INDIAN COUNCIL OF MEDICAL RESEARCH

ICMR LIBRARY BULLETIN
Volume- 7, Issue – 3. July – September 2010

Contents

Content Management System

Introduction:

Information on the web is growing tremendously, and searching on the Internet today can be compared to dragging a net across the surface of the ocean. Content is in essence, any type or 'unit' of digital information. It can be text, images, graphics, video, sound, documents, records etc. or in other words anything that is likely to be managed in an electronic format. The Internet's explosion created a new set of problems for site administrators. Producing and managing content was becoming increasingly difficult. A system was needed to manage, create, and distribute various forms of content. The Content Management is effectively the management of the content, by combining rules, process and/ or workflows in such a way that its electronic storage is deemed to be 'managed' rather than 'unmanaged'. The new domain in its own right, as it has employed the technologies and strategies of digital content management to address business process issues, such as records and auditing, knowledge sharing, personalization and standardization of content, and so on. A CMS is a software application that facilitates these tasks without the need for knowledge of HTML, CSS, or any other web programming language. The two factors must be considered before an organization decides to invest in a CMS. First, an organization's size and geographic dispersion must be considered especially if an organization is spread out over several countries. For these organizations, the transition to CMS is more difficult. Secondly, the diversity of the electronic data forms used within an organization must be considered. If an organization uses text documents, graphics, video, audio, and diagrams to convey information, the content will be more difficult to manage. The features of a CMS system vary, but most include Web-based publishing, format management, revision control, and indexing, search, and retrieval.

Content Management

Application that enables users to manage content in an orderly fashion, Content can include a variety of file types such as text, images, and media, which a CMS helps to create, edit, store and publish. The seen that is more flexible and easier than the traditional tools. The new technologies include Content Management Systems (CMS), Blogs, Wikis, and RSS etc. There are many Content Management Software's used like Joomla, Drupal, Bitweaver, Mambo, Pligg, Plone, Post Nuke, Tweak, zope etc.

Content Management System (CMS)

CMS means a tool for managing content, usually on a web site, that separates the design, interactivity, and content from one another to make it easier for content authors to provide content. CMS is a computer application used to create, edit, manage, search and publish various kinds of digital media and electronic text. In simple terms, content management can be defined as a process of creating, collecting, organizing, categorizing and structuring information resources of any type or format so that they can be saved, retrieved, published, updated and re-purposed in any way desirable. A CMS is responsible for the collection, management, and publishing of chunks of information known as content components. The benefit of using a CMS, especially for website creation, is that it does not require an extensive knowledge of coding. The CMS provides a bridge between the seasoned coder and the weekend blogger; in the sense that, both can maintain the site to their desired control, even though both have different levels of technical knowledge. After the arrival of Web 2.0 technologies, many tools are there in the seen, which are more flexible and easier than the traditional tools. It is capable to create a powerful portal website in a matter of minutes and it has wide supporting community. CMS consists of a content management application which enables the management and modification of content without advanced webmaster knowledge, and a content delivery application, that uses new information to update the website. The CMA element allows the content manager or author, who may not know HTML, to manage the creation, modification, and removal of content from a Web site without needing the expertise of a Webmaster. The CDA element uses and compiles that information to update the Web site.

CMS Subsystems:

A CMS is composed of various subsystems that interact with these:

i. Collection:
Subsystem which handles the creation and/or acquisition of information. It must provide support for the processes of content creation, workflows, syndication and integration of external sources. In addition, it must provide support to conversion processes between different formats as well as for the incorporation of contents from different sources within specific structures.

ii. Management:
Subsystem in charge of the management and control of information repositories, user groups, and support processes for other subsystems. It handles the defining and controlling of information flows

used by other subsystems, as well as the definition of parameters for the functioning of the system.

iii. Publishing:

Subsystem in charge of final production of publications and digital information products in an automatic or semiautomatic manner. It makes use of a model based on templates and must provide personalization options for users as well as the possibility of producing for a variety of platforms and/or customers.

