel to the X-axis and coincides with the AR curve.

OR

Supply refers to the quantity of commodity that the producers offer for sale at different prices.

Difference between increase in supply and extension in supply

Increase in supply	Extension in supply
Occur due to ***change in factors*** other than price of the commodity	Occur due to increase in the ***price*** of the commodity
Shown by ***rightward shift*** in the supply curve	Shown by ***upward movement*** along the supply curve
Diagrammatic representation:	**Diagrammatic representation:**



9. Price floor means the minimum price fixed by the government for a good in the market. The government fixes this price on agricultural products and food grains in particular. A minimum price is fixed which the traders must pay to the farmers in the wholesale market. Thus, the income of the farmer is regulated and a continuous production is assured.

Implications of price floor:

i. The government ensures to buy the full produce of the farmers which are not sold in the market at the price floor. Hence, they are able to produce the maximum level of output.

ii. Farmers are ensured with the minimum returns as their products are completely sold in the market at comparatively higher price. This leads to an increase in their level of income.

iii. Because of price floor, consumers and traders in the market are forced to pay higher price than the equilibrium price.

10. Conditions of consumer's equilibrium using utility analysis:

When a consumer buys both Goods X and Y, the consumer's equilibrium condition is expressed through the equation:

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y} = \frac{MU_m}{P_n} = MU_m$$

Consider the following numerical example to understand the consumer's equilibrium using marginal utility. A consumer Marginal Utility of Money (MU_m) is 16 utils and two Goods X and Y whose prices are Rs 1 (P_x) and Rs 1 (P_y) per unit, respectively. Consider the following schedule to analyse marginal utility of good x (MU_x) and good y (MU_y).

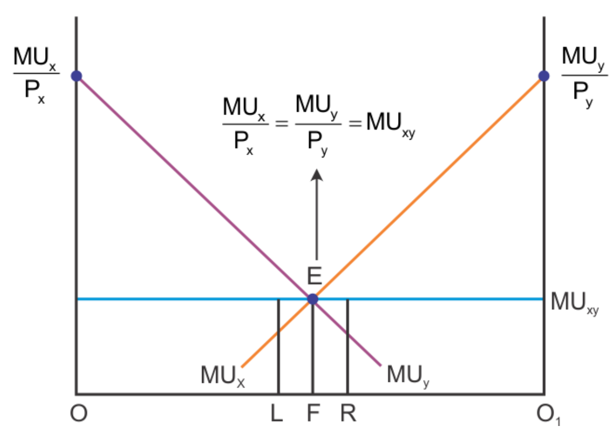
Units of x	MU x (Utils)	MU y3 (Utils)
1	28	32
2	24	29
3	21	27
4	20	23
5	16	20
6	13	18
7	9	17
8	5	16
9	3	12
10	1	9

Based on the given schedule, the consumer is in equilibrium at the consumption of 5 units of commodity x and 8 units of commodity y. At such a consumption combination, the marginal utility of a rupee spent on the commodity x$\left(\frac{MU_x}{P_x}\right)$ is equal to the marginal utility of a rupee spent on the commodity y$\left(\frac{MU_y}{P_y}\right)$ and also equal to the marginal utility of money (MU_m).

Marginal utility of a rupee spent on commodity x = marginal utility of a rupee spent on commodity y = Marginal utility of money

$$\frac{MU_x}{P_X} = \frac{MU_y}{P_y} = MU_m$$

$$\frac{MU_x}{P_X} = \frac{MU_y}{P_y} = \frac{16}{1} = 16 = MU_m$$



In the diagram, OO_1 is the total income of a consumer. MU_x and MU_y are the marginal utility curves of commodity x and commodity y, respectively.

The consumer does not attain equilibrium at Point L because the point at L is

$$\frac{MU_x}{P_X} > \frac{MU_y}{P_y}$$

The consumer does not attain equilibrium at Point R because the point at R is

$$\frac{MU_x}{P_X} < \frac{MU_y}{P_y}$$

So, when OF amount of income is spent on commodity x and FO_1 amount is spent on commodity y, the consumer is in equilibrium at Point E. Hence, at this point

$$\frac{MU_x}{P_X} = \frac{MU_y}{P_y} = MU_m$$

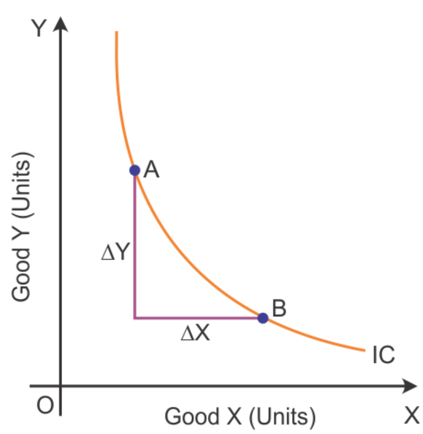
OR

Properties of indifference curves (ICs)

i. **Indifference curves slope downwards or negative slope:**
The indifference curves slope downwards, left to right, because an increase in the amount of Good X along the indifference curve is associated with a decrease in the amount of Good Y, as the preferences are monotonic.

ii. **Slope of indifference curves represents marginal rate of substitution:**

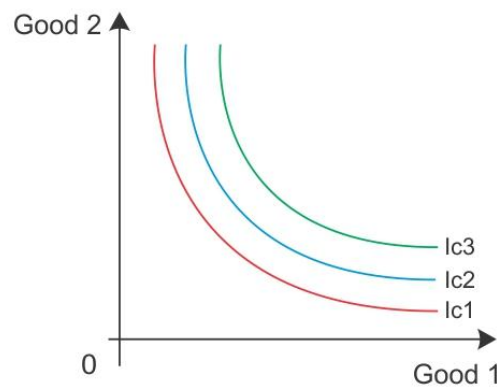
Marginal rate of substitution (MRS) is the rate at which a consumer is willing to substitute one commodity for another commodity.



Slope of indifference curve between A and B = $\frac{\Delta Y}{\Delta X}$ = MRS

MRS is the rate at which the output of Good Y is sacrificed for every additional unit of Good X.

iii. **In an indifference map, higher IC represents higher level of satisfaction:**
An indifference map refers to a set of indifference curves. An indifference curve which is to the right and above another shows a higher level of satisfaction to the consumer. Here, IC_3 shows higher level of satisfaction than IC_2. Thus, the indifference curve relates to a higher level of income of the consumer.



11. **Law of variable proportion:** Law of variable proportion states that as more of the variable factor input is combined with the fixed factor input, a point will eventually be reached where the marginal product of the variable factor input starts declining.

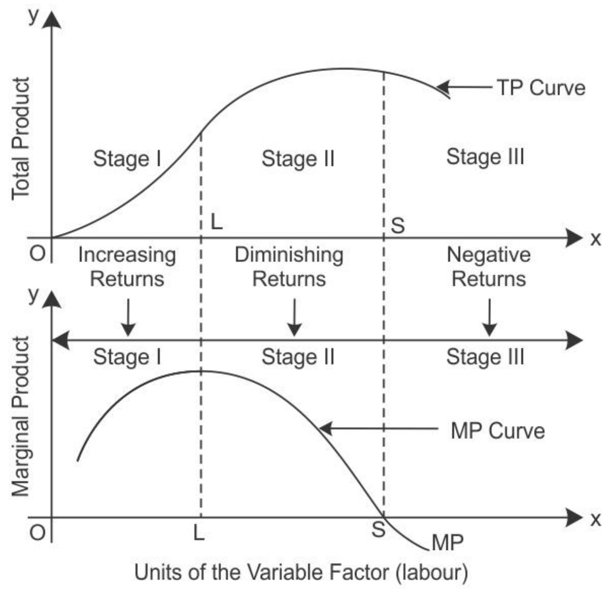
Units of Fixed Factor	Units of Variable Factor	TP	MP
1	1	4	4
1	2	12	8
1	3	24	12
1	4	32	8
1	5	34	2
1	6	34	0
1	7	30	−4
1	8	21	−9
1	9	10	−11

Let us consider the above table.

Stage I: As more units of factor input are used, MP tends to rise till 3 units of factor input are used. Here, the total product increases at an increasing rate which is called increasing returns to the factor input.

Stage II: However, when the 4th unit of factor input is used, the diminishing returns sets in where MP starts decreasing and TP increases at a decreasing rate. Diminishing MP reduces to zero. The total output is the maximum when the marginal output is zero.

Stage III: When MP is negative, TP starts declining from 34 to 10 when the 9th unit is employed.



12. A perfectly competitive market is a type of market where there are a large number of buyers and sellers.

Characteristics of a perfectly competitive market:

i. ***Large number of sellers and buyers***: The main feature of a perfectly competitive market is a large number of buyers and sellers in the market. Due to this feature, no single buyer or seller can influence market prices.

ii. ***Homogeneity***: All the producers in a perfectly competitive market always produce a similar type of products. Homogeneity in products is one of the important features of a perfectly competitive market.

iii. ***Complete mobility of factors of production***: In a perfectly competitive market, all the factors of production can shift from one place to another for better opportunity purposes.

iv. ***No transportation cost***: All the goods and services are manufactured in a local market, so transportation cost exists in a perfectly competitive market.

SECTION B

13. Option a is correct. With a rise in real national income, welfare of the people ***rises***. This is because when real GDP increases, output in the economy increases resulting in greater availability of resources per person. This implies rise in the welfare of the people.

14. If Legal Reserve Ratio is 20%, then value of money multiplier is 5.

$$Money\ multiplier\ (k) = \frac{1}{LRR} = \frac{1}{20\%}$$

$$k = \frac{100}{20}$$

$$\therefore k = 5$$

15. Option b is correct. Central bank ***does not provide banking facilities to public***.

16. If the value of average propensity to consume is given as 0.75, the value of average propensity to save would be **0.25**.

APC + APS =1

0.75 + APS =1

APS = 1- 0.75 = 0.25

17. (a) A car used as a taxi- It is a ***capital good*** as it is used as a fixed asset by the taxi driver.

(b) Refrigerator in a hotel- It is a ***capital good*** as it is used as a fixed asset in the hotel.

(c) Air-conditioner in a house- It is a ***consumer good*** as it is used by the final user and is not used in the production of other goods.

OR

Consumption of those goods which are within the boundary line of production, still the value is yet to add to these goods and are not available for use by their final users is called **intermediate consumption.** These goods are consumed by another firm and are used as intermediate goods in the production process or for further sale. For example, papers purchased by Newspaper agency for printing news. Here, consumption of paper is intermediate consumption. Value of intermediate goods is merged with the value of final goods.

Final consumption refers to consumption of those goods which will not pass any more stages of production process and are ready for use by their final users. Consumers and producers are the final users.

18. (i) C = 100 + 0.6Y (given)

We know, C = 100 + MPC Y

Thus, MPC = 0.6

Now, MPC + MPS = 1

$0.6 + MPS = 1$

$MPS = 1 - 0.6 = 0.4$

Hence, marginal propensity to consume is 0.6 and marginal propensity to save is 0.4.

(ii) Saving function is $S = -100 + 0.4\ Y$

19. The two methods of controlling credit which may be used by the central bank are:

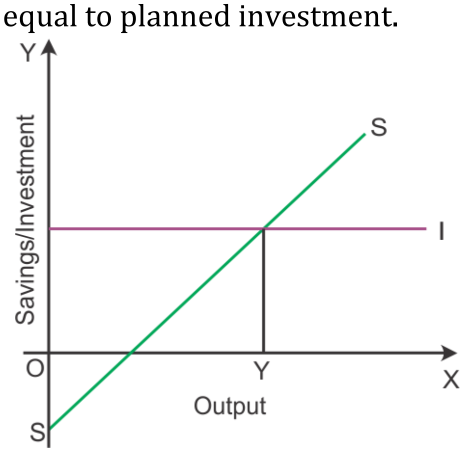
i. ***Bank rate***: The rate at which commercial banks borrow credit from the RBI is called the bank rate. Bank rate is the rate at which the central bank provides credit to commercial banks. An increase or decrease in the bank rate leads to an increase or decrease in the market rate of interest. Thereby the cost of credit changes in the market.

ii. ***Open market operations***: Open market operations refer to the sale and purchase of government securities and bonds by the Central Bank. For example, when Central Bank ***sells government securities to the public through the banks***. This results in the transfer of a part of bank deposits to the Central Bank account and reduces credit creation capacity of commercial banks.

Or

The central bank of a country has the exclusive authority to issue the currency (notes + coins). The currency issued by the central bank is known as 'legal tender money' i.e. the value of such currency is backed by the central bank. However, the currency issued by the central bank is its monetary liability. In other words, the central bank is obliged to back the currency issued by it by assets of equal value such as gold coins and foreign exchange. In addition to issuing currency to the general public, the central bank also issues currency to the central government of the country. That is, the central government if required, can sell its securities to the central bank and in return gets the required cash currency.

20. According to the saving–investment approach, equilibrium is attained at the point where planned saving is equal to planned investment.



According to the diagram, equilibrium is attained at Point E, where the saving curve SS intersects the investment curve I. Corresponding to this, the equilibrium level of output is OY.

In case of any deviation from the equilibrium level of output, a readjustment would start which would again bring back the economy to equilibrium.

If planned saving is more than planned investment, then there would be a rise in the level of inventory. To correct the situation, firms would reduce output and employment till investment and saving become equal to each other.

On the other hand, if planned saving is less than planned investment, then there would be a fall in the level of inventory. To correct the situation, firms would increase output and employment till investment and saving become equal to each other.

21. Investment multiplier is the ratio between increase in income ΔY and increase in investment ΔI.

$$k = \frac{\Delta Y}{\Delta I}$$

Where;

k is multiplier

ΔY increase in output

ΔI increase in investment

Additional investment ΔI generates additional income ΔY but income generated is many times more than the investment.

Relationship between multiplier and mpc

There is a direct relationship between multiplier and mpc. Higher the value of mpc, higher the multiplier effect and vice versa.

Relationship between multiplier and mps

There is an inverse relationship between multiplier and mps. Higher the value of mps, lower the multiplier effect and vice versa.

Assume MPC is 0.5, multiplier mechanism is as follows:

As a result of initial increase in investment by Rs 100 crore, there is change in income by Rs 100 crore in first round. Hence, mpc is 0.5, consumption will increase by Rs 50 crore and saving will increase by Rs 50 crore. In the second round, with the consumption expenditure of Rs 50 crore, there will be an increase in income by Rs 50 crore. This change in income Rs 25 crore is utilised for consumption from Rs 50 crore and the remaining Rs 25 crore is saved. Likewise, in different time periods, income will keep on increasing with an increase in consumption expenditure. In an economy, as people become thriftier they end up saving less or same as before in aggregate. This theory produced by Keynes "when people start saving money instead of spending it, in response to growing concerns about recession, they actually make the recession worse". Rise in MPS means a fall in MPC. When MPC falls, aggregate consumption expenditure in the economy falls. It leads to a rise in inventory and the producers and firms would thus plan to reduce the production. The demand for factor services and factor incomes will reduce. As a result, the total volume of saving generated in the economy would fall or remain unchanged. This is known as paradox of thrift.

22. (a) Differences between revenue expenditure and capital expenditure:

Revenue expenditure	**Capital expenditure**
Does not generate assets for the government	Generates assets for the government
Liability of the government cannot be reduced by revenue expenditure	Liability of the government can be reduced by capital expenditure
Examples: Expenditure on the defence sector, paying interest payments	Examples: Buying of shares, expenditure on building roads and highways

(b) Differences between primary deficit and capital deficit:

Primary deficit	**Fiscal deficit**
It is the difference between fiscal deficit and interest payment.	It is the difference between the government's total expenditure and total receipts without considering the borrowing.
It indicates borrowing requirement of the government exclusive of interest payment.	It indicates borrowing requirement of the government inclusive of interest payment.
Primary deficit = Fiscal deficit – Interest payment	Fiscal deficit = Total expenditure – Total receipts (except borrowings)

OR

Revenue receipts refer to receipts of the government as a result of which there is neither any creation of liability nor any reduction in assets of the government.

Two main sources of revenue receipts of the government:

i. ***Tax receipts***: It refers to the receipts from taxes and other such duties as imposed by the government. Taxes can further be classified as follows:

   a**. *Direct taxes*:** Direct taxes refer to taxes which are imposed directly on the individual and companies. The burden of such taxes cannot be passed onto others. Examples: Income tax, corporation tax

b. ***Indirect taxes*****:** Indirect taxes are taxes which are imposed on the consumption of goods and services. The burden of such taxes can be shifted to others. Examples: Sales tax, service tax

ii. ***Non-tax receipts***: Non-tax receipts refer to various receipts of the government from sources other than taxes. Some major sources of non-tax revenue receipts are interests on loans, fees and fines, licence fees, escheats, forfeitures, gifts and grants etc.

The system of taxation and subsidies by the government can be used to reduce the inequality of income in the economy. This can be done by imposing higher taxes on high-income groups and providing subsidies to low-income groups.

Capital receipts refer to receipts of the government as a result of which there is either a creation of liability or any reduction in the assets of the government.

Three main sources of capital receipts of the government:

i. ***Recovery of loans***: It includes recovery of loans which was given to the state government.

ii. ***Borrowings and other liabilities***: It includes government borrowing from the general public, the Reserve Bank of India and rest of the world.

iii. ***Other receipts***: It includes disinvestment.

23. Fixed exchange rate (also known as pegged exchange rate) is determined by the government and government has complete control over it. Under a fixed exchange rate, the exchange rate remains fixed as determined by the government.

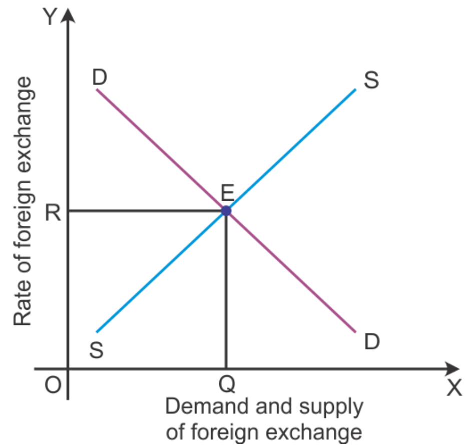
Equilibrium Exchange Rate

Under a flexible exchange rate regime, the exchange rate is determined by the forces of demand and supply. Demand for foreign exchange arises from the need to make payments in foreign exchange. Demand for foreign exchange varies inversely with the foreign exchange rate. As the foreign exchange rate rises, the demand for foreign exchange falls and *vice versa*. Supply of foreign exchange arises from the receipts of foreign exchange.

The supply of foreign exchange rate varies directly with the foreign exchange rate. As foreign exchange rate rises, the supply of foreign exchange rises and *vice versa*.

Equilibrium exchange rate is determined at the point where the demand for foreign exchange is equal to the supply of foreign exchange. Graphically, it is determined at the point where the demand curve for foreign exchange intersects the supply curve of foreign exchange.

According to the graph, the equilibrium is determined at Point E, where the demand curve DD intersects the supply curve SS. Here, the equilibrium exchange rate is OR and the equilibrium quantity of foreign exchange is OQ.



24. (a) GDP_{MP} = Private final consumption expenditure (C) + Government final consumption expenditure (G) + Gross domestic capital formation (I) + Net exports (X-M)

GDP_{MP} = 3500 + 4000 + 1100 + 500

Thus, GDP_{MP} = Rs 9100

(b) NNP_{FC} = GDP_{MP} - Consumption of fixed capital + NFIA - NIT

NNP_{FC} = 9100 – 120 + 100 - 300

Thus, NNP_{FC} = Rs 8780

CBSE

Class XII Economics

All India Board Paper Set 1 – 2017

Time: 3 hrs **Max. Marks: 100**

Note:

- Please check that this question paper contains 12 printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains 30 questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minutes time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

General Instructions:

(i) **All** questions in both the sections are compulsory.
(ii) Marks for questions are indicated against each question.
(iii) Questions No. **1 – 5** and **16 – 20** are very short-answer questions carrying **1** mark each. They are required to be answered in one sentence each.
(iv) Questions No. **6 – 8** and **21 – 23** are short answer questions carrying **3** marks each. Answers to them should normally not exceed **60** words each.
(v) Questions No. **9 – 11** and **24 – 26** are also short answer questions carrying **4** marks each. Answers to them should normally not exceed **70** words each.
(vi) Question number **12 – 15** and **27 – 30** are long-answer questions carrying **6** marks each. Answers to them should normally not exceed **100** words each.
(vii) Answers should be brief and to the point and the above word limits should be adhered to as far as possible.

SECTION A

1. Any statement above demand for a good is considered complete only when the following is/are mentioned in it. (choose the correct alternative) **[1]**

a) Price of the good
b) Quantity of good
c) Period of time
d) All of the above

2. Demand for a good is termed inelastic through the expenditure approach when if (choose the correct alternative) **[1]**

a) Price of good falls ,expenditure on it rises

b) Price of the good falls , expenditure in it falls
c) Price of the good falls ,expenditure on it remains unchanged
d) Price of the good rises ,expenditure in it falls

3. Define indifference curve **[1]**

4. A seller cannot influence the market price under (choose the correct alternative) **[1]**
a) Perfect competition
b) Monopoly
c) Monopolistic competition
d) All of the above

5. State any one feature of monopolistic competition. **[1]**

6. Give the meaning and characteristics of production possibility frontier. **[3]**

7. Explain the problem of "how to produce" **[3]**

8. Distinguish between 'increase in demand' and increase in quantity demanded 'of a good. **[3]**

OR

Explain the meaning of 'Budget set' and 'Budget line'.

9. Explain with the help of a numerical example, the meaning of diminishing marginal rate of substitution. **[4]**

10. Define market supply. Explain the factor 'Input prices' that can cause a change in supply. **[4]**

OR

Give the behaviour of marginal product and total product as more and more units of only one input are employed while keeping other inputs as constant.

11. Explain 'Perfect knowledge about the markets' feature of perfect competition. **[4]**

12. When the price of good rise from Rs 10 per unit to Rs 12 per unit, its quantity demanded falls by 20 percent. Calculate its price elasticity of demand. How much would be the percentage change in its quantity demanded, if the price rises from Rs 10 per unit to Rs 13 per unit? **[6]**

13. Complete the following table: **[6]**

Output	Average Fixed Cost	Marginal Cost	Average Variable Cost	Average Cost

(Units)	(Rs)	(Rs)	(Rs)	(Rs)
1	60	20	....	....
2	...	....	19	....
3	20	.....	18	....
4	...	18	....	....
5	12	....	....	31

14. From the following total cost and total revenue schedule of a firm, find out the level of output, using marginal cost and marginal revenue approach, at which the firm would be is equilibrium. Give reasons for your answer. **[6]**

Output (Units)	Total Revenue (Rs)	Total Cost (Rs)
1	10	8
2	18	15
3	24	21
4	28	25
5	30	33

15. Distinguish between perfect oligopoly and imperfect oligopoly. Also explain the "interdependence between the firms" feature of oligopoly. **[6]**

OR

Explain the meaning of excess demand and excess supply with the help of a schedule. Explain their effect on equilibrium price.

