

ECONOMICS METHOD

Module I – Unit 1 & Unit 2

01. ECONOMICS – DEFINITION AND NATURE & SCOPE OF ECONOMICS

Economics is the science that deals with production, exchange and consumption of various commodities in economic systems. It shows how scarce resources can be used to increase wealth and human welfare. The central focus of economics is on scarcity of resources and choices among their alternative uses. The resources or inputs available to produce goods are limited or scarce. This scarcity induces people to make choices among alternatives, and the knowledge of economics is used to compare the alternatives for choosing the best among them.

Two major factors are responsible for the emergence of economic problems. They are: i) the existence of unlimited human wants and ii) the scarcity of available resources. The numerous human wants are to be satisfied through the scarce resources available in nature. Economics deal with how the numerous human wants are to be satisfied with limited resources. Thus, the science of economics centers on **want - effort - satisfaction**. Economics not only covers the decision making behavior of individuals but also the macro variables of economies like national income, public finance, international trade and so on.

A. DEFINITIONS OF ECONOMICS

i) Wealth Definition

Adam Smith (1723 - 1790), in his book “An Inquiry into Nature and Causes of Wealth of Nations” (1776) defined economics as the science of wealth. He explained how a nation’s wealth is created. He considered that the individual in the society wants to promote only his own gain and in this, he is led by an “invisible hand” to promote the interests of the society though he has no real intention to promote the society’s interests.

ii) Welfare Definition

Alfred Marshall (1842 - 1924) wrote a book “Principles of Economics” (1890) in which he defined “Political Economy” or Economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well being”. The important features of Marshall’s definition are as follows:

a) According to Marshall, economics is a study of mankind in the ordinary business of life, i.e., economic aspect of human life.

iii) Welfare Definition

Lionel Robbins published a book “An Essay on the Nature and Significance of Economic Science” in 1932. According to him, “Economics is a science which studies human behavior as a relationship between ends and scarce means which have alternative uses

iv) Growth Definition

Prof. Paul Samuelson defined economics as “the study of how men and society choose, with or without the use of money, to employ scarce productive resources which could have alternative uses, to produce various commodities over time, and distribute them for consumption, now and in the future among various people and groups of society”.

B.NATURE OF ECONOMICS

In discussing the nature of Economics, we have to indicate whether it is a science or an art and a positive Science or a normative science. It also covers the subject matter of economics.

i) Economics - A Science and an Art

a) Economics is a science: Science is a systematized body of knowledge that traces the relationship between cause and effect. Another attribute of science is that its phenomena should be amenable to measurement. Applying these characteristics, we find that economics is a branch of knowledge where the various facts relevant to it have been systematically collected, classified and analyzed. Economics investigates the possibility of deducing generalizations as regards the economic motives of human beings. The motives of individuals and business firms can be very easily measured in terms of money. Thus, economics is a science.

Economics - A Social Science: In order to understand the social aspect of economics, we should bear in mind that labourers are working on materials drawn from all over the world and producing commodities to be sold all over the world in order to exchange goods from all parts of the world to satisfy their wants. There is, thus, a close inter-dependence of millions of people living in distant lands unknown to one another. In this way, the process of satisfying wants is not only an individual process, but also a social process. In economics, one has, thus, to study social behavior i.e., behavior of men in-groups.

b) Economics is also an art. An art is a system of rules for the attainment of a given end. A science teaches us to know; an art teaches us to do. Applying this definition, we find that economics offers us practical guidance in the solution of economic problems. Science and art are complementary to each other and economics is both a science and an art.

ii) Positive and Normative Economics

Economics is both positive and normative science.

a) Positive science: It only describes what it is and normative science prescribes what it ought to be. Positive science does not indicate what is good or what is bad to the society. It will simply provide results of economic analysis of a problem.

b) Normative science: It makes distinction between good and bad. It prescribes what should be done to promote human welfare. A positive statement is based on facts. A normative statement involves ethical values. For example, “12 per cent of the labour force in India was unemployed last year” is a positive statement, which could be verified by scientific measurement. “Twelve per cent unemployment is too high” is a normative statement comparing the fact of 12 per cent unemployment with a standard of what is unreasonable. It also suggests how it can be rectified. Therefore, economics is a positive as well as normative science.

Scope of Economics

Subject Matter of Economics

Economics can be studied through a) traditional approach and (b) modern approach.

a) Traditional Approach: Economics is studied under five major divisions namely consumption, production, exchange, distribution and public finance.

1. Consumption: The satisfaction of human wants through the use of goods and services is called consumption.

2. Production: Goods that satisfy human wants are viewed as “bundles of utility”. Hence production would mean creation of utility or producing (or creating) things for satisfying human wants. For production, the resources like land, labour, capital and organization are needed.

3. Exchange: Goods are produced not only for self-consumption, but also for sales. They are sold to buyers in markets. The process of buying and selling constitutes exchange.

4. Distribution: The production of any agricultural commodity requires four factors, viz., land, labour, capital and organization. These four factors of production are to be rewarded for their services rendered in the process of production. The land owner gets rent, the labourer earns wage, the capitalist is given with interest and the entrepreneur is rewarded with profit. The process of determining rent, wage, interest and profit is called distribution.