Types of Content Management System:

These terms describe the deployment pattern for the CMS in terms of when presentation templates are applied to render web pages from structured content. There are some major types of CMS: Enterprise content management systems, Web content management systems, Mobile content management system, Component content management system Document management system and Learning management system, etc.

i. Enterprise content management systems (ECM):

An enterprise content management (ECM) system is concerned with content, documents, details, and records related to the organizational processes of an enterprise. The purpose is to manage the organization's unstructured information content, with all its diversity of format and location.

ii. Web content management systems (WCM):

A web content management (WCM) system is a CMS designed to simplify the publication of web content to web sites and mobile devices, in particular, allowing content creators to submit content without requiring technical knowledge of HTML or the uploading of files.

iii. Mobile content management system (MCMS):

It is a type of (CMS) capable of storing and delivering content and services to mobile devices, such as mobile phones, smart phones. Mobile content management systems may be discrete systems, or may exist as features, modules or add-ons of larger content management systems capable of multi-channel content delivery. Mobile content delivery has unique, specific constraints including widely variable device capacities, small screen size, limited wireless bandwidth, small storage capacity, and comparatively weak device processors.

iv. Component content management system (CCMS):

It is a (CMS) that manages content at a granular level (component) rather than at the document level. Each component represents a single topic, concept or asset (e.g., image, table, product description). Components can be as large as a chapter or as small as a definition or even a word. Components in multiple content assemblies (content types) can be viewed as components or as traditional documents. Each component is only stored one time in the content management system, providing a single, trusted source of content. Component content management (CCM) is typically used for multi-channel customer-facing content (marketing, usage, learning, support).

v. Learning management system (LMS):

It is a software application for the administration, documentation, tracking, and reporting of training programs, classroom and online events, e-learning programs, and training content. LMSs range from systems for managing training and educational records, to software for distributing courses over the Internet with features for online collaboration. Some LMSs are Web-based to facilitate access to learning content and administration. LMSs are used by regulated industries (e.g. financial services and biopharma) for compliance training. It is also used by educational institutions to enhance and support classroom teaching and offering courses to a larger population of learners across the globe.

### vi. Document management system (DMS):

It is a computer system (or set of computer programs) used to track and store electronic documents and/or images of paper documents. The term has some overlap with the concepts of (CMS). It is often viewed as a component of enterprise content management (ECM) systems and related to digital asset management, document imaging workflow systems and record management systems. Several web based content management systems exist both in the Open Source and commercial domains. However, this is one area where (OSS) has gained dominance over proprietary counterparts.

How Content Management Works

Work chart of CMS:
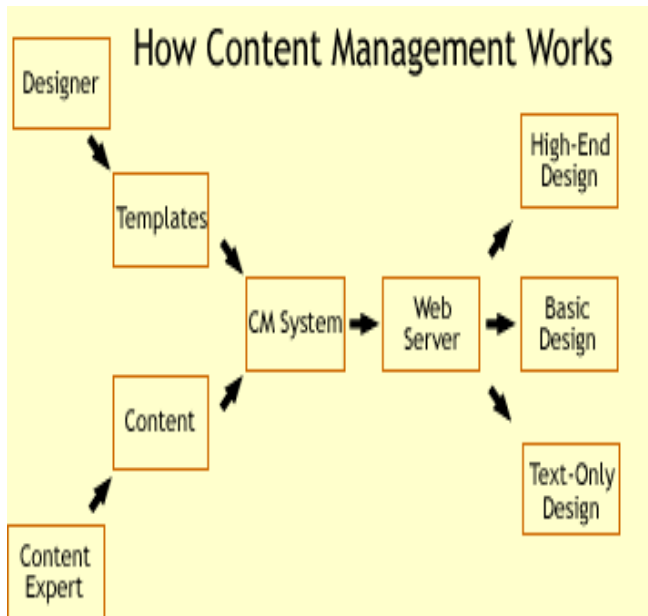
Content Management System (CMS) allows designers to focus on design by building templates. Subject experts build content in a separate environment. The server takes the content, inserts it into the correct template and sends it all, neatly wrapped up, to end users. But that's just the technology side of CM systems. CM's other aspect is the way it addresses your workflow. Sure, it's great to separate the design from the content, but CM wants to streamline how your designs get approved and onto the server.

