

KNOWLEDGE SKILLS FOR HIGHER EDUCATION

DATA, INFORMATION AND KNOWLEDGE REPOSITORY -All of us have some knowledge about computers. But do we know how it works and how it is useful for academic purposes? A computer connected to internet opens up a whole new world for us and we can enhance our knowledge. You can have any information on your fingertips as you can search for them using a search engine.

Data, Information and Knowledge People often use the terms data and information interchangeably but there is a distinction when we use them with reference to computers. Data is a collection of facts, or an idea. Data can be a number, a word, a picture, or even a recording of sound.

Thus Information is data that has been organized or presented in a meaningful fashion. Knowledge is what we know. Information allows us to expand our knowledge beyond the range of our senses. We can capture data in information, and then move it about so that other people can access it at different times. Knowledge is like the map of the World we build inside our brains. Like a physical map, it helps us know where things are – but it contains more than that. It also contains our beliefs and expectations.

Knowledge Management This is information age. To survive in this information age organizations should use information efficiently and effectively. Knowledge management includes identifying and mapping intellectual assets within the organization, generating new knowledge for competitive advantage within the organization, making vast amounts of corporate information accessible, sharing the best practices, and technology that enables all of the above including groupware and intranets.

INTERNET AS A KNOWLEDGE REPOSITORY -In the information age, lifelong learning and collaboration are essential aspects of most innovative work. Information technology is not only transforming our workplace but also our educational system. The information revolution is having a profound and permanent effect on the way we learn. Fortunately, the computer technology which drives the information explosion also has the potential to help individuals and teams to learn much of what they need to know on demand. In particular, computer-based systems on the Internet can be designed to capture knowledge as it is generated within a community of practice and to deliver relevant knowledge when it is useful.

ACADEMIC SEARCH TECHNIQUES - As the largest interconnection of computers and computer networks, the World Wide Web makes information widely accessible, but information integrity and management remain key issues for individuals and firms using this platform. The Internet can provide a wealth of information, but the credibility and accuracy depend entirely on the source, and finding credible information can be time-consuming, requiring hours of sorting through largely irrelevant sites.

GOOGLE

Google is a full-text search engine, which uses computerized "spiders" to index millions,• sometimes billions, of pages, allowing for much narrower searches than searchable subject index, which searches only the titles and descriptions of sites, and doesn't search individual Google is case-insensitive. If you search for Three, tHRee, THREE, or even THREE, you•pages The order of words matters. Google considers the first word most important, the second• Singular is different from plural. Searches for apple and apples turn up different pages •get the same results. Google ignores most little words, including include "I," "where," "how," "the," "of," "an,"•word next, and so on. "for," "from," "how," "it," "in," and "is,.". Google ignores most punctuation, except Google returns pages

that match your search terms exactly • apostrophes, hyphens, and quote marks Google search word limit is 32

BASIC CONCEPTS OF IPR

Intellectual property rights are a bundle of exclusive rights over creations of the mind, both artistic and commercial. The former is covered by copyright laws, which protect creative works, such as books, movies, music, paintings, photographs, and software, and give the copyright holder exclusive right to control reproduction or adaptation of such works for a certain period of time. Intellectual property rights includes • Patents - A patent is a set of exclusive rights granted by a state to an inventor or his assignee for a limited period of time in exchange for a disclosure of an invention. Only non obvious ideas can be patented. • Copyrights - Copyright gives the author of an original work exclusive right for a certain time period in relation to that work, including its publication, distribution and adaptation, after which time the work is said to enter the public domain. The work for which copy rights are given are poems, theses, plays, other literary works, movies, dances, musical compositions, audio recordings, paintings, drawings, sculptures, photographs, software, radio and television and broadcasts.

INTRODUCTION TO USE OF IT IN TEACHING AND LEARNING

Need for Use of IT in Education In order to remain competitive in Education Sector globally and to attain excellence in teaching, we have to guide and equip our students and teachers with satisfactory level of technical knowledge and skills. This is a competitive and career oriented world and hence we have to think globally and act locally. There should be a shift in learning pedagogy from conventional methods to modern methods, improve teaching quality, establish technology as a strategic resource for faculty, staff and students.

DICTIONARY & LIBRARY ENCYCLOPEDIAS

An encyclopedia is a book or series of books that contain articles on a wide range of subjects or on various aspects of a particular field.

LIBRARIES

A traditional library is a collection of books. Today's libraries are repositories and access points for print, audio, and visual materials in numerous formats including maps, prints, documents, microfilms, audio tapes, CDs, cassettes, videotapes, DVDs, video games, e-books, e-audio books and many other electronic resources. Libraries often provide public facilities to access to their electronic resources and the Internet.

BOOKSITES Book sites are the online book stores that allow you to buy books and sometimes even on a reduced rate. They offer a wide range of collection.

ACADEMIC SERVICE INFLIBNET- Is an Autonomous Inter-University Centre (IUC) of University Grants Commission, Government of India. It is involved in creating infrastructure for sharing of library and information resources and services among Academic and Research Institutions. INFLIBNET (Information and Library Network) works collaboratively with Indian university libraries to shape the future of the academic libraries in the evolving information environment.

NICENET- is an organisation of internet professionals, founded in 1995 with the objective to make electronic communication tools and resources accessible for education community. NICENET provides one of the most popular "Learning Management System.

BRNET- Bio-Resource Network (BRNet) is a prototype portal site for biological information. An initiative of Japan Science and Technology (JST) Corporation, BRNET is basically meant to bring together biological information resources scattered over different networks for optimum utilization.