5. Public finance: It studies how the government gets money and how it spends it. Thus, in public finance, we study about public revenue and public expenditure.

b) Modern Approach

The study of economics is divided into: i) Microeconomics and ii) Macroeconomics.

1. Microeconomics analyses the economic behaviour of any particular decision making unit such as a household or a firm. Microeconomics studies the flow of economic resources or factors of production from the households or resource owners to business firms and flow of goods and services from business firms to households. It studies the behavior of individual decision making unit with regard to fixation of price and output and its reactions to the changes in demand and supply conditions. Hence, microeconomics is also called price theory.

2. Macroeconomics studies the behavior of the economic system as a whole or all the decision-making units put together. Macroeconomics deals with the behavior of aggregates like total employment, gross national product (GNP), national income, general price level, etc. So, macroeconomics is also known as income theory. Microeconomics cannot give an idea of the functioning of the economy as a whole. Similarly, macroeconomics ignores the individual's preference and welfare. What is true of a part or individual may not be true of the whole and what is true of the whole may not apply to the parts or individual decision-making units. By studying about a single small-farmer, generalization cannot be made about all small farmers, say in Tamil Nadu state. Similarly, the general nature of all small farmers in the state need not be true in case of a particular small farmer. Hence, the study of both micro and macroeconomics is essential to understand the whole system of economic activities.

The economics of education in India

The Indian education system is under great study the world over these days. The reasons are at two levels — firstly, a lot of foreign universities are looking at India as a big profit zone for higher education; and second, overseas organizations are seeking to establish links between their countries and India. Also, a majority of knowledge-based industries these days are deeply dependent on Indian youth, who have undergone fundamental and higher studies under the Indian education system. The report makes a comment: “The higher education system in India enrolls the second largest number of students in the world after China — nearly 22 million. In the past two decades, enrolment grew by 7.7 per cent per annum and more than quadrupled. The number of institutions has grown even more rapidly, from fewer than 6,000 in 1990–1991 to more than 46,000 today, the most in any country in the world.”

It also refers to the 12th five year plan reforms, making a statement: “The state and institutional-level regulations and controls are supplemented by controls imposed from a still higher level, the national government and its regulatory arms. This has led to a collection of unclear and often contradictory policies and laws that have prevented the government from implementing cohesive reform.”

Today, our higher education system is showing the signs of breaking mainly under the pressure

of enhanced access and reduced finances. The system that is predominantly 'public' finds itself orphaned by the state which is not willing to evolve a long-term policy for co-existence of education as a 'merit good' and 'non-merit' good. We are locked in an unending discussion that touches age old issues of access, relevance and quality only at a peripheral level. The simple truth is that we need more educational institutions that give relevant and quality education to take full advantage of opportunities that are emerging at the global level. We can accept these challenges provided we strengthen our educational and research infrastructure in both quality and quantity.

A few core decisions need to be taken. Currently, education is treated as a non-profit activity. This approach, which was essential immediately after Independence, is not sustainable now, as the government has limited resources to meet ever-increasing demands. The creation of self-financing affiliating institutions has done more harm than good. We now need to accept that education can exist as a dual entity: 'merit good' activity to be done predominantly by the government and 'non-merit good' activity to be done by the corporate sector. We also need to address the issues of IPR in 'education businesses.' An education company's value is in its IPR. The existing accounting treatment does not allow an education company to value its IPR on its books. Let us make appropriate changes in accounting rules and procedures. The government should create an independent statutory authority (not controlled by the government), say an Educational Companies Board of India (ECBI), that has independent members from academic, financial, judicial and industry domains to monitor and also to work as checking body for malpractices and other aspects. In addition, we should create an appropriate mechanism for awarding scholarships and soft loans to deserving students through a special instrument funded both by the government and the private sector. This could maintain the balance between accessibility for students, social equity, competitive quality education and the government's responsibility of retaining education as a public good identity.

The right approach would be to create a Higher Education Finance Corporation (HEFC), an independent financial institution to support higher education on a long-term basis. This concept has been discussed for several decades but no government has ever stepped forward to establish it. HEFC could be a professionally managed financial entity where the government only needs to

make a bulk investment initially, introduce investor-friendly opportunities for private sector and create a continuous flow of revenue by introducing employment tax for employers. Each employer (private and public) should be levied a tax equivalent to the first month's salary for addition of every new employee. HEFC should make provisions for giving soft loans to students and institutions for development of academic and other infrastructure. The participation of the private sector, with fair returns for investors in for-profit institutions, will only enhance growth and competitiveness in higher education sector. The Indian education system would only gain by a dual identity as both 'public' and 'private' good. Consequently, there is a need to address issues related to the new economics of education, which demand a clear approach for raising and deploying finances.