Content Management Work Flow
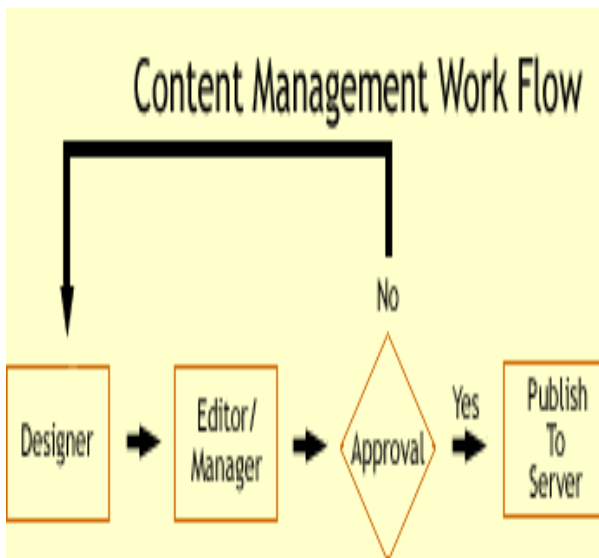
Create a design in whatever tool/environment you're comfortable with. Once it's tested and ready to go, you pass it to your manager or editor or boss or whoever okays your design. If it's approved, it's sent on to the server. If not, you get notes and it is sent back to you, all within the CM environment: no email, no voice mail, no printouts of your design with red ink and yellow sticky notes all over it. The same process happens on the content side. The end result is that even though it's easier for content and design to publish, there are still strict controls as to what makes it to the live server.

Content Management Tools:

Most systems use a database to store content, metadata, and artifacts that might be needed by the system. Content is frequently, but not universally, stored as XML, to facilitate reuse and enable flexible presentation options. Administration is typically done through browser-based interfaces, but some systems require the use of a fat client. Unlike

Web-site builders like Microsoft FrontPage or Adobe Dream weaver, a WCMS allows non technical users to make changes to an existing website with little or no training. A WCMS typically requires an experienced coder to set up and add features, but is primarily a Web-site maintenance tool for non-technical administrators. Content management tools allow anyone to edit their own website. Do not need to know HTML or any other web language. This Content management, tools are a way for a privileged user to make updates or additions to a web page without the need for extensive technical knowledge. This allows a company to easily modify its site at any time through a simple web interface. Content management tools allow companies to take control of their Web pages by managing the content as distinct from the design. The days of writing HTML for large Web sites may be numbered as content management tools take the floor. Many organizations build the content management tools to meet the specific needs, but in the last few years, several organizations have come out with some good content management software, some examples of these are given here.

http://www.daisycms.org:
Daisy is a Java/XML open-source based on the Apache Cocoon content management framework. Daisy is in use at major corporations for intranet knowledge bases, project documentation, and management of content-rich websites.

http://www.dspace.org:
It is a groundbreaking digital institutional repository that captures, stores, indexes, preserves, and redistributes. It manages and distributes digital items, made up of digital files and allows for the creation, indexing, and searching of associated metadata to locate and retrieve the items.

http://e107.org :
e107 is an open source Content management System (CMS) that allows for the quick creation and management of websites or community portals. It can be used for websites or for local intranet pages, it currently has support for several languages available as additional downloads.

http://www.fedora.info/:
Fedora is an acronym for Flexible Extensible Digital Object Repository Architecture. Among these are digital asset management, institutional

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repositories, digital archives, content management systems, scholarly publishing enterprises, and digital libraries.

http://www.opencms .org/:
Open Content Management System (CMS) is an open source CMS written in Java. Open CMS requires a JSP Servlet container such as Apache Tomcat. It is a CMS application with a browser-based work environment, asset management, user management, workflow management, a WYSIWYG editor, internationalization support, content versioning, and more features.

 http://phpcms.de/index.en.html:
Php CMS is an open source CMS written using PHP. Its creators describe php CMS as a highly flexible flat file, no SQL, Web CMS with complete content/ logic separation. Like many content management systems, php CMS intends to simplify a lot of tasks for the maintenance of complex web sites.

 http://www.phpwcms.de:
Php WCMS is an open source WCMS. It works on any web server platform that supports PHP with . MySQL, having been successfully tested on Windows XP and 2000, Mac OS X, and Linux.

 http://www.tikiwiki.org:
TikiWiki CMS/Groupware, originally and more commonly known as TikiWiki, is an open source (LGPL) CMS / Geospatial Content Management System (GeoCMS) / Groupware web application enabling websites and portals on the internet and on intranets and extranets.

 http://www.webgui.org/:
Web GUI is an open source Content Management System written in Perl and released under the GNU General Public License. The system permits non-technically minded users to arrange content in pages and layouts, containing 'Assets' (applets) which permit website visitors to view and interact with various types of data from basic Articles to full-blown CMS and custom applications.