SECTION B

16. Demand deposits include (choose the correct alternative) **[1]**

(a) Saving account deposits and fixed deposits

(b) Saving account deposits and current account deposits

(c) Current account deposits and fixed deposits

(d) All types of deposits

17. Define marginal propensity to consume. **[1]**

18. If the marginal propensity to consume is greater than marginal propensity to save, the value of the multiplier will be (Choose the correct alternative) **[1]**

(a) greater than 2

(b) less than 2

(c) equal to 2
(d) equal to 5

19. Define Government budget. **[1]**

20. What is meant by depreciation of domestic currency? **[1]**

21. Explain with the help of an example, the basis of classifying goods into final goods and intermediate goods. **[3]**

22. Explain "difficulty in storing wealth" problem faced in the barter system of exchange. **[3]**

OR

Explain the "medium of exchange" function of money.

23. Distinguish between direct taxes and indirect taxes. Give an example of each. **[3]**

24. Explain the "bankers' bank" function of the central bank. **[4]**

OR

Explain the process of credit creation by commercial banks.

25. An economy is in equilibrium. From the following data, calculate the marginal propensity to save: **[4]**

a) Income = 10,000
b) Autonomous consumption = 500
c) Consumption expenditure = 8,000

26. Explain how government budget can be helpful in bringing economic stabilization in the economy. **[4]**

27. Distinguish (a) between current account and capital account, and (b) between autonomous transaction and accommodating transactions of balance of payments account. **[6]**

28. Explain the precautions that should be taken while estimating national income by expenditure method. **[6]**

OR

Will the following be included in the domestic product of India? Give reasons for your answer.

a) Profit earned by foreign companies in India
b) Salaries of Indians working in the Russian Embassy in India
c) Profit earned by a branch of state Bank of India in Japan

29. Calculate (a) National Income, and (b) Net National Disposable Income: **[6]**

	(Rs In crores)
(i) Compensation of employees	2,000

(ii) Rent	400
(iii) Profit	900
(iv) Dividend	100
(v) Interest	500
(vi) Mixed income of self- employed	7,000
(vii) Net factor income to abroad	50
(viii) Net export	60
(ix) Net indirect taxes	300
(x) Depreciation	150
(xi) Net current transfers to aboard	30

30. Give a consumption curve, outline the steps required to be taken in deriving a saving curve from it. Use diagram. **[6]**

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SECTION A

Answer 1

The correct answer is option (d). Demand is the quantity which a consumer is willing and able to purchase at each possible price during a given period of time. So, the demand for a good is considered correct with four essential items i.e. quantity of the commodity, willingness to purchase, price of the commodity and period of time.

Answer 2

The correct answer is option (b). Demand for demand is inelastic through the expenditure approach when price of the good falls and expenditure also falls.

Answer 3

An indifference curve is the curve which represents all those ***combinations of two commodities*** which give the same level of satisfaction to a consumer. It slopes downward because an increase in the amount of Good X along the indifference curve is associated with a decrease in the amount of Good Y as the preferences are monotonic.

Answer 4

The correct answer is option (a). A seller cannot influence the market price under perfect competition because in a perfectly competitive market, the buyers will treat the products of all the firms in the market as homogeneous. There is zero degree of product differentiation and the firm cannot take any control of the price. Here, the firm does not involve in advertisement and sales promotion activities. Hence, ***uniform price prevails in a perfectly competitive market*** for homogeneous products.

Answer 5

Under monopolistic competition, there are large numbers of sellers but not homogeneous product. Each firm acts independently and limited share of the market.

Answer 6

Meaning: Production possibility frontier (PPF) means the geographical representation of possible combinations of two goods which can be produced with given resources and technology.

Feature: It slopes downwards because if more of one good can be produced only by taking resources away from the production of another good. Hence, there exists inverse relationship between change in quantity in one commodity and change in another commodity. It shifts from left to right.

Answer 7

Once the decision regarding the goods to be produced is taken, the next problem as to what techniques should be adopted to produce the commodity arises. This function is related to the allocation of resources to production techniques which have to be employed during the production of goods and services. The production of goods and services can take place in two ways –labour-intensive technique and capital intensive technique. The labour-intensive technique involves more of labour and less of capital in the output, while it is reverse for the capital intensive technique.

Therefore, it is upon the economy to decide on a specific method of production for particular goods. The economy has to decide between the automatic machines and handicrafts. Every method has its own advantages and disadvantages. Mechanization increases the quantity and quality of the goods. But as it requires fewer workers, it results in unemployment. Handicrafts reduce unemployment and the quantity of production is lesser. The economy has to decide about the techniques of production on the basis of the cost of labour and capital.

Answer 8

Increase in demand and increase in quantity demanded of a good

Increase in quantity demanded	Increase in demand
It refers to quantity demanded changes due to change in the price remaining other factors constant.	It refers to a rise in demand for a commodity because of factors other than the price.
Factors which cause increase in quantity demanded • An increase or a decrease in the price of the given commodity	Factors which cause increase in demand: • Increase in income of the consumer • Rise in price of substitute good • Fall in price of complementary good • Change in taste and preferences in favour of the good
It leads to a movement along the same demand curve either upwards or downwards.	It leads to shift in the demand curve either rightwards or leftwards.

OR

A budget set refers to attainable bundles of a set of two goods, given the prices of goods and the income of the consumer.

Equation of the budget set is $P_1X_1 + P_2X_2 < M$.

where

X_1 = Quantity of Good-1

X_2 = Quantity of Good-2

P_1 = Price of Good-1

P_2 = Price of Good-2

A **budget line** shows various combinations of two goods which a consumer can purchase with the given income and the prices of the two goods, when the consumer spends the entire income.

Answer 9

Diminishing marginal rate of substitution

Marginal rate of substitution means the rate at which the consumer is willing to substitute one commodity for the other commodity. MRS falls because of the law of diminishing marginal utility.

Law of diminishing marginal utility means that as more units of a good are consumed, the marginal utility received from the consumption of every additional unit of the good declines.

Units of Commodity X	Total Utility (TU) (utils)	Marginal Utility (MU) $MU_n = TU_n - TU_{n-1}$ (utils)
1	50	50 – 0 = 50
2	80	80 – 50 = 30
3	100	100 – 80 = 20
4	110	110 – 100 = 10
5	110	110 – 110 = 0
6	105	105 – 110 = –5

In the given schedule, marginal utility of the second unit is 30 utils and it decreases to 20 and 10 for the consumption of the 3rd and 4th unit of the marginal utility, respectively. It becomes zero for the consumption of the 5th unit, and it becomes negative for the 6th unit. Hence, the marginal utility will decrease with additional units of consumption.

Answer 10

Market supply of a commodity refers to the various quantities of the commodity which the producers are willing to offer for sale at different prices.

Factor the input price which affects supply:

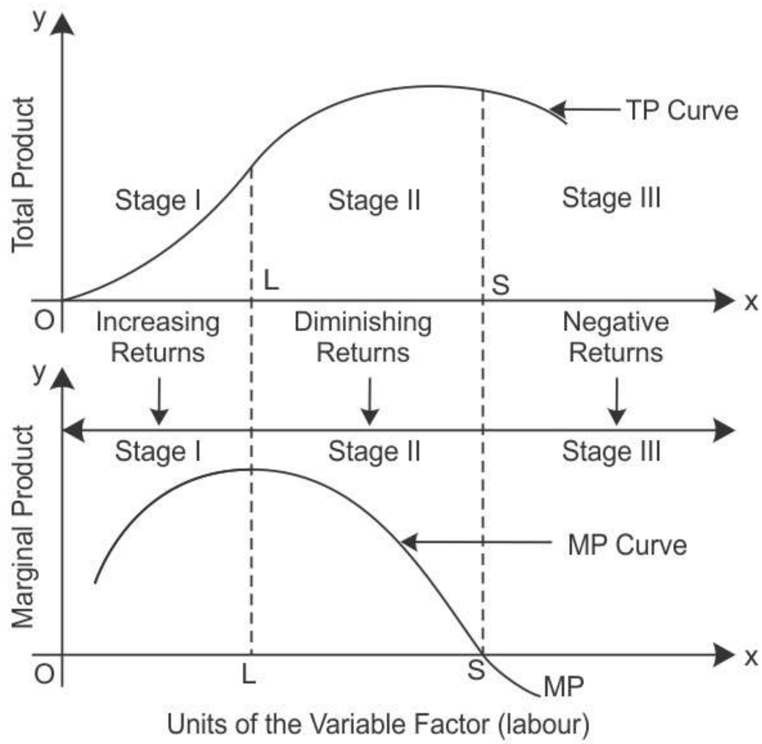
Price of raw material and other factors of production: If the price of raw material or other factors of production increases, then this implies an increase in the cost of production. Accordingly, the firms would be willing to supply more quantity of the commodity at the existing price.

OR

The behaviour of marginal product and total product as more and more units of only one input are employed and remains other inputs constant can be explained through an illustration

Units of Fixed Factor	Units of Variable Factor	TP	MP	Stages
1	1	4	4	Increasing MP (Increasing returns to a factor)
1	2	12	8	
1	3	24	12	
1	4	32	8	Diminishing MP (Diminishing returns to a factor)
1	5	34	2	
1	6	34	0	
1	7	30	−4	Negative MP (Negative returns to a factor)
1	8	21	−9	
1	9	10	−11	

In the above table,
Stage I: As more units of factor input are used, MP tends to rise till 3 units of factor input are used. Here, the total product increases at an increasing rate which is called ***increasing returns*** to the factor input.
Stage II: However, when the 4th unit of factor input is used, the ***diminishing returns*** set in, where MP starts decreasing and TP increases at a decreasing rate. Diminishing MP reduces to zero. The total output is the maximum when the marginal output is zero.
Stage III: When MP is ***negative***, TP starts declining from 34 to 10 when the 9th unit is employed.



Answer 11

Perfect competition- perfect knowledge about the market

Perfect knowledge means that both the buyers and sellers are fully informed about the market price. Its implication is that no firm is in a position to charge a different price and no buyer will pay a higher price. As a result a uniform price prevails in the market. Both buyers and sellers have perfect knowledge about the input markets. This means that each firm has an equal access to the technology and the inputs used in the production. Hence all the firms have uniform cost structure. Since, there is uniform price and uniform costs in case of all firms earn uniform profits.

Answer 12

Initial Price (P_0) = Rs 10

Final Price (P_1) = Rs 12

Percentage change in quantity demanded = -20

$$Ed = -\frac{\text{Percentage Change in Quantity Demanded}}{\text{Percentage Change in Price}}$$

$$Ed = -\frac{-20}{\frac{P_1 - P_0}{P_0} \times 100}$$

$$Ed = \frac{+20}{\frac{12-10}{10} \times 100}$$

$$\therefore Ed = 1$$

Now, $P_0 = \text{Rs}\,10$ & $P_1 = \text{Rs}\,13$

$$1 = -\frac{\text{Percentage Change in Demand}}{\frac{13-10}{10} \times 100}$$

$$\therefore \text{Percentage Change in Demand} = -30$$

Hence, demand falls by 30% when price rises from Rs 10 to Rs 13 per unit.

Answer 13

Output (Units)	**AFC(₹)** $AFC = \frac{TFC}{Q}$	**MC(₹)** $MC = TVC_n - TVC_{n-1}$	**AVC (₹)** $AVC = \frac{TVC}{Q}$	**AC (₹)** $AC = AFC + AVC$	**TFC**	**TVC**
1	60	20	**20**	**80**	**60**	**20**
2	**30**	**18**	19	**49**	**60**	**38**
3	20	**16**	18	**38**	**60**	**54**
4	**15**	18	**18**	**33**	**60**	**72**
5	12	**23**	**19**	31	**60**	**95**

Answer 14

Output (Units)	**Total Revenue (₹)**	**Total Cost (₹)**	**MR = TR_n - TR_{n-1}**	**MC = TC_n - TC_{n-1}**
1	10	8	**10**	**8**
2	18	15	**8**	**7**
3	24	21	**6**	**6**
4	28	25	**4**	**4**
5	30	33	**2**	**8**

The firm would be in equilibrium when following two conditions are satisfied:

i. MR = MC

ii. MC is rising or the MC curve cuts the MR curve from below.

Thus, at 4 units of output, the firm is in equilibrium as both the conditions are getting satisfied at this level.

Answer 15

Perfect oligopoly	Imperfect oligopoly
If the firms produce homogeneous product then it is called perfect oligopoly.	If the firm produce differentiated products then it is called imperfect oligopoly.
It is rare to find this type of situation. Examples: cement, steel, aluminium and chemical producing industries	Examples: Passenger cars, cigarettes and soft drinks.

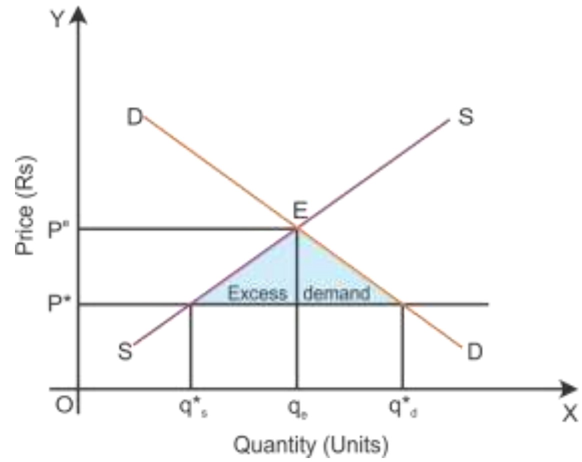
Feature 'interdependence of firms' in an oligopoly market: In a market, the price and level of output of one firm impact the price and level of output of rival firms. Keeping this impact in mind, a firm decides the price and output in accordance with prevailing market conditions. Hence, a high degree of interdependence exists among competing firms, especially with regard to price and quantity of output.

Or

Excess demand refers to a situation when quantity demanded is more than quantity supplied at the prevailing market price.

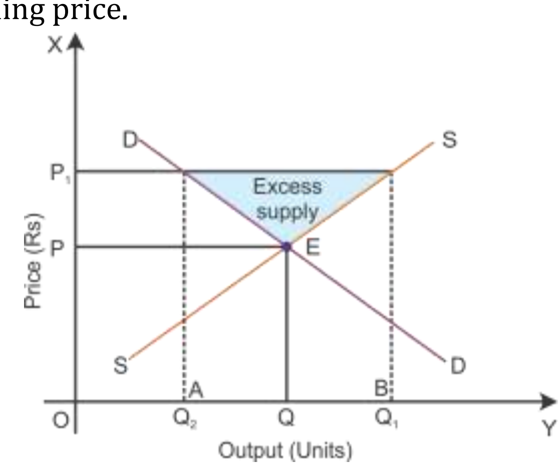
Price of Toy (Rs)	Market Demand (Units)	Market Supply (Units)	Shortage (-) or Surplus (+)	
2	100	20	(-) 80	Excess demand Market demand < Market supply
4	80	40	(-) 40	
6	60	60	0	Equilibrium Market demand = Market supply
8	40	80	(+) 40	Excess supply Market demand > Market supply
10	20	100	(+) 80	

Here both buyers and sellers are negotiating to buy and sell toys. Both have different prices to offer. Buyers will like to pay as low as possible and sellers will like to charge as high as possible. But market equilibrium will be determined only when both agree to a common price and a common quantity at that price. When increase in price from Rs 2 to Rs 4, market demand falls from 100 to 80 toys and market supply rises from 20 to 40 toys.



When the price is lower than the equilibrium market price of a good (OP^e), the price ceiling leads to ***excess of demand***. Now, the excess demand will increase the competition among consumers in the market. Thereby they consume the good at a higher price which leads to an increase in the price level, i.e. OP^e.

Excess supply refers to a situation when the quantity supplied is more than teh quantity demanded at the prevailing price.



When the price is above the equilibrium market price of a good (OP), the price ceiling leads to ***excess of supply.*** In the diagram, the equilibrium price and quantity are OP and OQ. As the equilibrium price is low for farmers, the government fixes the price floor, i.e. the price level increased from OP to OP_1 which leads to a decline in the quantity demand, and therefore, there is ***excess supply*** in the market. Here, the competition will increase among the sellers, and hence, the price will come down to the equilibrium point where market demand is equal to market supply.

SECTION B

Answer 16

The correct answer is option (b). Demand deposits include savings and current account deposits because demand deposits are not for any specific period of time. They can be withdrawn as and when required. These deposits are chequable deposits.

Answer 17

Marginal propensity to consume means the ratio of change in consumption expenditure to change in total income.

$$\text{MPC} = \frac{\text{Change in consumption}(\Delta C)}{\text{Change in income}(\Delta Y)}$$

Answer 18

The correct answer is option (a). When MPC >MPS, then the value of multiplier will be greater than 2 because the value of multiplier is directly related to the value of marginal propensity to consume. They both are directly related. In other words when MPC is more, k the multiplier is more and vice versa.

Answer 19

Government budget means an ***annual statement*** which shows the item wise estimates of receipts and expenditure during a fiscal year. Generally the fiscal is considered from 1st April to 31st March.

Answer 20

Depreciation of domestic currency refers to ***decrease in the value of domestic currency in terms of foreign currency***. For example, if the price of $1 increases from Rs 55 to Rs 59. It means fall in the price of domestic currency.

Answer 21

Classification of goods into final and intermediate goods:

Final goods are those goods which will not pass any more stages of production process and are ready for use by their final users. Consumers and producers are the final users. On the other hand, goods which are within the boundary line of production, still the value is yet to add to these goods and are not available for use by their final users are called **intermediate goods.** These goods are consumed by another firm and are used as intermediate goods in the production process or for further sale. For example, papers purchased by Newspaper agency for printing news are intermediate goods. Value of intermediate goods is merged with the value of final goods. Here the value of intermediate good is not included in the estimation of national income.

Answer 22

Difficulty in storing wealth:

People keep their wealth in the form of money because money is the most liquid form of wealth. Savings in the form of money is maintained for purchasing commodities in the future. In this case, the values of commodities are being stored. Hence, money acts as a store of value. However, the store of value is completely absent under the barter system.

Wealth is stored in terms of goods as there was no money in existence. There were many problems such as ***storage of goods cost, loss of value and movement of transfer***. For example, wheat and rice do not possess durability i.e. their quality deteriorates with passage of time. Storage of good requires time and efforts. Hence, it is not practically possible to store people's purchasing power.

OR

Medium of exchange:

The primary function of money is to act as a medium of exchange between two parties involved in a transaction. It avoids the practical problems of wastage of time and resources involved in the barter system of exchange and it improves the efficiency of the transaction. It promotes allocation efficiency in the trade and production of goods and services.

In case of the barter system, the sale and purchase of goods occurs at the same time. Their sale and purchase value also remains equal at that point. A person can purchase or sell goods with cash without selling or purchasing any good at that point, after money came into existence. Thus, the act of purchase and sale has been separated. Thereby the medium of exchange facilitated sale and purchase very easily in terms of monetary value.

Answer 23

Direct taxes and indirect taxes

Direct tax refers to those taxes which are imposed on property and income of individuals and companies and are paid directly by them to the government. For example, income tax- the tax burden cannot be shifted to any other person. The person on whom the government imposes the tax must pay a part of his/her income as tax to the government.

Indirect tax refers to those taxes which are imposed on an individual but are paid by another person either partly or wholly. Hence, the impact and incidence of taxes are on different persons. Customs and excise duties are examples of indirect taxes. Here the producer bears the impact and the incidence of tax on the consumer. Indirect taxes are those taxes in which the tax burden can be shifted to another person. The impact and incidence of tax falls on different persons. For example, the sales tax where the tax burden is shifted by the seller of the commodity to the buyer.

The impact of indirect taxation can be shifted on to others while the impact of direct taxation cannot be shifted. Example: Direct tax- income tax and indirect tax- sales tax

Answer 24

Banker's bank as function of bank:

The Central Bank is an apex bank of all banks in the country. It has almost the same relation with other banks in the country as a commercial bank has with its customers. The Central Bank keeps some cash balances of the commercial banks as compulsory deposit. This is to help them during financial crises. In this way, the central bank acts as a custodian of cash reserves of commercial banks. It assists these banks through discounting of approved securities and bills of exchange.

OR

Process of credit creation by commercial banks:

Commercial banks create money even though they cannot print money. Bank deposits form the basis for credit creation. They accept deposits from the public by opening a deposit account known as the primary deposit. Banks do not hold the money in the account itself, and the entire amount is not withdrawn from the account at the same time. So, they advance loans to business persons and retain only a small portion of the total deposits in the bank. The Central Bank decides the amount to be held in the form of cash and the remaining amount is advanced as loans to business persons only against collateral securities. The bank will not give cash but open a derivative account in the name of the individual or institution. Here, the loans create a derivative deposit which is called a secondary deposit or derivative deposit. This ***secondary deposit is called the creation of credit.*** Hence, the banks are able to provide financial assistance to traders and industrialists. Their cheques and drafts are useful for trading on a large scale. It also provides concessional loans to the priority sectors such as agriculture, small-scale industry, retail trade and export. Thus, the ***production activity increases*** the overall development of the nation.

Answer 25

$C = \overline{C} + cy$

$8{,}000 = 500 + C \times 10{,}000$

$7{,}500 = 10{,}000C$

$C = \dfrac{7{,}500}{10{,}000}$

$C = 0.75$

$MPC = 0.75$

We know,

$MPS = 1 - 0.75$

$\therefore MPS = 0.25$

Answer 26

Taxes and government expenditure can be influenced in bringing economic stabilisation in the following ways:

i. A tax is a legally compulsory payment imposed by the government on households and producers. The government imposes taxes on socially unsafe goods such as alcohol and tobacco. Thereby resources will be shifted to the production of socially essential goods.

ii. Subsidies do not reduce the liability of the government and it does not add to the assets of the government. The government also provides subsidies for necessary goods such as wheat, rice and sugar. Thereby the resources are shifted from the production of goods for the rich to the production of goods for the poor.

Thus, government budget can be helpful in bringing economic stabilisation in the economy.