Importance of Economics

- Theoretical Importance
- Practical Importance

Practical Importance:-

- 1) **Benefits to Consumers:-** Maximum satisfaction through his limited resources- spend his limited income in such a way that he may obtain maximum benefit from it.- Household budget- solve any problems.
- 2) **Importance for Producers:-** Essentials rules of economics. Every producer should have full knowledge of various resources of production, rules of production, principles of interest, principles of labour, principles of fixation of prices — how can they increase their income & what is nature of government tax system. Knowledge of Banks, insurance policies – rules of trading companies.
- 3) **Importance for Businessman:** - No businessman can achieve success in his business without the knowledge of Economics. Rise & fall of prices, rules of demand & supply, fixing prices, daily rates of local market, present position of national & international markets.
- 4) **Importance for Labourers:** - Position in overall system of production. Whether getting proper wages for his work. Steps to receive proper wages, labour unions.

- 5) **Importance for Politicians:** - Knowledge about taxes & revenue system, spend the public funds in most useful ways, concept of nationalization & labour laws.
- 6) **Importance for Society:-**Economics is important from point of view of social welfare- conversant with problems & suggest proper situations. Unemployment, semi-unemployment, unequal distribution of wealth, poverty, shortage of food- overall program of society is possible through economics.
- 7) **Social Reformer:** - Social unrest, poverty, illiteracy, over population, inequality in rate of births& deaths are social problems - also economic problems. The knowledge of economics can be very helpful in solving these problems - social workers can come to know the seriousness of these problems & methods of solving them. Economic planning – save society from social problem – evil customs, dowry, child marriage, drug addiction, etc.
- 8) **Students:** - Essential subject for them. Integral part of the curriculum of education- who has opted. Moreover the student can derive great benefit from knowledge of economics in their future life. Their success in life depends to great extent on the knowledge of useful topics of economics studied during their school or college career.

Theoretical Importance: - The subject imparts us many kinds of theoretical knowledge:-

1. Economics truth: Economics conducts research in many economics truths through deductive method.
2. Economics makes individuals conversant with many economics problems. Economics present problem in clean way – correct problem & correct efforts to solve that problem.
3. Analytical study of economics problems through inductive system. Formulate general principles of important aspects of human life.
4. We have to collect data regarding different economic fields in order to solve economic problems – make classifications – analysis & explanation.
5. Economics brings about an increase in overall human knowledge & human possibilities.
6. Being a normative knowledge, Economics presents before us many high ideals of life in the form of an art it presents the means of obtaining of those ideals. In this way it helps to bring about human progress.

Hence we can say that economics has great theoretical importance. In general way it is the best means of increasing human knowledge & bringing about human progress in all sphere of life. Hence this subject has become very popular.

Objectives of teaching at secondary & higher secondary level:-

No subject can be taught without having objectives of teaching that subject clearly before our eyes. These objectives are the guiding stars. They provide proper direction to the teacher & the students.

Objectives – are precise statement of purpose.

Objectives of Teaching Economics at Secondary Stage-

- 1) To acquaint students with the contemporary economic problems and to help them appreciate the efforts being made to solve these problems at local and national levels.
- 2) To foster an urge among students for effective participation in the tasks of national reconstruction.
- 3) To prepare students to cope with the stress and strains that occurs in the process of economic reconstruction.
- 4) To develop an understanding of the nation's physical and human resources and their potentialities for a better tomorrow.
- 5) To develop among students a favorable attitude towards conservation and wise use of our natural resources, avoiding their misuse and wastage.
- 6) To help students understand that various sectors of the Indian Economy are interlinked and that all the sectors must develop simultaneously, through planned and well coordinated efforts.
- 7) To develop among students a passion for social justice and an urge to resist exploitation in any form by men or by the state.
- 8) To familiarize students with the basic terminology and elementary ideas of economics.
- 9) To help students acquire skills in interpreting simple statistical data.

Objectives of Teaching Economics at Higher Secondary Stage-

- 1) To acquire the knowledge of facts, terms, concepts, conventions, trends, principles and generalizations, assumptions, hypotheses, problems, processes etc. in Economics.
- 2) To develop an understanding and trends, principles and generalizations, assumptions, hypotheses, problems, processes etc. in Economics.
- 3) To apply the acquired knowledge and its understanding to unfamiliar situations like analyzing the unfamiliar situation or problem, establishing relationship, suggesting alternative methods for solving the problems, drawing inferences and making generalizations and predicting outcome of a given situation.
- 4) To acquire of economics skills essential for the study of economics like drawing maps, charts, tables, diagrams, graphs, etc. from the given data, translating data from one form of presentation to another, and preparing models,
- 5) To develop interest in the subject and problems related to the economic life of people.
- 6) To develop desirable attitudes necessary for developing a broader outlook.

Correlation of Economics with other subjects

The main aim of education is the unification of knowledge existing in different branches of learning. To achieve such unification a conscious efforts has to be made by teachers teaching various subjects. It is only in such joint ventures that we will be able to achieve the goal of unification of knowledge & bridge the gap that separates them.

Economics is a social science in which we study economic activities of human beings in association & other members of a common society. Naturally therefore there is close relationship between economics & other social sciences.