Conclusion

Information and documentation services available on the Internet through web servers are growing in an exponential manner. In recent times, the field of content management system has seen particularly strong growth in open source solutions, perhaps in direct response to the very high prices that commercial content management system have historically demanded. . This activity will give the staff an indication of what works and what does not, what is interesting to the online visitor and what is not pleasant to use. The library authority also needs to be identifying the skilled manpower and form a Web team who will be responsible to present library to the global community through WWW. But gradually, it became difficult to maintain and update the websites because of their very dynamic nature and a variety of file formats. Content Management Systems (CMS) evolved as an alternative to such web-authoring tools. These procedures can be manual or computer-based. It enables even non-technical users to efficiently build a website, streamline the web publishing procedures and quickly deploy them, creating a content- rich website.

References

1. Kaushal, K. Giri Kirti, R. Nirgude, "Open Source Content Management Software: A Comparative Analysis CALIBER 2009,p 185-193. http://www.inflibnet.ac.in/caliber 2009/CaliberPDF/71.pdf

2. Umesha, Naik. D, Shivalingaiah, "Open Source Software for Content Management System CALIBER 2009, p225-239. http://www.inflibnet.ac.in/caliber 2009/CaliberPDF/71.pdf

3. Wikipedia. Content management system. Available athttp://en.wikipedia.org/wiki/ Content_managemen t_system.

4. Wikipedia. Web content management system. Available at http://en.wikipedia.org/wiki/ Web_content_mana g e m e n t _ s y s t e m.

5. Enterprise Content Management. Content management. Available at http://www.contentmana ger.eu.com/

6. Best Open Source Content Management Systems: Choose among the most popular CMS software. Available at http:// www.siteground.com/best_cms_ tools.htm

7. Content Management Available at http:// www.contentmanager. eu.com/cms. Htm.

8. Content Management Available at http:// e n. w i k i p e d i a .o r g / w i k i /Content_management_system.

9. Content Management Tools. Available at http://web d e s i g n. a b o u t. c o m / o d / com tentma nagement/a /aa031300c. htm

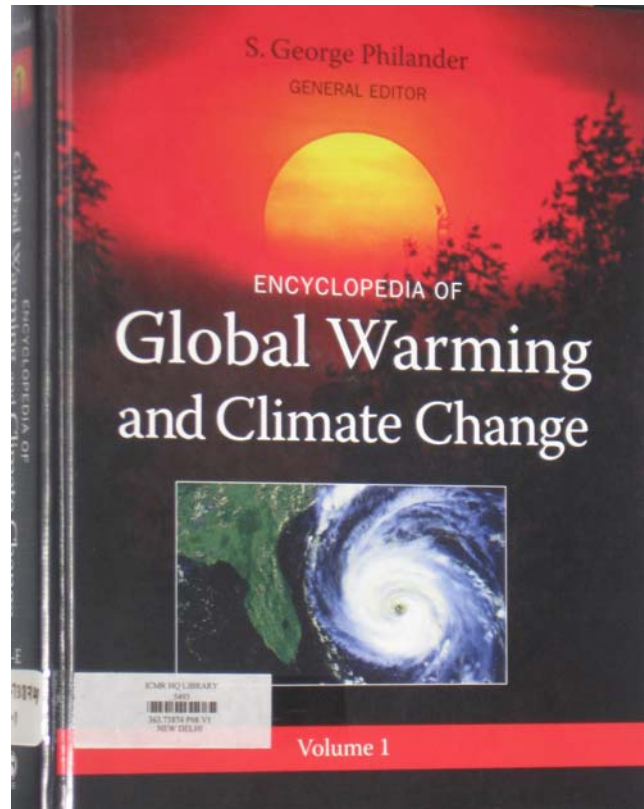10. James, Ellis," CMS and the single web designer. Graphic Design, Project Management and Workflow , 2002.

