**Q1) Explain the principle of economics?**

10 Principles of Economics

Gregory Mankiw, in his text ***Principles of Economics***, describes 10 principles of [Economics](https://wiki.ubc.ca/Category:Economics)[[1]](https://wiki.ubc.ca/10_Principles_of_Economics#cite_note-1), which are summarized below:

1. **People Face Tradeoffs**
   * To get one thing, we usually have to give up something else
     + Ex. Leisure time vs. work
2. **The Cost of Something is What You Give Up to Get It**
   * Opportunity cost is the second best alternative foregone.
     + Ex. The opportunity cost of going to college is the money you could have earned if you used that time to work.
3. **Rational People Think at the Margin**
   * Marginal changes are small, incremental changes to an existing plan of action
     + Ex. Deciding to produce one more pencil or not
   * People will only take action of the marginal benefit exceed the marginal cost
4. **People Respond to Incentives**
   * Incentive is something that causes a person to act. Because people use cost and benefit analysis, they also respond to incentives
     + Ex. Higher taxes on cigarettes to prevent smoking
5. **Trade Can Make Everyone Better Off**
   * Trade allows countries to specialize according to their comparative advantages and to enjoy a greater variety of goods and services
6. **Markets Are Usually a Good Way to Organize Economic Activity**
   * Adam Smith made the observation that when households and firms interact in markets guided by the invisible hand, they will produce the most surpluses for the economy
7. **Governments Can Sometimes Improve Economic Outcomes**
   * Market failures occur when the market fails to allocate resources efficiently. Governments can step in and intervene in order to promote efficiency and equity.
8. **The Standard of Living Depends on a Country's Production**
   * The more goods and services produced in a country, the higher the standard of living. As people consume a larger quantity of goods and services, their standard of living will increase
9. **Prices Rise When the Government Prints Too Much Money**
   * When too much money is floating in the economy, there will be higher demand for goods and services. This will cause firms to increase their price in the long run causing inflation.
10. **Society Faces a Short-Run Tradeoff Between Inflation and Unemployment**
    * In the short run, when prices increase, suppliers will want to increase their production of goods and services. In order to achieve this, they need to hire more workers to produce those goods and services. More hiring means lower unemployment while there is still inflation. However, this is not the case in the long-run.

**OR**

**Q1) Explain the principle of economics?**

* The word economy comes from a Greek word for “one who manages a household. Economics is the study of how society manages its scarce resources.

**HOW PEOPLE MAKE DECISIONS:**

**PRINCIPLE #1: PEOPLE FACE TRADEOFFS**

* There is no such thing as a free lunch.
* Example 1- The classic trade-off is between “guns and butter.” The more we spend on national defense to protect our shores from foreign aggressors (guns), the less we can spend on consumer goods to raise our standard of living at home (butter).

**PRINCIPLE #2: THE COST OF SOMETHING IS WHAT YOU GIVE UP TO GET IT**

* Because people face tradeoffs, making decisions requires comparing the costs and benefits of alternative courses of action.
* For example- the decision whether to go to college or to work outside. The benefit of going college is intellectual enrichment and a lifetime of better job opportunities but this decision will cost very much.
* The opportunity cost of an item is what you give up to get that item.

**PRINCIPLE #3: RATIONAL PEOPLE THINK AT THE MARGIN**

* Marginal changes small incremental adjustments to a plan of action.
* A rational decision maker takes an action if and only if the marginal benefit of the action exceeds the marginal cost

**PRINCIPLE #4: PEOPLE RESPOND TO INCENTIVES**

* Because people make decisions by comparing costs and benefits, their behavior may change when the costs or benefits change. That is, people respond to incentive.
* For example-When the price of an apple rises, for instance, people decide to eat more grapes and fewer apples, because the cost of buying an apple is higher. At the same time, apple orchards decide to hire more workers and harvest more apples, because the benefit of selling an apple is also higher.

**HOW PEOPLE INTERACT**

**PRINCIPLE #5: TRADE CAN MAKE EVERYONE BETTER OFF**

* Ford and Toyota compete for the same customers in the market for automobiles. Trade between two countries can make each country better off.
* For example-When a member of your family looks for a job, he or she competes against members of other families who are looking for jobs. Families also compete against one another when they go shopping, because each family wants to buy the best goods at the lowest prices. So, in a sense, each family in the economy is competing with all other families.

