

Group A

① Write any two features of mixed economy.

→ Any two features of mixed economy are:-

① There is existence of both public and private sectors.

② The private sectors are controlled and regulated by the government using direct and indirect measures.

② If total revenue of the firm is Rs 4000 and total cost is Rs 3300, then find the Total profit.

soln: Given,

$$\text{Total revenue (TR)} = \text{Rs } 4000$$

$$\text{Total cost (TC)} = \text{Rs } 3300$$

$$\text{Total profit } (\pi) = ?$$

Now,

$$\pi = \text{TR} - \text{TC}$$

$$= \text{Rs } 4000 - \text{Rs } 3300$$

$$= \text{Rs } 700 \quad \text{Ans}$$

③ What is government revenue?

→ Government revenue is a scope of government finance which studies the principle of taxation and methods of raising government revenue by the government. Tax revenue and non-tax revenue are the sources of government revenue.

④ Write any two basic components of HDI.

→ Any two basic components of HDI are:-

① Literacy rate which indicates the number of literate people in the nation.

② Per Capita Income which shows the living standard of the citizen.

④ Write any two differences between Balance of Trade and Balance of Payment.

BOT

BOP

① BOT is the complete record of export and import value of visible items of trade with the rest of the countries of the world.

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② Unfavourable BOT can be recovered from favourable BOP.

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⑥ What is the World Trade Organization?

→ World Trade Organization is one of the special organizations of the United Nations which was established on 1<sup>st</sup> January 1995 AD. to provide common institutional framework for the conduct of trade relations among its members. It has currently more than 160 member nations.

⑦ Write any two productive uses of remittance in Nepalese economy.

→ Any two productive uses of remittance are:-

① It can be used to develop industrial sector in order to produce more variety of products.

② It can be used in agricultural sector as 60% of Nepal's population is involved in it.



⑧ Which one of the 17 goals of sustainable development is not directly relevant to Nepal?

→ One of the 17 goals of sustainable development which is not directly relevant to Nepal is life below water as Nepal doesn't have direct access to sea or ocean.

⑨ Define statistics:

→ In singular sense, statistics is science of collection of data, presentation of data, analysis of data and interpretation of result whereas in plural sense, statistics is defined as aggregate of facts, affected by multiplicity of the causes to a marked extent, numerically expressed, enumerated or estimated according to reasonable degree of accuracy, collected in a systematic manner, for a predetermined purpose and place in relation to each other.

⑩ Why is primary data considered more reliable?

→ Primary data is collected from the original sources and is first hand. They are also collected for the predetermined purpose. So, primary data is considered more reliable.

(i) Find the value of 'X' if the mean is 16  
(Income in Rs): 10, 12, X, 18, 26

Soln:

$$\text{Mean } (\bar{X}) = \frac{\text{Sum of data } (\sum x)}{\text{No. of observations } (n)}$$
$$\text{or, } 16 = \frac{10 + 12 + X + 18 + 26}{5}$$

$$\therefore 80 = X + 66$$

$$\therefore X = 14 \quad \text{Ans.}$$

### Group B

(I) What is division of labour? Explain its advantages.

→ • Introduction:

Division of labour means splitting up the work in different parts and entrusting each part to an individual worker or group of workers according to their ability, knowledge, training, skill, qualification etc. Such individual worker or group of workers specializes in that specific job by doing it on repetitive basis. It leads to specialization.

• Advantages:

(i) Right man in right place:-

It is true that the workers are given their job according to their experience, skill, training and knowledge. So, under division of labour, workers are so distributed among the various jobs that each worker is put in the right place. There will be no round pegs in square holes.

(ii) Improvement in skill :-

Division of labour leads to the improvement in skill of the workers. The worker has to do the same work constantly, so it increases the skill of the workers. They become highly qualified and skilled. This is because practice makes a man perfect.



(iii) Large scale production:

Division of labour leads to the specialization of the workers in a particular field which in turn helps to increase the productivity. The workers become so skilled that they can do every task easily and in a jiffy manner. Thus, a firm can enjoy the economics of a large scale production.

(iv) Inventions:

Invention is one of the biggest merit of division of labour. Under the division of labour, a man performs the same job again and again. So, he/she tries to simplify the process of work to make him/her feel comfortable. This indeed leads to invention and innovation.

(v) Cheaper goods:-

Division of labour helps to increase the size of the company. Due to it, the firm can get into large scale production which leads to reduction in cost of production. So, the seller can sell them in cheap price to gain profit in large amount.

