### **HUMAN RESOURCE MANAGEMENT**

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#### 1.0 OBJECTIVES

After this module, students will be able to –

- 1. To differentiate the styles of leadership.
- 2. To understand how different approaches to leadership work.
- 3. To discuss leadership role of multiple organisations.
- 4. To critically evaluate the importance of classroom management.
- 5. To understand the steps of decision-making skills.
- 6. To develop an understanding for the need of supervising in the institution.
- 7. To apply the strategies for stress management.

#### 1.1 LEADERSHIP ROLES

#### 1.1.1 Introduction:

Before coming to the topic of Leadership let us first understand the concept of being a 'leader' in an institution. Generally, in any set up, a group of people are involved at multiple positions to achieve their goals, and thus to achieve those goals there may be some agreements and disagreements with reference to one's competence, working style, skills or opinions. Such kind of situations demand an individual who can control and lead the system towards a workable environment. Such an individual is called as a leader and the quality he possesses is 'leadership'.

#### **Definition-**

Leadership as defined by the oxford dictionary- "the action of leading a group of people or an organisation."

"An army of sheep led by a lion is better than an army of lions led by a sheep." Alexander the great.

The way a group of people are instructed is highly proportional to the instructions given by their leader. A leader pushes others to achieve their best with correct guidance to achieve anything which is new and novel.

#### 1.1.2 Functions of a leader:

A leader has the quality of influencing others behaviour towards achieving a goal. In simple terms, we can say that leadership is a process where a leader is seen directing its followers to attain the same objective. In order

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to influence and direct people, a leader has to function in the given pointers below-

**To be Supportive:** a leader has to enable themselves of being in support with the followers in order to attain the accomplishment of assigned tasks. The sole objective of leadership is not only to instruct the followers towards an action but also support them by guiding or getting involved with the followers whenever required.

**To formulating an ideology:** to achieve any objective, a desired mindset is required which will reflect the crux of an endeavour. Thus, the leader, here requires to formulate a belief system which will be a framework for the followers. The leaders formulate the best framework based on the nature of the goals to be achieved.

**To be a Role Model:** a leader has to be a role model first for his followers by practising values for himself and then applying it to influence people. He should possess all the qualities and capabilities for any challenged circumstance. Owning such qualities, he serves as a channel of inspiration for his followers

**To be a Mediator:** a leader also serves as a mediator in day-to-day situations. In a pressurised environment, the leader works as a mediator to resolves conflicts of the people and guides them to reach a mutual agreement. A leader also represent himself on behalf of his followers, organisation and the values he holds. Being a representator, gives the leader to act maturely and communicate the differences by building a bridge.

**To Motivate:** A leader is a constant source of motivation for his followers, he inspires them to keep going, to raise their spirit when things go south and also being a guiding angel to achieve their goals. The leader controls the rewards and penalties as a way of channelling them to perform better and enhance their productivity.

**To Strategize:** the main objective of a leader is to strategize the role of followers for the smooth onboarding process. This includes the principles and rules for building a teamwork. It is the function of a leader to implement a working mechanism which suits the nature of the work and the strength of the followers so that the goals can be achieved easily.

**To Organise:** to enhance productivity, the leader has to arrange the group in a manner where the followers could show their innate talents as well as handle tasks collectively. The leader sometimes brings the followers together to combine their abilities and achieve major task judiciously.

**Utility of power:** as it says, with more power comes more responsibility, and as a leader, it is expected to be more responsible in handling and assigning tasks equally without any prejudice and any complexity in any matter. A leader is a guiding force which scaffolds the followers to build themselves in order to achieve their objective.

#### 1.1.3 Styles of leadership:

The leadership styles are based on how leaders use their power. Generally, leadership is categorised in three broad styles-

#### **Autocratic / commanding style:**

The leader makes the decisions without taking any input from followers who report to him. This archaic style has very few followers as it discourages change. It is a formal environmental work style. This style can be summarised as the leader makes the decision and there is no scope of questioning to the leader.

#### **Democratic style:**

The leader here, consults the subordinates and encourages participation in decision making skills. The leader is open minded and thus the relationship between them is informal.

#### Lassiz fair style:

The lassis fair style is also called as free-rein style. The leader uses his power sparingly. It involves minimum interference of the management in the daily functioning of the institution. The leader is more of a supporter than a commander, most of the decisions are taken by subordinates and is achieved by them by strategizing the framework.

#### 1.1.4 Institutional managers:

An institutional manager is a person who manages an institution with traits of being a leader. Managers function in a number of roles including leading, sharing information, and making decision, it all pools down on how they execute the role, as it is solely dependent on their level of managing and the type of institution.

#### Level of managers:

Level of managers is the line of division that exists between different managerial positions in an organization. Owning to the different organizations in the workforce sector, there are multiple levels of management which looks into the well-being of the organisation. Levels of management can be distinguished into three main categories which possess different traits.

#### Top level manager:

This level of management is also called as administrative management. It consists of an organisation's directorate and the C.E. O's. This level has supreme authority as it supervises the aims and objective and builds up strategizes for the organisation. Their top priority is on the tactile planning and implementing it, for the smooth functioning of their organisation.

#### Their roles and responsibilities are-

- Formulates plans and guidelines for the organisation.
- Employing the middle level managers (departmental heads)
- Delivering overall guidance, direction and inculcating collaboration and a spirit of oneness.
- Drafting the objectives and policies for the organisation.
- Instructing for the preparation of department detailed expense, agendas and events, etc.
- Creating an atmosphere to regulate and to have a command for all the departments.
- Being at the administrative level, it is also responsible for communicating with the external resources and is answerable to the stakeholders for the performance of the organisation.

#### Middle level manager:

This is also called as executive level of management. The executive level forms the departmental heads or supervisors. These people of managers are answerable to top level managers for the functioning of their departments in all aspects. A small firm may have only one set of middle level managers but a large firm would have multiple level of junior and senior in the middle level managers.

#### Their roles and responsibilities are-

- Implementing the plans of the organisation with reference to the policies and instruction given by the top-level manager.
- Contributing input while hiring the lower-level management.
- Planning schedules and events of the sub-units of the organization.
- Educating the lower-level management about the policies and directives laid by the top-level managers.
- Assessment of the junior managers performances on a timely basis and giving effective feedbacks.

#### 1.1.5 Check your progress:

- Define leadership and list its functions.
- Discuss the responsibilities of top and middle level managers.

#### 1.2 CLASSROOM MANAGEMENT

#### 1.2.1 Introduction:

Imagine walking into a classroom filled with paper planes, students racing amidst desks, back benchers scribbling on the wall. You are trying to put a word in but you can only hear their yelling and screaming in the class. Would you walk in the class?

This was an instance of a poor classroom management which could be dramatic and intense than a movie.

Teaching can be rewarding as well as a challenging profession. Classroom management is the process in which a wide variety of skills and techniques are used by the teachers in order to keep their class structured, present, efficient and orderly during teaching learning session. The key to an effective classroom management requires awareness of individual needs, patience for different temperaments, good timing, teaching boundaries and instinct.

#### 1.2.2 Why is classroom management important?

Classroom management is an important tool in teaching learning environment. The main objective of applying classroom management techniques is to increase students' engagement towards academic. It helps learners to be productive and decrease in negative behaviour. It helps to establish orderly environment in the classroom learning which in turn creates a conducive atmosphere for learning. It helps in reduce misbehaviour in classroom which takes up the valuable time of the teaching learning process. Classroom management builds expectations to use in a structured environment by including rules and consequences. One of the prime factors in obtaining classroom management is that it paves the way for the instructor to engage learners towards succeeding in academics.

#### 1.2.3 Techniques to inculcate in classroom management:

**Subject expert:** For any class technique to work, it is necessary for the instructor to be a subject expert. So, when students ask random questions, the instructor must be able to answer them.

**Mirror behaviour:** Mirroring behaviour is basically showcasing a behaviour which the instructor would want to have in in the class. A simple way to mirror behaviour is to set up a role play where students are in interaction with a supervisor, administrative staff or a students' council to showcase the appropriate behaviour in class. This includes using polite language, listening attentively without distractions, eye contact, asking questions in a respectful manner without any interruptions.

**Building rules:** Allowing students participate in building classroom norms has become an enjoyable session. It gives the students an impression that their voice is heard and is valuable. This in turn makes the

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students feel valued and develop a strong opinion which can also be seen as a life skill

**Charting**: As the norms have been mutually decided, here the instructor can post these rules up in the class where the students can easily see where they stand when it comes to being compliance.

**Punishment:** Instead of punishing the whole class it is best to address the problem individually. Punishing the whole class leads to disliking the instructor as it jeopardizes the work of the sincere students.

**Participation of the class:** Letting the class participate in the interaction round requires motivation and encouragement form the instructor. There are all kinds of learners in the class, and an instructor can best take advantage of this and hand out assignment to understand each and every capability of a student as well as diving into something new which will help in all round development of the learner.

**Feedback:** Feedback always works when it is given on the appropriate time than after a few weeks. Giving immediate feedback works well as there is no repetition of mistakes and the students work is also acknowledged.

**Gestures:** Communication is of two kinds verbal and non-verbal. Non-verbal communication allows students to have a presence of mind and be attentive in the teaching learning process.

**Activities:** Activities are a part of effective teaching programme. This includes role play, assigning responsibilities, presenting data. All such activities develop the learner's confidence and boost their morale.

**Teaching Aid:** Students of any age group like their lessons and explanation to be easy to grasp. With the development of technology and multiple innovations, it is easier to indulge students into hands on learning and provide a learning experience.

Addressing conflicting behaviours: As a part of classroom management, it is important to have open conversation be it positive or conflicting topics. Avoid hesitation to initiate. Acting immediately will give you benefit as the feelings won't aggravate.

#### 1.2.4 Check your progress

• Elaborate the techniques to inculcate in classroom management.

#### 1.3 DECISION MAKING

#### 1.3.1 Introduction:

In day-to-day activity, we need to decide something or the other, be it what to wear for college or which book to read next or to go on social media or spent more time practising your favourite sport.

Be it anything, your decision-making skill will help you to accomplish daily goals in your life.

#### 1.3.2 What is decision making?

Decision making is the process of making a choice by recognising a decision, accumulating information and weighing options. Decision-making has become an integral part of current management system. Gone are the days where one could delay in deciding or being a poor decision maker, today it is all about how fast one could decide with weighing all the consequences. Every manager has to decide on numerous situations, every mother has to decide with reference to their children's preferences and when to push them out of their comfort zone.

According to Trewatha& Newport defines decision making process as follows:, "Decision-making involves the selection of a course of action from among two or more possible alternatives in order to arrive at a solution for a given problem".

This concludes that decision making involves options and effective decision maker is one who decides after weighing consequences. Decision making process can be seen as to examine and balance the system. Numerous hours are consumed to come to a decision and thus it should follow some steps to enable good decision-making skills.

#### 1.3.3 Steps of decision-making:

**Acknowledging the problem:** Before any decision is made, the first step is to identify the problem which you need to solve or the answer the question which is hovering you from sometime. Is the problem time-based, or situation-based.

Collecting information and data: Once the problem is acknowledged, the second step is to start collecting information, do research and collect statistical data. For example- During an event in the organisation, the teacher would collect the data from all the students regarding participation and performance in the event.

Weighing the options and Choosing from the alternatives: Once the information and data is collected, here the person will get different options to weigh the consequence. Example- if your college wants to gain more admission for a course, your options could include paid advertisement or word of mouth or a combination of two. Once you have weighed the options, now you can even go down the history lane and see how colleges in the past use to get more students during admission.

**Plan and execute:** Now that you have made your mind. Prepare a mind map related to your decision and then begin the process of assigning tasks to your team mates.

Evaluate the results: After a detailed study of the problem and the evaluation process whether it has achieved the results which you have

identified initially. If the results are unsatisfactorily, thus more alternatives should be added and weighed accordingly.

### 1.4 CONTROLLING AND SUPERVISING

#### 1.4.1 Controlling:

Control is a Latin word which means a "register, counter or record of something".

Controlling is all about functioning of activities adhering to the plans framed on the objectives of the organisation. It is the last function of managerial aspect includes- planning, organising, staffing, and directing.