Need & Importance of Correlation:-

This is an age of co relationship & no subject can be taught in isolation. It is only for convenience of study that we have split the knowledge into different subjects but no subject is completely aloof from others & it has to be correlated with other subjects.

Teaching of particular subject should be carried out in correlation with other subjects. There are various types of co relationship & every type of co relationship has its importance in education in different ways.

As a matter of fact correlation is a technique that establishes reciprocal relationship between different subjects of the curriculum for better & clear understanding of the subject under situation. It has been accepted since long back that no experience or knowledge is permanent and stable.

Truly speaking knowledge is one indivisible whole & it cannot be divided into any water-tight compartments. There is a power of mind known as **Cohesion**, which correlates the knowledge acquired through various sources. Human activities are correlated & no human activity is complete in itself.

Usefulness of Co relationships:

1. It makes the knowledge acquired more stable& permanent.
2. It leads to economy in knowledge & enables the students to acquire knowledge in a short period of time.
3. It helps to lighten the burden of curriculum.
4. It leads to the knowledge of various laws of learning & makes the knowledge convenient.
5. Correlationship of teaching of economics with other subjects leads to development of various human & social qualities such as cooperation, generosity etc.

Types of Co relationships

External Correlation: - This type of correlation is more or less natural. It is a matter of chance that a teacher of economics is able to establish co relationships of the knowledge of economics with that of the knowledge of other subjects particularly social science. No planned efforts are made by the teacher to establish this type of relationship and it is only by chance that such a co relationships is established. E.g.:- An economics teacher while teaching the production of cloth also explains to the students different geographical factors that are responsible for production of cotton. He may also explain the nature of the soil, the climate, the rain etc. that lead to the production of cotton.

Internal Correlation: - In this type of Correlation, an attempt is made to establish co relationships in various branches of a particular subject. E.g. an attempt is made to correlate production, consumption, distribution, exchange etc. which are different branches of economics.

Correlation of economics with other subjects:-

Economics is closely correlated with various other social sciences in particular & with other subjects in general. Economics mainly deals with the economic life of the citizens & students, various activities of man in regard to his livelihood. Since livelihood cannot go on without other aspects of social life. So it is imperative for the economics to be correlated with other branches of knowledge.

Relationship of Economics with Geography:- Economics is intimately related to geography. In economics, we study about various goods. This production is governed by various geographical factors such as the nature of soil. Moreover, the economical conditions of a country depend to a large extent on its geographical conditions. A close inter-relationship between economics & geography has led to the development of many new branches such as economic-geography human – geography etc.

Agriculture industry and other economic activities depend to a large extent on the various geographical factors prevailing in a region. E.g. the industrial unit is generally established in an area where the raw materials are available in abundance. The wealth of a country to a large extent depends upon various geographical factors because the wealth generating activities industry & agriculture depend upon various geographical factors. Thus to achieve good economic results we must have a good geographical background. Actually speaking in economics-geography an attempt is made to study various principles which help in the study of economic aspects of various geographical factors. It is not only the availability of raw material & production but the means of transport & communication etc. that must also be taken into consideration while studying the economics of a project. Thus, we find that economics & geography are highly correlated.

Human geography which is an important branch of geography deals with various natural & geographical factors like mountains, forests, rivers which have a good deal of influence on the man & other living beings. Means of livelihood of man are very much governed & determined by various geographical factors.

Relationship between Economics & Commerce:-

Our main aim in commerce is to study about business, industry, trade & organization, etc. As a matter of fact in commerce we study about all the activities beginning from production & leading up to distribution. In commerce the main aim is to acquaint the student with trade & commerce of the country. The topics that we study in commerce are trade, banking, export & import, bookkeeping etc. All these things are also closely related to the economic life of a society. Economics & commerce cannot be studied separately, their subject matter are inter-linked.

The economics teacher should try to teach the subject matter in such a way that he could explain to the students the learning of subject matter of economics in the commerce & that of the subject matter of commerce in economics. Thus we find a close correlation between commerce & economics.

Relationship of Economics & History:-

Both these subjects are social sciences. Their Correlation is therefore natural. Economic conditions play vital role in the course of history. If a country could reach a height of civilization in a period, it must have been due to good economic conditions of that country in that period.

History is concerned mainly with the study of man's growth through the ages, while economics is concerned with the study of progress of man how he has achieved his position & how much has yet to be achieved.

Various principles of economics are based on the study of history. It is through the knowledge of history that we are able to know about the economic conditions of a country or various countries in a period.

Economics without history has no roots; history without economics has no fruit.

After industrial revolution, we found that production of goods started in stupendous quality in Europe. First & second world wars were fought only for economic considerations. Some great powers like Germany & Japan wanted to usurp the world-trade & for this they had to fight against England & America.

History also provides us the knowledge about the time of discovery & exposition of various economic theories. It also tells us about the economic development of different countries. India

had to face many a foreign attacks in olden times & all these were just for economic reasons. If we are interested to know the prevailing economic conditions of India during the reign of Shahjahan, we shall be able to know it only through history.