Answer 27

Current account and capital account

Current account	**Capital account**
Current account transactions bring a change in the current level of economy's income.	Capital transactions bring a change in the capital stock of an economy
It is a flow of concept as it includes all items of flow nature.	It is a stock concept as it includes all items expressing changes in stock
Current account = visible trade + invisible trade + unilateral transfers + income receipts and payments	Capital account = Borrowings and lendings to and from abroad + investments to and from abroad + change in foreign exchange reserves.

Autonomous transactions and Accommodating transactions

Autonomous transactions	**Accommodating transactions**
An autonomous transactions are independent of the state of balance of payments account (BOP A/c)	An accommodating transactions are undertaken to maintain the balance in BOP account
These transactions take place on both current and capital accounts.	These transactions take place only on capital account
These items in BOP refer to foreign exchange transactions which are made independently of the state of the balance of payment, such as profit motive.	These items in BOP refer to the transactions which are undertaken to cover deficit or surplus in autonomous transactions.

Answer 28

Precautions taken while estimating national by expenditure method

i. Expenditure on intermediate goods will not be included in the national income as it already included in the value of final expenditure. It if it is included again by mistake, it will lead to double counting of expenditures.

ii. Transfer payments are not included because such payments are not related with any productive activity and there is no value addition.

iii. Purchase of second-hand goods will not be included because such expenditures has already been included when they were originally purchased. Those goods do not affect the current flow of goods and services. Hence any commission on those goods is included as it is a payment made for productive service.

iv. Purchase and financial assets will not be included because those transactions do not contribute to the current flow of goods and services.

v. Expenditure on own account production such self consumption and imputed value of owner occupied houses will be included in the estimation of national income since these are productive services.

OR

i. Profit earned by foreign companies is included in the estimation of domestic income as they are within the domestic territory of the country.

ii. Salaries of Indian working in Russian embassy in India are not included in the estimation of domestic income because the Russian embassy is not part of the domestic territory of India.

iii. Profit earned by a branch of State Bank of India is not included in the estimation of domestic income because it is located in Japan and is not part of the domestic territory of India.

Answer 29

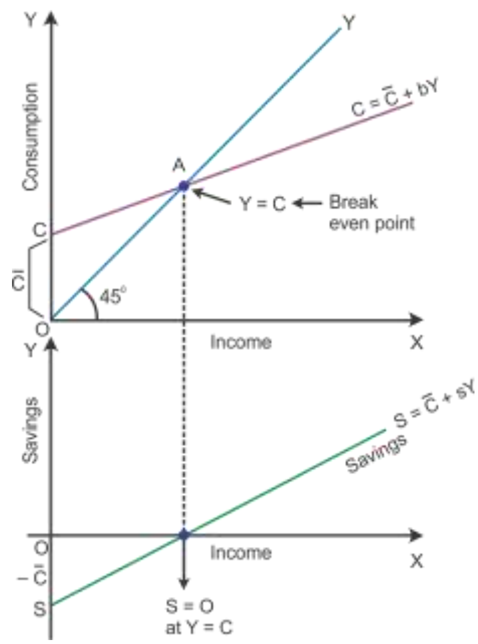
National Income = Compensation of employees + Rent + Interest + Profit + Mixed income of self employed - Net factor income to abroad
National Income = 2,000 + 400 + 500 + 900 +7,000 – 50
∴ National Income = ₹10,750

Net National Disposable Income = National income + Net indirect taxes – Net current transfers to abroad
Net National Disposable Income = 10,750 + 300 – 30
∴ Net National Disposable Income = ₹11,020

Answer 30

Deriving saving curve form consumption curve:

In the diagram, the consumption curve is given as $\overline{C}+bY$, where $\overline{C}$ represents the autonomous consumption, Y is income and b is the rate at which C increases corresponding to an increase in Y. The aggregate supply curve is the 45° line. Consumption is equal to income at Point E.



Derivation of saving function from consumption function:

$-\bar{C}$ is the saving function where negative savings are equal to autonomous consumption at Y = 0. This is shown on the negative axis in the lower panel at Point S. Here, all the income is spent on consumption expenditure. Hence, there is no saving which is shown as the breakeven point. After this point, S and Y are joined to have a straight line sloping curve.

CBSE
Class XII Economics
All India Board Paper Set 1 – 2016

Time: 3 hrs **Max. Marks: 100**

Note:
- Please check that this question paper contains 12 printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains 30 questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minutes time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

General Instructions:

(i) **All** questions in both the sections are compulsory.

(ii) Marks for questions are indicated against each question.

(iii) Questions No. **1 – 5** and **16 – 20** are very short-answer questions carrying **1** mark each. They are required to be answered in one sentence.

(iv) Questions No. **6 – 8** and **21 – 23** are short answer questions carrying **3** marks each. Answers to them should normally not exceed **60** words each.

(v) Questions No. **9 – 11** and **24 – 26** are also short answer questions carrying **4** marks each. Answers to them should normally not exceed **70** words each.

(vi) Question number **12 – 15** and **27 – 30** are long-answer questions carrying **6** marks each. Answers to them should normally not exceed **100** words each.

(vii) Answers should be brief and to the point and the above word limits should be adhered to as far as possible.

SECTION A

1. What is the relation between Average Variable Cost and Average Total Cost, if Total Fixed Cost is zero? (1)

2. A firm is able to sell any quantity of a good at a given price. The firm's marginal revenue will be : (Choose the correct alternative): (1)

(a) Greater than Average Revenue
(b) Less than Average Revenue
(c) Equal to Average Revenue
(d) Zero

3. When does 'change in demand' take place? (1)

4. Differentiated products is a characteristic of: (Choose the correct alternative): (1)

(a) Monopolistic competition only
(b) Oligopoly only
(c) Both monopolistic competition and oligopoly
(d) Monopoly

5. Demand curve of a firm is perfectly elastic under: (Choose the correct alternative) (1)

(a) Perfect competition
(b) Monopoly
(c) Monopolistic competition
(d) Oligopoly

6. A consumer consumes only two goods X and Y. Marginal utilities of X and Y is 3 and 4 respectively. Prices of X and Y are Rs 4 per unit each. Is consumer in equilibrium? What will be further reaction of the consumer? Give reasons. (3)

7. What will be the effect of 10 percent rise in price of a good on its demand if price elasticity of demand is (a) Zero, (b)-1, (c)-2. (3)

8. What is minimum price ceiling? Explain its implications. (3)

OR

If the prevailing market price is above the equilibrium price, explain its chain of effects.

9. Define demand. Name the factors affecting market demand. (4)

10. Define fixed cost. Give an example. Explain with reason the behaviour of Average Fixed Cost as output is increased. (4)

OR

Define marginal product. State the behaviour of marginal product when only one input is increased and other inputs are hold constant.

11. When price of a commodity falls from Rs 12 per unit to Rs 9 per unit, the producer supplies 75 percent less output. Calculate price elasticity of supply. (4)

12. Why do central problems of an economy arise? Explain the central problem of "for whom to produce"? (6)

13. Explain three properties of indifference curves. (6)

14. Examine the effect of (a) fall in the own price of good X and (b) rise in tax rate on good X, on the supply curve. Use diagrams. (6)

15. Explain the implications of the following in a perfectly competitive market : (6)

(a) Large number of sellers

(b) Homogeneous products.

OR

Explain the implications of the following in an oligopoly market:

(a) Barriers to entry of new firms

(b) A few or a few big sellers

SECTION B

16. Define flows. (1)

17. National income is the sum of factor incomes accruing to : (Choose the correct alternative) (1)

(a) Nationals

(b) Economic territory

(c) Residents

(d) Both residents and non-residents

18. What are revenue receipts in a government budget? (1)

19. Primary deficit equals : (Choose the correct alternative) (1)

(a) Borrowings

(b) Interest payments

(c) Borrowings less interest payments

(d) Borrowings and interest payments both

20. Foreign exchange transactions which are independent of other transactions in the Balance of Payments Account are called : (Choose the correct alternative)

(a) Current transactions

(b) Capital transactions

(c) Autonomous transactions

(d) Accommodating transactions

21. Assuming real income to be Rs 200 crore and price index to be 135, calculate nominal income. (3)

22. What is aggregate demand? State its components.

OR

Explain how controlling money supply is helpful in reducing excess demand. (3)

23. An economy is in equilibrium. Calculate Marginal Propensity to Consume : (3)

National income = 1000

Autonomous consumption expenditure = 200

Investment expenditure = 100

24. Sale of petrol and diesel cars is rising particularly in big cities. Analyse its impact on gross domestic product and welfare. (4)

25. Explain the 'medium of exchange' function of money. How has it solved the related problem created by barter? (4)

OR

Explain the 'standard of deferred payment' function of money. How has it solved the related problem created by barter?

26. Explain how 'Repo Rate' can be helpful in controlling credit creation. (4)

27. What is the difference between revenue expenditure and capital expenditure? Explain how taxes and government expenditure can be used to influence. (6)

OR

What is the difference between direct tax and indirect tax? Explain the role of government budget in influencing allocation of resources.

28. Given saving curve, derive consumption curve and state the steps in doing so. Use diagram. (6)

29. Indian investors lend abroad. Answer the following questions : (6)

(a) In which sub-account and on which side of the Balance of Payments Account such lending is recorded? Give reasons.

(b) Explain the impact of the lending on market exchange rate.

30. Find Gross National Product at Market Price and Private Income: (6)

		(Rs in crore)
(i)	Private final consumption expenditure	800
(ii)	Net Current transaction to abroad	20
(iii)	Net factor income to abroad	(-) 10
(iv)	Government final consumption expenditure	300
(v)	Net indirect tax	150
(vi)	Net domestic capital formation	200
(vii)	Current transfer to government	40
(viii)	Depreciation	100
(ix)	Net imports	30
(x)	Income accruing to government	90
(xi)	National debt interest	50

CBSE
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SECTION A

Answer 1

We know that

$TC = TFC + TVC$

Dividing both the side by 'Q', we get

$$\frac{TC}{Q} = \frac{TFC}{Q} + \frac{TVC}{Q}$$

$ATC = 0 + AVC$, here $TFC = 0$

Therefore, $ATC = AVC$

These cost curves will intersect each other.

Answer 2

The correct option is (c). Marginal revenue is the change in total revenue when one more unit of a good is sold. Assume that a firm sells any level of quantity of output at a given price, we can find that the firm's ***Marginal revenue = Average Revenue.***

Answer 3

Change in demand is a situation where the demand for a good increases or decreases because of changes in other determinants of demand other than own price of the commodity such as

i. Income of the consumer changes
ii. Price of the substitute good changes
iii. Tastes of the consumer of a good changes
iv. Availability of the good expected to change in the future

Answer 4

The correct option is (c). All firms in a ***monopolistic competitive market and oligopoly market*** sell a product which is not a perfect substitute but a close substitute of each other. Hence, the characteristic of a differentiated product prevails under both forms of market.

Answer 5

The correct option is (a). Demand curve of a firm is perfectly elastic, i.e. horizontal straight line under ***perfect competition.***

Answer 6

In case of two goods, a consumer strikes equilibrium when

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y}$$

Given that

$$\frac{MU_x}{P_x} = \frac{3}{4} = 0.75$$

$$\frac{MU_y}{P_y} = \frac{4}{4} = 1$$

Here, $\frac{MU_y}{P_y} > \frac{MU_x}{P_x}$

Thus, if a consumer is not in equilibrium, then the consumer ***increases the consumption of Good Y*** *and* ***decreases that of Good X*** to reach the equilibrium.

Answer7

(a)Given that

$E_d = 0$, Percentage change in price = 10

$$E_d = \frac{\text{Percentage change in quanitity demanded}}{\text{Percentage change in price}}$$

$$0 = \frac{\text{Percentage change in quanitity demanded}}{10}$$

Therefore, Percentage change in quanitity demanded $= 0$

(b)Given that

$E_d = -1$, Percentage change in price=10

$$E_d = \frac{\text{Percentage change in quanitity demanded}}{\text{Percentage change in price}}$$

$$-1 = \frac{\text{Percentage change in quanitity demanded}}{10}$$

Therefore, Percentage change in quanitity demanded = -10

(c) Given that

$E_d = -2$, Percentage change in price=10

$$E_d \frac{\text{Percentage change in quanitity demanded}}{\text{Percentage change in price}}$$

$$-2 = \frac{\text{Percentage change in quanitity demanded}}{10}$$

Therefore, Percentage change in quanitity demanded$= -20$

Answer 8

Price floor means the minimum price fixed by the government for a good in the market. The government fixes this price on agricultural products and food grains in particular. A minimum price is fixed which the traders must pay to the farmers in the wholesale market. Thus, the income of the farmer is regulated and a continuous production is assured.

Effects of price floor:

i. The government ensures to buy the full produce of the farmers which are not sold in the market at the price floor. Hence, they are able to ***produce the maximum level of output***.

ii. Farmers are ensured with the ***minimum returns*** as their products are completely sold in the market at comparatively higher price. This leads to an increase in their level of income.

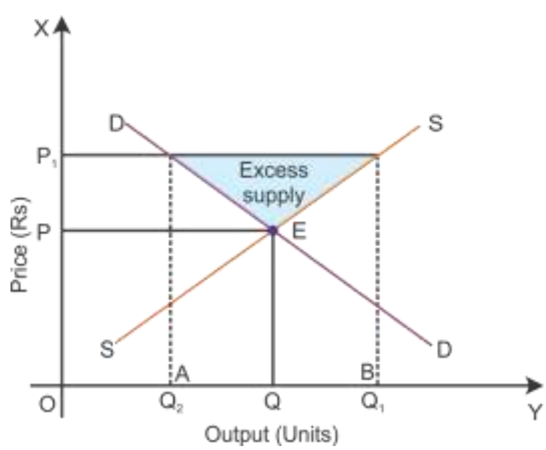
iii. Because of price floor, consumers and traders in the market are ***forced to pay higher price than the equilibrium price***.

iv. The interests of the farmer are protected by the government and they are forced to store the excess supply as a buffer stock including the ***storage cost*** of their product.

v. The cost incurred by the government is borne by consumers and traders in the form of tax, i.e. the ***consumption of excess supply at higher price in the market***.

OR

When the price is above the equilibrium market price of a good (OP), the price ceiling leads to ***excess of supply.*** In the diagram, the equilibrium price and quantity are OP and OQ. As the equilibrium price is low for farmers, the government fixes the price floor, i.e. the price level increased from OP to OP_1 which leads to a decline in the quantity demand, and therefore, there is ***excess supply*** in the market. Here, the competition will increase among the sellers, and hence, the price will come down to the equilibrium point where market demand is equal to market supply.



Answer 9

Demand refers to the desire to buy a good backed with sufficient purchasing power and the willingness to spend.

Factors determining the market demand of a commodity:

i. **Own price of good:** Assume that other things remain constant, an increase in the price of a good will decrease the demand for a good, and a decrease in the price of a good will increase the demand for a good. There is an inverse relationship between the price of a good and the demand for a good.

ii. **Price of other goods:** Demand for a commodity is influenced by a change in the price of other goods. When the price of one good falls, it becomes cheaper in relation to another good.

   If there is an increase in the price of the substitute good coffee, then the demand curve for tea shifts to the right. On the other hand, if there is a decrease in the price of the substitute good coffee, the demand curve for tea shifts to the left even when its price is constant.

   If there is an increase in the price of a good, then the demand for another good will decline. So, the demand curve shifts parallel to the left. On the other hand, if there is a decrease in the price of a good, then the demand for another good will increase and so the demand curve shifts parallel to the right.

iii. **Income of consumers:** A change in income causes a change in demand for good based on the variety of goods available in the market. There will be an increase in the demand for normal goods with a rise in income level. On the other hand, the demand will decrease for inferior goods with an increase in income.

iv. **Consumers' tastes and preferences:** Assume that other things remain constant, if consumers have more preference for a good than other goods, then the demand for those goods will increase. On the other hand, if consumers have no preference for a good than other goods, then the demand for those goods will decrease.

v. **Population size:** An increase or decrease in population size will influence the demand for goods in the market. There is a positive relationship between the size of population and the demand for a good.

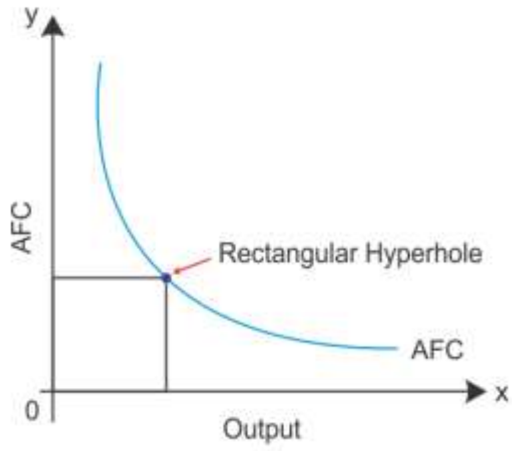
Answer 10

Fixed costs are the sum of total expenditure incurred by the producer on the purchase or hiring of fixed factors of production such as cost of plant and machinery.

Average fixed cost is the fixed cost per unit of output. Average fixed cost curve slopes downward to the right. It shows that AFC decreases as output increases. It is a rectangular hyperbola curve. It means that the product of AFC and output is equal to TFC which remains constant at all levels of output.

TFC = AFC* Q

$$\text{Therefore, AFC} = \frac{\text{TFC}}{\text{Q}}$$



OR

Marginal Product (MP) is the additional output attributed to an additional unit of the variable factor, other factors remaining constant. For example, if there is an increase in the output with more labour (1 unit), then

$MP_n = TP_n - TP_{n-1}$

where

MP_n -Marginal product of nth unit of labour

TP_n -Total product produced with n units of labour

TP_{n-1} = Total product produced with (n - 1) unit of labour

When only one input is increased and other inputs are hold constant, the MP will be

Units of Variable Factor	TP	MP	Change in the MP Curve
0	0	-	MP curve increases at an increasing rate till 3rd unit
1	4	4	
2	12	8	
3	24	12	
4	32	8	MP curve continues to fall from 5th unit
5	34	2	
6	30	−4	MP curve continues to fall and it becomes negative from 6th unit

Answer 11

Given that

P_0 = Rs 12, P_1 = Rs 9

Percentage change in quantity supplied =(-)75%

Change in price $(\Delta P) = P_1 - P_0$

$= 9-12$

$= (-3)$

$$\text{Percentage change in price} = \frac{\Delta P}{P_0} \times 100$$

$$= \frac{(-3)}{12} \times 100 = -25\%$$

$$\text{Price elasticity of supply } (E_s) = \frac{\text{Percentage change in quantity supplied}}{\text{Percentage change in price}}$$

$$= \frac{(-)75\%}{(-)25\%} = 3$$

Answer 12

Central problems arise in an economy because

i. Human wants are unlimited.
ii. Resources are scarce in relation to their wants. The resources available with each individual to satisfy their needs are limited. These individuals have to rationally manage their expenditure to promote economic interest.
iii. Resources have alternative uses. For example, land may be used for agricultural activity or for industrial purpose.

Central problem - 'For whom to produce':

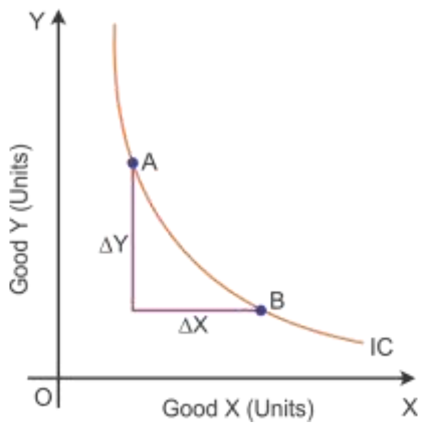
'For whom to produce' refers to the problem of distribution of final goods and services or the problem of distribution of income. It has two aspects. The first aspect relates to personal distribution and the second aspect relates to functional distribution. Personal distribution refers to output/income share of individuals or households in society. Functional distribution refers to income share of different factors of production. Here, the problem is whether allocation of resources is promoting equality or not. Equality is a social virtue, and inequality may induce high saving, investment and hence high rate of growth.

Answer 13

Properties of indifference curves (ICs)

i. **Indifference curves slope downwards or negative slope:**
   The indifference curves slope downwards, left to right, because an increase in the amount of Good X along the indifference curve is associated with a decrease in the amount of Good Y, as the preferences are monotonic.
ii. **Slope of indifference curves represents marginal rate of substitution:**

Marginal rate of substitution (MRS) is the rate at which a consumer is willing to substitute one commodity for another commodity.

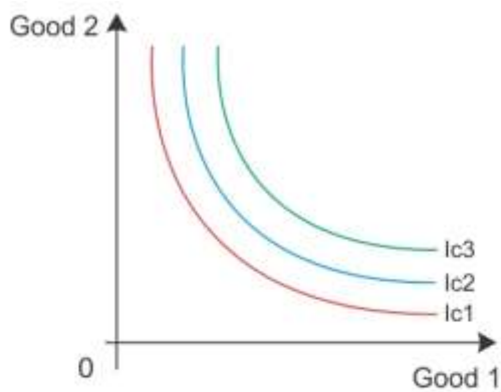


Slope of indifference curve between A and B = $\frac{\Delta Y}{\Delta X}$ = MRS

MRS is the rate at which the output of Good Y is sacrificed for every additional unit of Good X.

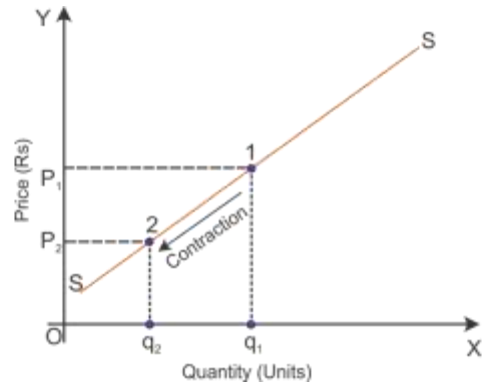
iii. In an indifference map, higher IC represents higher level of satisfaction:

An indifference map refers to a set of indifference curves. An indifference curve which is to the right and above another shows a higher level of satisfaction to the consumer. Here, IC_3 shows higher level of satisfaction than IC_2. Thus, the indifference curve relates to a higher level of income of the consumer.