Controlling completes the management cycle. Here, the management observes and compares the results with the objectives and maintain standards. It involves the authentication of the performance to understand that the managerial functions are done according to the instructions. It includes examining labour records, auditing training programmes, conducting interviews of the employees, appraisals, statistics, feedbacks, etc.

#### 1.4.2 Principles of controlling:

**Principle of reflection of plans:** Reflection of plans could be a success when planning and control are synchronized as they are two sides of the same coin. Thus, if a manager has a clear and complete plan then the system could be controlled effectively.

**Principle of responsibility:** If the controlling function has to be exercised thoroughly, it is mandatory that the group takes up responsibility and do not run around the bush as it may lead to procrastination and inefficiency.

**Principle of efficiency of control:** If the company set rules and controls strictly, then there are chances that the target achieved immediately but in the long term it is an obstacle of the company, thus efficient controlling is expected from the manager.

**Principle of organisational suitability:** The organisation's growth, stability and success depend not only on efficient control but also it depends on well-integrated and clear structure of the organisation, thus formulating the objectives in a manner which is appropriate for the organisation structure.

**Principle of flexibility:** To have a rigid working atmosphere will lead to stagnancy and thus in order to achieve targets working atmosphere has to flexible according to the needs of the hour.

#### 1.4.3 Supervising:

Supervising is a Latin word which means super means from the above and vising (vision – root word) means to see. In simple terms we can say that, supervising means to see the activities of others.

Supervising is mainly connected with overseeing or watching the performance of others under the control. He is a significant member in the administration. He is connected with the staff directly and is a medium between the administrator and the staff.

#### 1.4.4 Principles of supervising:

Supervising the staff should not be a channel for drawing out differences amongst the members rather it should be a medium for self- expression knowing that the supervisor would encourage and bring out innate abilities of the staff

The manager supervising should assign tasks to staff in order to take up responsibilities. The environment, thus should give an atmosphere with full opportunities to show cooperation, bring out team spirit and work on interpersonal relationship.

Supervisor should give independence to the staff in accordance of an individual's personality, ability and their respective traits. Being a supervisor, he/she should always scaffold staff members than drawing out prejudices and holding grudges.

Lastly, supervisors should be chosen by the staff. He/she should not be an autocrat as this will give rise to self-defeating. He/she must listen attentively to their subordinates' problems and maintain full discrepancy. Rather than indulging in arguments the supervisor must give listen and then issue any orders without partiality.

#### 1.4.5 Factors influencing supervising:

**Supervisor's skill set:** The supervisor possessing skills that has the ability to inspire, to administer, to communicate, to give judgement, to be an attentive listener and to give guidance could be an asset to the organisation, as such person can become a powerful leader as they can manage large group of people who are working as an assistant.

**Assistant's skill set:** The assistants possessing skills that has the ability to be proficient, to be educated, well-informed and capable require merely any supervision, and thus the supervisor could utilise its time and energy in managing another level. Such assistant proves to be beneficial for the organisation and becomes an asset for the same.

**Nature of work:** The monitoring of the nature and the value of the work requires attention and is another factor which influences supervision. Routine work doesn't require much time on supervisor's part. Different organisation offers different levels of supervision and thus lower level of supervisors could handle large group of assistants where as higher level of supervisors could engage in complex work which requires few assistants with focus and concentration.

**Delegation:** What makes a supervision more effective and favoured is that the supervisor gives equal attention as well as assigning work to the staff which focuses them to use their capabilities to the fullest. Delegation tasks

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at work, would not only make staff to implement their education but also the supervisor could attend to other requirements.

**Interaction:** Communication at work happens in all ways, upward, downward, horizontal, grapevine, etc. Effective communication plays an important factor of influence on supervisions in the organisations, especially how the supervisors communicate to the people around, word of mouth in such organisation plays an effective role, it can build or sabotage a personality.

**Plan and execute:** Quality of planning is a significant aspect in managing tasks in any organisations. It helps to assign roles based on the capacity of an individual. Utilisation according to individual's capacity helps in completing a task with ease, ability and reduces burden of the supervisors to explain and guide.

**Need for balance:** Lastly, it is essential for a supervisor to maintain work balance in order to showcase their best in the assigned role. According to Koontz and O 'Donnel, "There is a limit in each managerial position to the number of persons an individual can effectively manage, but the exact number in each case will vary in accordance with the effect of underlying variable and their impact on the time requirements of effective managing."

### 1.5 STRESS AND CONFLICT MANAGEMENT

#### 1.5.1 What is Stress?

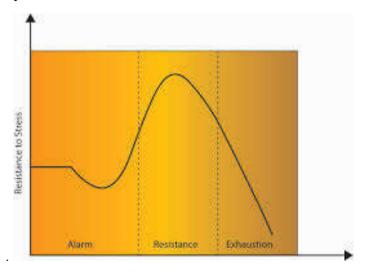
We all have experiences stress in some point in our life, there are shortand long-term stress. In this ultra-modern technological life where there are deadlines, targets, tasks, competition, and therefore, stress is bound to develop in our life. Stress can develop in any situation that makes us feel nervous, anxious, frustrated or angry. The word stress is derived from Latin 'stringi' which means drawing tight. Stress can start from domestic issues to work or work to domestic issues.

**Stress has three stages:** alarm, resistance and exhaustion stage. In alarm stress is the body's first response towards stress. This stage is also called as fight or flight response. Physical symptoms in alarms stage are increased heart rate, dilated pupils, pale skin, stuttering, stammering. For example- stage freight.

In resistance stage: it is the stage where your body repairs itself after a traumatic episode, if the stress is continued for a longer time your body starts producing stress hormone which increases your blood pressure until things are on track. Physical symptoms in resistance stage includes headaches, insomnia, anxiety, lack of focus, digestive issues. For exampleending a gaslighting friendship.

**In exhaustion stage:** it is the result of prolonged stress that drain your physical, emotional and mental energy. Physical symptoms for exhaustion stage includes- exhaustion, frustration, zero tolerance level, anxiousness.

For example- when one doesn't set boundaries in relationships and often has to justify themselves.



#### 1.5.2 Types of stress:

**Emotional stress:** is a normal reaction to daily hassles, it could be anger, losing interest in daily chores, fatigue, feeling helpless, guilty, avoiding family and friends, facing difficulty in engaging newness of work or home.

**Thermal stress:** change in temperatures (in western countries, during winters, people usually suffer seasonal stress due to less daylight) such as hot or cold, it could be headache, nausea, sweating, irritability.

**Physical stress:** chronic or acute stress comes in physical stress, it could be diarrhoea, constipation, heart disease, menstrual problems, obesity or skin problems.

#### 1.5.3 Strategies to cope stress:

Adopt a healthy eating habit- it is easier to say then do. Simple changes in your diet will lead to long term benefits. Like, have junk food before 6pm, eating seasonal fruits, drinking warm water in the morning. Munching on raw apples or carrots to release stress by their crunching noise.

**Exercise:** to exercise doesn't mean to workout for an hour only in a week, but to be movable for 10-30 mins a day simply by walking at first and later on increasing the levels by jogging, running or sprint. Exercise helps to elevate your mood and if exercise is done in a routine then it helps to clear your mind by unwanted thoughts and gives you peace.

**Breathing:** since childhood, we are taught to do one thing or the another, but no one teaches us breathing because it is considered as natural, but if we want to understand our body, we should first learn how to breathe. Breathing has numerous benefits, it lessens anger, makes you calm and content. Here is a simple way to learn and enjoy breathing.

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Sit or lie down in a comfortable position with your hands on your lap or by your side and your feet on the floor straight. Now close your eyes and imagine yourself in a relaxing place like on a hill or a park or a beach, slowly take deep breaths in and out. It can be done for 5 to 10 minutes at a time.

**Select a hobby:** our life is busy and competitive and thus owning a hobby is a necessary to relieve our stress. It could be anything from doing puzzles, playing board games, organising our house, baking, hiking, watching documentaries or reading.

**Journaling:** journaling our thoughts will help us to release our stress, making our thoughts organised and keeping us calm. Journaling also helps us to understand what trigger us and raises our stress in daily life. This will help us to understand ourselves which is a skill only some people can acquire.

#### 1.5.4 Conflict management:

Conflict management is the art of being able to understand conflicts judiciously and efficiently. It is the process of handling disagreements occurring through needs, desires, goals or opinions. Conflicts in business are a basic part and therefore it is important that it is managed by people by being educated on this subject. Conflict management is one of the prime eligibility criteria when hiring employees and thus one being knowledgeable in this part will prove to be beneficial.

#### 1.5.5 Stepsto manage conflict:

The goal should be to resolve conflict than adding fuel to fire and therefore there are four steps in managing conflict if it arises: CARE

**Communicate:** Expressing yourself assertively and politely resolves dispute. Being honest about the facts will showcase your genuineness through your actions. Instead of rigmarole things, it is best to be open, straightforward about misunderstandings to avoid conflicts.

**Actively listen:** Hearing and listening has a distinct line. Therefore, we need to listen i.e., to understand what the other is saying without any interruption. Being a good listener makes the other person develop confidence in you which is a trait to become a leader. Asking open ended questions will give you room to understand who is at fault.

**Review opinions:** Exploring options is never a problematic feature, rather it allows you to seek your comfortability and balance out the decision by pondering over the options thoroughly.

**End with a win:** Win situation-Coming to a mutual decision pave out the road for a win-win situation, where there are no hard feelings involved and both the parties can work in future with ease and smoothness and without any passive aggressive behaviour.

#### 1.5.6 Strategies for conflict management:

**Acceptance:** Running away from conflict will not bring any good rather it will harm the relationships at work. Conflict could be avoided if there is an open communication between people and misunderstandings could be cleared in one session itself

**Objectives:** In order to achieve objectives, it is best that all the team members are open to each other and ask open ended questions in order to bring out hidden assumptions. It is best to keep ourselves open rather than declaring judgements.

**Turn red to green:** This strategy means that one should try to turn differences into similarity by making mutual agreements on a win- win situation on a shared objective. It could resolve numerous challenges in an institution

**Compromising:** In a conflict, comprising strategy works towards on settling an issue that looks fair on both sides or preparing a mindset that there is light after the tunnel will help to work in a shared atmosphere.

#### 1.6 CHECK YOUR PROGRESS

- Discuss the steps of decision-making in day-to-day life.
- What are the principles of controlling in an institution?
- Explain the factors that influence supervision.
- Is emotional eating a cause of stress, justify.
- Communication is a key to resolve any problem, explain the statement with reference to conflict management.
- What are the stages of stress?
- Delegating is one of the important features of being a supervisor.



### CRISIS MANAGEMENT

#### **Unit Structure:**

- 2.0 Objectives
- 2.1 Background
- 2.2 Introduction Concept of Crisis and its Types
- 2.3 Check Your Progress 1
- 2.4 Concept of Crisis Management
- 2.5 Phases of Crisis Management (Mitigation, Prevention, Preparedness, Response, Recovery)
- 2.6 Check Your Progress 2
- 2.7 Importance of Crisis Communication
- 2.8 Organizational Crisis Management (Concept and ways to overcome)
- 2.9 Conclusion
- 2.10 Check your progress -3
- 2.11 References

#### 2.0 OBJECTIVES

After completing this unit, the student will be able to -

- 1. comprehend the meaning of Crisis Management.
- 2. differentiate between Crisis and Crisis Management
- 3. acquire the knowledge about the need for Crisis Management
- 4. develop an understanding about the various phases of Crisis Management
- 5. understand the meaning of Crisis Communication
- 6. critically evaluate the need for Crisis Communication
- 7. analyse the importance of Crisis Communication
- 8. list ways to overcome Organizational Crisis Management

#### 2.1 BACKGROUND

"It is better to be prepared for the unthinkable than to develop a plan as the crisis unfolds." The past decade has shown us the kind of external problems that can arises in school. Imaginethat on a cold winter morning a school shooting has taken place in the local high school. This

incident has now upset the school's equilibrium and has triggered innumerable emotions in students, parents and school personnel. The immediate questions that arise in our mind include-

- What are the roles and responsibilities now of the school personnel?
- What action will the school now take to help its students, teachers, parents and stakeholders?
- How can schools help students recover from this crisis?
- Does the school have a crisis response team or crisis management plan?