**PRINCIPLE #6: MARKETS ARE USUALLY A GOOD WAY TO ORGANIZE ECONOMIC ACTIVITY**

* Market Economy - An economy that allocates resources through the decentralized decisions of many firms and households as they interact in markets for goods and services.
* In a market economy, the decisions of a central planner are replaced by the decisions of millions of firms and households

**PRINCIPLE #7: GOVERNMENTS CAN SOMETIMES IMPROVE MARKET OUTCOMES.**

* There are two broad reasons for a government to intervene in the economy: to promote efficiency and to promote equality.
* Market failure a situation in which a market left on its own fails to allocate resources efficiently.
* The reasons of market failure are-
* Externality-An externality is the impact of one person’s actions on the well-being of a bystander.
* Market power the ability of a single economic actor (or small group of actors) to have a substantial influence on market prices.

**HOW THE ECONOMY AS A WHOLE WORKS**

**PRINCIPLE #8: A COUNTRY’S STANDARD OF LIVING DEPENDS ON ITS ABILITY TO PRODUCE GOODS AND SERVICES**

* Productivity-The amount of goods and services produced from each hour of a worker’s time.
* In nations where workers can produce a large quantity of goods and services per unit of time, most people enjoy a high standard of living.

**PRINCIPLE #9: PRICES RISE WHEN THE GOVERNMENT PRINTS TOO MUCH MONEY**

* Inflation -an increase in the overall level of prices in the economy.
* In almost all cases of large or persistent inflation, the culprit turns out to be the same—growth in the quantity of money. It must not be too slow or too fast.

**PRINCIPLE #10: SOCIETY FACES A SHORT-RUN TRADEOFF BETWEEN INFLATION AND UNEMPLOYMENT**

* The curve that illustrates the trade-off between inflation and unemployment is called the Phillips curve.
* When the government reduces the quantity of money, for instance, it reduces the amount that people spend. Lower spending, together with prices that are stuck too high, reduces the quantity of goods and services that firms sell. Lower sales, in turn, cause firms to lay off workers. Thus, the reduction in the quantity of money raises unemployment temporarily until prices have fully adjusted to the change.

**Q2) a) Define career planning staff and component of career management system?**

# ****CAREER PLANNING IN AN ORGANIZATION:****

Career planning is the process by which one selects career goals and the path to these goals. The major focus of career planning is on assisting the employees achieve a better match between personal goals and the opportunities that are realistically available in the organization. Career programmers should not concentrate only on career growth opportunities. Practically speaking, there may not be enough high level positions to make upward mobility a reality for a large number of employees. Hence, career-planning efforts need to pin-point and highlight those areas that offer psychological success instead of vertical growth.

Career planning is not an event or end in itself, but a continuous process of developing

human resources for achieving optimum results. It must, however, be noted that individual and organizational careers are not separate and distinct. A person who is not able to translate his career plan into action within the organization may probably quit the job, if he has a choice. Organizations, therefore, should help employees in career planning so that both can satisfy each other’s needs.

# ****Components of a Career Development System****

A career development system includes a variety of components for use in the organizations. In order to increase the efficiency of the system, the HR mangers must have complete knowledge about these tools since they play a role of consultant when employees and supervisors use this system. Plus, they are responsible for designing and developing an effective career development system for their organization. Some activities or components are known as individual career planning tools while some are used for organizational career management. To achieve greater efficiency, most organizations use a right combination of both types of activities. Let us understand these tools and activities to learn in-depth about career development system:

