INTRODUCTION Globalization and technological change processes that have accelerated in tandem 1.1 over the past years have created a new global economy –Powered by technology, fueled by information and driven by knowledge.?Nature of Educational Technology So far no one is universally agreed upon the definition of the term "educational technology." For most people the term brings to mind such electronic gadgetry as film projectors, tape recorders, television sets and micro–computers used as teaching tools. Other people add such nonelectrical instructional materials as books, photographs and charts. Still others subscribe to a definition that includes not only items used in teaching but also equipments used in educational administration––keeping students' records on the micro film, communicating between schools by radio, correcting entrance examination papers with the aid of a computer and the like. In effect, educational technology can mean different things to different people. Even those who have specialised in this field have failed to arrive at a proper definition. However, in an attempt to satisfy everyone, the Association for Educational Communications and Technology in the United States have come to the following definition: "Educational technology is a complex integrated process involving people, procedures, ideas, devices and organisation for analysing problems and devising, implementing, evaluating and managing solutions to those problems involved in all aspects of learning."In fact, there are two meanings attached to the definition of the term o'educational technology." One meaning refers to the detailed application of psychology of learning to practical teaching problems. The second meaning refers to the application of engineering principles in the development of electro–mechanical equipments of such devices––pictures, tape–recorders, computers etc. These two meanings of educational technology interact in the design and use of equipment to provide control over the learning situation, a rich array of stimulus materials (e.g., films) and interaction between responses of the learner and the presentation of instructional material.However, the correct meaning of the term "educational technology" has been differentiated by Lumsdaine by using two different symbols: ET–1, ET–2.The new term "educational technology" suggests itself and it may be used to refer to a little beyond the use of equipments and techniques that are associated with equipments. On the other route, starting from programmed instruction, a wider conception of educational technology tends to be reached. It is difficult to keep programmed instruction within narrow bounds. Programmed instruction begins to look as though it is a part of something larger and this is educational or instructional technology. Programmed instruction emphasises that the aims of teaching should be analysed, the methods of accomplishing them made explicit and the effects assessed as precisely as possible. These basic ideas are applicable to the systems of instruction that do not necessarily include the use of teaching machines. The term "technology", as Ofiesh (1964) observes, implies the application of science to art.according to futurist Alvin Toffler, –Will not be those who can not read and write, but those who can not learn, Unlearn & relearn?, Concerns over educational relevance and quality co–exist with the imperative of expending educational oppertunities to those made most vulnerable by globalization – developing countries in general, low income groups, girls and women and low skilled workers in particulars.– Darnton and GiacolettFrom the above discussion we can conclude that information technology refers to the information processing of the software application on operating systems or hardware applications that includes computers, videos, telephones and related equipments of telecommunications, tapes, CDs

etc.But it seems a little awkward to observe that whereas the contribution of some kind of technology is visibly felt in respect of the operation of our hospitals, factories, farms and offices, our classrooms have remained a unique example of backwardness by remaining insensitive to the technological inputs and their influences.However, the effective integration of ICTS into the educational system is a complex, om ultifaceted process that involves not just technology, indeed, given enough initial capital, getting the technology is the easiest part – but also curriculum and pedagogy, Institutional readiness, teacher competencies and longterm financing, among others.and more sophisticated modern hardware like electronic computers, space satellites, language laboratories etc.Programmed Learning and Educational Technology: Educational technology can be regarded, as the application of systematic knowledge about learning and instruction to teaching and training with the aim of improving their quality and efficiency.When used appropriately, different ICTS are said to help expand access to education, Strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by, among others, helping make teaching and learning into an engaging, active process connected to reallife.In addition, teachers who have traditionally perceived themselves as classroom's chief performers –– lecturing, conducting recitations, leading class discussion –– can feel demoted to a less prestigious educational role when they are asked to have reading materials, radio, television or computers to deliver the content of lessons.For solving the varied problems of education successfully, educational technology consisting of various media of mass communication, suitable child learning processes, and modern testing