In the wake of an unimaginable event, any organisation or institution or school authorities need to be prepared to handle such crisis or traumatic events. Without an apt crisis management plan in place, institutions may find it challenging to effectively respond to students, faculty and staff, and the community at large. After a traumatic event an organisations crisis managementplan always serves value.

# 2.2 INTRODUCTION- CONCEPT OF CRISIS AND TYPES

A very important lesson that COVID-19 taught the entire world was that a disaster or crisis can occur at any time, it is sudden, uncalled for and can befall on any community. Businesses, Companies, Organisations, Educational Institutions around the world were forced to shut their doors. Overnight, employees lost their jobs and were sent home. Essential services struggled to function. And today we are able to judge the value of a company on how effective they were in their crisis management skills. Where the pandemic is one type of disaster there are different types of disaster. They could be man-made or natural. Let us first understand the meaning of crisis.

According to Cambridge Dictionary Crisis is defined as, "A time of great disagreement, confusion or suffering."

According to Collins Dictionary, crisis is "a situation in which something or someone is affected by one or more very serious problems."

The Harvard Business School definition states that a crisis is: "a change – either sudden or evolving – that results in an urgent problem that must be addressed immediately" (Luecke and Barton, 2004).

Crisis Management

Crisis refers to a sudden unwanted event or series of events that may occur in an organisation. Its consequences are unpredictable which results in disturbances and disorder amongst the individuals working in an organisation. It generally arises on a very short notice and as a result of its sudden nature, crisis affects individual members, entire teams, complete organization orsociety on the whole. Crisis thus is any emergency that may occur in an organization which hampers the smooth functioning of the organization. It is often a dangerous moment in the direction of deterioration.

Due to the sudden occurrence crisis generally triggers a feeling of danger and fear in the employees. In simpler words crisis leads to ambiguity, threatens its existing values & aims, and causes major damage to the organization and its workers. Thereby making the adaptation mechanisms inadequate and demands urgent responses.

Hence it is crucial for the organisations to sense the early signs of crisis and warn the employeesagainst the negative consequences of the same. In such times it is imperative that decisions be made quickly to minimise the damage to the organization. If crisis is not tackled effectively intime then it not only affects the smooth functioning of the organization but will pose a threat to the organisations reputation and name.

Thus institutions should have a step-by-step plan that spells out the tasks to be performed by the team members before, during and after a crisis. This ensures that the institutions can benefit from the strengths of both professionals and volunteers rather than spending time, money and resources after a crisis has occurred by creating procedures to tackle the same. Thus each organisation should not only be aware of the knowledge of Crisis Management but have to be prepared for the unthinkable beforehand than to develop a plan as the crisis unfolds.

#### **Types Of Crisis;**

Crisis may be of different types and can quickly cause wide spread devastation and deteriorate reputation of an organisation if not dealt with instantly and commendably. A crisis can caused by either internal or external forces. These may include-

- **Natural Disasters:** These are disturbances that are caused due to the environment and nature. And thus these events are beyond the control of human beings. Example: Floods, Earthquakes, Landslides, Tsunamis, Pandemic, etc.
- **Technological Breakdown:** They arise due to failure in technology. Problems in the technological systems lead to technological crises. Example breakdown of machines, problems in internet, errors in passwords corrupted software, software being hacked, etc all result in crisis.
- Confrontation Crises: In organisations often employees fight amongst themselves or with the authorities due to certain differences in opinions. They may disobey superiors, and not cooperate. Employees may get indulged in non-productive acts like boycotts, strikes, internal disputes, resisting the administration, etc. All these give rise to confrontation crisis.

- Malevolence: Some notorious employees and/or opponents use criminal means and may take the extreme steps to get their demands fulfilled, express hostility or anger toward the organisation. They do it to seek gain from the organization or aim to destabilize or destroy a company. They may indulge in criminal activities like kidnapping company's officials, product tampering, spreading rumours and inaccurate information to tarnish the image of their organization, security breaches, etc.
- Organizational Misdeeds: At times certain organizational authorities may take decisions for quick results despite knowing the harmful consequences of the same towards the stakeholders and external parties. Example Management supports short-term growth and ignores broader issues, indulges in deliberate acts of illegality such as accepting bribes, frauds, data orinformation tampering all lead to organization crisis.
- Campus violence: It is a crisis that arises when employees or internal members of an organization indulge in violent acts like Violence, thefts, terrorism, Shoot out/ murders/ suicide, attack on staff members, beating employees or superiors in the premises itself result in crisis.
- Lack of Fund: Organizations, if they fail to pay their creditors and other parties it may lead to financial crises like bankruptcy.
- Accidents due to breakdown of safety regulations: Example- Fire, school bus crashes, leakage, damage to building, etc.

#### 2.3 CHECK YOUR PROGRESS - 1

- Explain what is meant by Crisis.
- Define Crisis
- Explain the different types of crises that an educational institution may face.

# 2.4 CONCEPT OF CRISIS MANAGEMENTWHAT IS CRISIS MANAGEMENT?

One of the most important role of an Organization is to be able to see extraordinary situations

that suddenly appear over time. These are called crises and they often put organizations in trouble. Crisis management is a critical function of an organization. Thus Organizations should be able to tackle these crisis effectively.

Crisis Management is a holistic management process of handling unexpected and sudden changes in organization culture. It identifies the potential threat the crisis may have on an organisation, provides a structure for building resilience in the organisation, tries to protect theinterests of its key stakeholders, reputation, etc.

#### **Definition of Crisis Management:**

- Crisis Management "Crisis management is the systematic attempt to avoid organizational crises or to manage those crises events that do occur" Pearson, C. M. & Clair, J. A. (1998).
- "Effective crisis management involving complex science and technology is wholly dependent on well-thought out, and actively practiced, crises response plans." Heineman, 2011
- According to Deon Canyon Crisis management is, "The measures and methodologies used to recognize, control and limit the damage of a crisis, and its ripple effects."

Thus in this sense Crisis Management is a system of dealing with potential emergency situations or dangerous scenarios, and thus Crisis management, then, is the regarded as a task of minimizing the harmful effects of a crisis using limited resources under extreme time constraints. It is often referred to as an art of dealing with the sudden and unexpected extraordinary situations which disturbs the employees, organization external clients as well as the society. This in turn ensures to help an organisation to limit the negative impact or minimizeany damage to the organization's reputation or image.

Crisis management enables organisations to apply various strategies and consists of skills and techniques adopted to cope with a sudden and significant negative event. They are designed to help an organization deal with the crisis and reduce its negative impact. It deals with threats before, during and after they have occurred.

Crisis management has four objectives: 1. Reducing tension during the incident 2. Demonstrating organizational commitment and expertise to handle the crisis. 3. Controlling the flow and accuracy of information 4. Managing the available resources effectively. To handle these objectives clearly it is necessary that the organisational leaders and its employees are trained in crisis management leadership. Leaders as well as employees should be able to -

- recognize uncertain situations that hold hidden risks,
- ensure systematic preparedness,
- identify the actions to be taken,
- respond effectively by taking critical decisions at the right time,
- encourage & motivate followers to maintain effective coordination amongst its various units in order to overcome crisis situations and
- Effectively minimize the negative impact.

Failure to handle the crisis by an organisation can often lead to serious threat to stakeholders, eventually leading to losses for an organization, and may lead to the end the organization.

#### **Need for Crisis Management:**

- ➤ Crisis Management prepares the organization to face unexpected and negative events with courage and grit.
- ➤ It enables its employees and stakeholders to adjust well to the sudden changes in the organization.
- ➤ To enable organizational managers to detect the early signs of crisis, and forewarn their employees so that they can investigate the causes of crisis, take precautions and deal with it effectively.
- ➤ It enables organizational leaders to develop strategies to come out of crisis situations and also decide on the future course of action.
- ➤ Crisis Management ensures that the management is prepare beforehand and does not have a casual approach. They are capable of handling a crisis issues at the grassroot before it can lead to major crisis.

# 2.5 PHASES OF CRISIS MANAGEMENT (MITIGATION, PREVENTATION, PREPAREDNESS, RESPONSE, RECOVERY)

During a crisis situation organizations need to adopt a step by step approach. In such events one cannot take impulsive and hasty decisions. Organizations need to adopt a proactive approach and thus need to think rationally and devise strategies which would help them become resilient by ensuring that the organization comes out of the crisis situation. No matter how worse the crises if organizations are prepared they can emerge more resilient and stronger than before. Thus planning a crisis management plan is essential.

Crisis Management Plan refers to a detailed plan which clearly spells out the various actions which must be taken in order to deal with potential crisis situation. This plan will ensure that the organization overcomes the crisis in the best possible way.

The process of crisis management is mainly the set of steps through which an institution or organization encounters the threats which are going to be dangerous for itself, its shareholders, or public in general. It is about organizing and directing resources to cope with a potential crisis where the ultimate aim is to minimize the event's impact and to enhance organizations resilience, while ensuring effective response and recovery capabilities. A comprehensive approach to crisis management comprises of five phases, namely –

- Prevention,
- Mitigation,
- Preparedness,
- Response
- Recovery



Fig 3.1 - Five Phases of Crisis Management

**Prevention-** A crisis may have passed and an organization may feel that prevention phases can be overlooked. However it is essential that organizations take preventative measures to ensure that either a potential crisis event does not happen in future or reduce the chance of its occurrence and minimise its damaging effects. In prevention the focus lies on preventing the occurrence of hazards. Crisis is unpredictable an as a result not all threats can be prevented. However crises is not unexpected thus its consequences can be prevented. Through proper planning organisations can reduce the risk of loss of life and injury with meticulous evacuationplans, fire safety installation, etc.

**Mitigation** - Mitigation phase takes place before and after a crisis has occurred. It includes all activities that are undertaken in an attempt to prevent the occurrence of a crisis situation, to reduce its occurrence, to ensure there is no loss of life and/or property and to reduce the severity or consequences of the unavoidable crisis. It focuses on long-term measures that are designed to reduce the effects of an unavoidable disaster.

An organization may take structural and non-structural measures to limit the impact of a crisis.

- Structural mitigation deals with physical construction done to reduce or avoid possible impacts of hazards. Example- conduct timely property inspection to find ways to strengthen the building against damage during a crisis, raising building elevations during floods, installing of generators in areas prone to prolonged electricity black-outs.
- **Non-structural mitigation** deals with use of knowledge and practice to reduce the impact of a crisis through policies and laws, public awareness raising, training and education. Example Flood insurances, etc.

**Preparedness** - It is a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action. Here the activities commences even before an emergency occurs. In simple words preparedness means to take actions ahead of time and to be ready for any

crisis. Thus, the focus in this phase is on training and exercising plans such that organisations are well prepared and trained to respond to any crisis. It would include preparations made to save lives and accordingly provide appropriate education to its employees. Example - Evacuation plans before a crisis hits, stocking food and water, Fire drills, active-shooter drills and evacuation rehearsals, listing down and stocking items that are useful during crisis, etc.

**Response** - phase occurs immediately after of a disaster. It is a reaction to the occurrence of a catastrophic event. Organizations focus their attention to protect people and to ensure that people are out of harm's way. They also try to minimize the risk of any additional property damage. Here the aim is to save lives, reduce economic losses, and easing suffering. Response actions here may include setting up of emergency hotlines, evacuate disaster struct areas, setting up shelters and medical care, fire fighting, activate rescue operations, etc

As the response period progresses, the focus of the organization will shift towards assessing the damage, conducting repairs, implement disaster response plans, cleaning up, re-establishing operations and start resource distribution as necessary. The safety and wellbeing of the members largely depends on organizations level of preparedness before disaster strikes.

**Recovery-** This is the fifth and last stage in the crisis management cycle. It consists of activities which begins immediately after the crisis has ended. It tries to restore functions and bring stabilization in the organization. It includes actions which are adopted such that an organization can return to a safer situation after the crisis hits. This stage is the restoration phase and it aims at helping the members of the organization and its stakeholders to recover and return to some degree of normalcy. Recovery can take a prolonged period of time, sometimes years. In recovery prioritization should be first given to essential services like medical care, food and drinking water, basic items utilities, transportation, etc which must will be restored, and then less-essential services are looked into.

