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SLOW- LEARNER PEER LEARNING





EXPERT SESSION











Audyogik Shikshan Mandal's

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COURSE PRESENTATION



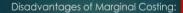


Introduction



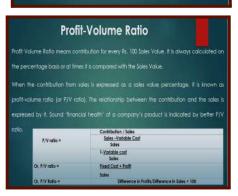






Break-Even Point (BEP): fixed Cost Contribution per unit (a) BEP (in terms of units) = Fixed Cost × Sales F/V Eatio













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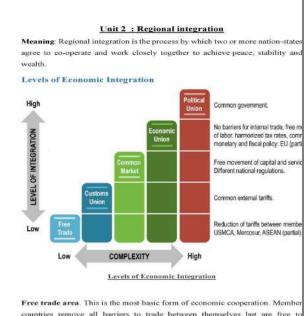
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COURSE NOTES



Free trade area. This is the most basic form of economic cooperation. Member countries remove all barriers to trade between themselves but are free to independently determine trade policies with non-member nations. An example is the North American Free Trade Agreement (NAFTA).

Customs union. This type provides for economic cooperation as in a free-trade zone. Barriers to trade are removed between member countries. The primary difference from the free trade area is that members agree to treat trade with nonmember countries in a similar manner.

Common market. This type allows for the creation of economically integrated markets between member countries. Trade barriers are removed, as are any restrictions on the movement of labour and capital between member countries. Like customs unions, there is a common trade policy for trade with non-member nations. The primary advantage to workers is that they no longer need a visa or work permit to work in another member country of a common market. An example is the Common Market for Eastern and Southern Africa (COMESA).

Economic union. This type is created when countries enter into an economic agreement to remove barriers to trade and adopt common economic policies. An example is the European Union (EU).

Objectives

- Trade creation. These agreements create more opportunities for countries
 to trade with one another by removing the barriers to trade and investment.
 Due to a reduction or removal of tariffs, cooperation results in cheaper
 prices for consumers in the bloc countries. Studies indicate that regional
 economic integration significantly contributes to the relatively high growth
 rates in the less-developed countries.
- Employment opportunities. By removing restrictions on labour movement, economic integration can help expand job opportunities.
- Consensus and cooperation. Member nations may find it easier to agree with smaller numbers of countries. Regional understanding and similarities may also facilitate closer political cooperation.



Principal

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European Union (EU), international organization comprising 27 European countries and governing common economic, social, and security policies. Originally confined to western Europe, the EU undertook a robust expansion into central and eastern Europe in the early 21st century. The EU's members are Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Irela nd, Italy, Latvia, Lithuania, Luxembourg, Malta, the

nd, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain,

and Sweden. The United Kingdom, which had been a founding member of the EU, left the organization in 2020.

The EU was created by the Maastricht Treaty, which entered into force on November 1, 1993. The treaty was designed to enhance European political and economic integration by creating a single currency (the euro), a unified foreign and security policy, and common citizenship rights and by advancing cooperation in the areas of immigration, asylum, and judicial affairs. The EU was awarded the Nobel Prize for Peace in 2012, in recognition of the organization's efforts to promote peace and democracy in Europe.

Origins

The EU represents one in a series of efforts to integrate Europe since World War II. At the end of the war, several western European countries sought closer economic, social, and political ties to achieve economic growth and military security and to promote a lasting reconciliation between France and Germany. To this end, in 1951 the leaders of six countries—Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany—signed the Treaty of Paris, thereby, when it took effect in 1952, founding the European Coal and Steel Community (ECSC). (The United Kingdom had been invited to join the ECSC

and in 1955 sent a representative to observe discussions about its ongoing development,

In March 25, 1957, the six ECSC members signed the two Treaties of Rome that established the European Atomic Energy Community (Euratom)—which was designed to facilitate cooperation in atomic energy development, research, and utilization—and the European Economic Community (EEC). The EEC created a common market that featured the elimination of most barriers to the movement of goods, services, capital, and labour, the prohibition of most public policies or private agreements that inhibit market competition, a common agricultural policy (CAP), and a common external trade policy.

The main decision-making institution of the EEC and the European Community (as the EEC was renamed in 1993) and the EU has been the Council of the European Union (originally the Council of Ministers), which consists of ministerial representatives.

The Maastricht Treaty (formally known as the Treaty on European Union), which was signed on February 7, 1992, created the European Union. British Prime Minister John Major was forced to call a vote of confidence in order to secure its passage. An amended version of the treaty officially took effect on November 1, 1993.