It is essential for students to know about the historical factors that were responsible for the birth of those principles. Thus it is quite important to establish a relationship between history & economics.

Relationship of Economics & Maths:-

There exists a very close relationship between Economics & Maths particularly statistics. Most of the economic theories are propounded on the basis of statistical data. This statistical data is multiplied, subtracted, added & so on & so forth. All these have a direct relationship with Maths.

To formulate economic theories, geometry & algebra are widely used. It shows that we draw a lot from Maths for proper understanding of economics. We cannot rely on any economic theory unless it has been put to test on the touchstone of calculations & principles of Maths & statistics. Statistics has become an essential part of economics without statistics the knowledge of economics remains incomplete.

Marshall- Statistics is the straw out of which I, like every other economist has to make bricks.

To draw graphs, sketches & tables the teacher of economics depends to a great extent on his / her mathematical knowledge. This is also indicative of a close relationship between economics & Maths.

Relationship between Economics & Sciences:-

Economics is a social science but it is closely related to physical sciences such as physics, chemistry, etc.

E.g. many of problems of agriculture have a close relationship with chemistry & physics. Similarly, the definition of production & consumption are based on the facts provided by the industry. Because of scientific inventions many changes occur in the field of theories of science. Thus we find that there exists a close relationship between economics & physical sciences.

Correlation with Civics and Political Science:-

If Economics prepares the causes, the Civics and political Science create the effect. It is on account of Economics that various political theories and isms play their role. Economics provides the stage on which the political movements play their role. Political science is concerned with the place and order of the country. Economic policies have their roots in political policies. Civics teaches us the art of leading a happy civic life. Politics teaches us the art of ruling a country for the benefit of the people at large. All these things cannot go on successfully unless economic base is sound.

Language and Economics:-

Language play important role in our life. Learning takes place with the help of language. Without proper language there cannot be any type of exchange. In Language we have different types of essays. Some are related to economic problem and economic development. While teaching economics, students can learn essay writing, report writing and letter writing.

Principles of Teaching

Great educator and intellectual Mr. Huges and Huges rightly says—"It has been well said that 'teaching' means 'causing to learn'. Nothing has been given until it has been taken; nothing has been taught until it has been learnt. Teaching is more than the efficient delivery of thoroughly prepared lectures."

This observation clearly states that for successful teaching, it is essential to know how the pupil learns and by which methods he learns. Since the teaching methods or strategies are based on certain principles, therefore, it is essential for a teacher to follow these general or basic principles while teaching. The principles are necessary to control the behaviour of the teacher.

1. Principle of Learning by Doing:

The principle of learning by doing means the teacher should create activity in each type of lesson. This activity is of two types physical and mental. The physical activity means to produce activity in the body organs of the pupils, and the mental activity means to activate the sense organs of the pupils. Psychologically, each pupil is temperamentally active. While teaching

Economics, teacher can teach facts and incidents very conveniently if these are shown in the form of plays as compared to the learning from books.

2. Principle of Variety:

The Principle of Variety means variety in educational goals, teaching methods, materials, feedback, and evaluation which can enhance education. Variety can build the strength and address some weakness of traditional education.

3. Principle of learner centeredness:

The goal of effective teaching is to fundamentally make an impact or change in the learner. Measuring the effectiveness of learning can be demonstrated in a variety of ways, especially in student-centered learning environments. Students learn best when they take ownership of their education and have a role in shaping the instruction. Today's students learn best by discovering how to learn for themselves in the process. It is here when the impact of effective teaching is most evident, as students who are at the centre of their learning will continue their journey with positive lifelong learning skills.

4. Principle of flexibility:

The principle of flexible learning environments acknowledges that learning take place everywhere, not only in the classroom. Structurally, the flexible learning environment expands beyond the classroom walls, allowing learning to take place in variety of environments, including online. By offering choice through such environment, student determines what they learn, where they learn and when they learn. The role of teacher in a flexible learning environment is to be a learning facilitator. It offers students choice about their schedules, so that pursuit of extra-curricular activities is recognized as part of student learning.

Maxims of Teaching

Maxims of teaching deserves more careful consideration of the teacher to enable him to make the teaching and learning go forward. Practical application of these maxims is a must for effective and efficient teaching and is indicative of teacher's ability. Utility of the maxims of teaching may be understood as follows:

"Maxims of teaching have been discovered, not invented. They are simply statements of the way in which teaching and learning go forward. They ensure effective and efficient teaching."
Meaning: Distribution of the knowledge and the teacher's ability, both are separate.

Some main teaching maxims are as follows:

Some Essential Maxims of Teaching

1. From Known to Unknown:

The meaning of 'from known to unknown' is that the basis of the pupil's new knowledge should be his previous knowledge. It is a psychological fact that it becomes very difficult to acquire the new knowledge if it is presented before the pupil at once. But he takes interest in learning new knowledge if it is linked with the pupil's previous knowledge. Hence, it is the duty of every teacher that before teaching anybody, he should activate his previous knowledge and present new knowledge on the basis of that activated previous knowledge of the pupil. It means to say that those small and simple information with which the pupil is already familiar, should be made basis for imparting unfamiliar information. Every teacher, especially pupil-teacher, should move forward after establishing relationship between that known and the unknown. In other words, whatever the pupils know, the new knowledge of the unknown should be given on that basis.