To conclude, the above phases of crisis management are critical for the success of an organization however one must not undermine the importance of reflection. Employers need

to be critical and self-introspect by asking themselves, "What did we learn from this?" Questions of this nature are often uncomfortable to organizations, however they are essential for the learning and development of an organization.

#### 2.6 CHECK YOUR PROGRESS - 2

- Explain the concept of Crisis Management
- Illustrate the phases of Crisis Management
- 'Crisis Management is essential for the survival of an organization.' Justify?

# 2.7 IMPORTANCE OF CRISIS COMMUNICATION MEANING OF CRISIS COMMUNICATION

One of the most important element during crisis management is Crisis communication. Crisis communication, is communication that occurs during a brief period of disequilibrium, which often reflects an individual's inability to cope using habitual methods of problem-solving during a crisis situation. It aims to protect the image of the organization and uphold its marketimage and maintain its firm standing in the industry.

Crisis communication occurs in crisis situations like theft, a legal dispute, fire, or any natural disaster. When a crisis occurs, it is critical to communicate effectively with the internal employees, as well as external clients and also the media. At such time transparency and immediacy are extremely vital. Crisis communication is an art which should be analysed carefully, so that misguidance or miscommunication are avoided.

#### NEED/IMPORTANCE OF CRISIS COMMUNICATION

- In this age of technology it often has seen that the organizational leaders themselves are caught off guard by the sheer speed of how news spreads. As a result the organization is confronted with the frenetic media and public response. They are questioned by stakeholders and angry public. It is imperative that the organization responds with speedas well as the credibility. Organization first must assess where it stands and then come up with a credible and authoritative response immediately so as to avoid rumours and misinformation being spread.
- Organizations must designate Crisis Communication spokesperson and train them to be able to confidently and effectively communicate at times of crisis. This would ensure that they help the organization to overcome crisis situations in the best possible and quickest way.
- To protect the organizations reputation and brand identity Crisis communication aims at safe guarding the brand name of the organization, the reputation of its stakeholders and maintain its public image and good will. After the crisis strikes the goal in crisis communication is to save the organization's reputation against further threats and challenges.
- Designing a crisis communication plan in advance ensures to reduce miscommunication, sets an effective communication channel, and ensures that messages are sent immediately.
- Crisis communication plays a vital role in minimising the harm caused by a negative event because effective crisis communication between institutional leaders can enable them to take decisions immediately which in turn will help them to implement their organization's emergency response plans immediately.

- It ensures that that goal of crisis communication is to provide clear, precise, consistent and timely information which in turn prevents miscommunication, inaccuracies and rumours.
- It indicates that the organization cares about both their employees as well as their stakeholders.
- Post-crisis communications is essential to release critical information as soon as possible in order to avoid fear and chaos amongst employees and stakeholders.

# 2.8 ORGANIZATIONAL CRISIS MANAGEMENT (CONCEPT AND WAYS TO OVERCOME)

#### **Concept Organizational Crisis Management:**

A crisis is unpredictable but not unexpected. An organization is considered wise if they accept that crises will befall them but they just do not know when. Crises can be anticipated. Some crises strike suddenly, however some crises offer a great deal of warning. And thus organizations should be ready to combat the same.

Organizational Crisis management is the process by which an organization applies certain specific strategies to deal with a sudden, negative and disruptive event that threatens to harm the organization or its stakeholders.

#### **Ways to Overcome Organizational Crisis Management:**

Through various ways organization can overcome crisis situations:

- **Identify risks** Crisis management always begins with anticipating potential threats or risks that an organization may face. The data once is created of all potential risks then accordingly the organization may plan ways to avoid them or handle them effectively at the right time.
- Communication During crisis situation organizations must not hide rather they must come out and interact. Ignoring stakeholders and media might worsens the situation.
- **Spokesperson** During a crisis, organizations must designate an official spokesperson in charge of communicating with employees, stakeholders and media. All information or updates about the crisis must be communicated continuously between the spokesperson and the crisis communication team. This will prevent the arising of any confusion due to different interpretation and delivery from different people. The spokesperson has to be carefully selected and trained beforehand such that he/she is to communicate through various channels of communication.
- Effective communication- If one has to overcome crisis in the organization, then one has to ensure that the communication channels are clear and effective. Each member of the organization must be aware of what is happening and the decisions taken. Organizational

Crisis Management

leaders must keep the employees abreast during critical situations. Information must flow fromtop to bottom and from bottom to top.

- **Discussions** Employees should have an open access to discuss critical issues and seek suggestions of their superiors. Fellow employees must discuss issues to come up with mutually acceptable solutions to tackle the crisis
- **Focused approach** Organizations must take an initiative to identify the reasons why the organization had to face a crisis. After identifying the areas where they lacked the organization must devise appropriate approaches to overcome the catastrophe if encountered by a crisis.
- Gather correct and relevant information During crisis situations the organization must double check the information related to the crisis before responding and taking actions to curtail its negative impact.
- Organization must delegate roles and responsibilities to their employees as per their specialization. In open forums employees must be motivated to perform their best and in order to help the organization's goals to overcome the crisis situation.
- It is essential to take quick decisions during critical situations.
  Organization and its employees must be quick to detect the early signs of crisis and act immediately.
- **Be calm and patient-** Organizations have to maintain their calm in an event of crisis. Stress could make the situation worse. Rather leaders have to stay calm and then decide on the future course of action to overcome crisis.

#### 2.9 CONCLUSION

While crises begin as a negative/threat, effective crisis management can minimize the damage and in some case allow an organization to emerge stronger than before the crisis. However, crises are not the ideal way to improve an organization. But no organization is immune from a crisis so all must do their best to prepare for one.

Finally, if crisis occurs, this can give the opportunity to the organization to evolve stronger andto set an advantage against competitors

#### 2.10 CHECK YOUR PROGRESS-3

- Explain the concept of Crisis Communication
- What is the importance of Crisis Communication
- Elucidate the ways to overcome Organizational Crisis Management?

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### **GRAPHICAL REPRESENTATION**

#### **Unit Structure:**

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3.0	Objectiv	U.S

- 3.1 Introduction
- 3.2 Concept of graphical representation
  - 3.2.1. Definition of graphical representation of data
  - 3.2.2 Principles of graphical representation
- 3.3 Importance of graphical representation
- 3.4 Limitations of graphical representation
- 3.5 Rules of graphical representation of data
- 3.6 Types of graphical representation of data
- 3.7 Histogram
  - 3.7.1 Meaning
  - 3.7.2 Construction of histogram
  - 3.7.3 Importance of histogram
- 3.8 Frequency polygon
  - 3.8.1 Meaning
  - 3.8.2 Construction of frequency polygon
  - 3.8.3 Importance of frequency polygon
- 3.9 Pie diagram
  - 3.9.1 Meaning
  - 3.9.2 Importance
  - 3.9.3 Construction of Pie diagram
- 3.10 Conclusion
- 3.11 Check your progress
- 3.12 References

#### 3.0 OBJECTIVES

- 1) To enable the students to acquire the knowledge of the concept of graphical representation
- 2) To comprehend the importance of graphical representation of data
- To develop an understanding about the different types of graphical representation such as Histogram, Frequency Polygon, and pie diagram
- 4) To develop the understanding about the merits and demerits of different types of graphical representation
- 5) To develop the skill of construction of different types of graphical representation such as Histogram, frequency polygon and pie diagram

#### 3.1 INTRODUCTION

The word data is from the Latin word Datum, which means something given. The numerical figures collected through a survey are called data and can be represented in two forms - tabular form and visual form through graphs. Once the data is collected through constant observations, it is arranged, summarized, and classified to finally being represented in the form of a graph. There are two kinds of data - quantitative and qualitative. Quantitative data is more structured, continuous, and discrete with statistical data whereas qualitative is unstructured where the data cannot be analyzed.

#### Graphical representation of data.

#### 3.2 CONCEPT

A graphical representation is a visual display of data in the form of a diagram or graph. A chart is a graphical representation of data, in which "the data is represented by symbols, such as bars in a bar chart, lines in a line chart, or slices in a pie chart". It represents the set of data in a meaningful way. It is a Graphical representation of data is an attractive method of showcasing numerical data that help in analyzing and representing quantitative data visually. A graph is a kind of a chart where data are plotted as variables across the coordinate. It became easy to analyze the extent of change of one variable based on the change of other variables. Graphical representation of data is done through different mediums such as lines, plots, diagrams, etc. Let us learn more about this interesting concept of graphical representation of data, the different types, and solve a few examples.

#### 3.2.1 Definition of Graphical Representation of Data:

A graphical representation is a visual representation of data statisticsbased results using graphs, plots, and charts. This kind of representation is

Graphical representation

more effective in understanding and comparing data than seen in a tabular form. Graphical representation helps to qualify, sort, and present data in a method that is simple to understand for a larger audience. Graphs enable in studying the cause and effect relationship between two variables through both time series and frequency distribution. The data that is obtained from different surveying is infused into a graphical representation by the use of some symbols, such as lines on a line graph, bars on a bar chart, or slices of a pie chart. This visual representation helps in clarity, comparison, and understanding of numerical data. Graphical presentation of data is about generating insights into the relationships and patterns in data, and clearly communicating those insights and results to others

#### 3.2.2 Principles of Graphical Representation of Data:

The principles of graphical representation are algebraic. In a graph, there are two lines known as Axis or Coordinate axis. These are the X-axis and Y-axis. The horizontal axis is the X-axis and the vertical axis is the Y-axis. They are perpendicular to each other and intersect at O or point of Origin. On the right side of the Origin, the X-axis has a positive value and on the left side, it has a negative value. In the same way, the upper side of the Origin Y-axis has a positive value where the down one is with a negative value. When -axis and y-axis intersect each other at the origin it divides the plane into four parts which are called Quadrant I, Quadrant II, Quadrant III, Quadrant IV. This form of representation is seen in a frequency distribution that is represented in four methods, namely Histogram, Smoothed frequency graph, Pie diagram or Pie chart, Cumulative or ogive frequency graph, and Frequency Polygon.

# 3.3 IMPORTANCEOF GRAPHICAL REPRESENTATION OF DATA

Listed below are some advantages and disadvantages of using a graphical representation of data:

- It improves the way of analyzing and learning as the graphical representation makes the data easy to understand.
- It can be used in almost all fields from mathematics to physics to psychology and so on.
- It is easy to understand for its visual impacts.
- It shows the whole and huge data in an instance.
- It is mainly used in statistics to determine the mean, median, and mode for different data
- The main use of a graphical representation of data is understanding and identifying the trends and patterns of the data.

- It helps in analyzing large quantities, comparing two or more data, making predictions, and building a firm decision.
- The visual display of data also helps in avoiding confusion and overlapping of any information. Graphs like line graphs and bar graphs, display two or more data clearly for easy comparison. This is important in communicating our findings to others and our understanding and analysis of the data.
- Graphical representation often facilitates understanding of a set of data.
- It is easier to read and interpret a graphical data.
- It helps us in analysing numerical data
- It helps in comparing different frequency distributions to each other.
- It catches the eyes and holds the attentionwhich other statistical evidences fail to attract.
- It helps us to dilute the abstractness of ideas by translatingnumerical facts into a more concrete and understandable form.

## 3.4 DISADVANTAGE OF GRAPHICAL REPRESENTATION

### The disadvantages of graphical representation of data is that

- 1) It takes a lot of effort as well as resources to find the most appropriate data and then represent it graphically.
- 2) At times it may be very difficult to denote the scores in case of decimals, fractions etc.on the graphical representation
- 3) It requires expert knowledge to interpret the data represented on graphical representation.
- 4) The part of the area lying above any given intervalcannot be taken as proportional to the frequency of that classinterval owing to irregularities in the frequency surface.
- 5) The assumption that all the scores within a classinterval fall at the midpoint of that interval produces a larger error when N is large than when N is small
- 6) It is less precise than the histogram is that it does not represent accurately. i.e in terms of area, the frequency upon each interval.