Objectives of the European Union

- Promote peace, values, and well-being of all the members of the European Union and citizens of the countries of the European Union.
- Provide freedom, social security, and justice to all the European Union members



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- Respect the cultural and linguistic diversity among the members of the European Union.
- · to strengthen the social, economic, and political organization
- To enhance economic integration by creating a single currency, the EURO, in all the economic transactions among European Union members.
- · To promote scientific and technological progress

Functions of the EU

- the European Commission.
- the European Parliament,
- . the European Council (of heads of state or government),
- the Council of the European Union (of state ministers, a council for each area of responsibility).
- . the Court of Justice of the European Union,
- the European Central Bank and
- · the European Court of Auditors

Brexit : Reasons and Implications

Brexit is a portmanteau of the words "British" and "exit" that was coined to refer to the United Kingdom's decision in a June 23, 2016, referendum to leave the European Union (EU).

On Dec. 24, 2020, the U.K. and the EU struck a provisional free-trade agreement ensuring the free trade of goods without tariffs or quotas. However, key details of the future relationship remain uncertain, such as trade in services, which make up 80% of the U.K. economy. This prevented a <u>no-deal</u> Brexit, which would have been significantly damaging to the U.K. economy.

Various causes of Brexit:

- 1. Sovereignty: Although the British Government has an influence in some form in selecting the members to the European Commission, the members are neither under the influence nor accountable to the British Parliament. Some of the policy decisions such as competition policy, agriculture, copyright and patent law go against the interests of Britain (these laws override the domestic laws). This weakness of being unable to take decisions in Britain's interests has led to support for Brexit.
- 2. Overriding regulations: Some of the regulations such as limits on the power of vacuum cleaners, non-recycling of tea bags etc. have often been seen as a burden by some of the conservatives in Britain. These limits and regulations acted against the British interests and has adversely impacted British economy, leading to rise of voice for Brexit.
- 3. Failure of Euro: Although Euro is the common currency for the EU, Britain still uses pound as its currency. The problem with the euro as a common currency has also been exposed wherein on one side countries such as Greece and Spain are suffering from high debt, high unemployment, whereas other countries such as Germany are enjoying higher growth. Thus it has not helped Britain interests much.
- 4. Immigration: Britain is not a signatory to the Schengen Border free zone. Over the last ten years there has been quite an opposition towards migration into the country from within the EU and its effects on wages and public services especially post 2008 recession wherein the workers from Lithuania, Poland, Italy, Romania etc. have moved to Britain.
- 5. Financial burden: Although EU doesn't have the powers to collect the taxes from the people directly, it mandates member countries to make payments. In the case of Britain it comes around \$19 billion per year or \$300/person. Although the funds are again used on Britain, the Brexit supporters say, the money could be used more efficiently, if Britain is out of the EU.
- 6. **Security concerns:** The rising threat of terrorism in Europe which is exaggerated by EU's inability to keep the area secure has led to Britain to get out of EU. Refugee crisis in Europe has added to the security concerns.



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QUESTION BANK

Paper I Method Of Applied Statistics Unit I Correlation

2marks Questions

- 1. Define:
 - i.Correlation
 - ii.Karl Pearson's correlation coefficient
 - iii.Spearman's rank correlation coefficient
 - iv.Bivariate data
 - v.Positive correlation
 - vi.Negative correlation
 - vii.Zero correlation.
- 2. Define positive correlation. Give one illustration
- 3. Define negative correlation. Give one illustration
- 4. Define coefficient of determination and state its interpretation.
- 5. Sketch scatter diagram for :
 - i. r=0
 - ii. r=-1
 - iii. r=+1
- 6. Draw scatter diagram when X and Y have
 - i) high positive correlation
 - ii) perfect negative correlation
- 8. State the types of correlation for the following.
 - i) Weight and blood pressure of individuals.
 - ii) Supply and price of vegetables
- 9. State the limits within which rank correlation coefficient lies..

4 marks Questions

- 1. Explain Correlation and types of correlation with example
- 2. Explain the scatter diagram method. State its merits and demerits.
- 3. Prove that $-1 \le r \le +1$

OR

7.

Derive the limits for correlation coefficient

OR

Show that Karl Pearson's coefficient of correlation between the two variables is numerically less than or equal to unity

4. Prove that
$$r_{xy} = \frac{hk}{|hk|} r_{uv}$$

OR

Derive the effect of change of origin and scale on correlation coefficient

OR

Show that numerical value of correlation coefficient is invariant to the change of origin and scale.

OR

Show that Karl Pearson's coefficient of correlation is independent of change of origin and scale.

 $5. \quad \text{Define Spearman's rank correlation coefficient and explain the calculation of Spearman's rank correlation coefficient}$

OR

Explain Spearman's rank correlation coefficient for case

i)when actual ranks are given

ii) Repeated ranks

Unit II Regression

2marks Questions

- Define:
 - i.Regression
 - ii.Linear Regression
- iii.Line of regression
- iv.Regression coefficient
- 2. Show that the algebra of signs of b_{yx} b_{xy} and r are the same.
- 3. Prove that $r^2 = b_{yx} \cdot b_{xy}$
- 4. Prove that $\frac{b_{yx}+b_{xy}}{2} > r$
- 5. Prove that $b_{xy} = \frac{n}{k} b_{uv}$
- 6. Define residual plot.
- 7. Write down the equations of two regression coefficients.