Some other advantages are:-

(vi) Less training required

(vii) Diversity in occupation

(viii) Saving in time, tools and implements.

• Conclusion

So, these are the substantial advantages of the division of labour which is very helpful. But there are some disadvantages of it as well which may not be suitable.

13) Explain the Classical Theory of Interest.

→ Introduction:

This theory was propounded by old classical economists and further developed by Marshall, Pigou, Walrus, Taussing, Knight etc. According to this theory, equilibrium rate of interest depends upon demand for capital and supply of capital. Therefore, this theory is also called demand and supply theory of interest.

• Demand for capital:

Demand for capital arises from investment and investment is the function of rate of interest i.e.

$$I = f(r), \quad f' < 0 \quad \left. \begin{array}{l} r \uparrow \rightarrow I \downarrow \\ r \downarrow \rightarrow I \uparrow \end{array} \right\} \begin{array}{l} \text{inverse} \\ \text{relation} \end{array}$$

It is evident from above that there is inverse relation between rate of interest and investment demand for capital. Higher the rate of interest lower will be the investment and vice-versa. This makes investment curve downward sloping.

• Supply of capital:

Supply of capital comes from saving and saving also depends upon the rate of interest.

$$i.e. \quad S = f(r), \quad f' > 0 \quad \left. \begin{array}{l} r \uparrow \rightarrow S \uparrow \\ r \downarrow \rightarrow S \downarrow \end{array} \right\} \begin{array}{l} \text{Direct} \\ \text{relation} \end{array}$$

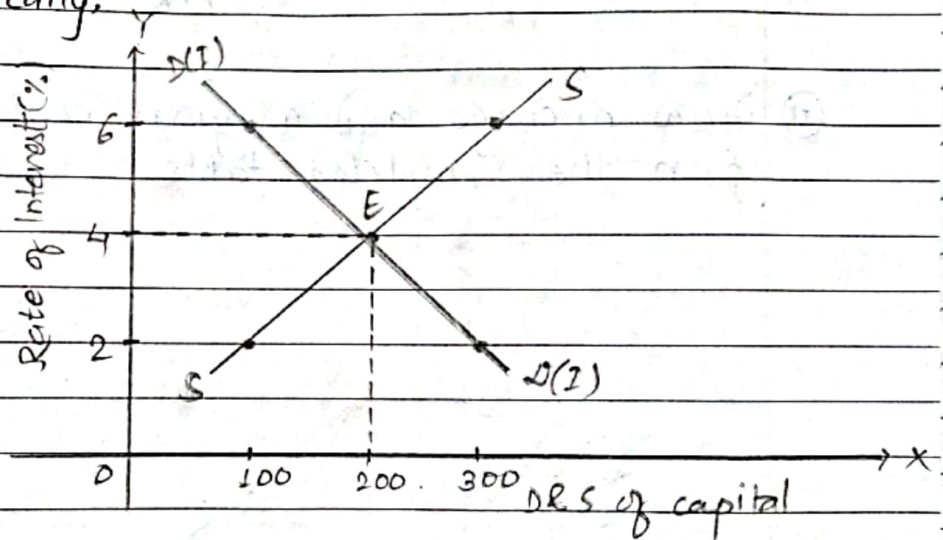
This shows that there is direct relation between the rate of interest and saving. Higher the rate of interest, higher will be the saving and vice-versa. This makes the saving curve upward sloping.



- Determination of equilibrium rate of interest:  
According to this theory, equilibrium rate of interest is determined at the point where demand for capital (investment) is equal to the supply of capital (savings). It is shown in the following table and diagram.

Rate of interest	Demand for Capital	Supply of Capital
6%	100	300
<u>4%</u>	<u>200</u>	<u>200</u>
2%	300	100

Diagrammatically,



As shown in the table and diagram, equilibrium rate of interest is at 4%. where demand for capital is 200 and supply of capital 200. So, they are equal at 4% rate of interest.

- Conclusion:

Hence, we can conclude that demand for capital and supply of capital determines the equilibrium rate of interest as shown in the table and diagram.