# 3.5 RULES OF GRAPHICAL REPRESENTATION OF DATA

While presenting data graphically, there are certain rules that need to be followed. They are listed below:

Graphical representation

- **Suitable Title:** The title of the graph should be appropriate that indicate the subject of the presentation.
- **Measurement Unit:** The measurement unit in the graph should be mentioned.
- **Proper Scale:** A proper scale needs to be chosen to represent the data accurately.
- **Index:** For better understanding, index the appropriate colors, shades, lines, designs in the graphs.
- **Data Sources:** Data should be included wherever it is necessary at the bottom of the graph.
- **Simple:** The construction of a graph should be easily understood.
- **Neat:** The graph should be visually neat in terms of size and font to read the data accurately.

# 3.6 TYPES OF GRAPHICAL REPRESENTATION OF DATA

Data is represented in different types of graphs such as plots, pies, diagrams, etc. They are as follows, Generally, the frequency distribution is represented in four methods, namely

- Histogram
- Smoothed frequency graph
- Pie diagram
- Cumulative or ogive frequency graph
- Frequency Polygon

#### 3.7 HISTOGRAM

#### **3.7.1 Meaning:**

- It is a graph in which class intervals are represented along the horizontal axis called the x-axis and their corresponding frequencies are represented by areas in the form of rectangular bars.
- The vertical y-axis represents the number count or percentage of occurrences in the data for each column. It appears as a series of bar graphs placed one ext to the other in a vertical array.
- Columns can be used to visualize patterns of data distributions.

#### 3.7.2 How to prepare Histogram:

**Step1-** Draw a horizontallineat the bottom of a graph paper along which mark off units to represent the class intervals. It is usual to start with the class intervals of lowest value.

**Step 2-** Draw a vertical line through the extreme end of the horizontal axis along which mark off units to represent the frequencies of the class intervals. Choose a scale which will make the largest frequency (the height) of the polygon approximately 75 percent of the width of the figure.

**Step-3** Draw rectangles with class units as base, such that the areas of rectangles are proportional to the frequencies of the corresponding classes.

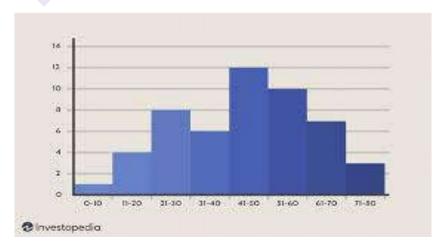
#### For example:

A census focused on the demography of a town may use a histogram to show how many people are between the ages of zero - 10, 11 - 20, 21 - 30, 31 - 40, 41 - 50, 51 - 60, 61 - 70, and 71 - 80.

This histogram example would look similar to the chart below. Let's say the numerals along the vertical access represent thousands of people. To read this histogram example, you can start with the horizontal axis and see that, beginning on the left, there are approximately 500 people in the town who are from less than one year old to 10 years old. There are 4,000 people in town who are 11 to 20 years old. And so on.

Histograms can be customized in several ways by analysts. They can change the interval between buckets. In the example referenced above, there are eight buckets with an interval of ten. This could be changed to four buckets with an interval of 20.

Another way to customize a histogram is to redefine the y-axis. The most basic label used is the frequency of occurrences observed in the data. However, one could also use percentage of total or density instead.



#### Importance of histogram:

- 1) It is simple and easily made.
- 2) A comparison among the different columns can be made by constructing a single histogram.
- 3) It gives us the graphic form of the distribution of the scores, whether they are piled at the low or high end of the scale.
- 4) It tells us whether the scores are evenly and regularly distributed or not
- 5) When the scores are pile up at the lower end of the scale, it shows that the test is difficult, if they pile up at the higher end, the test is easy.

### 3.8 FREQUENCY POLYGON

#### 3.8.1 Meaning:

A polygon is a many angled close figure. Another method of representing a frequency distribution graphically is, what is known as frequency polygon. It is a graphic representation of frequency distribution in which the mid points of the class interval are plotted against the frequencies.

#### 3.8.2 Steps to construct the Frequency Polygon:

Obtain the frequency distribution and find the midpoints of each class interval.

- Represent the midpoints along x-axis and frequencies along the yaxis
- Plot the points corresponding to the frequency at each midpoint.
- Join these points, using lines in order.
- To complete the polygon, join the point at each end immediately to the lower or higher class marks on the x-axis.

### Construction of frequency polygon:

#### **Ouestion:**

Draw the frequency polygon for the following data

Class Interval	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
Frequency	4	6	8	10	12	14	7	5

#### **Solution**:

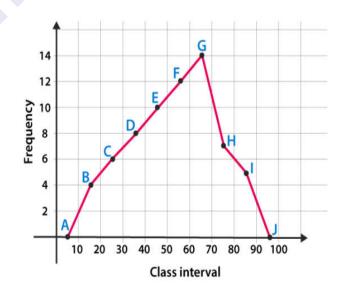
Mark the class interval along x-axis and frequencies along the y-axis. Let assume that class interval 0-10 with frequency zero and 90-100 with frequency zero.

Now calculate the midpoint of the class interval.

Class Intervals	Midpoints	Frequency
0-10	5	0
10-20	15	4
20-30	25	6
30-40	35	8
40-50	45	10
50-60	55	12
60-70	65	14
70-80	75	7
80-90	85	5
90-100	95	0

Using the midpoint and the frequency value from the above table, plot the points A (5, 0), B (15, 4), C (25, 6), D (35, 8), E (45, 10), F (55, 12), G (65, 14), H (75, 7), I (85, 5) and J (95, 0).

To obtain the frequency polygon ABCDEFGHIJ, draw the line segments AB, BC, CD, DE, EF, FG, GH, HI, IJ, and connect all the points.



#### 3.8.3 Importance:

- 1) It is simple and easily made.
- 2) It is possible to superimpose more than one frequency polygon on the sae graph by using coloured lines, broken lines, dotted lines etc.
- 3) Comparison of several frequency distributions can readily be made via frequency polygons.
- 4) It can be smoothed.

#### 3.9 PIE CHART

**3.9.1 Meaning:** The "Pie chart" is also known as a "circle chart", dividing the circular statistical graphic into sectors or sections to illustrate the numerical problems. Each sector denotes a proportionate part of the whole. To find out the composition of something, The pie chart\_is a type of graph in which a circle is divided into Sectors where each sector represents a proportion of the whole

#### 3.9.2 Importance of pie chart:

- 1) Pie charts will helps us to understand the scale of our portions. They are commonly used in business presentations and education to display proportions among a broad range of categories, such as expenditures, population groups, and survey responses.
- 2) It gives an overall graphic representation of data which makes the reader to easily compare the contribution of different sectors.
- 3) It also helps in promoting research based on the numerical values.
- 4) It helps the policy makers to arrive at conclusions based on the interpretation of data from the pie diagram.
- 5) It can be easily constructed as well as comprehended by any person.

#### 3.9.3 Construction of pie diagram/chart:

Imagine a teacher surveys her class on the basis of favourite Sports of students:

Football	Hockey	Cricket	Basketball	Badminton
10	5	5	10	10

The data above can be represented by a pie chart as following and by using the circle graph formula, i.e. the pie chart formula given below. It makes the size of the portion easy to understand.

**Step 1**: First, Enter the data into the table.

Football	Hockey	Cricket	Basketball	Badminton
10	5	5	10	10

**Step 2**: Add all the values in the table to get the total.

I.e. Total students are 40 in this case.

**Step 3**: Next, divide each value by the total and multiply by 100 to get a per cent:

Football	Hockey	Cricket	Basketball	Badminton
(10/40) × 100	(5/40) × 100	(5/40) ×100	(10/40) ×100	(10/40)× 100
=25%	=12.5%	=12.5%	=25%	=25%

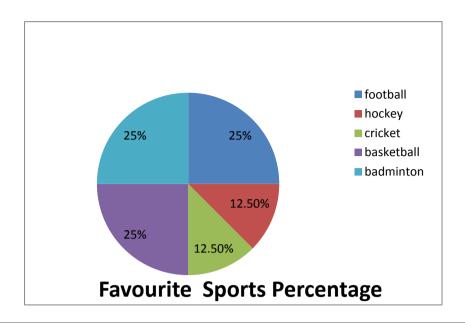
**Step 4**: Next to know how many degrees for each "pie sector" we need, we will take a full circle of 360° and follow the calculations below:

The central angle of each component = (Value of each component/sum of values of all the components) $\times 360^{\circ}$ 

Football	Hockey	Cricket	Basketball	Badminton
(10/40)×360°	(5 / 40) × 360°	(5/40) × 360°	(10/40)×360°	(10/40) × 360°
=90°	=45°	=45°	=90°	=90°

Now you can draw a pie chart.

**Step 5**: Draw a circle and use the protractor to measure the degree of each sector.



#### 3.10 CONCLUSION

Graphical representation is an important component in research and for evaluation purposes. It is a diagrammatic representation of numeric data. It make the complex data easy by depicting the statistical data in a pictorial form. It is easy to draw and represent the given data. However interpretation of data shown in a graphical presentation needs insight and expertise. There are different types of graphical representation of data. In this unit Histogram, Frequency polygon and Pie chart is discussed with their respective importance.

#### 3.11 CHECK YOUR PROGRESS

- Q.1) What is meant by graphical representation?
- Q.2) Explain the importance of graphical representation of data?
- Q.3) Differentiate between a Histogram and frequency polygon.
- Q.4) list the demerits of graphical representation of data.
- Q.5) Construct a histogram for the following frequency distribution.

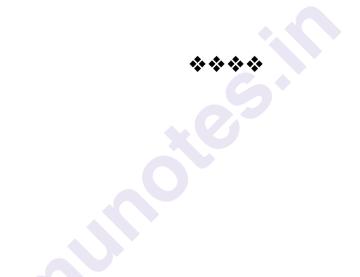
Height (in cm)	101 - 110	111 - 120	121 - 130	131 - 140	141 -150
Number of children	15	18	12	6	9

Q.6) Draw the frequency polygon for the following data

Class Interval	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
Frequency	8	4	10	8	14	12	5	2

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#### FINANCIAL MANAGEMENT

#### **Unit Structure:**

- 4.0 Objectives
- 4.1 Introduction
- 4.2 What is financial management?
- 4.3 Following are the most important elements of financial management:
- 4.4 Need /Importance for financial management in an educational organisation
- 4.5 Budgeting and Allocation of Finances to Departments and Activities
- 4.6 Educational Budgeting
- 4.7 Sources of Funds for Efucational Institutions
- 4.8 Allocation of Finance to Department and Activities
- 4.9 Event Management- Need and Steps
- 4.10 Need for Event Management
- 4.11 Stepps of Event Management
- 4.12 Greening of the Educational Institution- Saving Energy and Expenses
- 4.13 Conclusion
- 4.14 References

#### 4.0 OBJECTIVES

- 1. To help students to understand the meaning of Financial Management.
- 2. To help students to understand the importance and need of Financial Management in Education .
- 3. To help students to understand the meaning of Educational Budgeting, it's execution and importance.
- 4. To help students to understand the process of allocating financial resources to the different departments and activities .

- 5. To help students to understand the meaning of Event Management, it's need and steps.
- 6. To help students to understand the meaning of Greening of Educational Institution.
- 7. To help students to understand the different methods of saving energy and expenses under Greening of Educational Institution.
- 8. To impart the knowledge, skills of being an excellent Educational managers.

#### 4.1 INTRODUCTION

If we look at the term, we encounter two terms: one is financial and second is management. So let's first understand the meaning of this term 'financial management" in simple words it can be said that financial management means applying the functions of management to finances so that they can be used effectively with a greater profit seeking objective. What comes to our mind when we are speaking about any organisation? It's not just about the humans who are working in, it it's not about the materials which are used to function, but it is about everything that is required to function properly in the organisation If you look at any organisation, the resources of the organisation can be classified into 3 main categories. The categories are as under:

- 1. Human resources
- 2. Material resources
- 3. Financial resources
- **1. Human Resources:** Human resources means the people who are working in an organisation. It involves the teaching staff, non teaching staff, supportive staff and so on.
- **2. Material resources:** material resources means all the material for example the benches, the board, the cupboard etc which are required in the organisation for carrying out day today activities.
- **3. Financial resources:** financial resources means the money which is required to carry out the smooth functioning of all the resources including human resources and material resources.

As we know that to run an organisation it takes a lot of hard work and a lot of Management so the most important factor in almost all the spheres of the organisation is the money. So basically financial management means managing the finances of the organisation properly which involves following the functions of Management. Firstly we will try to explain the term financial management in terms of Management as follows.