* **Self-Assessment Tools:** This is the first technique that is widely used by organizations in their efforts to career management of their employees. This is a career exploration tool where individuals complete self-assessment exercises and fill information about their skills, interests, competencies, work attitudes and preferences, long and short term goals and obstacles and opportunities. The whole exercise helps them understand their own desires and aspirations and likes and dislikes.
* **Career Planning Workshops**: Once employees are through their self-assessment, they share their findings with other individuals and their supervisors in career-planning workshops. It allows them to receive feedback from others and check the reality of their plans and aspirations. They may change their plans if they find them unrealistic and move in new direction.
* **Individual Counseling:** It is one of the most common activities that are undertaken by almost all people developing organizations. Generally, individual counseling is provided by career development specialists, HR specialists or life skills development trainers. Some organizations hire them from outside while some have their own full fledged departments where they recruit and hire trainers for full time. It helps employees in understanding their own goals, making a change in them if required and working on improving their skills and competencies.
* **Organizational Assessment Programs**: Organizational assessment programs include tools and methods for evaluating employees’ potential for growth within the organization. Johnson & Johnson is one company that uses these programs to assess the careers of their employees and evaluate their potential in order to facilitate the staffing and development of special teams known as “tiger teams”. These special teams are formed to speed up the development of new products. The most popular programs under this category include assessment centers, psychological testing, 360 degree appraisal, promo ability forecasts and succession planning.
* **Developmental Programs:** Developmental programs are used by an organization to develop their employees for future positions. They can be internal as well as external and can be performed under the supervision of human resource staff or trainers and specialists from outside. These programs include assessment centers, job rotation programs, tuition refund plans, internal training programs, external training seminars and formal mentoring programs.

In addition to these programs, there are several other components of a career development system such as career programs for special target groups, fast-track or high potential employees, supervisors, senior-level employees, women, technical employees, minorities and employees with disabilities, etc.

**Q2) b)** **Define economic efficiency in engineering?**

**Q3) a)** **Define Fiqah and Islamic economy?**

**Definition:** Fiqah in Islam is known as “Islamic jurisprudence,” one of the dynamic disciplines, dealing with the practical regulations and rules of the sharīʿah, such as observance of worships, rituals, and social legalism derived from the primary sources of the Qur’ān and sunnah. In other words, fiqh is the legal dimension of Islam and increased expansion of the sharīʿah laws. Fiqh can best be defined as the study of the “science of the Divine Law” in Islamic jurisprudence. It embraces variant approaches and develops in the context of different culture and tradition, while applying the methodologies and applications of God’s revelation. Fiqh envisages the efforts of jurists to understand and to practice the will of God and His guidance in the interface of individual, societal, communal, and civilizational settings.

**Meaning of Fiqh:**

Fiqhis an Arabic term derived from the root

**Islamic Economics:**

It is difficult to understand and study Islamic economics and the structure of the Islamic financial mechanism in isolation; unlike in ‘Western' type economies where it is done with some degree of ease. Islamic Economics differs fundamentally from man-made laws and systems in defining economic problem.

While Islam is one of the principal global religions, more importantly it is a wholly integrated way of life, where various principles are interrelated and a dictate under one aspect e.g. family, can logically be relevant to another e.g. jurisprudence. For starters it can be put that Islamic economics is based on the socio-economic paradigm. In this approach Islam is seen as a system of ethics.

Possibly one of the starting points to understand Islam and Islamic economics, is what can be considered as the central theme – 5:120 The Qur'an, where it states that dominion of the cosmos belongs to God (Allah) and therefore we are but His vice-regents (or trustees) of all this dominion, whether we seemingly own some part of this individually, jointly or otherwise. Naturally therefore, all economic and financial activities that would effect and regulate our lives, must be driven by this key principle.

There are many contributory verses that guide and lay down the economic and financial principles, to human beings as individuals or collectively as a society or as a nation. These principles form the Islamic law which is known as Shari'ah (the corpus of Islamic law based on Divine guidance, as given by the Quran and the Sunnah).

**Q3) b) Define Basic Principle of Islamic Banking?**

## What is Islamic Finance? Islamic finance is a type of financing activities that must comply with Sharia (Islamic Law). The concept can also refer to the investments that are permissible under Sharia.

The common practices of Islamic finance and [banking](https://corporatefinanceinstitute.com/resources/careers/jobs/banking-finance-accounting-job-titles/) came into existence along with the foundation of Islam. However, the establishment of formal Islamic finance occurred only in the 20th century. Nowadays, the Islamic finance sector grows at 15%-25% per year, while Islamic financial institutions oversee over $2 trillion.

lslam has set values and goals that meet all the economic and social requirements of the human life. Islam is a religion that not only focuses on the success of the afterlife but also organize the life of a person perfectly. The Islamic laws are known as Sharia that means clear path. In the present is banking system is against the principles of Islamic banking. Due to the reason, here we discuss the seven major principles of Islamic Banking and finance:

**1. Profit and Loss Sharing:**

It is one of the best principles of Islamic finance where the partners will share their profit and loss according to the part they played in the business. There will be no guarantee on the rate of the returns that the Muslims will play the part of a partner and not a creditor.