2. From Simple to Complex.

A key to successful teaching is creating interest in the pupils for new knowledge and developing self-confidence in them. From this point of view, if the teaching is to be made successful, it is essential to use a maxim called 'From Simple to Complex'. This maxim means the teaching of simple to the pupil first and then the complex contents should be taught afterwards. If this is not followed, the pupils will lose their confidence. Therefore, we should divide the subject-matter in such a way that the simple aspects should come first and these should be followed by the complex one in an order. Now the question arises that which aspect is simple and which one is complex. It should be remembered that the things simpler in teacher's view may be complicated for pupils.

3 From Particular to General. This maxim means that the specific examples should be presented before the pupil's first and then the general laws or principles should be derived from those specific examples. According to this maxim, the teacher should present some specific examples before the pupil. Then the same examples should be evaluated and after understanding the fact, pupils should be motivated to derive general principles.

4. From Concrete to Abstract.

It is a psychological fact that the mental development of the pupils begins with the concrete objects and afterwards he gains micro-words for them. Therefore, to begin the education of pupils, the concrete object and fact should be made known first. In other words, when knowledge about small things (micro) is to be imparted to the pupils of lower classes in order to provide a

definite shape to their ideas, the same objects should be shown or their models, pictures and lines can be used.

5. From Whole to Part. In the twentieth century, Gestalt psychologists proved that we first perceive the object as a whole and then its parts. In other words, we gain knowledge about the 'whole' first and then about the 'parts'. Remember that it is essential to study the background and environment of the object about which the knowledge is to be gained according to this Gestalt theory. Hence, the teacher should present before the pupils the new teaching matter as a whole and in an organized way first and then its parts should be explained on the basis of this 'whole' and organized teaching-matter. According to this maxim, by starting with the 'whole' object, the teacher imparts knowledge about each and every part of the object to the pupils.

Module II – Unit 3 & 4

Methods of Teaching Economics (Procedure, advantages and limitations)

- ⊙ Lecture and questioning
- ⊙ Discussion
- ⊙ Survey
- ⊙ Problem solving
- ⊙ Project

Lecture cum questioning

Purpose of Questioning

- ⊙ For exposing difficulties
- ⊙ For promoting thinking
- ⊙ For searching new ideas and view points
- ⊙ For developing appreciation
- ⊙ For directing learning to deeper and broader understanding
- ⊙ For improving concentration
- ⊙ For revising work covered earlier
- ⊙ For preventing misbehavior
- ⊙ For laying emphasis

Types of Questions

- ⊙ Testing questions
 - ⊙ Introductory
 - ⊙ questions
 - ⊙ Recapitulatory questions
- ⊙ **Teaching questions**
 - ⊙ Developmental questions
- ⊙ Developmental Questions
 - ⊙ Knowledge-based
 - ⊙ Comprehension-based
 - ⊙ Application-based
 - ⊙ Analytical questions
 - ⊙ Evaluative questions
 - ⊙ Appreciation-based questions

Features/advantages

1. Gives benefit of lecture as well as questioning method
2. Adapted to the abilities, interest, previous knowledge and needs of the students
3. Include teacher and students
4. Teacher and students both are active
5. Based on psychological and sociological perspective
6. Intellectual team work
7. Improves communication skills

Limitations

- ⊙ Teacher centered

- ⊙ Not useful for kinesthetic and visual learners
- ⊙ Limited active learning
- ⊙ Monotonous method
- ⊙ Only intelligent students may be attentive
- ⊙ Pressure on below average students
- ⊙ Not psychological

Project method

Outcome of pragmatic ideas by John Dewey.

Definitions

A project is a problematic act carried out to its completion in its natural setting.

- Stevenson

A project is a bit of real life that has been imported to school

- H.G. Ballard

Steps of project method

1. Providing the situation
2. Choosing and purposing
3. Planning of the project
4. Execution of the project
5. Evaluation of the project
6. Recording of the project

Merits of project method

1. Psychological basis: child centered, self chosen as per interest, law of readiness, work in social environment, learning by doing
2. Provides integration of physical and mental activities

3. Democratic way of teaching
4. Development of social values
5. Positive attitude towards manual work
6. Provides teaching through correlation

Limitations of project method

1. Costly
2. Neglecting intellectual work
3. Too much time consuming
4. Not helpful in providing systematic and adequate learning
5. Not suitable for the shirkers and shy
6. Practical difficulties
7. Lack of competent teachers

Problem solving method

Problems solving is a planned attack upon difficulties or perplexity in which a person uses his ability and capacity to find a suitable a satisfying solution

A problem exists for an individual when he has a definite goal and he cannot reach by the behaviors pattern which he already has available

- Gates

Steps in problem solving

1. Formation and appreciation of the problem
2. Collection of relevant data and information
3. Organization of data
4. Drawing conclusion
5. Testing conclusion

Merits of problem solving method

1. Psychological method

2. Helpful in the development of mental faculties
3. Helpful in the development of scientific attitude
4. Helpful in the development of problem solving ability
5. Helpful in making learning practical and useful
6. Helpful in promoting good habits and virtues
7. Helpful in maintaining healthy relationship

Limitations of problem solving method

1. Limited applicability
2. Difficulty in covering syllabus
3. Difficulty on the part of student
4. Increase in the responsibilities of teachers
5. Lack of proper means and material
6. Not suitable for present day situation in our school

Survey method

Meaning

The survey according to recent social science terminology is organized attempt to analyze, interpret, and report the present status of social institution, group area.