#### **4.2 WHAT IS FINANCIAL MANAGEMENT?**

Financial Management

Financial management means strategically planning, directing and controlling of the finances of an organisation in order to ensure the proper distribution of the money in an organisation which will yield the smooth functioning of the organisation. In any organisation the most important thing is ensuring that the organisation meets its objectives as decided earlier and such objectives can be achieved only when its finances are properly managed. To make the concept clear let's take an example,

"If in a school the salaries of the teachers are paid on every first day of the month in one month the principal is on vacation and so the salaries are not credited into the accounts on the first day of that month, the principal returned to school after 15th day of that month. It was a pretty much delay in paying the salaries of the teachers ,so it created kind of dissatisfaction into the minds of the teachers, also it has created imbalance in managing the finances of that school."

In this example if the principle was about to go on vacation, he would have in prior informed any other Concerned person who would have signed the cheques or have issued the salary so that the work can be done on time as it was done before. So if we fail to do any activity according to schedule or execute any thing according to our planning, it make create a sense of confusion; it make create a sense of mismanagement into the minds of the people who are working over there. The example is about the salaries of the employees but the mis management can also happen in terms of other resources also. So in order to avoid or such kind of mistakes we need to have a proper financial management. This is why Financial Management is of utmost importance in an educational organisation.

## 4.3 FOLLOWING ARE THE MOST IMPORTANT ELEMENTS OF FINANCIAL MANAGEMENT

#### 1. Budgeting:

Financial management cannot be possible without making a budget. A budget refers to the forecasting of all the expenditures and incomes which are to be received in a year in an organisation. So if we have to run any organisation, the budget must be prepared before entering into that particular year. If we are talking about the education institute, then at the time of the beginning of academic year the committee should organisers the meeting and instruct the concerned department to prepare a budget for all the expected income and expected expenditures which are to be incurred in the upcoming financial year.

#### 2. Proper allocation of resources:

There are three types of resources involved in an organisation to make it function so the finances must be spent properly in an organisation on this resources that should not be over budget. In that ,there should not be over spending likewise there should not be under spending on any of the resources. That's why the must be proper allocation of resources which is the important part of financial management.

#### 3. Cash flow management:

Again in financial management the cash which is flowing in and out means the incomes and expenditures are to be managed properly under financial management.

#### 4. Reporting:

All the records under financial management suggest the budgets, the income statements, the different kinds of accounts the spending must be recorded properly. They can be maintained manually also and digitally also. Maintaining a proper digital record in today's times is very much necessary in order to ensure the smooth functioning and planning for next academic year.

# 4.4 NEED /IMPORTANCE FOR FINANCIAL MANAGEMENT IN AN EDUCATIONAL ORGANISATION

#### A) Makes it easier to forecast:

It makes easier to forecast about the funds the requirement of the funds it also helps to have adequate funds very sources of funds can be brought to get to make a proper capital structure in an organisation.

#### B) Helps to reduce uncertainty:

Financial planning can help to reduce uncertainty with regard to change in the Trends which can be easily met with the help of adequate funds

#### C) Ensures liquidity:

Liquid funds are maintained to make an obligation as required.

#### D) Maintain stability:

Financial management helps in maintaining a reasonable balance between outflow and inflow of the funds so that stability is maintained.

#### E) Increase in profitability:

It ensures proper and strategic planning. It helps to evaluate Investment plans as a result profitabilities are enhanced.

#### F) Helps in growth and expansion:

It helps in growth and expansion of the organisation which ensures the long run survival of the Institution.

#### **G)**Locating the problems:

It helps to locate the problems of the organisation through analysis. This helps in taking proper action against the problems.

#### H) Risk management:

When Financial Management is done, we can manage the risks which are encountered in the process of managing the organisation effectively.

Thus we have seen the detailed meaning of Financial Management as above .This will help you in understanding further concepts related to Financial Management.

#### • Check your progress:

- 1 What is Financial Management?
- 2 What are the different elements of financial management?
- 3 Why ia financial management needed?

## 4.5 BUDGETING AND ALLOCATION OF FINANCES TO DEPARTMENTS AND ACTIVITIES

Budgeting in general and Educational budgeting in special are is very important. Budget means the estimates which are made before carrying out any activity, so that the activity can be carried out smoothly and with no or minimum errors. We will see in detail the meaning of the term Budget as follows:

#### What is a Budget?

"Suppose you want to buy a mobile phone of Rs.10,000. You visit the shop and the shopkeeper offers you a mobile phone of Rs.15,000, you think to yourself that this mobile is expensive as it is going out of your budget .It means you have planned to spend Rs.10,000 only for buying a new mobile phone after considering your resources etc."

The word budget is derived from the French word 'Bougette' meaning small bag. From this example, the meaning of Budget is clear .In other words it can be said that Budget is the Blue Print of income and expenditure which will be met in a particular period of time. It is the outline of all the expenses, earnings which will be acquired by a unit /firm/institution.

#### 4.6 EDUCATIONAL BUDGETING

In an educational institution one has to think about profit planning, this profit planning has to be done in taking into consideration so many factors such as available resources, available funds, managements of work flow and accomplishment of the objectives. For all this proper planning is required it can be done effectively if the institution prepares an educational budget. In other words it can be said that educational budgeting means preparing a Blue Print for the activity which will be carried out in the institution in an academic year.

Budgeting is the formulation of plans for the future as such, budgets are statements of anticipated results. Generally the budget is prepared for one academic year. The educational budget is not just a fiscal planning document or an expense tracking tool, but a tangible deliverable of the educational promises of the institution to its community as important as the school budget is to achieving the educational goals of the institution, the process for developing a good budget is not complicated. The process of developing an educational budget can be given as follows:

#### 1. Review:

Before drawing a plan for the future most look into the past for achievement and mistakes, this process is called a Review. We can look for accuracy of the previous budget, whether we under spent or over spent. Such things can help us in preparing our budget more accurately. It can also save the cost.

#### 2. Planning:

The planning stage shouldn't be a one-step process. It's important to model a range of income and cost scenarios based on your most important data. To be as accurate as possible in your planning, consider data such as:

- Changes in funding (revenue and capital income)
- Number of pupils and their characteristics
- Class and group sizes
- Staffing profiles and increments
- Pay and price increases
- Procurement and maintenance
- Longer-term development plans in areas such as asset management, premises, staff and IT/ICT
- Local Authority Plans/Central Government Plans

#### 3. Forecasting:

Forecasting means gassing about the changes which will take place in future. Many times this thing is done to predict about the availability of funds. This changes can appear due to following factors:

- Inflection
- Curriculum changes
- Teaching staff salary
- Aims of the school development plans
- Longer term improvement and development aspiration

#### 4. Implementation and Evaluation:

Was the budget gets approval from the governing body the budget is implemented. At the same time monitoring and evaluation should begin it will help us to highlight the areas of potential risk at the earliest. Ongoing evaluation gives us a head start on the following years review an helps inform forecasting.

## 4.7 SOURCES OF FUNDS FOR EFUCATIONAL INSTITUTIONS

In order to manage the finances effectively the first thing we need is the funds or we can say the money. From where do the education institutions get these funds? The answer to this question can be given as follows with the help of following points in which I have tried to give the different sources of funds which are provided to educational institutions.:

#### 1) The central government:

There are different schemes and policies laid down by the central or union government which provide a huge amount of help to the educational institutions all over India. The central government provides funds in the form of different policies and projects to almost all the schools or educational institutions in India under different schemes.

#### 2) The state government:

The state government of the educational institution in which it is located also helps to a great extent in providing the funds which are necessary to carry out different activities and tasks, mainly the process of education. These are also provided under different schemes and policies of the government.

#### 3) The local government:

The local government also helps in providing the funds to the educational institutions where it is located.

#### 4) Other government organisations:

There are different departments of government and different organisations which also provide a great help to the education sectors by providing the funds in the form of money or the material which is needed in these educational institutions.

#### 5) Private funding:

There are various business firms ,corporates, MNCs and industries which are also helping this education sector to grow by providing them various funds. Under CSR, which is corporate social responsibility, many companies are taking up different projects to help out the school children to Excel into their fields of interest. They also provide funds to the education institute.

#### 6) Individual funding:

Any individual who wants to fund the educational organisation also donates the funds towards that organisation also in individual funding the private management of the educational institution invests its own funds into that institution

#### 7) Fees from the studens:

The fees which are charged from the students is also the major contribution of the funds of any education Institution. In Private Institutions it serves as the major contributor of the funds.

#### 8) Other fund raising drives taken up by the educational institution:

The institution may take up different drives for fun reason such as Diwali mela ,Ganpati Mela, exhibitions on different topics etc in order to race the funds for the education Institution

Thus, we have seen from where the sources come and from where the educational institutions can get funds. However getting funds is not only important but managing the funds properly and affectively is also of greater importance so for these purposes effective Financial Management is needed.

## 4.8 ALLOCATION OF FINANCE TO DEPARTMENT AND ACTIVITIES

Once the institution has funds(finance) they should be allocated properly to all the department. While allocating the finance to department and activity following thinks must be kept in mind:

#### • Knowing the scope

Before allocating the finance, we must know the department and activity such as is it big or small, long or short etc.

#### • Determining your total spending requirement

We Should determine are money requirement which will be spent in an academic year.

#### • Department wise finance allocation

In an institution there are different departments such as the academic department, there are such departments in an academic department which involves teaching learning, laboratories, examination etc. infrastructure, administrative department, accounts department etc. according to the requirement of this department the finances must be allocated.

#### • Activity wise finance allocation

In an institution there are various activities some activities may be short term or long term, some activity may be big or small so accordingly the finances must be allocated.

#### • Do not over finance or under finance

The funds which are necessary for the institution are carefully allocated among the departments and activities. For this, Budgeting helps to a great extent.

#### • Maintain a "crisis amount "

This can be done after forecasting the changes in the coming future, we have to maintain a certain amount which can be used in the crisis situation if arises any.

#### • Check your progress:

- 1. what is budgeting state its process
- 2. which are the different sources of funds for an educational institution
- 3. state how is effective allocation of finances to different departments and activities is done.

#### 4.9 EVENT MANAGEMENT- NEED AND STEPS

Event means any occasion which ranges from small scale to large scale. These occasions can be any festival, a conference, School Gatherings, Exhibitions etc Event management focuses on the fulfillment of objectives which are set before the event. Event management is nothing but applying the functions of Management while carrying out any event. These functions of management are

- Planning
- Organising
- Staffing
- Directing
- Controlling.

There must be management to each and everything we do, when it comes to organising anu event, it must be properly planned, well executed and controlled for checking achievements and loopholes. Evemt management is an art and science as well.

#### 4.10 NEED FOR EVENT MANAGEMENT

Event management is important from the following points of you

#### • It increases the brand value of your company

With a proper event management it proves beneficial in improving the brand value of your company and in our terms of our educational institution if the events are properly plant it create an impression over the community with which it deals.

#### • Enhances leadership

When there is a matter of managing any event it must be headed by a leader hence it enhances the leadership qualities of the persons involved in the lead position so it can be used as a tool for development of the employees working in an institution. Effective leadership can manage the event effectively there by making it a success.

#### • To meet the goals

In an institution every event is plant under certain objectives and goals base goals depends on the nature of the event it may be a sports event a competition and examination a gathering any community program any conference etc proper event management helps us to achieve the goals which are set by the Institution if there is no event management then such event may go in rain resulting in not yelding anything out of it.

#### • Scope for creativity

Event management can also provide a scope for creativity in terms of innovations creation of new ideas which can be implemented while executing the event such creativity helps in the growth of Institution there by increasing the brand value of the Institution.

#### • Helps in managing the budget

When any event is going to take place it is certainly going to utilize the funds of the institution if proper event management is done then it can help in managing the budget which was required to carry out such event such a budget planning in advance helps in forecast in the estimated funds and also can solve the problems if there is short touch of funds.

#### Building up an image in the society

When events of the Institutions are properly plant it is for sure that the events will go properly such proper event management helps in creating a positive image of the institution in the society. It increases the trust of the people on the institution obviously it is going to help the institution in the present and future Times.

#### • Check your Progress:

- 1. What is budgeting?.
- 2. What is the process of Budgeting?
- 3. Which are the different sources of funda for an Educational Institution?