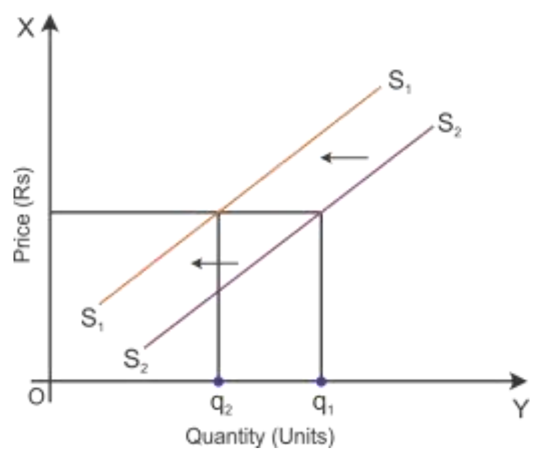


Answer 14

a. A decline in the own price of Good X shows a positive relationship with the supply of good. When the price declines from P_1 to P_2, there will be ***contraction of supply*** from Q_1 to Q_2. Hence, the supply curve will move downwards.



b. Assuming other things remain constant, the levy of a tax on Good X shows a negative relationship with the supply of a good. When there is a tax on a good, the cost of production increases and decreases the profit of the producer. Hence, it leads to a ***decrease in the supply of a good*** which shifts the supply curve towards the left, i.e. S_2S_2 to S_1S_1.



Answer 15

a. A perfectly competitive market is a market which consists of buyers and sellers. They produce a homogeneous product. When the number of buyers is more, the demand of an individual buyer is only a small portion of the market demand. Individual buyers cannot influence the market price of a good by varying their demands, and thus, ***an individual buyer is a price taker and not a price maker.***

b. In a perfectly competitive market, buyers will treat the products of all the firms in the market as homogeneous. There is zero degree of product differentiation and the firm cannot take any control of the price. Here, the firm does not involve in advertisement and sales promotion activities. Hence, ***uniform price prevails in a perfectly competitive market*** for homogeneous products.

OR

a. In an oligopoly market, there are barriers to the entry of new firms. The patents rights are largely created for these firms and hence entry is restricted to new firms. The existing firms need not face any problem of new firms and they are able to earn-extra normal profit.

b. Only few number of firms in the industry but they are big firms dominate the market for product. They establish brand loyalty through intense advertising. Hence, they are able to earn extra-normal profit.

SECTION B

Answer 16

Flow is a quantity measured over a specified period of time. For example, the amount of interest received against bank deposits. Examples of flow are income, expenditure of money, capital formation, changes in the supply of money in a country and interest on capital.

Answer 17

The correct option is (c). National income is the total of factor incomes earned by ***normal residents*** of a country during an accounting year as rewards for rendering their factor services.

Answer 18

A revenue receipt does not reduce the liability of the government and it does not add to assets of the government. Revenue receipts are classified into tax receipts and non-tax receipts.

Answer 19

The correct option is (c). Primary deficit is the difference between the fiscal deficit and interest payment. It determines the amount of borrowing which is necessary for the government to pay for the expenses other than interest payments.

Primary deficit = Fiscal deficit − Interest payment

Answer 20

The correct option is (c). An ***autonomous item*** in balance of payment refers to foreign exchange transactions which are made independently of the state of the balance of payment, such as profit motive.

Answer 21

$$\text{Real Income} = \frac{\text{Nominal Income}}{\text{Price Index of Current Year}} \times \text{Price Index of Base Year}$$

Consider, Price Index of base year as100

$$200 = \frac{\text{Nominal Income}}{135} \times 100$$

$\therefore$ Nominal Income = Rs 270 crore

Answer 22

Aggregate demand means the total demand for goods and services in an economy during the year.

Components of aggregate demand:

i. Private consumption expenditure (C) is the total expenditure of households on final goods and services to satisfy their wants. It includes autonomous consumption expenditure and induced consumption expenditure.
ii. Private investment expenditure (I) is ex-ante investment by private investors corresponding to different income levels in the economy. It includes autonomous investment expenditure and induced investment expenditure.
iii. Government expenditure (G) is the planned expenditure by the government on consumption and investment expenditure for the welfare of the economy.
iv. Net export (X–M) is the difference between the goods and services produced domestically by the rest of the world and abroad by the residents of a country.

OR

Excess demand can be reduced by using the following instruments to control the money supply:

i. Cash Reserve Ratio (CRR) is the necessary minimum percentage of a bank's total deposits which is to be kept with the Central Bank. Commercial banks need to maintain with the Central Bank a certain percentage of their deposits in the form of cash reserves. The Central Bank can vary CRR between 3% and 15%. When they hold a large portion of their deposits as CRR, it reduces the provision of credit to the public. This leads to a decline in the demand for loans and consumption expenditure. Thus, the aggregate demand comes down and the economy attains equilibrium.
ii. The Central Bank increases the bank rate and there is an increase in the cost of borrowing for commercial banks. This enables the decrease for the demand for loans and borrowings in the market. This in turn decreases the ability to purchase more. In this way, the aggregate demand decreases to the level of aggregate supply and the economy attains equilibrium.
iii. The repo rate will be increased by the Central Bank and it will increase the cost of borrowings for the commercial bank. This leads to a decline in the demand for loans and consumption expenditure. Thus, the aggregate demand comes down and the economy attains equilibrium.
iv. Reduction of margin money requirements is a measure which induces borrowers to avail more loans from commercial banks. This in turn increases the ability to purchase more. In this way, the aggregate demand increases to the level of aggregate supply and the economy attains equilibrium.

Answer 23

Given that

National income $(Y) = 1000$

Autonomous consumption expenditure$(\bar{C}) = 200$

Investment expenditure$(I) = 100$

As we know that

National Income = Consumption + Investment expenditure

$Y = \bar{C} + cY + I$

where c is marginal propensity to consume

$1{,}000 = 200 + c(1{,}000) + 100$

$700 = c(1{,}000)$

$c = 0.7$

Hence, marginal propensity to consume is 0.7

Answer 24

Rising sale of petrol and diesel cars leads to air pollution. This polluted air causes many diseases related to the respiratory system. It affects human health quality which has a ***negative impact on the welfare of the nation.***

Rising sale of petrol and diesel cars means an increase in the demand for a car. So the producers will try to increase the supply of cars to balance with the increasing demand. Hence, this leads to ***increase in GDP***.

Answer 25

i. **Medium of exchange**: The primary function of money is to act as a medium of exchange between two parties involved in a transaction. It avoids the practical problems of wastage of time and resources involved in the barter system of exchange and it improves the efficiency of the transaction. It promotes allocation efficiency in the trade and production of goods and services.
In case of the barter system, the sale and purchase of goods occurs at the same time. Their sale and purchase value also remains equal at that point. A person can purchase or sell goods with cash without selling or purchasing any good at that point, after money came into existence. Thus, the act of purchase and sale has been separated. Thereby the medium of exchange facilitated sale and purchase very easily in terms of monetary value.
For example, a fruit seller wants to sell his fruits to buy wheat. In the absence of money, he will have to look for some person who wants to sell wheat and buy fruits. This is not always easy and possible. However, with money as a medium of exchange, the fruit seller has to just find a buyer for his fruits. When fruits are exchanged for money, he can purchase wheat from the market.

ii. **Standard of deferred payment:** Deferred payments refer to those payments which are made in the future. Money has made deferred payments easier. When money is borrowed, the principal and interest amounts have to be returned to the lender. However, these transactions are not possible in terms of goods and services. Money performs this function more effectively.

Answer 26

Repo rate is the rate at which commercial banks can borrow money from RBI to overcome the shortage of money. By varying the repo rates, the RBI can increase or decrease the supply of money. This rate relates to the loan offered by RBI with securities and only short term borrowings by the commercial banks.

Repo rate is used as the main instrument of credit control. When the Central Bank raises the repo rate, there will be an increase in the cost of borrowing which reduces commercial banks borrowing from the Central Bank. Consequently, the flow of money from the commercial banks to the public reduces. Therefore, the supply of money reduces and bank credit creation is controlled.

Answer 27

Basis of Difference	Capital Expenditure	Revenue Expenditure
Meaning	A decline in the government liabilities and creates assets for the government	No decline in government liabilities and does not create assets for the government
Examples	Purchase of shares and bonds	Salaries, pensions and interest payments

Taxes and government expenditure can be influenced as follows:

i. A tax is a legally compulsory payment imposed by the government on households and producers. The government imposes taxes on socially unsafe goods such as alcohol and tobacco. Thereby resources will be shifted to the production of socially essential goods.

ii. Subsidies do not reduce the liability of the government and it does not add to the assets of the government. The government also provides subsidies for necessary goods such as wheat, rice and sugar. Thereby the resources are shifted from the production of goods for the rich to the production of goods for the poor.

OR

Direct Tax	Indirect Tax
It is imposed on the income of a person based on the principle of ability to pay. The income tax burden is equitably distributed on different people and institutions. Thereby the tax burden falls more on the rich than on the poor.	It is imposed on an individual but is paid by another person either partly or wholly. Hence, the impact and incidence of taxes are on different persons.
Tax burden cannot be shifted to another person.	Tax burden can be shifted to another person.
Prices are not affected.	Prices are affected because the price of the product is inclusive of tax.
Examples: Income and property tax	Examples: Union excise duties and custom duties

Through the budgetary policy, the government can reallocate resources so that social and economic objectives can be met in the following ways:

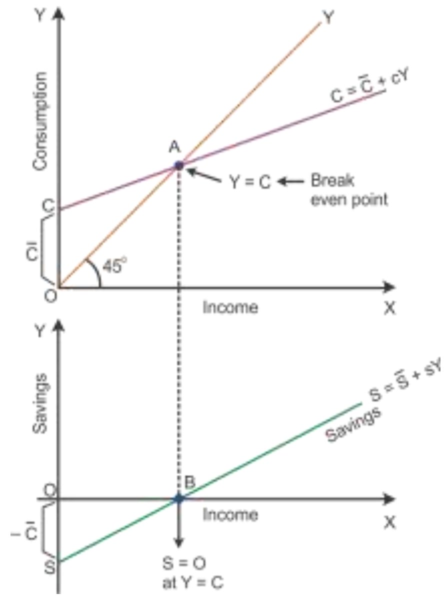
i. The government ensures productive expenditure to maximise the welfare of the nation with minimum level of profit.
ii. The government regularises the activities of the private sector to provide social benefit to the poor.
iii. The government impose taxes on socially unsafe goods such as alcohol and tobacco to shift resources to the production of socially essential goods.

Answer 28

In the diagram, the supply curve is given as the SS curve and $-\bar{C}$ represents negative savings. At the breakeven Point B, we find that Y = C and S = O.

Derivation of the consumption curve from the saving curve:

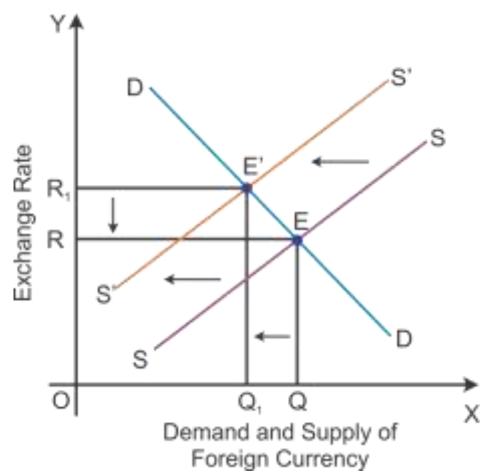
Given the SS curve, let us consider OS = OC. At Point B, draw a perpendicular 45° line towards Point A. Points C and A are joined to produce a straight line upward sloping consumption curve CC.



Answer 29

a. Indian investors lending abroad leads to an outward flow of foreign exchange and is hence treated as a ***negative item in the capital account of balance of payments***.

b. This will reduce the supply of foreign currency from SS to S′S. Hence, the new equilibrium is reached at Point E′ with a new exchange rate OR_1.



Answer 30

GDP_{MP} = Private final consumption expenditure + Government final consumption expenditure + (Net domestic capital formation + depreciation) − Net imports

= 800 + 300 + (200 + 100) − 30 = 1.370

= Rs 1.370 crore

GNP_{MP} = GDP_{MP} − Net factor income to abroad

= 1,370 −(−10) = 1.380

= Rs 1,380 crore

Private Income = GDP_{MP} − Net indirect taxes − Depreciation − Income accruing to government − Net factor income to abroad + Current transfers from Government − Net current transfers to abroad + National debt interest

= 1.370 − 150 − 100 − 90 −(−10) + 40 − 20 + 50 = Rs 1,110 crore

= Rs 1,110 crore

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All India Board Paper Set 1 – 2015

Time: 3 hrs **Max. Marks: 100**

Note:

- Please check that this question paper contains 12 printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains 29 questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minutes time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

General Instructions:

(i) **All** questions in both the sections are compulsory.

(ii) Marks for questions are indicated against each question.

(iii) Questions No. **1 – 3** and **15 – 19** are very short-answer questions carrying **1** mark each. They are required to be answered in one sentence each.

(iv) Questions No. **4 – 8** and **20** – **22** are short answer questions carrying **3** marks each. Answers to them should normally not exceed **60** words each.

(v) Questions No. **9– 10** and **23– 25** are also short answer questions carrying **4** marks each. Answers to them should normally not exceed **70** words each.

(vi) Question number **11 – 14** and **26 – 29** are long-answer questions carrying **6** marks each. Answers to them should normally not exceed **100** words each.

(vii) Answers should be brief and to the point and the above word limits should be adhered to as far as possible.

SECTION A

1. Define indifference curve. [1]

2. If due to fall in the price of good X, demand for good Y rises, the two goods are : (Choose the correct alternative) [1]

a. Substitutes
b. Complements
c. Not related
d. Competitive

3. If Marginal Rate of Substitution is increasing throughout, the Indifference Curve will be:

(Choose the correct alternative) [1]

a. Downward sloping convex
b. Downward sloping concave
c. Downward sloping straight line
d. Upward sloping convex

4. Giving reason comment on the shape of Production Possibilities curve based on the following schedule : [3]

Good X (units)	Good Y (units)
0	30
1	27
2	21
3	12
4	0

5. What is likely to be the impact of "Make in India" appeal to the foreign investors by the Prime Minister of India, on the production possibilities frontier of India? Explain. [3]

OR

What is likely to be the impact of efforts towards reducing unemployment on the production potential of the economy? Explain.

6. Explain the significance of 'minus sign' attached to the measure of price elasticity of demand in case of a normal good, as compared to the 'plus sign' attached to the measure of price elasticity of supply. [3]

7. In a perfectly competitive market the buyers treat products of all the firms as homogeneous. Explain the significance of this feature. [3]

8. What are the effects of 'price-floor' (minimum price ceiling) on the market of a good? Use diagram. [3]

9. A consumer spends Rs 1,000 on a good priced at Rs10 per unit. When its price falls by 20 percent, the consumer spends Rs800 on the good. Calculate the price elasticity of demand by the Percentage method. [4]

10. What is the behaviour of (a) Average Fixed Cost and (b) Average Variable Cost as more and more units of a good are produced? [4]

OR

Define Average Revenue. Show that Average Revenue and Price are same.

11. A consumer consumes only two goods X and Y, both priced at Rs 2 per unit. If the consumer chooses a combination of the two goods with Marginal Rate of Substitution equal to 2, is the consumer in equilibrium? Why or why not? What will a rational consumer do in this situation? Explain. [6]

OR

A consumer consumes only two goods X and Y whose prices are Rs 5 and Rs 4 respectively. If the consumer chooses a combination of the two goods with marginal utility of X equal to 4 and that of Y equal to 5, is the consumer in equilibrium? Why or why not? What will a rational consumer do in this situation? Use utility analysis.

12. What are the different phases in the Law of Variable Proportions in terms of marginal product? Give reason behind each phase. Use diagram. [6]

13. Explain why will a producer not be in equilibrium if the conditions of equilibrium are not met. [6]

14. Market for a good is in equilibrium. The supply of good "decreases". Explain the chain of effects of this change. [6]

SECTION B

15. What is 'aggregate demand' in macroeconomics? [1]

16. If MPC = 1, the value of multiplier is: (Choose the correct alternative) [1]

a. 0
b. 1
c. Between 0 and 1
d. Infinity

17. Primary deficit in a government budget is : (Choose the correct alternative) [1]

a. Revenue expenditure - Revenue receipts
b. Total expenditure - Total receipts
c. Revenue deficit - Interest payments
d. Fiscal deficit - Interest payments

18. Direct tax is called direct because it is collected directly from : (Choose the correct alternative) [1]

a. The producers on goods produced

b. The sellers on goods sold
c. The buyers of goods
d. The income earners

19. Other things remaining the same, when in a country the market price of foreign currency falls, national income is likely (Choose the correct alternative) [1]

a. to rise
b. to fall
c. to rise or to fall
d. to remain unaffected

20. If the Real GDP is Rs400 and Nominal GDP is Rs450, calculate the Price Index (base = 100). [3]

21. What are fixed and flexible exchange rates? [3]

OR

Explain the meaning of Managed Floating Exchange Rate.

22. Where is 'borrowings from abroad' recorded in the Balance of Payments Accounts? Give reasons. [3]

23. Explain the "Bankers' Bank function" of the central bank. [4]

OR

Explain the "Bank of Issue function" of the central bank.

24. Currency is issued by the central bank, yet we say that commercial banks create money. Explain. How is this money creation by commercial banks likely to affect the national income? Explain [4]

25. An economy is in equilibrium. Calculate the Investment Expenditure from the following: [4]

National Income = 800
Marginal propensity to save = 0.3
Autonomous Consumption = 100

26. Giving reason explain how the following should be treated in estimation of national income: [6]

i. Payment of interest by a firm to a bank
ii. Payment of interest by a bank to an individual
iii. Payment of interest by an individual to a bank

27. What is 'deficient demand'? Explain the role of 'Bank Rate' in removing it. [6]

OR

What is 'excess demand'? Explain the role of 'Reverse Repo Rate' in removing it.

28. Explain how the government can use the budgetary policy in reducing inequalities in incomes. [6]

29. Calculate the 'National Income' and 'Private Income' : [6]

		(Rs crores)
i.	Rent	200
ii.	Net factor income to abroad	10
iii.	National debt interest	15
iv.	Wages and salaries	700
v.	Current transfers from government	10
vi.	Undistributed profits	20
vii.	Corporation tax	30
viii.	Interest	150
ix.	Social security contributions by employers	100
x.	Net domestic product accruing to government	250
xi.	Net current transfers to rest of the world	5
xii.	Dividends	50

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SECTION A

Answer 1

An indifference curve is the curve which represents all those ***combinations of two commodities*** which give the same level of satisfaction to a consumer. It slopes downward because an increase in the amount of Good X along the indifference curve is associated with a decrease in the amount of Good Y as the preferences are monotonic.

Answer 2

The correct option is (b). If due to a fall in the price of good X, the demand for good Y rises, the two goods are ***complements*** because these goods complete the demand of each other.

Answer 3

The correct option is (b). Assume that the marginal rate of substitution is increasing throughout; the indifference curve would be a ***downward sloping concave*** because the consumer can get higher marginal utility from each additional unit of output.

Answer 4

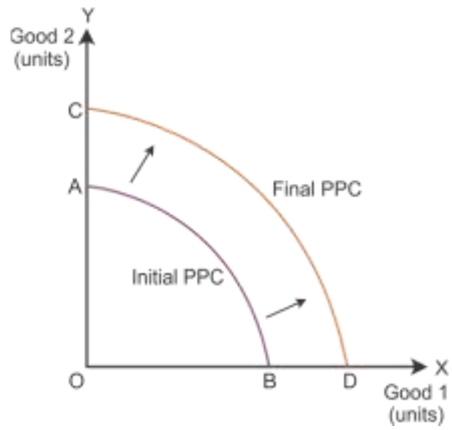
Marginal opportunity cost is as follows:

Good X (units)	Good Y (units)	$MOC = \frac{\Delta Y}{\Delta X}$
0	30	–
1	27	3/1 = 3
2	21	6/1 = 6
3	12	9/1 = 9
4	0	12/1 = 12

The above schedule clearly states that the production of Good X increases from Unit 1 to Unit 2, and correspondingly, the units of Good Y forgone is 3. While the production of Good X increases from Unit 2 to Unit 3, 6 units of Good Y are forgone. With each additional unit of production of Good X, the amount of Good Y to be forgone increases. So, because of increasing opportunity cost, the production possibility curve (PPC) is ***concave to the origin.***

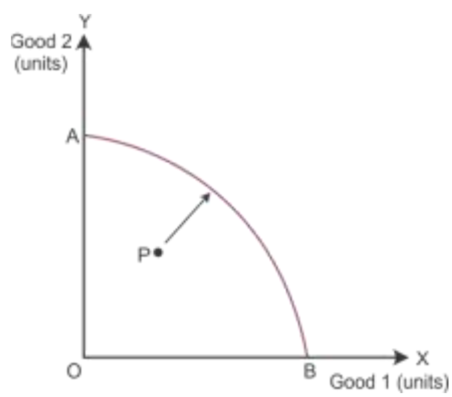
Answer 5

The *Make in India* appeal implores foreign producers to produce in India. This will increase the level of resources and lead to an increase in the country's production potential. Therefore, the ***production possibility curve will shift to the right*** as shown in the below diagram, i.e. the production possibility curve shifts from the initial curve AB to the final curve CD.



OR

When an economy is producing below its potential level because of unemployment, it implies that the economy is not functioning on the PPC but below the PPC, i.e. Point P as shown in the below diagram. Given the resources and technology, along with the initiation of government schemes, the employment level will increase. Therefore, Point P will ***shift nearer to PPC.***



Answer 6

The measurement of price elasticity of demand for normal goods has a (–) sign because the demand and price of the good are ***inversely related***. It is assumed that other things remain constant if an increase in the price of a good causes a ***decrease in the quantity demanded for a good.***

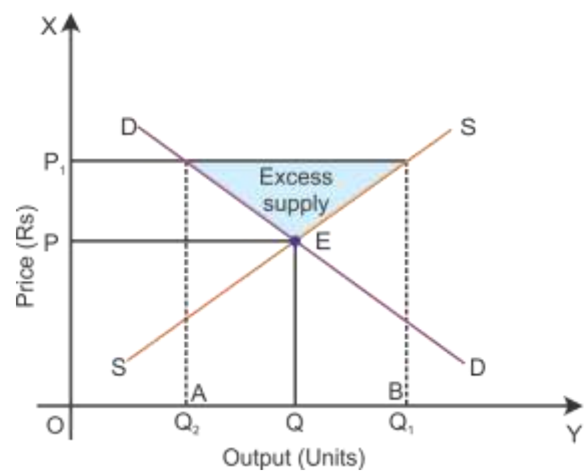
The measurement of price elasticity of supply for normal goods has a (+) sign because the supply and price of the good are ***positively related***. It is assumed that other things remain constant if an increase in the price of a good causes an ***increase in the quantity of supply of goods.***

Answer 7

In a perfectly competitive market, the buyers will treat the products of all the firms in the market as homogeneous. There is zero degree of product differentiation and the firm cannot take any control of the price. Here, the firm does not involve in advertisement and sales promotion activities. Hence, ***uniform price prevails in a perfectly competitive market*** for homogeneous products.