-Whitney F. L.

A social survey is an inquiry into the composition, activities and living condition of a group of people.

Procedure of survey method

1. Selection of a problem
2. Preparation of questionnaire

3. Collection of facts and figure
4. Organization of facts
5. Generalization
6. Evaluation and application

Merits of survey method

1. Based on psychological law of learning
2. Various skills are developed
3. Scientific attitude
4. Democratic citizenship
5. Cramming is discouraged

Limitations of survey method

1. Time consuming
2. All generalizations and conclusions cannot reach through survey
3. Heavy curriculum,
4. Teachers and textbooks
5. Not suitable for secondary school
6. Haphazard
7. Domination by brilliant students

Procedure of survey

1. Selection of a problem
2. Preparation of questionnaire
3. Collection of facts and figure
4. Organization of facts
5. Generalization
6. Reporting

Unit 4: Innovative Trends in teaching of economics

Cooperative Learning Strategies in Teaching of Economics.

(Think –Pair- Share, Jig Saw, Reciprocal Peer Teaching)

COOPERATIVE LEARNING TECHNIQUE

Cooperative learning is a successful teaching strategy in which small teams, each with students of different levels of ability, use variety of learning activities to improve their understanding of a subject.

Each member of a team is responsible not only for learning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement. Students work through the assignment until all the members successfully understand and complete it. Cooperative efforts result in participants striving for mutual benefit so that all group members.

ELEMENTS OF COOPERATIVE LEARNING

1. Positive interdependence
2. Face to face interaction
3. Individual and group accountability
4. Interpersonal and small-group skills
5. Group processing

ADVANTAGES OF COOPERATIVE LEARNING TECHNIQUE

1. Face to face learning situations promote an atmosphere of cooperation and empathy
2. Personal relationships are usually less problematic.
3. It encourages broader skills of cooperation and negotiation.
4. It promotes learner autonomy
5. Promotes students' learning and academic achievement

6. Increases students' retention
7. Enhances students' satisfaction with learning experience
8. Helps students to develop skills in oral communication
9. Develop students' social skills
10. Gain confidence from each other's effort
11. Recognize that all group members share a common fate

DISADVANTAGES OF COOPERATIVE LEARNING TECHNIQUE

1. It is likely to be noisy. Some teachers feel that they lose control, and the whole-class feeling which has been painstakingly built up may dissipate when the class is split into smaller entities.
2. Not all the students enjoy it, since they would prefer to be the focus of the teacher's attention rather than working with their peers. Sometimes students find themselves in uncongenial groups and wish they could be somewhere else.

Think – Pair - Share

Think-Pair-Share is a cooperative discussion strategy that gets its name from the three stages of student action, with emphasis on what students are to be **DOING** at each of those stages.

☉ 1) Think

The teacher provokes students' thinking with a question, prompt, or observation. The students should take a few moments (probably not minutes) just to **THINK** about the question.

☉ 2) Pair

Using designated partners, nearby neighbors, or a desk mate, students **PAIR** up to talk about the answer each came up with. They compare their mental or written notes and identify the answers they think are best, most convincing, or most unique.

☉ 3) Share

After students talk in pairs for a few moments (not minutes), the teacher calls for pairs to SHARE their thinking with the rest of the class. Often, the teacher or a designated helper will record these responses on the board or on the overhead.

Advantages of Think-Pair-Share

- ⦿ Think-Pair-Share is helpful because it structures student discussion.
- ⦿ Students follow a prescribed process that limits off-task behavior.
- ⦿ Accountability is built in because each must report to a partner, and then partners report to the class.
- ⦿ In the first stage, students simply THINK - there is Wait Time – they actually have time to think about their answers.
- ⦿ The teacher has posed the question, and has EVERYONE thinking about the answer, which is much different from asking a question and then calling on an individual student.
- ⦿ Students get to try out their answers in the private sanctuary of the pair, before having to "go public" in front of the rest of their classmates.
- ⦿ Students who would never speak up in class are at least giving an answer to SOMEONE this way.
- ⦿ Students also discover that they rethink their answer in order to express it to someone else, and they also often elaborate on their answer or think of new ideas as the partners share.
- ⦿ As the whole group comes back together, there are an array of answers that enhance the classroom conversation, increasing student engagement and reading comprehension.

Jigsaw

It is a teaching technique invented by social psychologist [Elliot Aronson](#) in 1971.