#### 4.11 STEPPS OF EVENT MANAGEMENT

We have seen the importance or need of event management, now we will discuss the different steps which can be implemented while planning any event to make the event successful. The steps of event management can be stated as follows:

#### 1. Define goals and objectives:

The first and foremost important thing is defining the goals and objectives of the event. These goals and objectives can be set according to the nature of the event, the outcomes which are needed for the Institution, the population on whom it is going to focus and the returns which are expected by the Institution.

#### 2. Prepare event budget:

For any event, the budget is most important. So the budget should be made before planning any event. The budget can be made in taking into consideration the different things such as the expenses which will be incurred for the execution of the event. The material which is required for the event, the marketing cost of a event and every cost which is involved in the management of the event. We should also think about the available resources which are going to be sources of funds for the institution.

#### 3. Staffing or building of the team:

As one of the functions of the management staffing is very important. Who will do what duty, who will be concerned for different things which are involved in the event. All such things are decided at the stage when staffing is done. We assign responsibilities to different persons, the tasks are divided, the schedule is made and accordingly everyone starts working towards the event

#### 4. Deciding the venue and date:

At this stage the date and the venue of the event is decided by mutual discussions among the team members of the event management team. The date and venue of the event is decided after taking into consideration various factors of the Institutions and the population or the target group for whom the event will be organised

#### 5. Marketing or branding of the event:

In order to make the event in reach of the targeted population, the marketing is very important the marketing should be done in such a way

that more and more people will be attracted towards the event, so that the event can be made a youth success this marketing should go along with the interest of the Institution and according to the nature of the event.

#### 6. Actual execution of the event:

The day when the event is going to take place is very important. At this stage, controlling function of management is used where while carrying out the event continuous supervision is done to ensure that everything is going well.

#### 7. Evaluation of the event:

Lastly after the event has taken place, the evaluation of the event is very much important. In order to find out the achievements and loop holes of the event. The achievements can prove as an encouragement for the institution to carry out such events in future and loop holes will come tell the institution to avoid such mistakes while implementing event planning in the future.

Thus, need and steps of event event management are stated as above. Let it be the smallest even the planning is very important, so we must not ignore if any small event is going to take place in our institution because if the event management is done properly, the event indeed becomes successful.

#### • Check your progress

- 1. Define event management and state its need.
- 2. What are the different steps of event management?
- 3. State how does the event management prove helpful to an educational institution.

## 4.12 GREENING OF THE EDUCATIONAL INSTITUTION- SAVING ENERGY AND EXPENSES

You may be surprised at the word 'greening of the education institution'. In fact this is very interesting term as the word such as greening is concerned with environment. Greening is concerned with greenery in today's world where we are facing many problems. Which are created by humans, such as pollution, deforestation etc which are proving to the human beings that is boom in the technical sector. Thanks to the invention in Science and Technology that the life has become easiest. The tasks are being done swiftly by the Machines but after all benefits of such Technology there are some disadvantages. Also in this modern era we have started to realise the importance of Sustainable environment the importance of nature and hence we must go back towards the nature in some possible ways.

Which possible ways can save the energy and expenses of the institution today? The cost of electricity, the cost of maintenance of every equipment is increasing day by day. It is not just a burden on the budget of the

Financial Management

institution but also proving a hazard to the environment. So why not make the greening of the education institution by implementing the ways in which non conventional energy resources can be used.

#### Following are the ways of greening and education institution to save the energy and expenses

#### 1. Using solar energy:

Solar panels can be installed in the institution and it can be used as an alternative to traditional electricity. Though complete replacement is not possible but we can certainly use different forms of solar energy to supplement the use of power in the institution. It can also reduce the burden on the financial system of Institution.

#### 2. Rainwater harvesting:

The technique which is followed by most of the educated and environment concerned people nowadays in the rainy season is rainwater harvesting. Rainwater harvesting can be done in the rainy season to retain the rainy water to supplement the use of normal water which is stored in the water tank. Such water can be used for so many purposes in the institution it will reduce the burden on the water supplying bodies also it will reduce the water bill of the institution this will inculcate the value of Environment protection among the students of the institution.

#### 3. Tree plantation in the institutional campus:

There are different varieties of plants and trees which can be planted in the campus for different purposes. It will help to maintain the atmosphere of the campus pure and lively. The green cover in the campus will be a pleasing picture to witness.

#### 4. Going paperless:

The merciless cutting of trees has resulted in deforestation. Papers are used widely in the institution for different purposes. At this time we can take help of technology to replace the paper work. E-files can be maintained instead of paper files, examinations can be held using the electronic mediums, data can be stored on the computer instead of registers. Going digital can help in reducing the paper work and saving the trees.

#### 5. Encouragement to cycling:

Considering the distance from which students travel to the school we can encourage them to make use of cycles instead of the vehicles which run on fuels this can help in saving the fuels and reducing the pollution.

#### 6. Special campaigns for students and community:

Special campaigns related to protection of environment and importance of going green can be organised for the students and also for the community. It will also help in inculcating the values of Environment protection.

#### 7. Setting an eco-friendly code of conduct for the institution:

The eco friendly code of conduct consists of different roots and ethics which must be followed by each and every person working in the Institution and also the students. So that the environment will be protected. Such rules are switching of the fans and lights when not necessary, throwing the garbage into the dustbin, saving the water etc.

Thus, we have explained the different things which can be implemented in the educational institution in order to make it green which will help in reducing the expenses of the Institution and also saving the energy. This is a high time that we should realize ,we have to return to the environment what we have taken from it.

#### • Check your progress:

- 1. Which are the different ways of greening of an education institution?
- 2. How will greening of an institution help in saving energy and expenses of the Institution?

#### 4.13 CONCLUSION

Thus in the above topic of financial management, we have discussed the meaning of financial management, the important elements of financial management, why Financial Management is needed in an educational institution. We have also seen the concept of educational budgeting, the steps of preparing an educational budget, sources of funds for an educational institution. We have further seen the allocation of finances to the departments and activities of an education Institution. In next segment, we have dealt with the meaning of event management, the steps of Event Management and the importance/need of event management. Lastly, we have dealt with the very important concept of greening of an education institution which is the need of the hour. This module will help you to develop and understanding of all the topics which are covered as above.

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#### PRACTICUM WORK OF EDUCATIONAL MANAGEMENT

#### **Unit Structure:**

- 5.0 Objectives
- 5.1 Introduction
- 5.2 Data Collection Techniques
- 5.3 Data Analysis
- 5.4 Practical Work: Interview a middle level educational manager, about the challenges faced in managing the educational institution
- 5.5 Practical Work: Interview a school or college teacher, about challenges faced in classroom management
- 5.6 Practical Work: Essay Writing: An essay of 1000 words, on the given topic
- 5.7 References

#### 5.0 OBJECTIVES

- 1. To compare middle level educational managerin managing the educational institution.
- 2. To create a survey tool (Google Forms) for middle level educational manager.
- 3. To acquire knowledge of challenges faced by middle level educational manager, in managing the educational institution.
- 4. To study the opinions of middle level educational manager, in managing the educational institution.
- 5. To compare school or college teacher in classroom management.
- 6. To acquire knowledge of challenges faced in classroom management.
- 7. To create a survey tool (Google Forms) for a school or college teacher, about challenges faced in classroom management
- 8. To develop the ability to identify roles of participating members (individual/ collective) & plan various institutionalized managerial activities.

#### 5.1 INTRODUCTION

Managing educational organisations is the focus of the research and practise of educational management. The main focus of educational management is on the education objectives. These objectives or goals provide the management of educational institutions the essential feeling of direction. When a group combines people and material resources to supervise, plan, implement strategies, and implement structures to execute an education system, this is referred to as educational management.

The project course work for educational management is the topic of this unit.

Understanding how various management concepts are applied in the context of education is the objective of this unit.

#### **5.2 DATA COLLECTION TECHNIQUES**

Data will be collected in order to examine and decide how to face the challenges in managing the educational institution. The information gathered will be used to draw some conclusions. Therefore, collecting information is essential for comprehending the challenges of managing educational institutions and the roles of middle level educational managers. Let's first examine what data gathering is and how it benefits different areas before moving on to the techniques of data collection. (Koul et al., 2016)

Data collection in statistics refers to the process of collecting information from all pertinent sources in order to resolve the study topic. Evaluating the result of the issue is helpful. One might get to a conclusion about the answer to the relevant issue using the data collecting techniques.

- A. Inquiry forms
- B. Observation
- C. Interview
- D. Sociometry
- E. Psychological Tests

#### **INTERVIEW:**

A qualitative interview occurs when researchers ask one or more participants general, and record their answers. The researcher then transcribes and types the data into a computer file for analysis. When it's impossible to observe participants directly, interviews in qualitative research offer important information and let participants express in-depth personal information. The interviewer, as compared to the observer, has more control over the kinds of information obtained since they are able to ask particular questions to elicit this information. (C.R. kothari, 1990)

#### **TYPES OF INTERVIEWS:**

There are a number of approaches to interviewing and using questions on questionnaires. Which interview approach to use will ultimately depend on the accessibility of individuals, the cost, and the amount of time available.

**One-on-One Interviews:** The most time-consuming and costly approach is to conduct individual interviews. A popular approach in educational research, the one-on-one interview is a data collection process in which the researcher asks questions to and records answers from only one participant in the study at a time

**Focus Group Interviews:** Focus groups can be used to collect shared understanding from several individuals as well as to get views from specific people. A focus group interview is the process of collecting data through interviews with a group of people, typically four to six. The researcher asks a small number of general questions and elicits responses from all individuals in the group. Focus groups are advantageous when the interaction among interviewees will likely yield the best information and when interviewees are similar to and cooperative with each other.

**E-Mail Interviews:** Another type of interview useful in collecting qualitative data quickly from a geographically dispersed group of people. E-mail interviews consist of collecting data through interviews with individuals using computers and the Internet to do so. If you can obtain e-mail lists or addresses, this form of interviewing provides rapid access to large numbers of people and a detailed, rich text database for qualitative analysis. It can also promote a conversation between yourself as the researcher and the participants, so that through follow-up conversations, you can extend your understanding of the topic or central phenomenon being studied.

Different tools are appropriate for gathering different types of information for different objectives. The student may combine one or more of the tools to achieve his goals. Therefore, students should get familiar with the various instruments, as well as their characteristics, benefits, and drawbacks. They should be proficient in their creation and application. The methodology is the methodical approach used to complete a challenging or scientific activity.

#### **RATING SCALES:**

One of the query forms is the rating scale. Form is a term used to describe expression or assessment of a situation, an item, or a character. Typically, opinions are presented on a value scale. Devices for quantifying such judgements include rating techniques. A rating scale is a highly helpful tool for evaluating quality, especially when it's challenging to measure quality objectively. A question like "How good was the performance?" is one that is difficult to objectively answer. Rating scales keep track of judgments or views and show the degree or quantity of various quality levels that are grouped along a line. For instance: How effective was the exhibition?

This is the most commonly used instrument for making appraisals. It has a large variety of forms and uses. Typically, they direct attention to a number of aspects or traits of the thing to be rated and provide a scale for assigning values to each of the aspects selected. They try to measure the nature or degree of certain aspects or characteristics of a person or phenomenon through the use of a series of numbers, qualitative terms or verbal descriptions.

#### THE LIKERT SCALE:

The Likert scale utilizes questions that are phrased for or against the proposition, and the strength of the respondent's approval or disapproval of the statement is expressed by the response's five-point rating. With this approach, there is no longer a requirement to submit items to the judges so they can determine scaled values for each item. (Donald Ary et al., 2010)

The first stage is to compile a group of statements about the issue at hand. Statements may or may not be true, but they must reflect the views of a sizable portion of the population. They must clearly state whether they are in favour of or against a certain point of view. The ratio of positive and negative comments should equal.

The Likert's scaling techniques assigns a scale value to each of the five responses. All favourable statements are scored from maximum to minimum i. e. from a score of 5 to a score of one or 5 for strongly agree and so on 1 for strongly disagree. The negative statement or statement opposing the proposition would be scored in the opposite order i.e. from a score of 1 to a score of 5 or 1 for strongly agree and so on 5 for strongly disagree. The total of these scores on all the items measures a respondent 's favourableness towards the subject in question.