14) Answer the following questions based on the table:

(i) Complete the given table

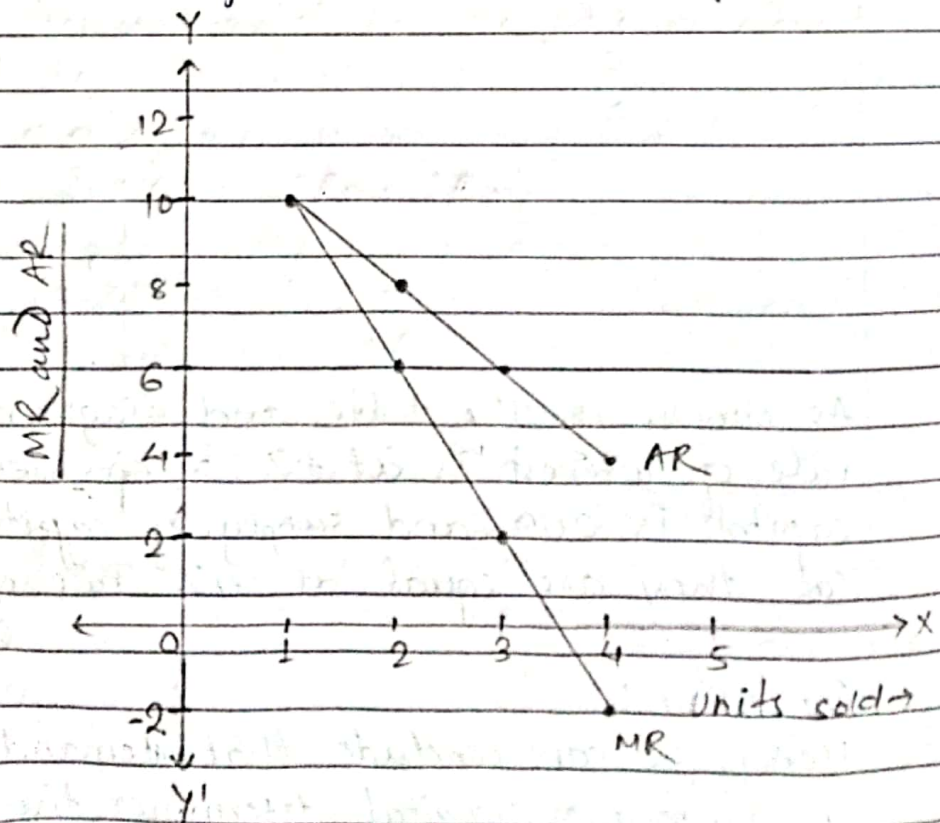
Units sold	Price (in Rs)	Total Revenue ( $P \times Q$ )	Marginal Revenue ( $\frac{\Delta TR}{\Delta Q}$ )	Average Revenue ( $\frac{TR}{Q}$ )
1	10	10	10	10
2	8	16	6	8
3	6	18	2	6
4	4	16	-2	4

Here,

when  $Q=0$ ,  $TR=0$ . So at  $Q=1$ ,  $TR=10$

$\therefore MR=10$  at  $Q=1$

(ii) Draw average and marginal revenue curves from the completed table.





### • Relation between Marginal revenue and average revenue

- (i) MR and AR starts from the same point.
- (ii) MR falls faster than AR with increase in units sold.
- (iii) AR is always greater than MR.
- (iv) MR becomes zero and negative, but AR always remains positive.

### • Conclusion:

The table and diagram themselves justify the relationship between Marginal revenue and average revenue.

15) Analyze the relationship between average cost and marginal cost based on a diagram.

→ • Introduction:

(i) Average cost: The per unit cost of the output is called average cost. It is obtained by dividing total cost (TC) by the quantity produced (Q).

Mathematically,

$$AC = \frac{TC}{Q} = \frac{TFC + TVC}{Q} = AFC + AVC$$

(ii) Marginal cost:

MC is defined as the additional cost incurred in the production of one extra unit of output. In other words, it is the rate of change in total cost.