Answer 8

Price floor means the minimum price fixed by the government for a good in the market. The government fixes this price on agricultural products and food grains in particular. A minimum price is fixed which the traders must pay to the farmers in the wholesale market. Thus, the income of the farmer is regulated and a continuous production is assured. In the diagram, the equilibrium price and quantity are OP and OQ. As the equilibrium price is low for farmers, the government fixes the price floor, i.e. the price level increased from OP to OP_1 which leads to a decline in the quantity demand, and therefore, there is ***excess supply*** in the market.



Effects of price floor:

i. The government ensures to buy the full produce of the farmers which are not sold in the market at the price floor. Hence, they are able to ***produce the maximum level of output***.

ii. Farmers are ensured with the ***minimum returns*** as their products are completely sold in the market at comparatively higher price. This leads to an increase in their level of income.

iii. Because of price floor, consumers and traders in the market are ***forced to pay higher price than the equilibrium price***.

iv. The interests of the farmer are protected by the government and they are forced to store the excess supply as a buffer stock including the ***storage cost*** of their product.

v. The cost incurred by the government is borne by consumers and traders in the form of tax, i.e. the ***consumption of excess supply at higher price in the market***.

Answer 9

Given:

Actual Total Expenditure $(TE_0) = \text{Rs } 1000$

Change in Total Expenditure $(TE_1) = \text{Rs } 800$

Actual Price $(P_0) = \text{Rs } 10$

Percentage change in price $= -20$

$$\text{Percentage change in price} = \frac{P_1 - P_0}{P_0} \times 100$$

$$-20 = \frac{P_1 - 10}{10} \times 100$$

$$\frac{-200}{100} = P_1 - 10$$

$$P_1 = 8$$

Therefore,

Price (P)	Total Expenditure (TE) = Price (P) × Quantity (Q)	Quantity (Q) = $\frac{TE}{P}$
P_0 = Rs 10	TE_0 = Rs 1000	Q_0 = 100
P_1 = Rs 8	TE_1 = Rs 800	Q_1 = 100

$$Ed = (-)\frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in price}}$$

$$Ed = (-)\frac{\frac{\text{Change in demand}}{\text{Actual demand}} \times 100}{-20}$$

$$Ed = (-)\frac{\frac{Q_1 - Q_0}{Q_0} \times 100}{-20}$$

$$Ed = (-)\frac{\frac{100 - 100}{100} \times 100}{-20}$$

$\therefore Ed = 0$

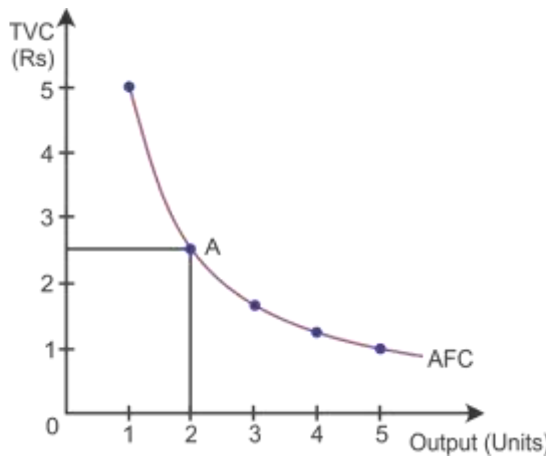
Thus, the price elasticity of demand is 0.

Answer 10

a. Average fixed cost is the fixed cost per unit of output produced. It ***slopes downward to the right*** because AFC decreases as the output increases. It is a rectangular hyperbola curve. It means that the product of AFC and output is equal to TFC which remains constant at all levels of output. AFC is Rs 2.5 for 2 units of output produced at Point A as shown in the diagram.

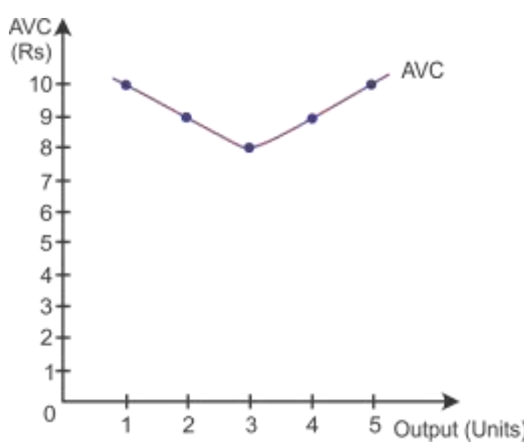
TFC = AFC × Q

$$AFC = \frac{TFC}{Q}$$



b. Average variable cost is the variable cost per unit of output produced. It is a U-shaped curve because AVC decreases as output increases till it reaches Point K and it starts increasing as shown in the diagram. It is the law of variable proportion.

$$AVC = \frac{TVC}{Q}$$



OR

Average revenue is the revenue earned per unit of output sold in the market. It is identical to the price of the output produced.

$$AR = \frac{TR}{Q}$$

where

TR = total revenue

$$AR = \frac{P \times Q}{Q}$$

$$AR = P$$

Thus, AR is always equal to the price of the output.

Answer 11

The consumer reaches equilibrium point only when the following condition is satified

$$MRS = \frac{P_x}{P_y}$$

Given that,

$$MRS = 2$$

$$\frac{P_x}{P_y} = \frac{2}{2} = 1$$

As MRS is greater than the price ratio, the rational consumer would try to satisfy the condition by increasing the consumption of Good-X and forego the consumption of Good-Y.

OR

The consumer reaches equilibrium only if the following condition is satisfied

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y}$$

Give that,

$$\frac{MU_x}{P_x} = \frac{5}{4}$$

$$\frac{MU_y}{P_y} = \frac{4}{5}$$

Here, $\frac{MU_x}{P_x}$ is greater than $\frac{MU_y}{P_y}$, the rational consumer would try to satisfy the condition by increasing the consumption of Good-X and forego the consumption of Good-Y.

Answer 12

Law of variable proportion:

As more of the variable factor input is combined with the fixed factor input, a point will eventually be reached where the marginal product of the variable factor input starts declining.

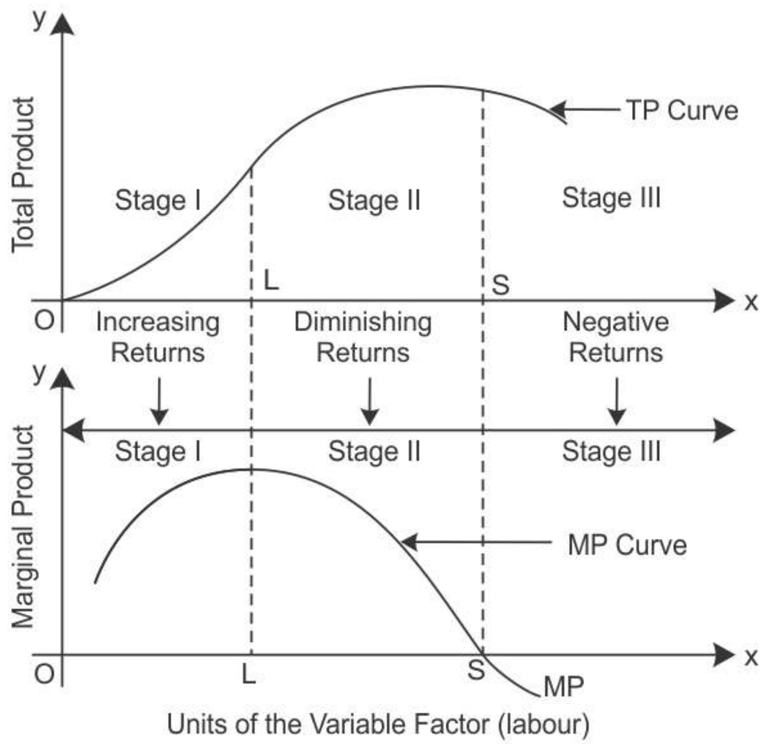
Units of Fixed Factor	Units of Variable Factor	TP	MP	Stages
1	1	4	4	Increasing MP (Increasing returns to a factor)
1	2	12	8	
1	3	24	12	
1	4	32	8	Diminishing MP (Diminishing returns to a factor)
1	5	34	2	
1	6	34	0	
1	7	30	−4	Negative MP (Negative returns to a factor)
1	8	21	−9	
1	9	10	−11	

Consider the above table.

Stage I: As more units of factor input are used, MP tends to rise till 3 units of factor input are used. Here, the total product increases at an increasing rate which is called increasing returns to the factor input.

Stage II: However, when the 4th unit of factor input is used, the diminishing returns sets in, where MP starts decreasing and TP increases at a decreasing rate. Diminishing MP reduces to zero. The total output is the maximum when the marginal output is zero.

Stage III: When MP is negative, TP starts declining from 34 to 10 when the 9th unit is employed.



Answer 13

The producer's equilibrium refers to the situation in which he maximises his profits. A producer strikes equilibrium when two conditions are satisfied:

i. MR = MC
ii. MC is rising or the MC curve cuts the MR curve from below.

MR, MC Schedule and Producer's Equilibrium:

Output	MR	MC
1	10	8
2	10	7
3	10	6
4	10	8
5	10	10
6	10	13

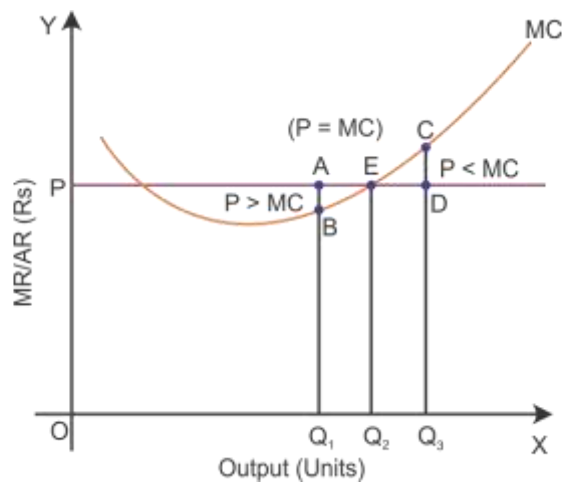
Here, it is assumed that price (AR) is constant, so that MR is constant, i.e. = Rs 10 under perfect competition. This table indicates that the two conditions of equilibrium are satisfied only when 5 units of output are produced. It is here that (i) MR = MC = Rs 10 and (ii) MC is rising.

Equilibrium is not struck when MR > MC. In such a situation, producing an additional unit would add more to TR than to TC. This implies that the gap between TR and TC tends to widen or that profits are still to be maximised.

Condition 1:

i. If MR > MC:

Suppose OQ_1 is the output level at the price AQ_1 and the marginal cost is BQ_1, then it would be $AQ_1 > BQ_1$. Here, OQ_1 is not the level of output at which the profit is maximised. So, the firm can increase its profit by increasing the production to the OQ_2 level of output.

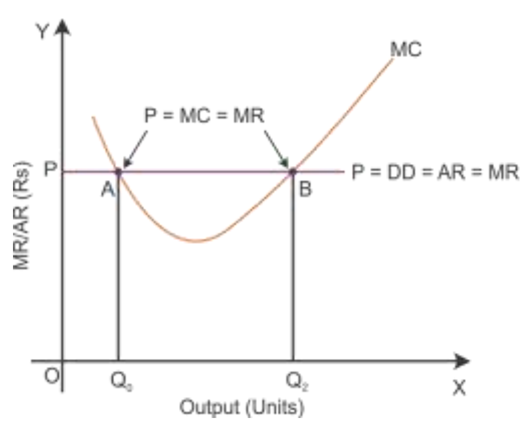


ii. If Price (MR) < MC:

Suppose OQ_3 is the output level at the price DQ_3 and the marginal cost is CQ_3, then it would be $DQ_3 < CQ_3$. Here, OQ_3 is not the level of output at which the profit is maximised. So, the firm can increase its profit by decreasing its output level to OQ_2. Thus, the firm's equilibrium level of output to maximise output is that MR = MC and MC should rise at the point of intersection with MR.

Condition 2:

In the diagram, the MC curve intersects the price line (or MR) at two points—A and B. Here, Condition 1 of profit maximisation MR = MC is satisfied at these two points. Next, let us consider Condition 2.



i. **Intersection point at A:**

At intersection point A, price is equal to MC but MC is falling, and it is a downward-sloping curve. If the output is increased more than the OQ_0 level, then the price is more than MC. This means that the firm can increase the production more than the OQ_0 level of output to maximise profit.

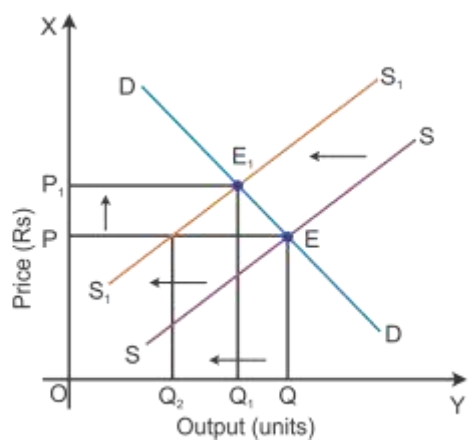
ii. **Intersection point at B:**

At intersection point B, if the output is increased more than output OQ_2, the price is more than MC. This states that the firm can increase the production more than the OQ_2 level of output to maximise profit. While if the firm produces higher level of output than OQ_2, then the price is less than MC. This clearly states that high profit is possible by decreasing the output level to OQ_2. Thus, Point B is the producer's equilibrium and OQ_2 is the output level to maximise profit by satisfying the two necessary conditions (i) Price = MC and (ii) the MC curve is rising.

Answer 14

Consider DD to be the initial demand curve and SS to be the supply curve of the market. Market equilibrium is achieved at Point E, where the demand and supply curves intersect each other. Therefore, the equilibrium price is OP, and the equilibrium quantity demanded is OQ.

When there is a change in factors other than price, there will be a decrease in the supply of goods. There will be a shift in the supply curve towards the left to SS_1 with a decrease in the supply, and the demand curve DD will remain the same. This implies that there will be a situation of excess demand at the equilibrium point as shown in the below diagram.



This excess demand increases the competition among buyers, and they will pay a higher price to obtain more goods. So, the price will tend to increase till it reaches to OP_1 and the total quantity will fall to OQ_1. Now, the new market equilibrium will be at Point E_1, where the new supply curve SS_1 intersects the demand curve DD.

SECTION B

Answer 15

Aggregate demand means the total quantity demanded for goods and services by all the consumers of a country at a given price.

Answer 16

The correct option is (d). We know that

The value of multiplier is

$$\frac{1}{1-\text{MPC}}$$

where

MPC = Marginal propensity to consume

Given that

MPC = 1

Thus, the value of multiplier becomes infinity.

Answer 17

The correct option is (d). Primary deficit is the difference between the fiscal deficit and interest payment.

Primary deficit = Fiscal deficit − Interest payment

It determines the amount of borrowing which is necessary for the government to pay for the expenses other than interest payments.

Answer 18

The correct option is (d). Direct tax means the tax which is ***directly imposed on individuals*** and collected by the government. The burden of tax cannot be shifted to any other person. Here, the income earners are the individuals who pay the direct tax.

Answer 19

The correct option is (b). Currency appreciation takes place when there is a decrease in the price of a foreign currency in terms of the domestic currency. Here, less rupees are required to buy one dollar, i.e. the value of domestic currency becomes more valuable in relation to a foreign currency. So, the quantum of imports will increase and the exports will decrease, and thereby it leads to a ***decrease in national income***.

Answer 20

$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{Price Index of Current Year}} \times 100$$

$$400 = \frac{450}{\text{Price Index of Current Year}} \times 100$$

$$\text{Price Index of Current Year} = 112.5$$

Answer 21

Fixed exchange rate is fixed by the government or Central Bank of a country and the changes can be made by the government. Under this system, the value of currency is fixed against different currencies to ensure stability in the exchange rate and it promotes foreign trade.

Flexible exchange rate is determined by demand and supply forces of varied currencies in the foreign exchange market. It is also called free rate of exchange, as it is freely determined by demand and supply forces in the international market. Here, the government does not hold any reserves and there is no problem of under or over valuation of currency.

OR

Managed floating is a system which allows adjustments in exchange rate according to a set of rules and regulations which are officially declared in the foreign exchange market. It is the combination of both fixed exchange rate and the flexible exchange rate. Here, the exchange rate is agreed on the basis of market forces along with the involvement of the monetary authority.

Answer 22

Borrowings which include commercial borrowing by the government or private sector from the rest of the world and the external assistance to a nation or by a nation. These borrowings lead to an inward flow of foreign exchange and hence are treated as ***positive items in the capital account of balance of payments***.

Answer 23

Banker's bank functions of the Central Bank:

The Central Bank is an apex bank of all banks in the country. It has almost the same relation with other banks in the country as a commercial bank has with its customers. The Central Bank keeps some cash balances of the commercial banks as compulsory deposit. This is to help them during financial crises.

OR

Bank of issue functions of the Central Bank:

The Central Bank of a country has the exclusive right of issuing notes. If commercial banks enjoy the right to issue notes, then they will partly control the supply of money. Because the commercial banks are profit-maximising firms, these banks will manipulate the amount of paper notes to suit their own objective. This may not be conducive to the economic interests of the country. This is why the right has been relegated to the Central Bank. Notes issued by the Central Bank are unlimited legal tender.

Answer 24

Commercial banks create money even though they cannot print money. Bank deposits form the basis for credit creation. They accept deposits from the public by opening a deposit account known as the primary deposit. Banks do not hold the money in the account itself, and the entire amount is not withdrawn from the account at the same time. So, they advance loans to business persons and retain only a small portion of the total deposits in the bank. The Central Bank decides the amount to be held in the form of cash and the remaining amount is advanced as loans to business persons only against collateral securities. The bank will not give cash but open a derivative account in the name of the individual or institution. Here, the loans create a derivative deposit which is called a secondary deposit or derivative deposit. This ***secondary deposit is called the creation of credit.*** Hence, the banks are able to provide financial assistance to traders and industrialists. Their cheques and drafts are useful for trading on a large scale. It also provides concessional loans to the priority sectors such as agriculture, small-scale industry, retail trade and export. Thus, the ***production activity increases*** the overall development of the nation.

Answer 25

Given that

National Income $(Y) = 800$

Marginal Propensity Save $= 0.3$

Therefore,

$MPC = 1 - MPS$

$= 1 - 0.3 = 0.7$

$\bar{C} = 100$

We know that

$Y = C + I$

$Y = \bar{C} + MPC(Y) + I$

$800 = 100 + 0.7 \times 800 + I$

$I = 140$

Thus, the investment expenditure is Rs 140.

Answer 26

i. Payment of interest by a firm to bank ***is included*** in the estimation of national income because it is only an intermediate expenditure for the firm.

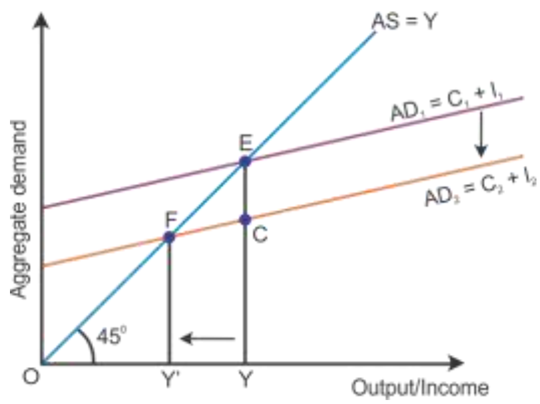
ii. Payment of interest by a bank to an individual ***is included*** in the estimation of national income because the bank has used the amount of saving of an individual for productive purposes.

iii. Payment of interest by an individual to a bank ***is not included*** in the estimation of national income because an individual's loan is used only for consumption purposes but not productive purposes.

Answer 27

Deficient demand means a situation when the aggregate demand is short of the aggregate supply corresponding to full employment in the economy. It leads to a fall in the general price level and results in deflation, i.e. AD < AS.

Aggregate demand is shown by the AD curve and aggregate supply is shown by the AS curve (as shown in the diagram below). While the aggregate demand curve and the aggregate supply curve intersect each other, the full employment equilibrium is attained at Point E. OY is the full employment level of output, and EY is the aggregate demand at full employment level of output. If the aggregate demand decreases below the full employment level of output from EY to CY, then the economy will have ***deficient demand,*** (EY − CY = EC).

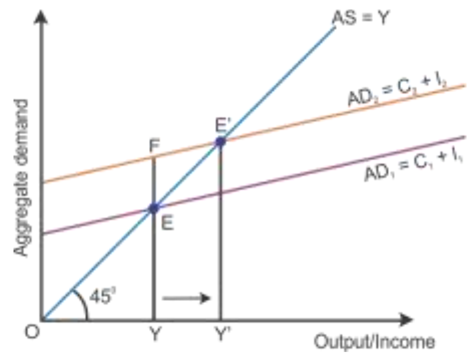


The Central Bank overcomes the deficient demand. The Central Bank decreases the bank rate and there is fall in the cost of borrowing for commercial banks. This enables the increase for the demand for loans and borrowings in the market. This in turn increases the ability to purchase more. In this way, the aggregate demand increases to the level of aggregate supply and the economy attains equilibrium.

OR

Excess demand occurs in a situation when aggregate demand is more than aggregate supply corresponding to full employment. It leads to reduction in inventories and inflation in the economy. This situation is considered an inflationary gap—the difference between aggregate demand beyond full employment and aggregate demand at full employment.

Aggregate demand is the AD curve and aggregate supply is the AS curve (as shown in the diagram below). While the aggregate demand curve and the aggregate supply curve intersect each other, the full employment equilibrium is attained at Point E. OY is the full employment level of output, and EY is the aggregate demand at full employment level of output. If the aggregate demand increases beyond the full employment level of output from EY to FY, then the economy will have ***excess demand*** (FY – EY = FE).



Because of excess demand, the repo rate will be increased by the Central Bank and it will increase the cost of borrowings for the commercial bank. This leads to a decline in the demand for loans and consumption expenditure. Thus, the aggregate demand comes down and the economy attains equilibrium.