**2. Shared Risk:**

In the economic transactions, the risk sharing is promoted by the Islamic banking. When two or more parties will share the risk following the principles of Islamic banking the burden of the risk will be divided and reduced in the parties. So it will improve the economic activity of the state.

**3. Riba:**

It can be regarded as the prohibition of interest:

The wealth will get the return without any risk or effort.

Regardless of the outcome of economic activity the person who gets the loan has to return the money and Riba to the lender.

In principles of Islamic banking, taking advantages of the issues that other are facing is unjust.

**4. Gharar:**

According to the Islamic finance principles, Muslims are not allowed to participate in the ambiguous and uncertain transactions. According to Islamic rules, both parties should have a proper control over the business. As well as the complete information should be shared with both parties so that the profit and loss will be equally shared.

**5. Gambling**:

In Islam, the acquisition of wealth through evil means or participation in gambling is prohibited. It will protect the Muslims from the conventional insurance products because that is a type of gambling. On the other hand, Islamic banking works in Takaful that involves mutual responsibility and shared risks.

**6. No Investment In Prohibited Industries:**

The industries that are harmful to society or have a threat to the social responsibilities are prohibited in Islam. They include:

Pornography.

Prostitution.

Alcohol.

Pork.

Drug.

According to the Islamic finance principles, you are not allowed to invest in such industries. You cannot even participate in the mutual funds that will help the industry to flourish.

**7. Zakat:**

There is a property tax included in the rules of Islam that it known as Zakat, which allows the balanced distribution of wealth. According to the Islamic banking principles the fair amount of Zakat is deducted from the accounts of Muslim in the holy month of Ramadan. Islamic banks promote this social responsibility and distribute the amount among the needy.

**CONCLUSION:** So we can say that the principles of Islamic finance guide us to invest in an industry that will help us to achieve the financial and social objectives that have been determined by Islam. The Islamic finance principles have been designed to make an economy successful. So it is a way of saving our money from being invested in a wrong path.

**Q4) Explain knowledge Area of management system?**

Project Management rules are governed by Project Management Body of Knowledge called PMBOK which is currently in its 6th edition. According to it, there are 49 processes mapped across 5 phases and 10 knowledge areas.

The 10 Knowledge Areas that have been defined in project management are:

**1)Project Integration Management:**

The journey of Project Integration starts with the preparation of the Charter which is the primary bible for any project manager and concerned team to investigate the details of the project. Based on which, the Project Management plan is made and given for execution when moving from initiation to planning phase, after which the whole responsibility of execution starts with managing & direction of the project work, preparation of the project knowledge and facts to be presented across to the different stakeholders and monitory agencies.

In the Project integration, monitoring and controlling phase has a lot of importance with the monitoring and controlling team looking to make the best of the work completed along with the implementation of any change management if required in the due course of the ongoing project.

Finally, the Integration management ends with the closure and handover of the project to the customer with thorough checks and signoffs from concerned teams.

**2)Project Scope Management:**

Defining the project scope is a great step towards making the right inroads into the next development and execution of set goals. The scope here defines collecting the requirements of the project, defining the goals and missions that will complete the project diagram and making the right work breakdown structure that will help the team to go ahead with the schedule management plan for its implementation in the planning stage.

Work Breakdown Structure (WBS) is an important step as the main work related to the project scope is broken down into minute pieces that will aid the team via brainstorming and deeper understanding of the requirements. The Scope Management does not have any role in the Execution phase and in Monitoring and Controlling phase, the scope of the project is validated and monitored if the project has been successfully executed as per the first accepted and drawn scope insights.

**3)Project Schedule Management:**

Time is an important factor for the completion of the project, and it is one of the KPIs that can make the customer come back for consecutive deals with the company and boost the performance and ratings in the industry. Schedule Management starts with planning with the inputs of the Work Breakdown structure, defining the activities that will make the project execution smoother, sequencing the activities in order to help the executor and keep the schedule in order.