Mathematically,

$$MC = TR_n - TR_{(n-1)}$$

OR

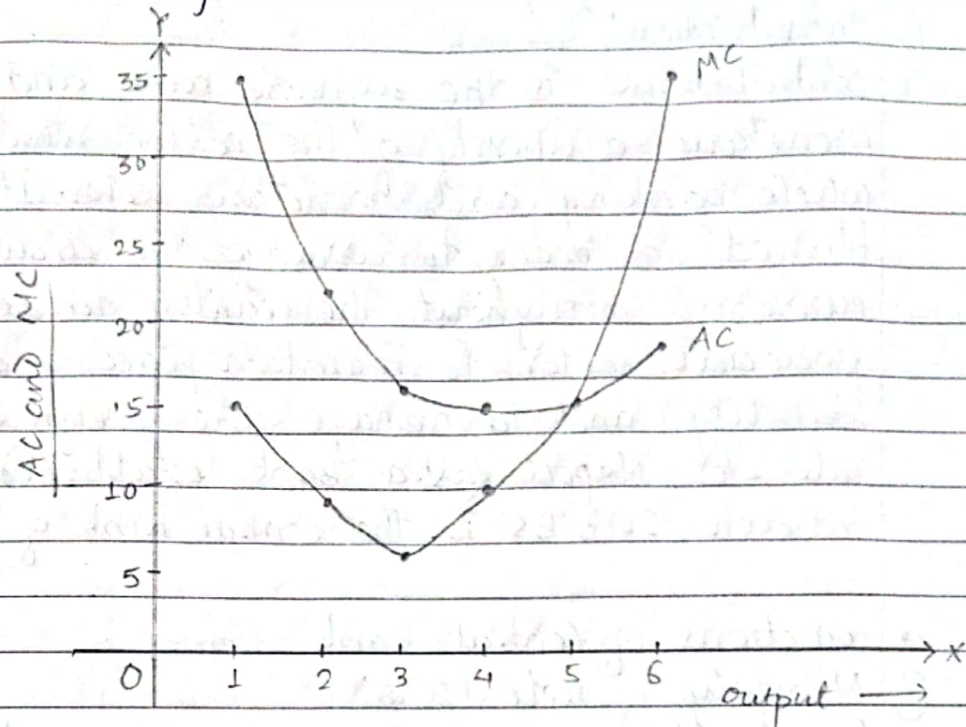
$$MC = \frac{\Delta TC}{\Delta Q}$$

• Table: Relation between AC and MC

Level of output (Q)	Total cost (TC)	Average cost (TC/Q)	Marginal cost ( $\frac{\Delta TC}{\Delta Q}$ )
0	20	0	-
1	35	35	15
2	44	22	9
3	50	16.67	6
4	60	15	10
5	75	15	15
6	110	18.33	35



Diagrammatically,



• Relation between AC and MC

- (i) Both AC and MC are roughly U-shaped because of law of variable proportion.
- (ii) MC intersects AC at its minimum.
- (iii) When MC is falling, AC is also decreasing.
- (iv) When MC intersects AC, then AC increases.
- (v) MC rises rapidly after intersecting AC.

• Conclusion:

The table and figure justify the relationship between ~~AR~~ AC and MC.

(16) Describe any five functions of Central Bank.

• Introduction:

Central bank is the supreme bank and apex monetary authority of the nation which regulates whole banking and monetary sector. It is established in order to arrange the circulation of currency throughout the country, to develop the financial sector, to maintain peace and economic stability and to manage the foreign exchange rate etc. Nepal Rastra Bank, established on 14<sup>th</sup> Baisakh 2013 BS is the central bank of Nepal.

• Functions of Central Bank.

(i) Monopoly of note issue:

In almost every country, monopoly of note issue is given to the Central Bank in order to ensure uniformity in the currency system and to secure control over it. Moreover, it becomes easier for the government to supervise and control note issue. In issuing notes, the Central Bank is governed by certain rules as laid down by law. It must keep reserves of gold, silver and good securities in fixed proportion.

(ii) Banker to the Government:

The central bank acts as a banker, agent and advisor to the government. As government's banker, it makes and receives payment on behalf of government. It provides short term loans to meet the current requirements of the government. It also manages long term finance of the government by the sale of securities.



### (ii) Banker's bank:

Central bank is also called bankers' bank. It supervises the working of the member banks. For this reason, the central bank can impose certain obligations on the member banks and thus keep control on them. These conditions are imposed on member banks in order to ensure a sound banking system. Thus, every member bank is required to keep a certain percentage of its total liability on deposits with the central bank.

### (iii) Control of credit:

Control of credit is regarded as the most important function of a central bank. The objective of credit control is to ~~ensure~~<sup>secure</sup> price stability. For the purpose of credit control, the central bank may use various tools such as bank rate, open market operations, change in reserve ratios, selective method of credit control etc.

### (iv) Clearinghouse functions:

The central bank acts as a clearinghouse for member banks. As all banks have their accounts with the central bank, the claims of the banks against one another are settled by simple transfer from and to their accounts.