#### 5.3 DATA ANALYSIS

#### **GRAPHICAL REPRESENTATION OF DATA:**

The distribution represents the frequency of particular values or ranges of values for a variable. The simplest distribution would include every conceivable value of a variable along with the number of persons who had each value. Frequency distributions can be shown as a table or a graph, respectively. Examples of this include line graphs, pie charts, and bar graphs. The distribution of the scores collected on a variable is often displayed using a line graph in order to demonstrate the shape of the distribution. Using the bar diagram, mean scores on the research variable are compared across several subgroups. Pie charts are used to display a variable's variance or the percentage of various subgroups in the sample.

A statistical graph is a tool that informs you about the shape or distribution of a population or a sample. A graph can be a more effective approach to convey data than a mass of numbers since we can see where data clusters

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and when there are only a few data values. Newspapers and websites utilise graphs to show patterns and make it simple for readers to compare data quickly. Statisticians usually plot the data first to visualise it. Thus, it is feasible to employ more formal techniques. The graph types that are used to summarise and organise data include the dot plot, bar graph, histogram, stem-and-leaf plot, frequency polygon, pie chart, and line graph.

#### **Pie Charts:**

In a pie chart, a circle is split into sectors, each of which represents a proportion of the whole. Each category is represented by a piece of the pie in a pie chart. The slice's size varies according to the percentage of replies that fall into each category. The relative frequency has simply been multiplied by 100.Pie charts are useful for showing the relative frequency distributions of a few different categories. Pie charts that compare the results of two distinct surveys or tests may often be confusing.

#### Bar charts:

A group of data represented with rectangular bars with lengths proportional to the values is a bar graph. The bars can either be vertically or horizontally plotted. Bar graphs may also be used to display the frequency distribution of several categories. We frequently need to compare the findings of many surveys, or of various situations within a single survey. In this instance, we are contrasting the replies' "distributions" across the surveys or circumstances. Bar graphs are frequently great for comparing two distributions side by side.

#### Line graph:

The data is shown in the line graph as series that are connected by straight lines. These sequences are known as markers. A chart type called a line graph is used to display data that evolves over time. We create line graphs by connecting a number of points together using straight lines. It is also known as a line graph. The 'x' and 'y' axes' are the two axes that make up the line graph. The x-axis is referred to as the horizontal axis. The y-axis is the term for the vertical axis.

#### General Rules for Graphical Representation of Data:

There are certain rules to effectively present the information in the graphical representation. They are:

- Suitable Title: Make sure that the appropriate title is given to the graph which indicates the subject of the presentation.
- **Measurement Unit:** Mention the measurement unit in the graph.
- **Proper Scale:** To represent the data in an accurate manner, choose a proper scale.

- **Index:** Index the appropriate colours, shades, lines, design in the graphs for better understanding.
- **Data Sources:** Include the source of information wherever it is necessary at the bottom of the graph.
- **Keep it Simple:** Construct a graph in an easy way that everyone can understand
- **Neat:** Choose the correct size, fonts, colours etc in such a way that the graph should be a visual aid for the presentation of information.

#### Each student must a report submit a report on any one of following:

- a. Interview a middle level educational manager, about the challenges faced in managing the educational institution
- b. Interview a school or college teacher, about challenges faced in classroom management
- c. Write an essay of approximately 1000 words on: Educational institution's carbon audit.

# 5.4 PRACTICAL WORK: INTERVIEW A MIDDLE LEVEL EDUCATIONAL MANAGER, ABOUT THE CHALLENGES FACED IN MANAGING THE EDUCATIONAL INSTITUTION

Each student must construct a tool to conduct Interview of Middle level Educational managers about the challenges faced in managing the educational institution and submit a detailed report (including an introduction, significance, methodology, data result, conclusions and complete bibliography)

#### **Introduction of Topic:**

- 1. A Full description of Qualification Educational Managers, workload and skills required
- 2. A full description of requirements of Good Educational Institution.
- 3. A full description of instruction transacted by Educational managers.
- 4. A full Description of Government guidelines and regulation for Educational Institution

#### Significance:

- 1. A full description of Important role of Educational Managers in Educational Institutes
- 2. A full description of How Educational Managers overcome challenges

#### The data collection Tool (Google Form):

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#### **Tool Construction:**

Use 5 Point Likert Rating Scale with 20 items

#### Sample:

List the educational Managers and their data, that responded to your questionnaire, in paragraph or table

#### **Data Collection Process:**

Explain how you sent the questionnaire to the educational institutes Managers and collected data

#### The Data Analysis:

1. Graphical Analysis of the data

#### The Findings and conclusion:

- 1. Summarises the significant findings of the analysed Data
- 2. Express opinions about Educational Managers
- 3. List Skills developed in you
- 4. Reflection

#### The Bibliography:

List of books, Articles, websites address used as reference

# 5.5 PRACTICAL WORK: INTERVIEW A SCHOOL OR COLLEGE TEACHER, ABOUT CHALLENGES FACED IN CLASSROOM MANAGEMENT

Each student must construct a tool to conduct Interview of Interview a school or college teacher, about challenges faced in classroom management and submit a detailed report (including an introduction, significance, methodology, data result, conclusions and complete bibliography)

#### **Introduction of topic:**

- 1. A Full description of Qualification a school or college teacher, workload and skills required
- 2. A full description of requirements of Classroom Managements.
- 3. A full description of instruction transacted by a school or college teacher.
- 4. A full Description of Challenges faced in classroom management

#### Significance:

- 1. A full description of Important role of a school or college teacher in Educational Institutes
- 2. A full description of How a school or college teacher overcome challengesfaced in classroom management.

#### The data collection Tool (Google Form):

**Tool Construction:** Use 5 Point Likert Rating Scale with 20 items

#### Sample:

List a school or college teacher and their data, that responded to your questionnaire, in paragraph or table

#### **Data Collection Process:**

Explain how you sent the questionnaire to the school or college teacher and collected data

#### The Data Analysis:

- 1. Para graphical Analysis of the data.
- 2. Graphical Analysis of the data

#### The Findings and conclusion:

- 1. Summarises the significant findings of the analysed Data
- 2. Express opinions about a school or college teacher
- 3. List Skills developed in you
- 4. Reflection

#### The Bibliography:

List of books, Articles, websites address used as reference

## 5.6 PRACTICAL WORK: ESSAY WRITING: AN ESSAY OF 1000 WORDS, ON THE GIVEN TOPIC

Write an essay of approximately 1000 words on: Educational institution's carbon audit.

#### **Introduction of topic:**

- A Full description of Environment issues Global Worming, Use of Energy Resources
- A Full description of Meaning of Carbon Audit

#### **Description of topic**

- A Full description of History of Educational Institutes in India
- A Full description of Present Condition of Educational Institutes in India
- A Full description of Annual Audit of Educational Institutes
- Use of energy resources by Educational Institutes
- Need of Carbon Audit in Educational Institutes

#### **Bibliography:**

List of books, Articles, websites address used as reference

Write an essay of approximately 1000 words on: Educational institution's carbon audit.

#### **Educational institution's Carbon Audit:**

The two main environmental issues facing the world now are global warming and climate change. Growing populations and economies result in higher energy usage. As fossil fuels make up a significant portion of the energy used to produce electricity, this results in the issue of diminishing fossil fuel supplies. The abovementioned problem is made worse by the rising emissions of CO2 and other "Green House Gases" (GHG), which raise earth's temperature and are referred to as "global warming". It is our job to limit energy use and, consequently, greenhouse gas emissions.

A carbon audit measures all greenhouse gas (GHG) emissions, represented as carbon dioxide equivalent, from a specific person, event, organisation, service, area, or product (CO2e). When fossil fuels are burned, land is cleared, and products like food, manufactured goods, materials, wood, roads, buildings, transportation, and other services are produced and consumed, greenhouse gases, such as the carbon-containing gases carbon dioxide and methane, can be released into the atmosphere. The carbon audit assessment is a measure of the total amount of carbon dioxide emissions that is directly and indirectly caused by an activity or is accumulated over the life stages of a product. Global GHG emissions are presently about 34.5 Billion ton of CO2 equivalent per year which is equal to about 5 ton per person per year. The carbon audit assessment helps us to gain a better understanding of how our actions are connected to the climate change. The term carbon audit can be defined as the estimated emission of carbon dioxide and other greenhouse gases associated with a particular activity. Calculating the CEF of educational institution makes the campus more sustainable, and will help to create environmentally responsible students. Educational institutions play a significant role in growth of a nation's economy.

It is thought that the history of education in India began during the Vedic era, when small groups of students were taught the Vedas, religion, math,

and logic. The disciples would go to a guru, who was typically an elderly person who lived in or near a clearing in a forest. The Gurukul System was the name of this style of instruction. The English education system at the time was the result of the Industrial Revolution. Subjects like the arts and humanities took a backseat as they didn't help the students become immediately employable, while science and mathematics took the forefront. This education system was shipped to Britain's different colonies around the world, India being one of them.

To fulfil the demands of students and society, educational institutions have undergone significant modifications from the gurukul period to the present. Every subject, including infrastructure and educational methods, has undergone transformation. Education institutions are now turning into centres for education. Educational institutions are attempting to produce more in order to meet society's needs and those of the students. For students, they provide a variety of programmes, instructional approaches, and learning environments. However, as they meet these needs, educational institutions are utilising more energy resources, such as lighting, air conditioning, IT labs, etc.

The process of systematically evaluating and documenting financial statements, taxes, expenditures, and incomes obtained by educational organisations such as schools, colleges, and universities from registration and academic fees, payment transactions, fines and penalties, funds and donations, hostel accommodations, assets and investments, grants from the government or other sources is known as the audit of educational intuitions, or audit of books in the education industry. While Carbon Audit or Carbon Footprint of an Educational Institution is very important to understand such that it's key emission sources can be identified and necessary mitigation measures can be adopted for carbon reduction.In today's date, very few colleges disclose their carbon emissions. By educating graduates and educating the public through research, educational institutions have a significant impact on local and national policymaking. It lays the foundation for educating the young brains that serve as effective innovation incubators and the source of many sustainability efforts.

An energy audit is a routine examination of a building's energy use to improve energy efficiency. The auditors look at how much energy is consumed by energy-consuming equipment, see how it is utilised by its different parts, and look for chances to save money. The standard steps in an energy audit procedure are:

- Energy performance evaluation of your system
- Identification of equipment EMO (Energy Management opportunities)
- Estimated savings potential
- Strategies for reducing energy use are advised.

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Benefits of Energy Audit: Energy auditing is a powerful tool for energy management. Energy savings and an increase in the lifespan of equipment and systems can both be accomplished by discovering and putting into practise methods to achieve energy efficiency and conservation. All these represent financial savings. The power supply firms will produce substantially less emissions and by products based on the axiom that "The less energy is consumed, the less fossil fuel will be burned." As a result, everyone involved helps to protect the environment and advance sustainable development.

The development of a country's economy is significantly influenced by educational institutions. It is a field that is expanding and uses more energy than businesses and information technology parks. Therefore, it is crucial to examine the educational institutions' carbon impact. Students learn about their carbon impact and their obligations via this type of learning. Universities are facilities committed to post-secondary education and research that grant academic degrees in a variety of disciplines. Education institutions are frequently referred to as universities. Consequently, they contribute significantly to sustainable development and the battle against climate change as institutions involved in research, teaching, and community activities.

The way people live and work has already started to alter as a result of climate change. Educational institutions must provide an example for their students, staff, and society at large as they serve as organisations dedicated to education and research and play a vital role in producing graduates who are responsible and interested in preserving sustainable development.

Educational Institutionsmust make investments in energy-saving technology, identify sustainable supply chains, and prioritise increased energy efficiency, including more environmentally friendly and sustainable structures. Many Educational Institutions have created their own carbon reduction goals. Educational Institutions must take greater action to minimise their own carbon emissions, including educating students about sustainable development and the climate emergency, divesting from fossil fuel investments, reinvesting in renewable energy sources, and planting trees on their expansive territory.

Senior leadership, who frequently do not prioritise addressing climate change, must join forces with the young people who are very concerned about what the ecological catastrophe and climate emergency will entail for their futures.

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