and evaluation techniques are essential.Information technology (IT) is the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information by a micro–electronics – based combination of computing and telecommunication.refers to –any communication or representation of knowledge such as facts, data or opinions in any medium or for, including textual, numerical, graphic Cartographic, narrative or audiovisual forms.?Instructional Technology is neithers technology in education nor technology of education but both and all pervasive which pervades the whole teaching learning or engineering put it should be taken as a sum total of all such aspects, which go a long way in shaping the personality of the learner in a meaningful context.The point is that it is not merely a system of presentation, a particular technique or a set of principles; it is a methodology for discovering an efficient means of organising learning situatiens to attain specified objectives.The factors causing ihe progress of educational technology are: (1) Student flood due to population explosion; (2) Acute resource scarcities; (3) Rising costs; (4) Unsuilability of output.It spans a wide variety of areas that include but are not limited to things such as processes, computer software, computer hardware, Programming Languages and data constructs.Definition of Information Technology: –Information Technology is a scientific, technological and engineerning discipline and management technique used in handing the information, it's application and association with social, economical and cultural matters.?Programmed learning, though wide in scope, is only a part of the broader concept of educational technology which must include many areas such as the problem of innovation, resources of learning, standardisation and compatibility of system components, the training of personnel, educational productivity and the design of educational plant.Altering old leaching habits in order to master new ones entails not only theexpenditure of energy but also the risk of a teacher looking foolish by committing

embarrassing errors when attempting new techniques in the classroom.* Easy availability of updated data * Connecting Geographically dispersed regions * Wider range of communication media.1.2.1 Concept of Communication Technology Communication Technology is also comprised of two words like –Communication & Technology?.The interaction of physical sciences with education provides us with traditional aids, tools and hardwares such as paper, ink, books, radios, lin–guaphones, films, etc.It should, however, be emphasised that techniques such as critical path analysis, curriculum development methods and task analysis are essential components as well as the hardware system.Earlier educators used to advocate the use of audio–visual aids in the process of teaching in addition to supplementary aids such as pictures, charts, maps, models and various audio–aids.In this connection, Information and communication technologies (ICTS) which include radio and television, and the Internet – have been touted as potentially and powerful enabling tools for educational change and reform.The term in its modern sense first appeared in a 1958 article published in the Harvard Bussiness Review, in which authors Leavitt and whisler commented that –the new technology does not yet have a single established name.In short, anything that renders data, information or perceived knowledge in any visual format whatsoever, via any multimedia distribution mechanism, is considered part of the domains space known as Information Technology.It is processing of information interms of accessing information, decoding information and sending it via a medium and changer to the receivers.Definition of Instructional Technology : Instructional technology is just what it sounds lie, using computers, CD Roms, interactive media, modems, satellites, teleconferencing and other technological means to support learning.According to the Association fo Educational Communications and Technoogy (AECT) – Instructional Technology is often reffered to as a part of educational technology but the use of these terms has changed over the years.While instructional Technology covers the processes and systems of learning and instruction, educational techology includes other systems used in the process of developing human capabilities?ET–2 means the application of scientific principles to instruction and hence the emphasis is on objectives and performances.Our teacher and via him/her the processes of educational resource generation have not properly assimilated or understood the importance and relevance of technology for the classroom.It modifies the learner's environment through the various techniques of presentation, arrangement of learning activities and organisation of physical surroundings.But both these meanings make the scope limited because educational technology is also concerned with the management and organisation of man and material both, so that they achieve the specific objectives of planning and implementation.It modifies the learner's environment through the varied techniques of presentation, arrangement of learning activities and organisation of social and physical surroundings.Technology includes: (1) Preparing pupils for learning experience; (2) Reinforcing their values while pupils are sharing the ex– perience; (3) Relating the experience with the lesson and thus stimulating further learning.We will also dicuss the need & significance of ICTS in Education with specific reference to historical perspective and emerging trends.Instructional technology, today is widely accepted as the application of systems approach in the systemic design of a learning system and as a method or approach combined with the appropriate and necessary media and material to bring about improvement in teaching – learning – evaluation process.It developes new concepts like programmed