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4 marks Questions

- State any two properties of regression coefficient
- Define regression coefficients and state it's any two properties
- Derivation of line of regression of Y on X

Describe the stepwise procedure of fitting a line of regression of Y on X to the bivariate data by using method of least squares.

Derivation of line of regression of X on Y

OR

Describe the stepwise procedure of fitting a line of regression of X on Y to the bivariate data by using method of least squares.

- Define regression coefficients and state it's any two properties
- Explain the fitting of second degree parabola
- Explain the fitting of growth curve of models for $Y=ae^{bX}$
- Explain the fitting of growth curve of models for $Y = ab^X$
- 9. Explain the fitting of growth curve of models for $Y = aX^b$

Unit III Multiple Regression and multiple, partial correlation. **2marks Questions**

- Define partial correlation coefficient.
- Define multiple correlation coefficient.
- What is partial regression coefficient? 3.
- State the relation for R2.13 in terms of total correlation coefficients.
- State the equation of multiple regression plane of X_1 on X_2 and X_3 .
- State relation of r_{13.2} in terms of total correlation coefficients. Also state the limits within which partial correlation coefficient lies.

- Explain the fitting of multiple regression plane
- Explain the concept of multiple correlation coefficient with an illustration.
- Explain the concept of partial correlation coefficient with an illustration. State two situations where multiple regression analysis is used.
- Explain the concept of multiple regression using Yule's notation.

Explain in brief the method of moving averages for calculating the trend.

UNIT VI: Time series

2 marks Questions

- What is mean by time series
- Mention components for time series with illustrations.
- Define additive and multiplicative models.
- State various methods used to find the trend in time series.
- State the uses of time series.
- State the merits and demerits of method of moving averages
- State the merits and demerits of method of least square method.

4 marks Questions

- What is time series? What is the need(Objective) for analysis of time series?
- Discuss the component of time seires
- Explain in brief the method of least squares in fitting a linear trend.



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Fill	in the Blanks
a)	The Octal number System uses onlydigits or symbols
b)	A file is a collection of related
c)	WWW refers to
d)	are visual effects for the objects in your PowerPoint presentation.
e)	Yahoo is a type of
f)	Microsoft is a spreadsheet program included in the Microsoft Office Suite.
g)	ISP stands for Internet
h)	An is software program that enables the computer hardware to communicate and operate with the computer software.
i)	The first generation computers were using the technology of
j) Tru	A is formed when the computers are connected in a neighbourhood area. e of False
a)	COBOL is Machine Level Language.
b)	DVD is an magnetic disk.
c)	Excel average function is used to add numbers.
d)	MS-Powerpoint is spreadsheet software
e)	Windows is Mobile Operating System.
f)	Digitizer Converts information into digital form.
g)	Authorization is a security mechanism.
h)	Excel average function is used to add numbers.
i)	MS-Powerpoint is spreadsheet software
j)	ROM is a type of Secondary memory.

Write Answer in Brief

- a) What is a Computer and its types?
- b) Describe the Services provided by operating system.
- c) Describe the network topology with its types.
- d) What is a Computer and its types?
- e) Describe the Services provided by operating system.
- f) What is MS-Excel? Explain the features of MS-Excel.
- g) With the Help of Diagram describe classification of memory

Write Short note on

- a) E-mail.
- b) Types of Charts in MS-Excel.
- c) Computer Programming Language
- d) Cyber Security.
- e) Search Engine.
- f) Types of Network.







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ADVANCE LEARNER STUDENTS- COURSE PRESENTATION

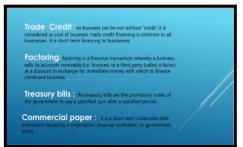






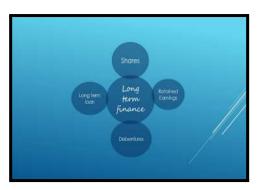
SHORT TERM FINANCE - Short term refers to the finance, one may need for one day or one year. - It covers all type of finance which is available within one year period. - All the sources which for up to one year available from included all business, industries and incitrations are short term type of finance.





LONG TERM FINANCE

- Long term finance means finance available for more than five years.
- Anyone investing or borrowing the money for more than five year period, in any instruments available for financing a long term, is called long term finance.



Debenfures: debentures are debt securities that organizations issue to raise a capital. They offer investors interest payment and a return of the principal at maturity.

Refolined Earnings: the sum of company's earnings from prior periods, after deducting any dividends paid to the company's shareholders.

Shares: a share is a fractional part of the capital of the company which forms the basis of ownership and interest of a substriber in company.

Long ferm loan: in the same way of debentures, loan is the capital raised by company by borrowing the money from the bank or any other financial institution for a limited period of time on fixed or variable type of interest.





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EXTRA CO CURRICULAR ACTIVITIES













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