Answer 28

Budgetary policy in reducing inequalities in incomes:

Fiscal policy implies the income and expenditure policy or the budgetary policy of the government. Income inequality has increased in both advanced and developing economies in recent decades. Evidence from public surveys indicates that widening income inequality has been accompanied by growing public demand for income redistribution. Governments can play a significant role in reducing inequality of income and wealth as well as inequality of opportunity through fiscal policies.

Both ***tax and spending policies*** can alter the distribution of income over both short-term and medium-term. For example, progressive income taxes and cash transfers can reduce the inequality of disposable incomes today. Spending on education has an impact on future earnings, and therefore, it could eventually increase the number of individuals earning a higher income.

Answer 29

National Income = Wages and salaries + Social security contributions by employers + Rent + Interest + Dividends + Corporation tax + Undistributed profits - Net factor income to abroad

NNP_{FC} = 700 + 100 + 200 + 150 + 50 + 30 + 20 – 10
= 1240 crore

Private Income = National income – Net domestic product accruing to government + Current transfer from government – Net current transfers to the rest of the world + National debt interest
= 1240 – 250 + 10 – 5 + 15
= 1010 crore

CBSE

Class XII Economics

All India Board Paper Set 1 – 2014

Time: 3 hrs **Max. Marks: 100**

Note:

- Please check that this question paper contains 12 printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains 32 questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minutes time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

General Instructions:

(i) **All** questions in both the sections are compulsory.

(ii) Marks for questions are indicated against each question.

(iii) Questions Nos. **1 – 5** and **17 – 21** are very short-answer questions carrying **1** mark each. They are required to be answered in one sentence each.

(iv) Questions Nos. **6 – 10** and **22** – **26** are short answer questions carrying **3** marks each. Answers to them should normally not exceed **60** words each.

(v) Questions Nos. **11 – 13** and **27 – 29** are also short answer questions carrying **4** marks each. Answers to them should normally not exceed **70** words each.

(vi) Question Nos. **14 – 16** and **30 – 32** are long-answer questions carrying **6** marks each. Answers to them should normally not exceed **100** words each.

(vii) Answers should be brief and to the point and the above word limits should be adhered to as far as possible.

SECTION A

1. The government has started promoting foreign capital. What is its economic value in the context of Production Possibilities Frontier? [1]

2. Define indifference curve. [1]

3. Define marginal product. [1]

4. What is market supply of a product? [1]

5. What is imperfect oligopoly? [1]

6. Why is Production Possibilities Curve concave? Explain. [3]

7. When the price of a good falls from Rs 10 to Rs 8 per unit, its demand rises from 20 units to 24 units. What can you say about price elasticity of demand of the good through the 'expenditure approach'? [3]

8. Explain how technological progress is a determinant of supply of a good by a firm.

OR

Explain how input prices are a determinant of supply of a good by a firm. [3]

9. Why is Average Revenue always equal to price? [3]

10. Why is the number of firms small in oligopoly? Explain. [3]

11. A consumer consumes only two goods X and Y and is in equilibrium. Show that when the price of good X rises, the consumer buys less of good X. Use utility analysis. [4]

OR

Given the price of a good, how will a consumer decide as to how much quantity of that good to buy? Use utility analysis.

12. Give the meaning of "inferior" good and explain the same with the help of an example.[4]

13. Giving reasons, explain the 'Law of Variable Proportions'. [4]

14. Explain why is an indifference curve

a. Downward sloping and

b. Convex.

OR

Explain the concept of 'Marginal Rate of Substitution' with the help of a numerical example. Also explain its behaviour along an indifference curve. [6]

15. From the following information about a firm, find the firm's equilibrium output in terms of marginal cost and marginal revenue. Give reasons. Also find profit at this output. [6]

Output (units)	Total Revenue (Rs)	Total Cost (Rs)
1	6	7
2	12	13
3	18	17
4	24	23
5	30	31

16. Market of a commodity is in equilibrium. Demand for the commodity 'decreases'. Explain the chain of effects of this change till the market again reaches equilibrium. Use diagram. [6]

SECTION B

17. What are time deposits? [1]

18. Define inflationary gap. [1]

19. What is full employment? [1]

20. Define fiscal deficit. [1]

21. Define foreign exchange rate. [1]

22. What are externalities? Give an example of a positive externality and its impact on welfare of the people. [3]

23. Explain the significance of the 'Unit of Account' function of money. [3]

OR

Explain the significance of the 'Standard of Deferred Payment' function of money.

24. Is the following a revenue receipt or a capital receipt in the context of government budget and why? [3]

i. Tax receipts
ii. Disinvestment

25. Distinguish between 'autonomous' and accommodating' Balance of Payments transactions. [3]

26. Foreign exchange rate in India is on the rise recently. What impact is it likely to have on exports and how? [3]

27. Explain 'Banker to the Government' function of the central bank. [4]

OR

Explain 'Bankers' Bank' function of the central bank.

28. Calculate Marginal Propensity to Consume from the following data about an economy Which is equilibrium: [4]

National income = 2000

Autonomous Consumption expenditure = 200
Investment expenditure = 100

29. Tax rates on higher income group have been increased. Which economic value does it reflect? Explain. [4]

30. Calculate 'Net National Product at Factor Cost' and 'Gross National Disposable Income' from the following: [6]

	(Rs in Arab)
i. Social security contributions by employees	90
ii. Wages and salaries	800
iii. Net current transfers to abroad	(-)30
iv. Rent and royalty	300
v. Net factor income to abroad	50
vi. Social security contributions by employers	100
vii. Profit	500
viii. Interest	400
ix. Consumption of fixed capital	200
x. Net indirect tax	250

31. How should the following be treated in estimating national income of a country? You must give reason for your answer. [6]

i. Taking care of aged parents
ii. Payment of corporate tax
iii. Expenditure on providing police services by the government

32. When is an economy in equilibrium? Explain with the help of Saving and Investment functions. Also explain the changes that take place in an economy when the economy is not in equilibrium. Use diagram. [6]

OR

Outline the steps required to be taken in deriving the Consumption Curve from the given Saving Curve. Use diagram.

CBSE
Class XII Economics
All India Board Paper Set 1 – 2014 Solution

SECTION A

Answer 1

When the government promotes foreign capital, there is an increase in the flow of money into the country. This in turn increases the availability of resources to a great extent which leads to an increase in the country's production potential. So, there is a rise in economic value which leads to a shift in the production possibility curve (PPC) to the right.

Answer 2

An indifference curve is the curve which represents all those ***combinations of two commodities*** which give the same level of satisfaction to a consumer. It slopes downward because an increase in the amount of Good X along the indifference curve is associated with a decrease in the amount of Good Y as the preferences are monotonic.

Answer 3

Marginal product (MP) is the additional output attributed to an additional unit of the variable factor, other factors remaining constant.

$$\text{Marginal product} = \frac{\text{Change in total product}}{\text{Change in labour units}}$$

Answer 4

Market supply of a product is the supply of various quantities of the product by all the producers at various price levels during a given period of time.

Answer 5

Imperfect oligopoly is a form of market in which firms produce differentiated products such as automobile industries and soft drinks.

Answer 6

The production possibility curve is concave to the point of origin because to produce each additional unit of Good X, more units of Good Y will have to be sacrificed than before. Opportunity cost of producing every additional unit of Good X tends to increase in terms of the loss of production of Good Y.

Let us consider capital goods and consumer goods to represent PPC in the diagram. If 1 unit of capital good and 48 units of consumer goods are produced at the initial production point B, then to produce one additional unit of capital good, 4 units of consumer goods must be sacrificed. The opportunity cost of one additional capital good is 4 units of consumer goods at Point C. Likewise, it moves on to Point D by sacrificing 9 units of consumer goods to produce one more unit of capital good. The opportunity cost increases as the PPC moves down from Point C to D. Hence, PPC has a concave shape.

Production Possibility Curve

Answer 7

Given that

$Q_1 = 20$

$Q_2 = 24$

$P_1 = \text{Rs } 10$

$P_2 = \text{Rs } 8$

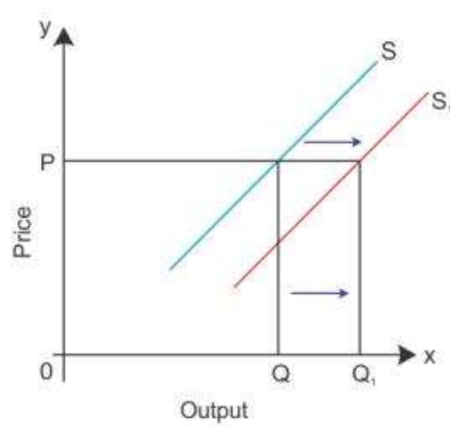
Total initial expenditure $= Q_1 \times P_1 = 10 \times 2 = \text{Rs } 200$

Total new expenditure $= Q_2 \times P_2 = 8 \times 24 = \text{Rs } 192$

Since, the total expenditure is falling with a decrease in the price of the commodity, the price elasticity of demand for the good is less than 1.

Answer 8

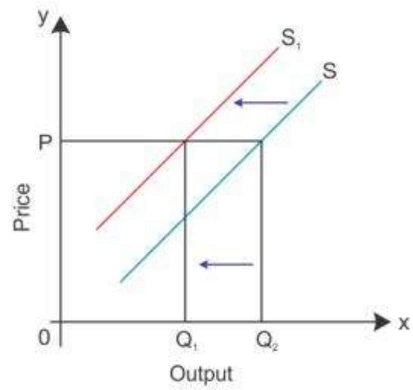
When there is advancement in technology, the cost of production falls and there is an increase in profit. It leads to an increase in the supply of good which shifts the supply curve towards the right.



The above diagram shows that the advancement in technology shifts the supply curve S towards the right from S to S_1 and the increase in the supply of good from OQ to OQ_1. However, the price of the good at OP remains constant.

OR

When there is a rise in input prices, there will be an increase in the cost of production which results in a decline in profit margin and the supply of good.



When there is an increase in input prices, the supply curve S shifts leftwards from S to S_1. It leads to a fall in the supply of good from OQ_2 to OQ_1, where the price remains constant at OP.

Answer 9

Average revenue of a firm is the total revenue per unit of output sold.

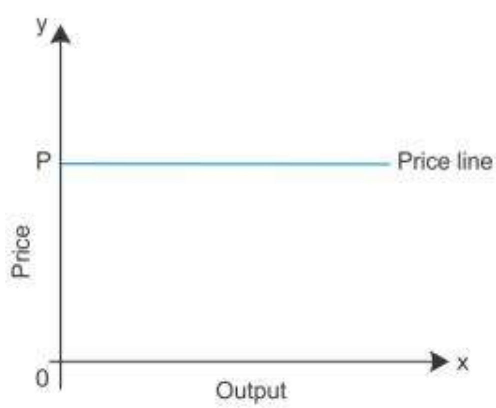
AR = TR/q ----- (1)

TR = p*q ----- (2)

By relating Equations 1 and 2,

AR = p*q/q = p

When AR equals the market price, the firm can sell any amount of good at a given price.



Answer 10

In an oligopoly market, each firm is huge enough to control a significant portion of the market even though they are few firms. Output quotas and the price have a direct bearing on the output and price of rival firms in the market. So, there is no unique demand curve for an oligopoly firm. They form a collusive agreement among the firms to fix the price and output in the market. It is in order to avoid price competition and earn monopoly profits.

Answer 11

When a consumer buys both Goods X and Y, the consumer's equilibrium condition is expressed through the equation:

$$\frac{MU_x}{P_x}=\frac{MU_y}{P_y}=\frac{MU_m}{P_n}=MU_m$$

Consider the following numerical example to understand the consumer's equilibrium using marginal utility. A consumer's Marginal Utility of Money (MU_m) is 16 utils and two commodities x and y whose prices are Rs 1 (P_x) and Rs 1 (P_y) per unit, respectively. Consider the following schedule to analyse marginal utility of commodity x (MU_x) and commodity y (MU_y).

Units of x	**MU x (Utils)**	**MU y3 (Utils)**
1	28	32
2	24	29
3	21	27
4	20	23
5	16	20
6	13	18
7	9	17
8	5	16
9	3	12
10	1	9

Based on the given schedule, the consumer is in equilibrium at the consumption of 5 units of commodity x and 8 units of commodity y. At such a consumption combination, the marginal utility of a rupee spent on commodity x $\left(\frac{MU_x}{P_x}\right)$ is equal to the marginal utility of a rupee spent on commodity y $\left(\frac{MU_y}{P_y}\right)$ and also equal to the marginal utility of money (MU_m).

If the price of commodity x rises, the ratio of marginal utility to price of X $\left(\frac{MU_x}{P_x}\right)$ will be lesser than that of y.

$$\frac{MU_x}{P_x}<\frac{MU_y}{P_y}$$

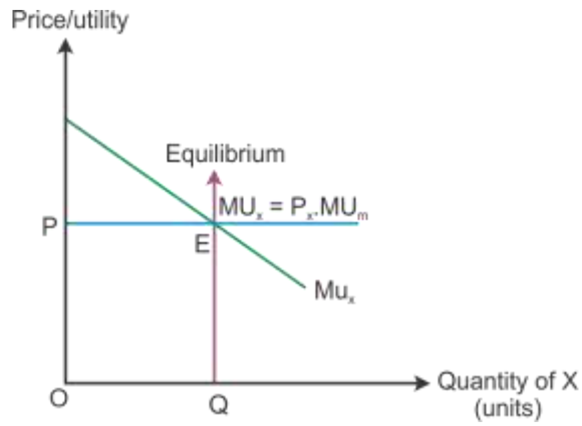
Here, the consumer reorganises his consumption combination to attain equilibrium. Therefore, the consumption of commodity x decreases till it reaches equality.

OR

Given the price of the good, a consumer will decide the amount of goods to buy. So, the consumer compares the price of the good with its utility. A rational consumer will be at equilibrium only when the marginal utility is equal to the price paid for the good.

$MU_X = P_X$

The marginal utility is greater than the price paid for the good, i.e. $MU_X > P_X$ implies that the consumer is not in equilibrium and buys more of a good. While the marginal utility is lesser than the price paid for the good, i.e. $MU_X < P_X$ implies that the consumer is not in equilibrium and buys less of that good.



In the diagram, OP is the price of the good given on the Y-axis and OQ is the utility given on the X-axis. The marginal utility curve MU_X slopes downwards because the marginal utility diminishes with every additional consumption of X. The consumer reaches equilibrium at Point E, where the marginal utility is equal to the price paid for the good.

Answer 12

<u>Inferior goods</u> are goods which have a ***<u>negative relationship</u>*** between income and quantity demanded. Assume that other things remaining constant, an increase in the consumer's income will lead to a decrease in the quantity demanded and a decrease in the consumer's income will lead to an increase in the quantity demanded. For example, if the income of the consumer increases, he/she will prefer to replace the consumption of boiled rice with basmati rice, then the demand for boiled rice will decline. Here boiled rice is an inferior good.

Income of the consumer is given on the Y-axis and the demand for boiled rice is given on X-axis. If the income of the consumer increases from OY to OY_1, the demand for boiled rice will decline from OQ to OQ1 because the consumer shifts to basmati rice the superior good with increased income.

Answer 13

Law of variable proportion:

Law of variable proportion states that as more of the variable factor input is combined with the fixed factor input, a point will eventually be reached where the marginal product of the variable factor input starts declining.

Units of Fixed Factor	Units of Variable Factor	TP	MP	Stages
1	1	4	4	Increasing MP (Increasing returns to a factor)
1	2	12	8	
1	3	24	12	
1	4	32	8	Diminishing MP (Diminishing returns to a factor)
1	5	34	2	
1	6	34	0	
1	7	30	−4	Negative MP (Negative returns to a factor)
1	8	21	−9	
1	9	10	−11	

In the above table,

Stage I: As more units of factor input are used, MP tends to rise till 3 units of factor input are used. Here, the total product increases at an increasing rate which is called ***increasing returns*** to the factor input.

Reasons:

i. The units of labour are not sufficiently used with the available fixed factors. So the firm increase the number labour units with the fixed factor to increase the level of output.

ii. This facilitates the division of labour and hence the productivity level increases.

iii. This in turn increases the specialisation of labour and therefore it leads to improved efficiency of labour with high productivity.

Stage II: However, when the 4th unit of factor input is used, the ***diminishing returns*** set in, where MP starts decreasing and TP increases at a decreasing rate. Diminishing MP reduces to zero. The total output is the maximum when the marginal output is zero.

Reasons:

i. The units of labour are used more to use the fixed factors at the maximum level.

ii. There is no perfect substitution exists between labour and capital and hence the diminishing returns take place.

iii. Once the optimum combination reached, the total product is maximum. Hence, the marginal return to variable factor starts to diminish.

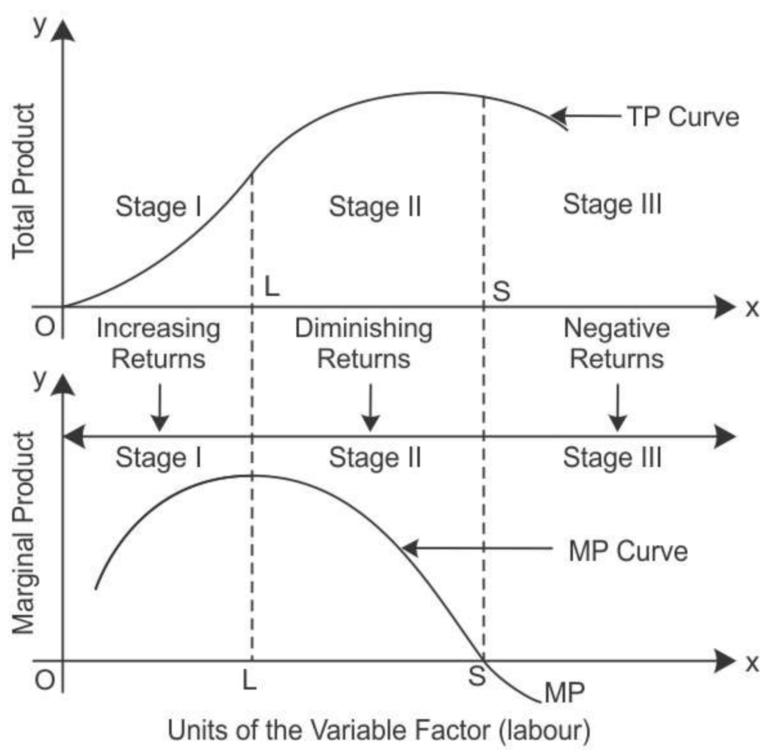
Stage III: When MP is ***negative***, TP starts declining from 34 to 10 when the 9th unit is employed.

Reasons:

i. Over-utilisation of the fixed factors leads to negative returns to a factor.

ii. Here the cost of additional unit of labour is higher than its contribution to the total production.

iii. It becomes inefficient to manage more units of labour in the production system.



Answer 14

a. The indifference curve slope downwards from left to right because an increase in the amount of good 1 along the indifference curve is associated with a decrease in the amount of good 2, as the ***preferences are monotonic.***

b. At the point of tangency of the budget line and the indifference curve, the ***indifference curve must be convex to the origin, i.e. the MRS must fall.*** In other words, for every additional unit increase in consumption of one good, the consumer must be willing to sacrifice less and less units of the other good. That is the law of diminishing marginal utility must be followed.

OR

Marginal Rate of Substitution means the rate at which the consumer is willing to substitute one commodity for the other commodity.

The optimum bundle of the consumer is located at the point where the budget line is tangent to an indifference curve. When the budget line is tangent to an indifference curve at a point, the absolute value of the slope of the indifference curve and of the budget line is equal at that point, i.e. marginal rate of substitution (MRS) is equal to the price ratio. The slope of the budget line is the rate at which the consumer is able to substitute one good for the other in the market. At the optimum, the two rates should be the same. Thus, at a point at which MRS is greater, the price ratio cannot be optimum, as well as when MRS is less, the price ratio cannot be the optimum.

$$MRT = \frac{\Delta Y}{\Delta X} = \frac{\text{Amount of good y sacrified}}{\text{Amount of good x gained}}$$

For example, assuming that resources and technology remain constant, an economy is producing Good X and Good Y. Different combinations of production of Good X and Good Y are given in the product possibility schedule:

Production Possibilities	**Good X**	**Good Y**	$MRT = \frac{\Delta Y}{\Delta X}$
I	0	30	**-**
II	1	27	**−3**
III	2	21	**−6**
IV	3	12	**−9**
V	4	0	**−12**

In the beginning, at the production point II, where 1 unit of Good X and 27 units of Good Y are produced. To produce an additional unit of Good X, 3 units of Good Y must be sacrificed.

Here, the marginal rate of transformation (MRT) is

$$MRT = \frac{\Delta Y}{\Delta X} = \frac{\text{Amount of good Y sacrifed}}{\text{Amount of good X gained}} = \frac{27-30}{2-1} = -3$$

Thus, MRT or the opportunity cost of getting an additional unit of Good X is 3 units of Good Y.

Answer 15

The producer's equilibrium refers to a situation in which he maximises his profits. A producer strikes an equilibrium when two conditions are satisfied:

i. MR = MC
ii. MC is rising or the MC curve cuts the MR curve from below.

Output (units)	Total Revenue (Rs)	Total Cost (Rs)	Marginal Revenue (Rs)	Marginal Cost (Rs)	Profit (TR - TC)
1	6	7	-	-	-1
2	12	13	6	6	-1
3	18	17	6	4	1
4	24	23	6	6	1
5	30	31	6	8	-1

Here, the firm is in equilibrium at output equal to ***4 units*** i.e. MR= MC and MC start ***rising*** after the 4th unit of output.

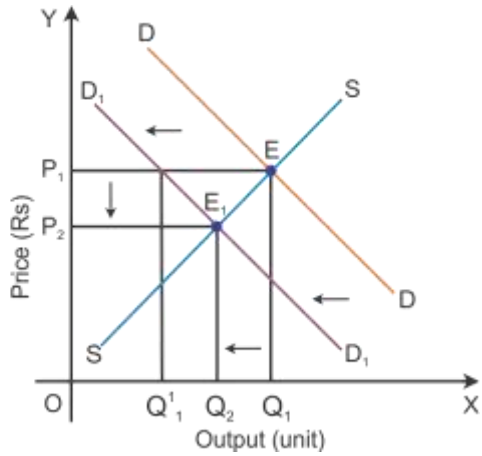
Equilibrium is not struck when MR > MC. In such a situation, producing an additional unit would add more to TR than to TC. This implies that the gap between TR and TC tends to widen or that profits are still to be maximised. On the other hand, if the firm produces slightly higher level of output than 4 units, then the firm will face price which fall short of the MC.