Estimation of the schedule keeping different factors in mind – like availability of the team and their skills, customer requirement and project charter information; after all the data is taken into consideration, the schedule is developed & published.

Maintaining the schedule is a big task and controlling it will provide brownie points in completion of the project as part of the Monitoring & Controlling phase.

**4)Project Cost Management:**

Project Cost is another important factor that will determine the credibility and effectiveness of the company in the execution of the project in the accepted invoice amount. The steps involved in this knowledge area is spread across planning and monitoring & controlling phases; In planning phase – the cost management and disbursement plan is made for each entity with inputs of the Schedule management, cost estimated and finally the budget for each phase is allocated on a project basis.

In the Monitoring & Controlling phase, the cost is monitored as the project is executed and controlled in case of overheads beyond the given permissible limits.

Overall, a report is generated for assessment and will be used as a precursor for insights and business sense to be captured when performance is being measured from a project perspective.

**5)Project Quality Management:**

Project quality is one of the prominent indicators that determine the deliverables, the cost and schedule are directly proportional to the quality and project scope that is being carried over by the final delivery.

Quality Management comes into play in planning, execution and manage & control phases; proper planning will be the key to a great quality that is maintained across all the phases with inputs from cost management and people behind the project who manage & execute for the customer as per their requirements.

In the monitor & control phase, controlling the quality is the key as the customer expects the best while the project is getting handed over for its destination and application.

**6)Project Resource Management:**

Resources are the backbone of the project in terms of human capabilities and planning your overall work schedule. The tasks under this knowledge category are spread across planning, Executing and Managing & Control Phases. The work starts with planning the resources from the inputs of cost, quality and schedule management keeping in mind the project scope with special focus on the deliverables.

Next, the estimation of the resources takes place where the availability of the resources is taken into consideration and activity to be assigned.

In the Execution phase, acquisition of the resources for the project along with deployment of the skills to deliver the goals is set as per schedule, managing them to ensure all the tasks are done in time through proper planning.

Once the execution in place, controlling of resources is done to ensure the deliverables are delivered to the destination customer on time.

**7)Project Communications Management:**

Communications with different people involved internally or externally is the lifeline for success or failure of the project. Communication could be synchronous or asynchronous in nature where all team members are present or it can be in the form of Email, Dashboards, etc.

This one is spread across planning, execution and managing & controlling phases – managing the communications is the key for good relationship management among the team members, monitoring them is also necessary for regular intervals to ensure ironing of all issues is done in time.

Monitoring can be done via the use of an assertive, active and passive voice that power the language and way the things are being reported back to the customer regarding status reports and meeting procedures followed to reduce friction between the team members.

**8)Project Risk Management:**

It is a process to identify the potential risks that will affect your project, analyze them to see how it is going to make an impact for the pace of implementing the project over the planned schedule.

Risk Management tenure runs over Planning, Executing, Monitoring & Controlling phases that are majorly part of the project before the closure.

In the planning stage, Risk Management runs in with risk management plan preparation, identifying the potential risks and branding them positive or negative based on its impact, analysis & assessment of them through qualitative and quantitative angles, work on the responses for the identified risks.

In the Execution stage, the risks are overseen, and action is taken to mitigate the same…, based on the response and monitoring them to see if the insights can be applied for a similar project next time.

**9)Project Procurement Management:**

Procurement refers to the vendor’s management and here it is purely referred to the supplies that will be affecting the deliverables of the project.

This area is run across the planning phase with planning for the procurement of the supplies from vendors in the allocated budget and quality assured as it will be affecting the deliverables for the customer.

In the Executing phase, the procurements are done and executed for the deliverables and checked for its quality control in the Managing & Controlling phase.

This is an area referring to both internal and external factors and vendors who will be part of the project and ensure good quality deliverable with procurement order from qualified organizations.

**10)Project Stakeholder Management:**

One of the most important areas which occupy a great extent of responsibility from initiating to managing & controlling phases. Project Stakeholder Management starts with the identification of possible stakeholders to be part of the project and they are classified as internal and external, the people nominated to be represented in the project can be from the customer side and executor side.

In the planning phase, planning the rights of the stakeholders and their roles are set up as per their engagement.