Other functions are:-

(v) Lender of last resort

(vi) Custodian of foreign reserves.

### • Conclusion:

Hence, we can conclude that central banks perform varieties of functions to maintain economic stability.

⑫ Evaluate the causes of increasing unemployment in Nepal.

→ • Introduction:

The existence of a part of a labour force who are willing and able to work but unable to find a gainful employment is called unemployment. Unemployment is one of the major causes of many micro-economics and macro-economic problems.

Unemployment is measured as the percentage of the total labour force. It can bring serious problems both for those who are unemployed and for the nation.

• Causes of increasing unemployment:

① Underutilization of natural resources:

One of the major causes of unemployment in developing countries like Nepal is the underutilization of natural resources. Nepal is rich in water resources, mineral resources, forest resources etc. However, such resources are not utilized properly at its maximum capacity. We can create mass unemployment if could utilize water resources only but due to its unutilization, unemployment is increasing.

② Lack of industrial development:

The major sector which can create mass employment and employment to large group of people is industry. We know that industries are not well-developed in Nepal, so there is unemployment problem in Nepal. Low industrial development means low creation of employment opportunities creating large unemployment.



(iii) Searching for higher wages:-  
Searching for higher wages rate is another cause of unemployment in developed nations, and among skilled workers in developing countries like Nepal. The skilled unemployed people don't want to work for a little wage. All the workers cannot fulfill their basic needs from low wage rate. So, they remain unemployed seeking for high paying jobs.

(iv) Advancement in technology:-  
Replacement of labour by technology is another cause of unemployment. Due to advancement of the technologies, new and new machines are invented. They are used to produce maximum quantity of goods. But it changes the labour intensive industry to capital-intensive industry which creates unemployment for labourers.

(v) Entry of new workforce:-  
Another cause of unemployment in the under-developed nation is due to entry of new workforce. Government is already unable to provide job for previously unemployed people. In Nepal, 450000 new workforce enter into Nepalese job market in search of job. It creates more unemployment in the country.

#### • Conclusion:

Hence, these are the causes that bring the unemployment in Nepal. Unemployed problem can be solved if these causes are addressed.

18) What measures do you suggest to make plan formulation effective in Nepal? Give your opinion

→ Introduction:

Plan formulation is a process of making a new plan with reference to the evaluation of previous plans including evaluation and monitoring of the current plan.

• Measures for effective plan formulation:

(i) Complete implementation of past plans before making new plans and policies:

The plans and proposals that have been formulated previously should be implemented first. If the past plans are not implemented and new plans are made, then it creates gathering of countless plans and proposals and due to it, the plans could never be completed. If new plans are made, then executive committee need to focus on many plans which would lead to ineffective plan implementation. Therefore, completing previously proposed plan before ~~pro~~ proposing new one is a measure for effective plan formulation.

(ii) Plans ensuring sustainable development:

The planning committee should focus on the sustainable development. If they focus on the long lasting development plans, it would be beneficial for the country, eventually making the plan formulation effective. For example, new plans and proposals should be made for hydroelectricity, solar energy, wind energy etc instead of fuel energy to make plan formulation more effective.



### (iii) ~~the~~ Balanced regional development:

The planning committee should propose the plans that develop and connect every parts of Nepal. Balanced regional development ensures the effectiveness of the plan because we can't say a plan is effective if only a particular field or part of the country is developed. So, ~~each~~ the plans that promote inclusiveness and develop each and every part of the country should be formulated to ensure effective plan formulation.

### (iv) Formulation of employment-oriented plans and proposals:

The plan formulation can be said to be effective if it is beneficial for the citizens of the country. Unemployment is a big problem in Nepal, so the plans should be formulated that brings ~~an~~ employment in Nepal. If plans that develop the industrial sector is formulated, employment opportunities can be created and plan formulation would be effective.

### (v) Cost-benefit analysis

### (vi) Reduction of political influence

### (vii) Comprehensive discussion of among stakeholders.

### (V) Cost-Benefit Analysis:

While formulating a plan, the planning commission needs to estimate the costs to be incurred for implementation of plan and benefit that can be received after implementing. Therefore, the planning commission should evaluate and analyze the costs and reward of the plan while formulating it.