Answer 16

Consider DD_1 to be the initial demand curve and SS to be the supply curve of the market. Market equilibrium is achieved at Point E, where the demand and supply curves intersect each other. Therefore, the equilibrium price is OP_1, and the equilibrium quantity demanded is OQ_1.

If there is fall in the demand, the demand curve will shift towards the left to DD_1 and the supply curve SS will remain the same. This implies that at the initial price OP_1, there is an excess supply of OQ_1 to $OQ^1{}_1$ units of output. Thereby the competition among producers will increase and they tend to reduce the price of the output to the OP_2 level. Now, the new market equilibrium will be at Point E_1, where the new demand curve DD_1 intersects the supply curve SS.

This clearly states that if the ***demand curve shifts towards the left, the price of the good tends to decrease with a decrease in the demand for a good***. Thus, the direction of change in equilibrium price and the quantity are the same whenever there is a shift in the demand curve.



SECTION B

Answer 17

Time deposits are fixed-term deposits with a fixed maturity period and their term of deposit varying from 7 days to 10 years. One cannot avail the benefits of issuing cheques against these deposits and they cannot be payable on demand. However, time deposits can avail interest towards the deposited amount.

Answer 18

Excess demand occurs in a situation when aggregate demand is more than aggregate supply corresponding to full employment. It leads to reduction in inventories and inflation in the economy. This situation is considered an inflationary gap—the difference between aggregate demand beyond full employment and aggregate demand at full employment.

Answer 19

Full employment is a situation where all the resources in an economy are efficiently utilised. It reaches equilibrium when the aggregate demand is equal to the aggregate supply at full employment level.

Answer 20

Fiscal deficit is the excess of total expenditure, i.e. revenue and capital expenditure over total receipts. This measure reflects ***total borrowings of the government*** during the financial year.

Answer 21

The foreign exchange rate is the rate at which one currency is exchanged for the other. It implies the price of one currency related to the other currency.

Answer 22

Externality is a positive and negative impact on economic activity on the others without involving any price. For example, emissions from driving contribute significantly to global warming. This leads to poor air quality and it contributes to significant health problems.

People who breathe in this polluted air are at a higher risk for asthma and damage to the reproductive system. Thus, it affects the health of the people, which in turn reduces the welfare of the nation.

Answer 23

It is the monetary expression of the market value of goods and services. These goods are measured in terms of gram, litre and metre. This common unit of measurement enables the buyer and seller to compare the value of goods in the market. This enhances the activities of buying and selling in the market.

The common device to measure goods is completely absent under the barter system. The sale and purchase of goods occur at the same time. Their sale and purchase values also remain equal at that point. After existence of money, a person can purchase or sell goods with cash at any point of time. Thus, the act of purchase and sale has been separated.

The introduction of money resulted in the end of the barter system where the value of goods are measured in terms of money and are hence progressed with market activities.

OR

Deferred payments refer to those payments which are made in the future. Money has made deferred payments easier. When money is borrowed, the principal and interest amounts have to be returned to the lender. However, these transactions are not possible in terms of goods and services. Money performs this function more effectively.

Answer 24

i. Tax receipts are the revenue receipts which neither create any liability nor cause any reduction in the assets of the government.

ii. Disinvestment is the capital receipt which causes reduction in the assets of the government.

Answer 25

Autonomous transaction	**Accommodating transaction**
An autonomous transaction is shown as an item in the balance of payment (BOP). It refers to international economic transactions which are made independently of the state of the BOP, such as ***profit motive.***	An accommodating transaction is shown as an item in the BOP. It refers to international economic transactions which are ***not made with the profit motive*** such as government financing.
It is also known as ***'above the line items'*** in BOP.	It is also known as ***'below the line items'*** in BOP.
It is ***independent of the BOP condition*** of an economy.	It is ***dependent on the BOP condition*** of an economy because compensating short-term capital transactions are undertaken to correct the disequilibrium in the autonomous items.

Answer 26

When there is an increase in the exchange rate in India, there will be an increase in the demand for export of goods and services in India. For example, if the exchange rate for \$1 = Rs 50 increases to \$1 = Rs 56, then the export of goods to foreign countries will become cheaper. So, the goods worth Rs 56 for \$1 can be exported, and hence, there is an increase in the demand for exports.

Answer 27

Banker to the government

The Central Bank is also a banker, agent and financial advisor to the government. As a banker, it manages government accounts across the country. It buys and sells securities on behalf of the government as an agent of the government. It helps the government in framing policies to regulate the money market by acting as an advisor to the government.

OR

Banker's bank functions of the Central Bank:

The Central Bank is an apex bank of all banks in the country. It has almost the same relation with other banks in the country as a commercial bank has with its customers. The Central Bank keeps some cash balances of the commercial banks as compulsory deposit. This is to help them during financial crises.

Answer 28

Given that

National income (Y) = 2000

Autonomous consumption expenditure = 200

Investment expenditure = 100

As we know that

$Y = C + I$

Since $C = \overline{C} + cY$, we have

$Y = \overline{C} + cY + I$

By substituting the given values, we get

$2000 = 200 + c(2000) + 100$

$1700 = 2000c$

$c = 0.85$

Therfore, the marginal propensity to consume is 0.85

Answer 29

An increased tax rate on higher income will increase the tax revenue of the government. So, there will be an increase in government expenditure on producing public goods which in turn improves the welfare of the nation. The government can reallocate resources so that social and economic objectives can be met in the following ways:

i. The government ensures productive expenditure to maximise the welfare of the nation with minimum level of profit.
ii. The government regularises the activities of the private sector to provide social benefit to the poor.

Hence, it helps to bridge the gap between the rich and poor sections of society.

Answer 30

NNP_{fc} = Wages and salaries + Social security contribution by employers + Rent and royalty + Profit + Interest − Net factor income to abroad
= 800 + 100 + 300 + 500 + 400 − 50
= Rs 2050 arab

Also, Gross National Disposable Income = NNP_{fc} + NIT − Net current transfers to the rest of the world + Consumption of fixed capital
= 2050 + 250 − (−30) + 200
= Rs 2530 arab

Answer 31

i. Taking care of aged parents is ***not included in the estimation of national income*** because it does not involve any production of goods and services. Also, it is meant only for self-consumption.
ii. Payment of corporate tax ***is included in the estimation of national income*** because it is a part of corporate profit.
iii. Expenditure on providing police services by the government ***is included in the estimation of national income*** because it is a part of government's final consumption expenditure.

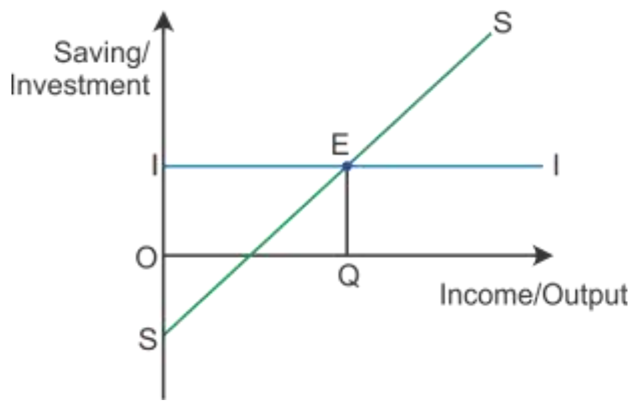
Answer 32

An economy is in equilibrium when any of the following two conditions are satisfied:

i. Aggregate demand = Aggregate supply
ii. Saving = Investment

Saving and Investment Approach

In the saving and investment approach, the equilibrium is attained at the point where saving and investment will intersect each other, i.e. leakages are equal to injections.



In the diagram, SS and II is the saving curve and investment curve, respectively. The II curve is a horizontal line which implies the autonomous investment. OQ is the equilibrium level of income where the SS and II curves intersect each other at Point E.

Saving < investment on the left side of equilibrium point E: Investment exceeding saving implies that the injection into the circular flow of income is more than the withdrawal from the income. Supply of goods and services is not sufficient to meet the demand for goods and services. As consumption is high, there will be a low amount of saving and thereby planned output is not sufficient to meet the demand. This leads to a fall in the inventory, and therefore, the savings need to increase. This is possible only when the savings are again equal to the investment and the equilibrium is restored.

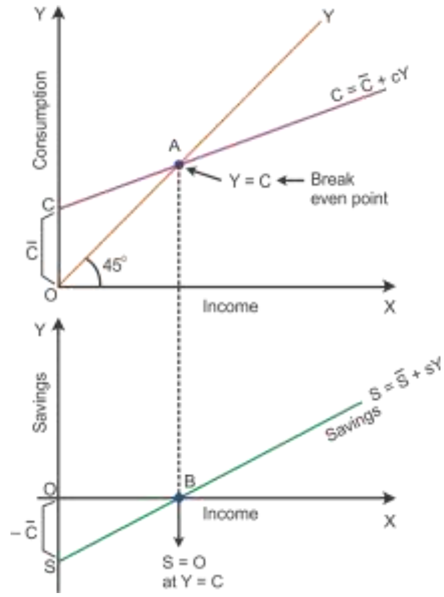
Saving > investment on the right side of equilibrium point E: Saving exceeding investment implies that the withdrawal from the income is more than the injection into the circular flow of income. Consumption of goods and services is less than the supply of goods and services. As saving is high, there will be low amounts of consumption and thereby the sold output is less than the planned output. This leads to accumulation of inventory, and therefore, the savings need to reduce. This is possible only when the savings are again equal to the investment and the equilibrium is restored.

OR

In the diagram, the supply curve is given as the SS curve and $-\bar{C}$ represents negative savings. At the breakeven Point B, we find that Y = C and S = O.

Derivation of the consumption curve from the saving curve:

Given the SS curve, let us consider OS = OC. At Point B, draw a perpendicular 45° line towards Point A. Points C and A are joined to produce a straight line upward sloping consumption curve CC.


Y
Y
Consumption
C = C̄ + cY
A
Y = C ← Break even point
C
C̄
45°
O
Income
X
Y
Savings
S = S̄ + sY
Savings
O
B
Income
X
– C̄
S
S = O
at Y = C

CBSE
Class XII Economics
All India Board Paper Set 1 – 2013

Time: 3 hrs **Max. Marks: 100**

Note:

- Please check that this question paper contains 12 printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains 32 questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minutes time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

General Instructions:

(i) **All** questions in both the sections are compulsory.

(ii) Marks for questions are indicated against each question.

(iii) Questions No. **1 – 5** and **17 – 21** are very short-answer questions carrying **1** mark each. They are required to be answered in one sentence.

(iv) Questions No. **6 – 10** and **22 – 26** are short answer questions carrying **3** marks each. Answers to them should normally not exceed **60** words each.

(v) Questions No. **11 – 13** and **27 – 29** are also short answer questions carrying **4** marks each. Answers to them should normally not exceed **70** words each.

(vi) Question number **14 – 16** and **30 – 32** are long-answer questions carrying **6** marks each. Answers to them should normally not exceed **100** words each.

(vii) Answers should be brief and to the point and the above word limits should be adhered to as far as possible.

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1. Define marginal revenue. (1)

2. What does a rightward shift of demand curve indicate? (1)

3. Under which market form is a firm a price taker? (1)

4. When is the demand for a good said to be perfectly inelastic? (1)

5. Give one reason for an "increase' in supply of a commodity. (1)

6. How is the demand for a good affected by a rise in the prices of other goods? Explain.(3)

7. A firm supplies 10 units of a good at a price of Rs 5 per unit. Price elasticity of supply is 1.25. What quantity will the firm supply at a price of Rs 7 per unit? (3)

8. Explain the meaning of diminishing marginal rate of substitution with the help of a numerical example. (3)

9. From the following table, find out the level of output at which the producer will be in equilibrium. Give reasons for your answer. (3)

Output (units)	Marginal Revenue Rs	Marginal Cost Rs
1	8	10
2	8	8
3	8	7
4	8	8
5	8	9

10. Why can a firm not earn abnormal profits under perfect competition in the long run? Explain.

OR

Why is the demand curve of a firm under monopolistic competition more elastic than under monopoly? Explain. (3)

11. Equilibrium price of an essential medicine is too high. Explain what possible steps can be taken to bring down the equilibrium price but only through the market forces. Also explain the series of changes that will occur in the market. (4)

12. Explain the meaning of opportunity cost with the help of production possibility schedule. (4)

OR

With the help of suitable example explain the problem of 'for whom to produce'.

13. A 5 percent fall in the price of good raises its demand from 300 units to 318 units. Calculate its price elasticity of demand. (4)

14. Explain three properties of indifference curves. (6)

OR

Explain the conditions of consumer's equilibrium under indifference curve approach.

15. If equilibrium price of a good is greater than its market price, explain all the changes that will take place in the market. Use diagram. (6)

16. Giving reasons, state whether the following statements are true or false: (6)

(i)Average product will increase only when marginal product increases.

(ii) With increase in level of output, average fixed cost goes on falling till it reaches zero.

(iii) Under diminishing returns to a factor, total product continues to increase till marginal product reaches zero.

17. Give two examples of intermediate goods. (1)

18. State the components of supply of money. (1)

19. What one step can be taken through market to reduce the consumption of a product harmful for health? (1)

20. How can Reserve Bank of India help in bringing down the foreign exchange rate which is very high? (1)

21. What is revenue deficit? (1)

22. Explain the 'medium of exchange' function of money. (3)

OR

Explain the 'lender of last resort' function of central bank.

23. Distinguish between revenue receipts and capital receipts. Give an example of each. (3)

24. How can budgetary policy be used to reduce inequalities of income? (3)

25. Explain the effect of depreciation of domestic currency on exports. (3)

26. How is exchange rate determined in the foreign exchange market? Explain. (3)

27. Calculate 'Sales' from the following data: (4)

		(Rs in Iakhs)
i.	Subsidies	200
ii.	Opening stock	100
iii.	Closing stock	600
iv.	Intermediate consumption	3,000
v.	Consumption of fixed capital	700
vi.	Profit	750
vii.	Net value added at factor cost	2,000

28. Distinguish between -real' gross domestic product and -nominal' gross domestic product. Which of these is a better index of welfare of the people and why? (4)

OR

Distinguish between stocks and flows. Give two examples of each.

29. Explain the credit creation role of commercial banks with the help of a numerical example. (4)

30. From the data given below about an economy, calculate (a) investment expenditure and (b) consumption expenditure. (6)

(i) Equilibrium level of income 5,000

(ii) Autonomous consumption 500

(iii) Marginal propensity to consume 0.4

31. Explain the meaning of under-employment equilibrium. Explain two measures by which full-employment equilibrium can be reached. (6)

32. Calculate "Gross National Product at Market Price" from the following data: (6)

S. No.	Particulars	(Rs in crores)
i.	Compensation of employees	2,000
ii.	Interest	500
iii.	Rent	700
iv.	Profits	800
v.	Employers contribution to social security schemes	200
vi.	Dividends	300
vii.	Consumption of fixed capital	100
viii.	Net indirect taxes	250
ix.	Net exports	70
x.	Net factor income to abroad	150
xi.	Mixed income of self-employed	1,500

OR

Calculate "Gross National Disposable Income" from the following data:

S. No.	Particulars	(Rs in crores)
i.	Net domestic product at factor cost	3,000
ii.	Indirect taxes	300
iii.	Net current transfers from rest of the world	250
iv.	Current transfers from the government	100
v.	Net factor income to abroad	150
vi.	Consumption of fixed capital	200
vii.	Subsidies	100

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Answer 1
Marginal revenue (MR) is the change in total revenue when another unit of a good is sold.

Answer 2
The rightward shift of demand curve shows an increase in the demand for a good because of a favourable change in other factors than the own price of the good. Increase in the prices of substitute goods and decrease in the prices of complementary goods are examples of changes in factors.

Answer 3
Under perfect competition, an individual firm cannot influence the price level on its own as its share is negligible in the total market supply. So, a firm is a price taker under this form of market.

Answer 4
When a large change in the price does not bring about a significant change in the demand, it is called perfectly inelastic demand (=0), i.e. the slope of an inelastic demand curve is steep.

Answer 5
An increase in the supply of a good caused because of a change in any factor other than the own price of the good. Change in the price of inputs and change in taxes are examples of changes in factors.

Answer 6
Price of other goods and demand for the given good
i. Demand for a commodity in relation to price of the substitute good
When the price of one good falls, it becomes cheaper in relation to another good. As a result, one good is substituted for the other good such as coffee and tea. Assume tea and coffee are two substitute goods.
Increase in the price of substitute good: If there is an increase in the price of the substitute good coffee, then the consumer is willing to buy more quantity of tea. Here, more tea is consumed even when its price is constant.
ii. Demand for a commodity in relation to price of the complementary good
Complementary goods are purchased jointly such as ink and ink pens.
Increase in the price of complementary good: If there is an increase in the price of a good, then the demand for another good will decline.

Answer 7

Given that

$Q_s = 10$, P = Rs 5 and $E_s = 1.25$

If the new price is Rs 7 per unit

$\Delta P = 7 - 5 = 2$

As we know,

$$E_s = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

or

$$1.25 = \frac{\Delta Q}{2} \times \frac{5}{10}$$

or $\Delta Q = 1.25 \times 4 = 5$

A change in quantity that the firm would supply at a price of Rs 7 per unit is 15 (5+10).

Answer 8

Marginal rate of substitution is the rate at which the consumer is willing to substitute one commodity for another commodity.

For example, assuming that resources and technology remain constant, an economy is producing Good X and Good Y. Different combinations of production of Good X and Good Y are given in the production possibilities schedule:

Production Possibilities	**Good X**	**Good Y**	$MRT = \frac{\Delta Y}{\Delta X}$
I	0	30	**-**
II	1	27	**−3**
III	2	21	**−6**
IV	3	12	**−9**
V	4	0	**−12**

In the beginning, at the production Point II, where 1 unit of Good X and 27 units of Good Y are produced, to produce an additional unit of Good X, 3 units of Good Y must be sacrificed.

Here, the marginal rate of transformation (MRT) is

$$MRT = \frac{\Delta Y}{\Delta X} = \frac{\text{Amount of good Y sacrifed}}{\text{Amount of good X gained}} = \frac{27 - 30}{2 - 1} = -3$$

Thus, MRT or the opportunity cost of getting an additional unit of Good X is 3 units of Good Y.

Answer 9

Output	Marginal Revenue	Marginal Cost
1	8	10
2	**8**	**8**
3	8	7
4	**8**	**8**
5	8	9

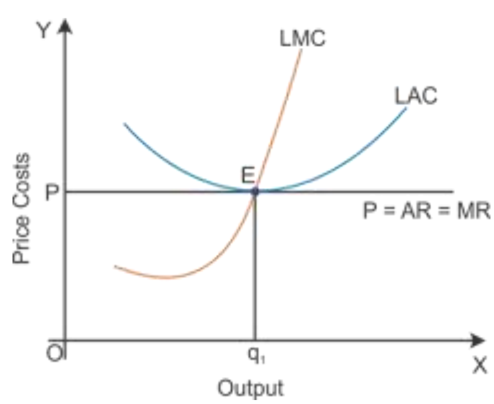
The producer's equilibrium refers to a situation in which he maximises his profits. A producer strikes equilibrium when two conditions are satisfied:

i. MR = MC
ii. MC is rising or the MC curve cuts the MR curve from below.

Here, the firm is in equilibrium at output equal to 2 units and 4 units, i.e. MR = MC and MC start rising after the 4^{th} unit of output.
Equilibrium is not struck when MR > MC. In such a situation, producing an additional unit would add more to TR than to TC. This implies that the gap between TR and TC tends to widen or that profits are still to be maximised. On the other hand, if the firm produces slightly higher level of output than 4 units, then the firm will face a price which falls short of MC.

Answer 10

In the long run, a firm makes only normal profits (AR = AC) because of freedom of entry and exit. If the firm earns abnormal profit in the long run, then new firms enter the market. This leads to an increase in output, and the supply of output will also rise. At this point, price continues to fall till it reaches the minimum average cost. Hence, there will not be any abnormal profit or zero profit in the long run.



The diagram shows equilibrium at Point S, where MR = MC and also AR = AC. Price is determined by the industry, and the firm adjusts its output to the given price. Thus, the firm in the long run strikes equilibrium, where

i. MR = MC
ii. MC is rising
iii. AR = AC only normal profits are earned

OR

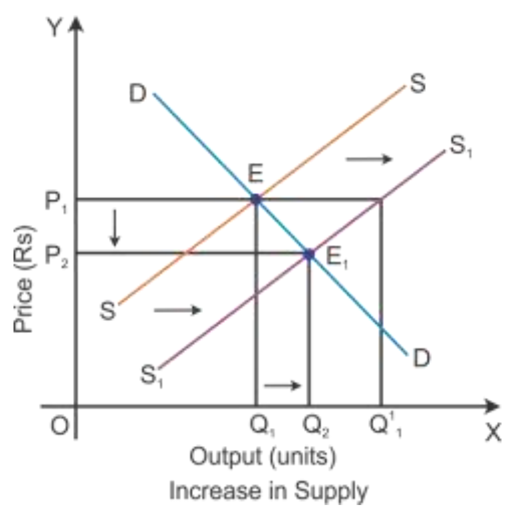
Under monopolistic competition, the downward sloping demand curve is more elastic than monopoly because of the presence of close substitutes. Products are differentiated on the basis of brand, colour, size and shape under monopolistic competition. Here, the demand curve is more elastic to the changes in the price of the good. On the other hand, there are no close substitutes of the product under monopoly market. Hence, the demand curve is less elastic to the changes in prices of the good.

Answer 11

If the equilibrium price of an essential medicine is too high, then the price can be brought down by creating a situation of excess supply.

Consider DD to be the initial demand curve and SS to be the supply curve of the market. Market equilibrium is achieved at Point E, where the demand and supply curves intersect each other. Therefore, the equilibrium price is OP, and the equilibrium quantity demanded is OQ.

When there is change in other factors than the price, there will be rise in the supply of goods. There will be a shift in the supply curve towards the right to SS1 with an increase in the supply, and the demand curve DD will remain the same. This implies that there will be a situation of excess supply at the equilibrium point.