In Executing phase, stakeholder engagement is managed, and any issues are ironed out with regular communication channel.

In Managing & Controlling phase, controlling the engagement before the sign off is done and ensuring the smooth acceptance of the deliverables.

Knowledgeable areas in project management is a big aspect and it forms the nucleus of the total management plan spread over 5 phases and 10 areas with 49 processes that define the complete life cycle of the project.

Covering the aspects of Integration, Scope, Schedule, Cost, Quality, Resources, Risk, Procurement and Stakeholder engagement – this covers all the matrix of work and ensures the end to end completion of the project from initiation to closure.

Covering the axis from internal to external vendors, people, and contractors who will be part of the project, knowledgeable areas help you gain insights that will take your organization to upper heights and build competent teams for handling multiple projects with multitasking.

**Q5) Define modern concept of management?**

To understand the concept of management we must know the meaning of management. Management is defined differently by different authors. The Traditional Viewpoint of management is considered inappropriate in the present day environment where workers are educated and have higher level of aspirations. In present day environment it is not possible to direct the efforts of employees by force.

It is necessary to create an environment so that employees perform in a desired manner; on the other hand, traditional definition does not define functions of management.

According to modern concept “management is a process of getting things done with the aim of achieving goals effectively and efficiently”.

**Modern definition insists on:**

**1. Process:**

Process refers to the series of steps or basic functions necessary to get the things done. These steps are planning, organizing, staffing, directing and controlling.

**2. Effective and efficient performance:**

Modern concept of management says that employees must be effective as well as efficient. Effectiveness refers to completion of work or achievement of target on time. Efficiency refers to optimum utilization of resources or no wastage of resources, both are must for every organization; for example, if the annual target of a worker is to produce 1000 units of output, the employee achieves this target by wasting various resources and by mishandling the machinery then the organization will have no benefit so only effectiveness is not required. It must be accompanied by efficiency.

**3. Achievement of group, common or organizational goal:**

The modern concept of management insists that all the functions and activities of managers must be directed towards the achievement of organizational goal and this goal should be the goal of every employee and must be considered as group or common goal.

**Relation between Efficiency and Effectiveness:**

Effectiveness and efficiency are equally important as being effective means completing the task on time but it is not enough to just complete the task on time but it must be done correctly without any wastage of resources. Effectiveness & efficiency are the two sides of a same coin; one without other is of no use.

Effectiveness and efficiency together lead to higher profit and prosperity of an organization. And failure of organization is due to inefficiency and ineffectiveness.

## **Characteristics of Management**

## Basic characteristics of management are:

1. **Management is a goal-oriented process**: An organization has a set of basic goals which are the basic reason for its existence. Management unites the efforts of different individuals in the organization towards achieving these goals.
2. **Management is all pervasive**: The activities involved in managing an enterprise are common to all organizations whether economic, social or political.
3. **Management is multidimensional**: Management is a complex activity that has three main dimensions:
   1. **Management of work**: All organizations exist for the performance of some work. Management translates this work in terms of goals to be achieved and assigns the means to achieve it.
   2. **Management of people**: Human resources or people are an organization’s greatest asset. Managing people has two dimensions:
      1. it implies dealing with employees as individuals with diverse needs and behavior;
      2. it also means dealing with individuals as a group of people

The task of management is to make people work towards achieving the organization’s goals, by making their strengths effective and their weaknesses irrelevant.

* 1. **Management of operations**: It requires a production process which entails the flow of input material and the technology for transforming this input into the desired output for consumption

1. **Management of operations**: It requires a production process which entails the flow of input material and the technology for transforming this input into the desired output for consumption
2. **Management is a continuous process**: The process of management is a series of continuous, composite, but separate functions (planning, organizing, directing, staffing and controlling). These functions are simultaneously performed by all managers all the time.
3. **Management is a group activity**: An organization is a collection of diverse individuals with different needs. Management should enable all its members to grow and develop as needs and opportunities change
4. **Management is a dynamic function**: Management is a dynamic function and has to adapt itself to the changing environment. In order to be successful, an organization must change itself and its goals according to the needs of the environment.
5. **Management is an intangible force**: Management is an intangible force that cannot be seen but its presence can be felt in the way the organization functions

**Q5) b)** **Define Relation of Engineering to Economics?**