### (VI) No political influence:

The formulation of plans should be free of political influence to make it effective. When any plans are made under the influence of politics, there is always chances of unsuccess of the plan because the plan is formulated for the benefit of political parties, not for the welfare of the nation. Therefore, plans should be political influence free for its effectiveness.

### (VII) Comprehensive discussion among stakeholders:

Plans are the building blocks of the development of any country. If the formulation of plan is carried out effectively, it is regarded as the half success of the development project. So, rigorous, detailed and comprehensive discussion among the stakeholders should be done for the perfect and fruitful formulation of the plans.



- (19) Find the standard deviation from the given table and interpret the result.

sol<sup>n</sup>:

Calculation of standard deviation

wages (x)	No. of labour (f)	fx	fx <sup>2</sup>
15	4	60	900
22	5	110	2420
26	3	78	2028
32	6	192	6144
35	2	70	2450
	N = 20	$\Sigma fx = 510$	$\Sigma fx^2 = 13942$

Now,

$$\begin{aligned}
 \text{standard deviation } (s) &= \sqrt{\frac{\Sigma fx^2}{N} - \left(\frac{\Sigma fx}{N}\right)^2} \\
 &= \sqrt{\frac{13942}{20} - \left(\frac{510}{20}\right)^2} \\
 &= \sqrt{697.1 - 650.25} \\
 &= \sqrt{46.85} \\
 &= 6.845
 \end{aligned}$$

Interpretation:

$s = 6.845$ , it means that the average deviation of the data from the mean value of 25.5 is 6.845.

(19) OR: Find Paasche's Price Index Number from the given data and interpret the result.

Soln:

Calculation of Paasche's <sup>price</sup> Index Number

Goods	$P_0$	$Q_0$	$P_1$	$Q_1$	$P_1 Q_1$	$P_0 Q_1$
A	8	12	15	15	225	120
B	9	22	12	19	228	171
C	12	11	18	19	342	228
D	5	20	10	25	250	125

$$\sum P_1 Q_1 = 1045 \quad \sum P_0 Q_1 = 644$$

Now,

$$\text{Paasche's Price Index Number: } P_{01}(P) = \frac{\sum P_1 Q_1}{\sum P_0 Q_1} \times 100$$

$$= \frac{1045}{644} \times 100$$

$$= 162.26$$

$$\begin{aligned} \text{Rise in price (Inflation)} &= 162.26\% - 100 \\ &= 62.26\% \end{aligned}$$

Interpretation:

The rise in price level is 62.26% in 7 years.

$$\therefore \text{Inflation per year} = \frac{62.26\%}{7}$$

$$= 8.9\%$$



Group-C

- (20) How equilibrium price and output are determined in the short run by a firm using MR-MC approach under Perfect competition? Explain.

→ Introduction:

Perfect competition is the market structure in which there are large number of buyers and sellers of homogeneous product. Some features of perfect competition are:-

- (i) Large number of buyers and sellers.
- (ii) Homogeneous products
- (iii) Free entry and exit of the firm
- (iv) Perfect knowledge
- (v) Perfect mobility of factors of production.

Under perfect competition, there is difference between firm and industry. Firm is an individual producing unit whereas industry is a group of firm producing homogeneous product. Price of the product is determined by the interaction of demand and supply force. A firm is the price taker. The job of the firm is to determine equilibrium level of output where the two conditions are fulfilled:-