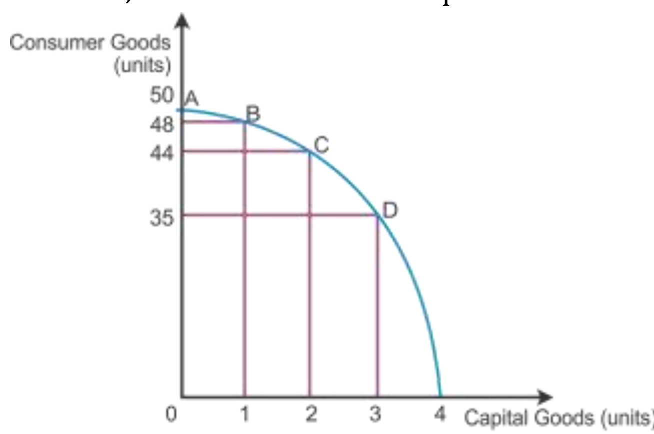


In the diagram, there is an excess supply of OQ1 to OQ11 units of output at the initial price OP1. Thereby the producers will tend to reduce the price of the output to increase the sale in the market. Profit margin of the firm will come down and slowly some firms will tend to quit the market. So, the market supply will decline to OQ2 level of output and the price of the output also gets reduced to Point OP2. Now, the new market equilibrium will be at Point E1, where the new supply curve SS1 intersects the demand curve DD.

Answer 12

Opportunity cost refers to value of a factor in its next best alternative use, i.e. opportunity cost of producing every additional unit of Good X tends to increase in terms of the loss of production of Good Y.

Consider capital goods and consumer goods to represent PPC in the diagram. If 1 unit of capital good and 48 units of consumer goods are produced at the initial production Point B, then to produce one additional unit of capital good, 4 units of consumer goods must be sacrificed. The opportunity cost of one additional capital good is 4 units of consumer goods at Point C. Likewise, it moves on to Point D by sacrificing 9 units of consumer goods to produce another unit of capital good. The opportunity cost increases as the PPC moves down from Point C to D. Hence, PPC has a concave shape.



Production Possibility Curve

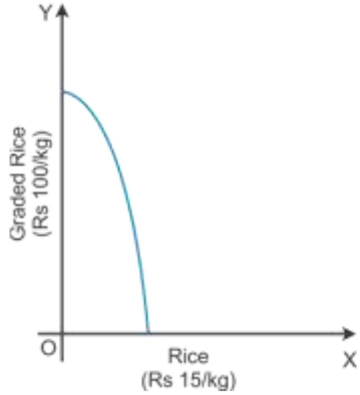
The production possibility curve is concave to the point of origin because to produce each additional unit of Good X, more units of Good Y will have to be sacrificed than before.

OR

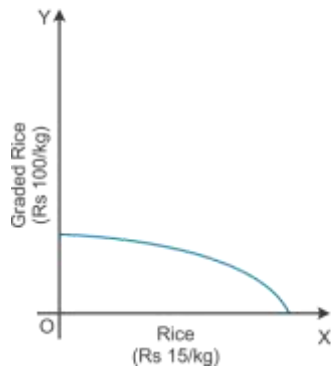
Central problem - 'For whom to produce':

'For whom to produce' refers to the problem of distribution of final goods and services or the problem of distribution of income. It has two aspects. The first aspect relates to personal distribution and the second aspect relates to functional distribution. Personal distribution refers to output/income share of individuals or households in society. Functional distribution refers to income share of different factors of production. Here, the problem is whether allocation of resources is promoting equality or not. Equality is a social virtue, and inequality may induce high saving, investment and hence high rate of growth.

Suppose an economy producing normal rice and graded rice at Rs 15 per kg and Rs 100 per kg, respectively. More of normal rice produced to provide sufficient food grains to the lower segment of the nation, the production possibility curve will be as



While the economy provides more of graded rice to the upper segment of the nation and lesser normal rice for the low segment, the PPC will be as



Answer 13

Given, the original quantity $Q_1 = 300$

$\Delta Q = 318 - 300 = 18$

Percentage fall in price = $\frac{\Delta P}{P} \times 100 = (-)5\%$

As we know that,

$$E_d = (-)\frac{\frac{\Delta Q}{Q} \times 100}{\frac{\Delta P}{P} \times 100}$$

$$E_d = (-)\frac{\frac{18}{300} \times 100}{(-)5}$$

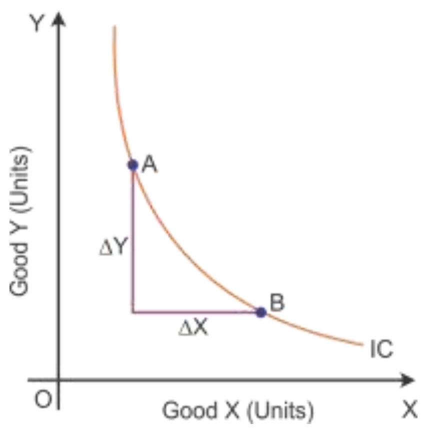
$$E_d = (-)\frac{6}{(-)5} = 1.2$$

Thus, price elasticity of demand is 1.2

Answer 14
Properties of indifference curves (ICs)

i. **Indifference curves slope downwards (negative slope):**
The indifference curves slope downwards, left to right, because an increase of Good X along the indifference curve is associated with a decrease of Good Y, as the preferences are monotonic.

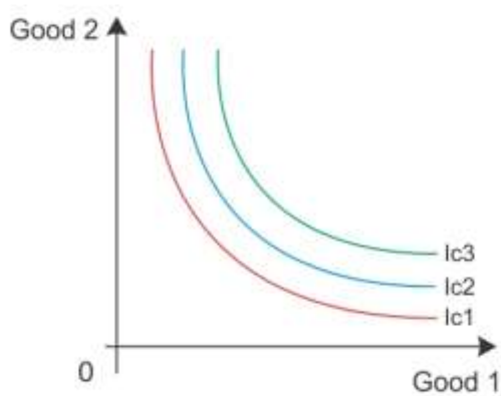
ii. **Slope of indifference curves represents marginal rate of substitution:**
Marginal rate of substitution (MRS) is the rate at which a consumer is willing to substitute one commodity for another commodity.



Slope of indifference curve between A and B = MRS

MRS is the rate at which the output of Good Y is sacrificed for every additional unit of Good X.

iii. **In an indifference map, higher IC represents higher level of satisfaction:**
An indifference map refers to a set of indifference curves. An indifference curve which is to the right and above another shows a higher level of satisfaction to consumers. Here, IC3 shows higher level of satisfaction than IC2. Thus, the indifference curve relates to a higher level of income of the consumer.



OR

Conditions of consumer's equilibrium using indifference curve analysis:

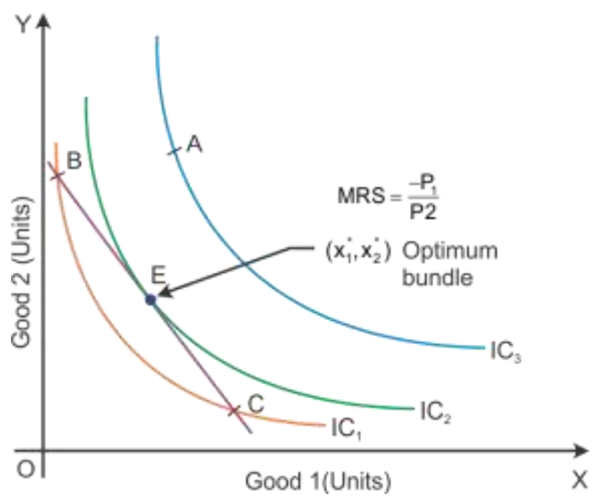
A consumer will strike his equilibrium at the point where the budget line is tangent to an indifference curve.

Slope of IC = Slope of price line

$$\left|\frac{-dy}{dx}\right| = |MRS| = \left|\frac{-P_1}{P_2}\right|$$

Equality of marginal rate of substitution and ratio of prices: When the budget lines is tangent to an indifference curve at a point, the absolute value of the slope of the indifference curve and of the budget line are equal at that point, i.e. MRS is equal to the price ratio. The slope of the budget line is the rate at which the consumer can substitute one good for the other in the market. At the optimum, the two rates should be the same. Thus, a point at which the MRS is greater, the price ratio cannot be optimum, and when the MRS is less than the price, the ratio cannot be optimum.

The equilibrium can be represented as follows:



In the diagram, Point E shows consumer equilibrium where the budget line is tangent to the indifference curve. Consumers desire to purchase corresponds to the consumer's original purchase, i.e. x1*, x2* shows the optimum bundle.

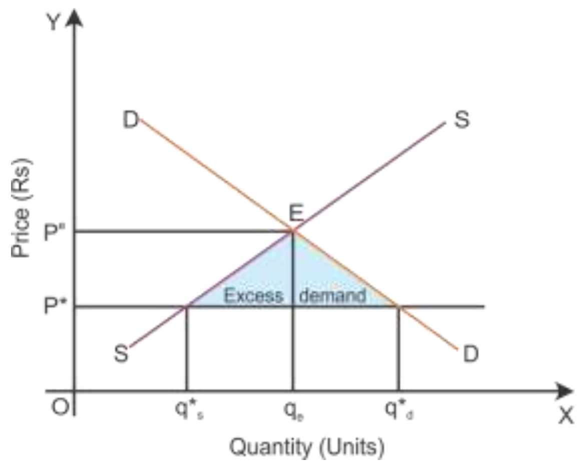
Consumer does not reach equilibrium condition at the following points:

<u>At Point B:</u> MRS > $-\frac{P_1}{P_2}$

<u>At Point A:</u> MRS > $-\frac{P_1}{P_2}$

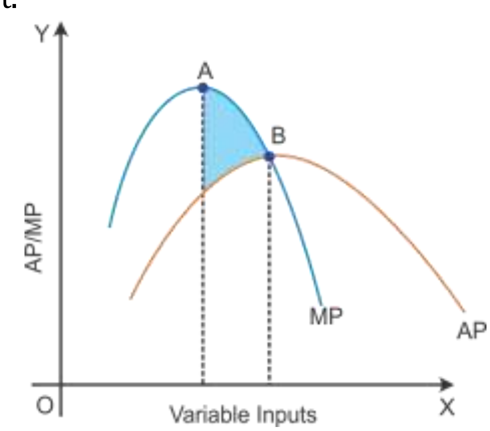
Answer 15

When the price is lower than the equilibrium market price of a good (OPe), the price ceiling leads to excess of demand. Now, the excess demand will increase the competition among consumers in the market. Thereby they consume the good at a higher price which leads to an increase in the price level, i.e. OPe.

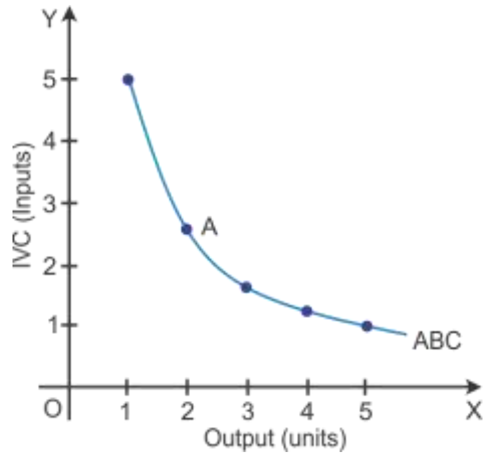


Answer 16

i. It is false because if the marginal product rises, the average product does not increase. Average product keeps increasing with a fall in the marginal product. In the diagram, the area between A and B, the average product increases although the marginal product decreases. This is because the marginal product will increase or decrease at a faster rate than the average product.



ii. It is false because the average product cannot fall till it reaches zero with an increase in the level of output. As we know that average fixed cost is a rectangular hyperbola which cannot be zero.



In the diagram, the average fixed cost being a rectangular hyperbola appears to be zero, but it can never become zero.

iii. It is true. As more units of factor input are used, MP tends to rise till 3 units of factor input are used. Here, the total product increases at an increasing rate which is called increasing returns to the factor input. However, when the 4th unit of factor input is used, the diminishing return sets in where MP starts decreasing and TP increases at a decreasing rate. Diminishing MP reduces to zero. The total output is maximum when the marginal output is zero.

Units of Fixed Factor	Units of Variable Factor	TP	MP	Stages
1	1	4	4	Increasing MP (Increasing returns to a factor)
1	2	12	8	
1	3	24	12	
1	4	32	8	Diminishing MP (Diminishing returns to a factor)
1	5	34	2	
1	6	34	0	

Answer 17

Wood purchased by a furniture industry and cotton purchased by a cloth industry are two examples of intermediate goods.

Answer 18

Currency and deposit are two components of supply of money.

Answer 19

If taxation increases, consumers will be discouraged to consume products which are harmful for health.

Answer 20

The Reserve Bank of India can sell foreign currency in exchange of domestic currency to reduce the foreign exchange rate.

Answer 21

Revenue deficit is an excess of revenue expenditure of the government over its revenue receipts.
Revenue deficit = Revenue expenditure – Revenue receipts

Answer 22

Medium of exchange: The primary function of money is to act as a medium of exchange between two parties involved in a transaction. It avoids practical problems of wastage of time and resources involved in the barter system of exchange and it improves the efficiency of the transaction. It promotes allocation efficiency in the trade and production of goods and services.
For the barter system, the sale and purchase of goods occurs at the same time. Their sale and purchase value also remains equal at that point. After money was introduced, a person can purchase or sell goods with cash without selling or purchasing any good at that point. Thus, the act of purchase and sale has been separated. Thereby the medium of exchange facilitated sale and purchase very easily in terms of monetary value.
For example, a fruit seller wants to sell his fruits to buy wheat. In the absence of money, he will have to look for some person who wants to sell wheat and buy fruits. This is not always easy and possible. However, with money as a medium of exchange, the fruit seller has to just find a buyer for his fruits. When fruits are exchanged for money, he can purchase wheat from the market.

OR

Lender of the last resort: A Central Bank is the apex bank which controls the entire banking system of a country. It has the sole authority to issue notes in that country. It also acts as a banker to the government and controls the supply of money in the country.

The Central Bank provides financial assistance to commercial banks by rediscounting eligible bills of exchange. When commercial banks do not get loan facilities from any other sources, they approach the Central Bank as a last resort. The Central Bank advances loans to such banks against approved securities. Thus, the Central Bank acts as a 'lender of the last resort'.

Answer 23

Basis of Difference	Capital Receipts	Revenue Receipts
Definition	Capital receipt which causes reduction in the assets of the government and creates liability to the government.	Revenue receipts which neither create any liability nor cause any reduction in government assets.
Impact	Decrease in government assets and create liabilities for the government.	Zero effect on government assets and liabilities.
Example	Disinvestment	Tax receipts

Answer 24

Through the budgetary policy, the government can reallocate resources so that social and economic objectives can be met in the following ways:

i. The government ensures productive expenditure to maximise the welfare of the nation with minimum level of profit.

ii. The government regularises the activities of the private sector to provide social benefit to the poor.

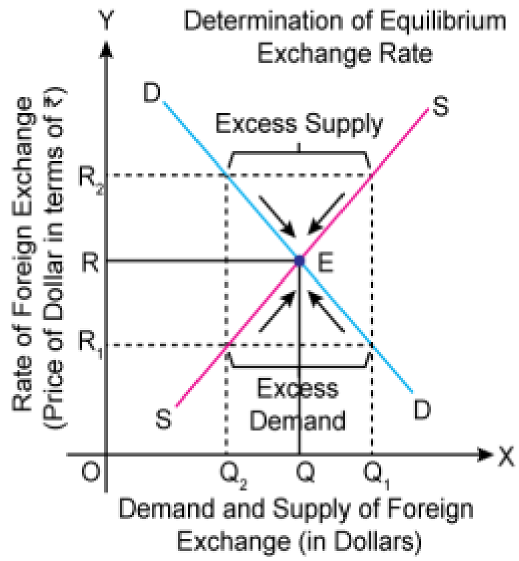
iii. The government imposes taxes on socially unsafe goods such as alcohol and tobacco to shift resources to the production of socially essential goods.

Answer 25

Depreciation of domestic currency refers to a decrease in the price of domestic currency related to foreign exchange. For example, \$1 = Rs 48 to \$1 = Rs 52 indicates that the exports will be cheaper, and hence, a raise in the demand for exports.

Answer 26

The foreign exchange rate is the rate at which one currency is exchanged for the other. It implies the price of one currency related to the other currency. In a flexible exchange rate market, the interaction of the forces of demand and supply of foreign currency determines the equilibrium level of the exchange rate.



In the diagram, the demand curve and the supply curve intersect each other at Point E which represents the equilibrium exchange rate. If there is an increase in the exchange rate to OR2, then the supply of foreign currency will be more than the demand for foreign currency. This will push the exchange rate to level OR because of excess supply. On the other hand, if there is a fall in the exchange rate to OR1, then the demand for foreign currency will be more than the supply of foreign currency. Eventually, it will push the exchange rate from OR1 to OR.

Equilibrium – DD for foreign exchange = SS of foreign exchange (OR = OQ)

Answer 27

GDPMP = NDPFC – Subsidies + Depreciation

= 2000 – 200 + 700

= 2500

So,

GDPMP = Sales + (Closing Stock – Opening Stock) – Intermediate Consumption

or

Sales = GDPMP – (Closing Stock – Opening Stock) + Intermediate Consumption

= 2500 – (600 – 100) + 3000

= 5000

Answer 28

Real GDP	Nominal GDP
i. Total market value of the output at the base year prices.	i. The total market value of the output at the current year prices.
ii. Only when quantity of output changes overtime, the value of real GDP will change.	ii. Only when there is a change in the prices overtime, the value of nominal GDP will change.

iii. Treated as an index of economic growth, i.e. higher real GDP.	iii. Treated as an index of economic growth, i.e. higher nominal GDP, but it does not indicate higher economic growth.

Real GDP is a better index as compared to nominal GDP. It is determining the effect of increase in production of goods and services because it is affected by change in physical output only. It provides international comparison of economic performance across countries.

OR

Stock	Flow
i. Stock is a variable which is measured at a particular time.	i. Flow is a variable which is measured over a long period of time.
ii. Stock is static.	ii. Flow is dynamic.
iii. Time dimension is not applied to the stock concept.	iii. Time dimension is applied to the flow concept.
iv. Examples: National wealth and bank deposits	iv. Examples: National income and interest on capital

In a tank of water, the flow of water can be considered a flow variable and the stock of water can be considered a stock variable because it can be measured at a particular point of time. Capital is like the stock of water in the tank at a particular point of time, whereas net investment is like the flow of water into the tank.

Answer 29

Money multiplier refers to the number of times the value of money increases from the reserves held by commercial banks. Algebraically, it is the reciprocal of the legal reserve ratio.

Money multiplier = 1/LRR

Through the process of money creation, commercial banks are able to create capital which is more than the initial deposits. Bank offered loans are many times more than the deposits received by banks. It is assumed that the entire banking system is one unit and all receipts and payments in the economy are routed through the bank.

Now, let us measure the amount of money banks are able to create in the form of deposits with every unit of money it keeps as reserves.

Rounds	**Deposits**	**Loans**	**Cash Reserves (LRR = 20%)**
Initial Deposit	1000	800	200

First round	800	640	160
Second round	640	512	128
Total	5000	4000	1000

Money Multiplier = 1/LRR

= 1/0.2

= 5

So, it indicates that higher the value of LRR, lower the value of the money multiplier.

Answer 30

a. **Investment Expenditure**

Consumption function

$C = \bar{C} + (C)Y$

where autonomous consumption (C) = 500

Equilibrium level of income (Y) = 5000

Marginal propensity to consume (c) = 0.4

By substituting the values in the give formula,

$C = 500 + (0.4)\ 5{,}000$

$C = 2{,}500$

We know that

At equilibrium level Y = C + I

So,

I = Y – C

Or

I = 5000 – 2500 = 2500

b. **Consumption Expenditure**

As we know that

$C = \bar{C} + (C)Y$

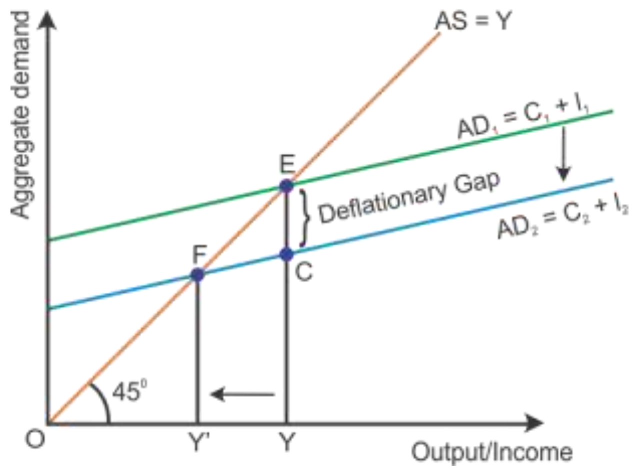
C = 500 + (0.4)5000 = 2500

Answer 31

Under employment equilibrium level is a situation where the actual or the equilibrium level of output is less than the full employment level of output. This situation indicates a deficit demand.

Deficient demand is a situation when the aggregate demand is short of the aggregate supply corresponding to full employment in the economy. It leads to a fall in the general price level and results in deflation, i.e. AD < AS.

Aggregate demand is the AD curve and aggregate supply is the AS curve (as shown in the diagram below). While the aggregate demand curve and the aggregate supply curve intersect each other, the full employment equilibrium is attained at Point E. OY is the full employment level of output, and EY is the aggregate demand at full employment level of output. If the aggregate demand decreases below the full employment level of output from EY to CY, then the economy will have deficient demand, i.e. situation of the deflationary gap (EY − CY = EC).



a. **Buying securities in the market**
The Central Bank overcomes the deflationary situation by buying securities in the market. This increases the circulation of money and it enables people to increase their ability to purchase more. In this way, the aggregate demand increases to the level of aggregate supply and the economy attains equilibrium.

b. **Bank rate**
The Central Bank overcomes the deficient demand. It decreases the bank rate and there is a fall in the cost of borrowing for commercial banks. This enables the increase for the demand for loans and borrowings in the market. This in turn increases the ability to purchase more. In this way, the aggregate demand increases to the level of aggregate supply and the economy attains equilibrium.

Answer 32

i. As we know that
GNPMP = NDPFC + Depreciation + Net indirect taxes – Net factor income to abroad,
where NDPFC = Compensation of employees + Interest + Rent + Profits + Mixed income of self-employed

Or
NDPFC = 2000 + 500 + 700 + 800 + 1500 = 5500
By substituting this value in the formula for GNPMP,
GNPMP = 5500 + 100 + 250 − 150
= 5700 crore

ii. Gross National Disposable Income = Net domestic product at factor cost + Indirect taxes −

Subsidies + Net current transfers from the rest of the world − Net factor income to abroad + Consumption of fixed capital

Or

Gross National Disposable Income = 3000 + 300 − 100 + 250 − 150 + 200

= Rs 3500 crore