Students of a normal-sized class (26 to 33 students) are divided into competency groups of four to six students, each of which is given a list of subtopics to research.

Individual members of each group then break off to work with the "experts" from other groups, researching a part of the material being studied, after which they return to their starting body in the role of instructor for their subcategory.

Importance

The strategy is an efficient teaching method that encourages listening, engagement, interaction, peer teaching, and cooperation by giving each member of the group an essential part to play in the academic activity.

Both individual and group accountability are built into the process.

Reciprocal peer teaching (RPT)

- ⊙ Reciprocal peer teaching (RPT). It is one form of cooperative learning.
- ⊙ Reciprocal peer teaching illustrates circumstances where students alternate roles as teacher and student.
- ⊙ RPT is a collaborative approach in learning.
- ⊙ Reciprocal peer tutoring (RPT) is a peer assisted learning intervention that was developed originally for pairs of low-achieving urban, elementary school students (Fantuzzo, King and Keller, 1992).

Features

- ⊙ Effective strategy to help children in high-risk environment feel academically competent and make achievement gains.
- ⊙ Students with similar skills/needs tutor each other, alternate roles (within session, across sessions)
- ⊙ Teacher trains all students in procedures, skills etc
- ⊙ Both students gain insights into learning strategies/processes/styles
- ⊙ Teacher monitors, provides feedback etc
- ⊙ Can be used as apprenticeship for subsequent cross age/ability tutoring – part of tutor training

- ⊙ Can be element in whole school peer support programme

In this procedure, students are assembled in groups of two or more and are trained to work together on a specific academic task. The students work together to prompt, monitor, and evaluate each other, while working toward group goals.

The typical procedure was to pair students throughout the semester. Students in each dyad were responsible for preparing and constructing multiple-choice format test, administering these tests to each other, and providing explanations for incorrect responses to their partners.

Thus, the procedure enabled students to provide facilitating processes for each other instruction, evaluation, feedback and social support.

Three basic principles underlying RPT

- ⊙ Increasing academic engagement,
- ⊙ Increasing the opportunity to respond, and
- ⊙ Increasing timely feedback regarding students' responses.

Steps

- ⊙ Students are divided into group
- ⊙ Each group become expert in one of the themes
- ⊙ Orientation to the block : introduction to each theme by faculty
- ⊙ Group preparation of lesson plan and teaching
- ⊙ Contact session with facilitator
- ⊙ Presentations
- ⊙ Group discussion

Advantages of RPT

- ⊙ Improve understanding of course content
- ⊙ Develop communication skills, teamwork

- ⊙ It helps in improving leadership skills, confidence and respect for peers.
- ⊙ Reciprocal Peer Teaching (RPT), along with effective mentoring, has been proven to be a successful tool
- ⊙ It is a cost effective,
- ⊙ Proactive approach to attaining overall academic achievement.
- ⊙ Students in need of remedial instruction can accurately and effectively tutor one
- ⊙ Students with average and below average IQ alike may develop their self confidence as they are trained to support one another by acting as tutor and tutee.
- ⊙ College Teachers may use this peer-mediated approach to train students' social skills, enhance their self-efficacy, and remedy skill deficiencies

Concept map

In the 1960s, Joseph D. Novak (1993) at Cornell University began to study the concept mapping technique. His work was based on the theories of David Ausubel (1968),

"A concept map is a graphical representation where nodes (points or vertices) represent concepts, and links (arcs or lines) represent the relationships between concepts. The concepts, and sometimes the links, are labeled on the concept map. The links between the concepts can be one-way, two-way, or non-directional. The concepts and the links may be categorized, and the concept map may show temporal or causal relationships between concepts.

Concept mapping is a technique that allows you to understand the relationships between ideas by creating a visual map of the connections. Concept maps allow you to:

- (1) See the connections between ideas you already have (which can be helpful in studying for an exam);

(2) Connect new ideas to knowledge that you already have (which can help you organise ideas as you find them in researching for an essay or research paper); and

(3) Organize ideas in a logical but not rigid structure that allows future information or viewpoints to be included (which can help you absorb and adapt to new information and ideas).

Steps

- ⊙ Read text and highlight light important ideas
- ⊙ Identify key concepts
- ⊙ Make list of general and specific concepts
- ⊙ Place the concepts
- ⊙ Join the concepts with lines and label the lines with linking words
- ⊙ Finish mapping of all concepts
- ⊙ Put cross links
- ⊙ Put arrows

Uses of concept map

- ⊙ Teaching and revision topic
- ⊙ Reinforce understanding
- ⊙ Check learning and identify misunderstanding
- ⊙ Assessment
- ⊙ To generate ideas
- ⊙ To communicate complex ideas
- ⊙ To aid learning by explicitly integrating new and old knowledge.

Advantages

- ⊙ Dynamic tool

- ⦿ Clarify misunderstanding
- ⦿ Deeper understanding
- ⦿ Visual symbols are quickly and easily recognized;
- ⦿ Minimum use of text makes it easy to scan for a word, phrase, or the general idea; and
- ⦿ Visual representation allows for development of a holistic understanding