(a)  $MR = MC$

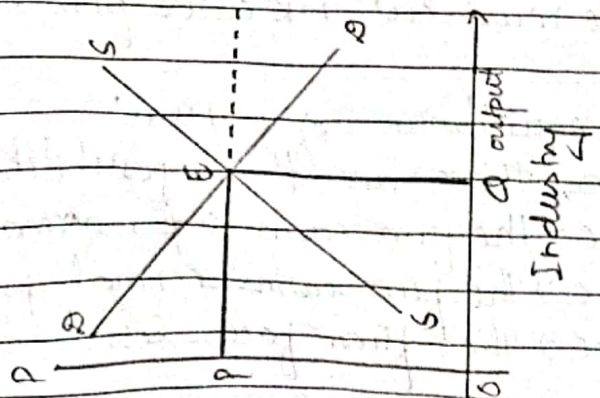
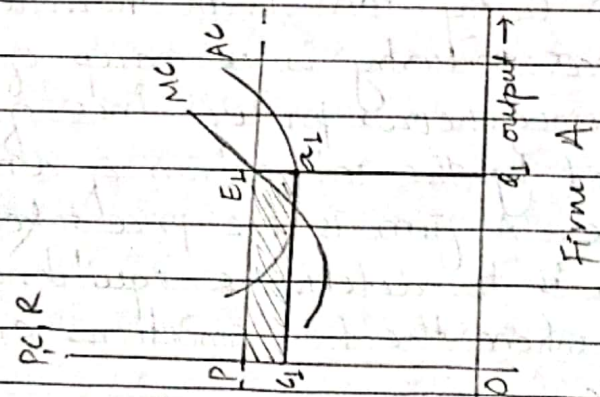
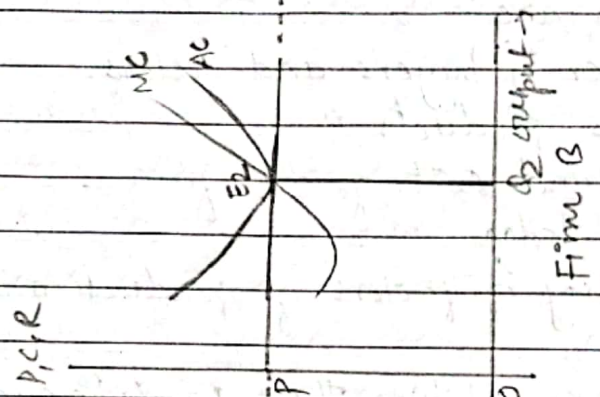
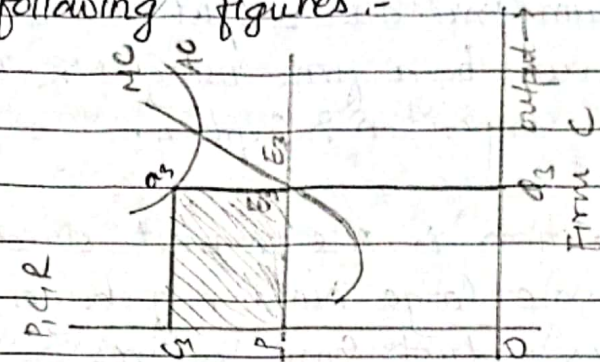
(b) MC curve must cut MR curve from below:

• Short run equilibrium of a firm:

In short-run, there are three possibilities:-

- (a) If  $AR > AC \Rightarrow$  The firm earns super-normal profit.
- (b) If  $AR = AC \Rightarrow$  The firm earns normal profit
- (c) If  $AR < AC \Rightarrow$  The firm faces loss.

These three possibilities can be shown by the help of following figures:-





The first figure gives the equilibrium price determined by the industry.

In firm A,

$$AR = E_1 Q_1$$

$$AC = a_1 Q_1$$

Here,  $AR > AC \Rightarrow$  super normal profit

$$\therefore \pi = PE_1 a_1 Q_1$$

In firm B,

$$AR = E_2 Q_2$$

$$AC = E_2 Q_2$$

Here,  $AR = AC \Rightarrow$  Normal Profit

$$\therefore \pi = 0$$

In firm C,

$$AR = E_3 Q_3$$

$$AC = a_3 Q_3$$

Here,  $AC > AR \Rightarrow$  Loss

$$\therefore \text{Loss} = PE_3 a_3 Q_3$$

• Conclusion:

The figure determines the price and output under different circumstances.

(21) Why is government borrowing important for Nepal's economy? Give reasons.

→ Introduction

Government borrowing refers to the borrowing raised by the government from within the country or outside the country. Public borrowing (government borrowing) is essential to conduct development activities by the government. So, public borrowing is an important concept in public finance.

Government borrowing is important for Nepal's economy due to following reasons:-

(i) It helps to meet budget deficit:

In case of Nepal, Nepal always has been in the trap of budget deficit. The expenditure done by Nepal's government has been greater than the revenue collected by the government. In order to meet the expenditure, government has to take loans from within the country or abroad as government borrowing. Hence, budget deficit is met.

(ii) It helps to meet war expenses:

During the war between the countries, all the money or income are utilized by the war country. So, in order to meet the war expenses, the appeal for government borrowing is made. After the war, the economy <sup>will be</sup> very low, so to bring economic growth, borrowing is made.



(iii) To solve the problem of unemployment:

Government borrowing is made to develop the different infrastructures of development. Investment is made in different sector to create the employment opportunities. Employment is created only when infrastructure is being developed, so borrowing helps to reduce the problem of unemployment.