learning, microteching, Simulated teaching, video tape, projector and computer etc.Analysis of contents in depth is carried out in this technology.1.3 CONCEPT OF EDUCATIONAL TECHNOLOGY Meaning of "Educational Technology" Words are of little interest in themselves but they do indicate changes in thinking. Once the climate of opinion is right, one may arrive at the word "Educational Technology" by different routes.Hence the heading has to become audio-visual aids and programmed instruction, an odd pairing since some forms of programmed instructions use only the printed page.Frequently, teachers avoid attempting a new instructional technique because it requires too much from them'in energy, time, patience or skill to become adept in its Use.Gradually, the emphasis shifted to the employment of costly gadgets such as video and computers and now the multi-media approach.This requires modernisation in educational management, modernisation of teachers, of learning processes, strengthening of educational finance and emphasis on non-formal education.As you know the half life of information continues to shrink and access to information continues to grow exponentially, schools can not remain mere venues for the transmission of a prescribed set of information from teacher to student over a fixed period of time.- UNSECO -Information technology is a systemic study of artifacts that can be used to give form to facts inorder to provide meaning for decision making, and artifacts that can be used for organization, processing, communication and application of information?the application of learning theories and styles to designing instruction the selection of materials and tools to design and implement a design.In modern education, we can witness the impact of two forces; one, of physical sciences and electronics and the other, of behavioural sciences, operating on theprocess of instruction.In fact, as long as programmed learning co-ordinates these techniques, it is woven into the fabric of educational technology.This is because some technologies are not accepted or only partly accepted because they require too many adjustments of traditional methods of instruction or administration.Thus the amount of change required in the existing habits and the fear of failure or of decreased prestige can affect the teachers' willingness to accept a new technology.To utilise educational television (ETV), many teachers think that much training equipment and general reevaluation of teaching goals and activities would be required.Scope of Educational Technology By taking into consideration the usefulness of educational technology in all branches of education, one dare not deny thevastness of its scope.It is concerned with achieving the goals--of maintaining internal discipline, adapting to its environment etc.Especially in developing countries like India, it has to be mastered and utilised by educationists if they are to keep pace with each other and catch up with the developed nations.As such both quantitative expansion and qualitative improvement of education can be facilitated and accelerated with the help of educational technology.The uniqueness of educational technology is characterised as: (1) Use of a broad range of resources fo: learning; (2) Emphasis on individualised learning; and (3) Use of systems approach.The effectiveness of educational technology depends on: (1) Ability to achieve goals; (2) To maintain itself internally; and (3) To adapt to its environment.The emergence of this new global economy has serious implications for the nature and purpose of educationalinstitutions.The international Labour organization defines the requirements for education and training in the new global economy simply as a -Basic education for all,?-Information Technology is any equipment or interconnected system or sub system of equipments that is used in the acquistion, storage manipulation, management transmission or reception

of data or information.?It is the process & transfering information form a Sender to a receiver with the use of a medium in which the communication information is understood by both sender and receiver.Systems such as telephone, telex, Fax, radio, T.V. and Video are included, as well as more recent computer based technologies, including electronic data interchange and e-mail.?In short, communication technolgoy is the activity of designing and constructing and maintaining communication systems.They are: Systematic application of scientific knowledge to the practical tasks and the division of the practical tasks into sections and Subsections.It is a contiuous, dynamic, progressive & effect producing method.It can not replace the teacher Characteristics of Instructional Technology : It is helpful in achieving cognitive objectives.For this reason, a wide range of presentation, control and feedback devices may be employed such as teaching machines, stimulators and computers.Looked at from another point of view, the job of the programmer can be regarded as that of providing appropriate opportunities for the pupils to learn.If educational technology possesses any value at all, it is vital that the teachers in training shall be introduced to its philosophy and techniques.Educational technology is thus the application of scientific knowledge about learning and conditions of learning to improve the effectiveness of teaching and learning.It faciliates communication between individuals or groups.-?Communication