(iv) To control inflation:

Government borrowing also helps to control the inflation. When government borrowing is made from public within the country, it reduces the supply of money in the country and eventually the purchasing power of the consumer reduces. It leads to the fall in general price level of goods and services. Hence, inflation is controlled.

(v) To develop infrastructures:

Government borrowing from within the country and from outside the country is made to collect huge funds. These funds are utilized for the infrastructural development. It is used to develop industries, agriculture, tourism and other sectors. Infrastructural development also ensures the creation of employment opportunities. Roads, bridges, communication system etc can be improved by government borrowing.

(vi) To fight or tackle depression:

Depression is the condition when costs reduce, there is a lack of courage in people for spending money on industries and in future, there is no possibility of getting gain. This condition can be removed when there is increase in the demand of things and services and it is possible only where there is an increase in the expenditure of public construction work or most use important public use and infrastructure services.

(vii) Expansion of Education and Health services:-

Government can also take debt for the construction and development of education and health services and other services like this. That helps to increase normal social welfare but does not give any direct finance and that is not productive from angle of currency. So, government borrowing is made the expansion of these services.

(viii) To cover the expenditure on Administrative work till getting income:-

The income which the government gets from taxes that is available at the end of the year but expenditure is from the starting of the year. So, at the beginning of the year, government spends money by borrowing and pays the debt when it gets the income in the last of the year.

• Conclusion:

Hence, these were the reasons depicting why government borrowing is needed to a country.



Q2) What measures do you suggest to reduce trade deficits of Nepal? Explain.

→ Introduction:

International trade of Nepal was confined only with India and Tibet (95% and 5% respectively) before 1956 AD. Nepal started foreign trade with other overseas country only after 1956 AD. Since then, Nepal has always been in trade deficit. The import value has always been higher than export values. So, in order to minimize the trade deficit of Nepal, following measures are suggested:

• Measures to reduce trade deficit:

① Establishment of large scale industries:

Nepal should establish sufficient number of large scale industries like: chemical fertilizers, automobile companies, textile industries, agro based industries, fruit processing industries, paper, sugar, steel and iron industries and so on. The products produced by many large scale production reduces the imports. It minimizes trade deficit.

② Reducing the cost of production:

The cost of production of Nepalese goods are comparatively higher than that of foreign goods. So, Nepal should use modern techniques of production to minimize the cost of production. We should produce goods and services in large scale in order to reduce the average cost of production. Lower cost of production make Nepalese more competitive in foreign market.

(iii) Controlling illegal trade between Nepal and India: Geographically, Nepal is surrounded by India from three sides and China from north side. More than 60% of Nepal's foreign trade is concentrated with India. Due to open border, illegal trade takes place between two countries. A special focus should be given to control illegal trade between India and Nepal. It controls the illegal activities and increases the government revenue, thus reducing trade deficit.

(iv) Using alternative means of energy: One of the most expensive items that Nepal imports is the petroleum products. So, its import is increasing day by day and thereby trade deficit. Thus, Nepal should identify and use alternative source of energy like electricity, solar energy. It lowers the import of petroleum and trade deficit of Nepal.

(v) Conducting research for exporting to new destinations and new products: Nepal imports most of the luxurious and expensive commodities from more than 100 countries and exports few primary products to a few countries. So, we should conduct research to identify new destinations for Nepalese products. Hence, we should produce and export more varieties of products in whole market.



(vi) Increasing the productivity and types of products:  
The production capacity of Nepalese industries is very low. So, the production capacity should be increased by using modern method of production. Similarly, very few types of products are produced in Nepal and maximum are imported. So, focus should be given towards increasing the types of production. It substitutes for imports and reduces the trade deficit.

(vii) Use alternative means of transport:  
Nepal is using road transport (mainly trucks) to import and export goods. It is very expensive means of transportation. So, in order to minimize the transit cost, we should use alternative means of transport like railway to carry goods, pipelines for petroleum products, at large quantity in lower transport cost. It helps to minimize the transit cost and thereby trade deficit.

(viii) Managing sufficient amount of capital for investment:  
We know that Nepal is a developing country with low per capita income. On the one side, the rate of capital formation is low and thus, less amount is available for investment. On the other side, the available capital is used in unproductive sectors. So, available capital should be used in productive sectors. It helps to increase the production of goods and services. It reduces the import and thus lowers the trade deficit.