Contents

363.7   ENVIRONMENTAL PROBLEM

Abstract:

This book include paleoclimatology i.e weather, climate and current debate about global warming. It include geographers, political scientists, chemists, anthropologists, medical practitioners, development experts & sociologists. The selection of articles are categories as atmospheric sciences, climate, climate change effects, climate and society, climate feedbacks, climate models, institutions studying climate change, oceanography, paleoclimates, programs and convections & people studying climate change. It covers a vast range of topics affecting global warming and global warming issues, concepts, theories, examples, problems and policies together in one place, with the goal people and their planet. It provides opportunity to reader to get information on the status of global warming its causes and effects by country.
Keywords: Global warming- Encyclopedias; Climate change- Encyclopedias.

**Robust Methods in Biostatistics/ Stephane heritier… [et al] . — UK:Wiley, 2009. 268p. ISBN: 9780470027264.**
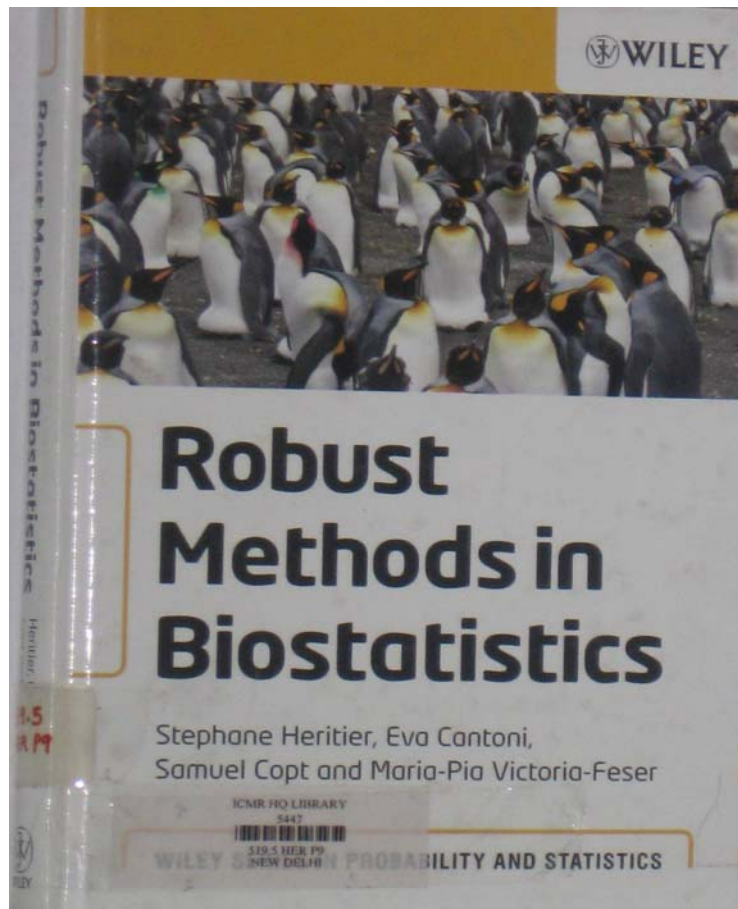
Abstract:

This book is intended to fill the existing gap and present robust techniques in a consistent and understandable manner to all researchers in the health sciences and related fields interested in robust methods. The book in bio medical research used to motivate robustness issues, explain the central ideas and concepts and illustrate similarities and differences with the classical approach. It provides valuable feedback in academia. This book includes: biostatisticians who wish to discover robust statistics, update their knowledge with more recent developments, applied researchers is medical or health sciences.
Keywords: Biometry - Statistical methods.

571.4   BIOPHYSICS

Handbook of Biological effects of Electromagnetic fields: bioengineering and biophysical aspects of electromagnetic fields/ edited by Frank S. Barnes, Ben Greenebaum .—London: Taylor & Francis, 2007. 430p. ISBN: 9780849395390.
  571.4 BAR P7   **5463**
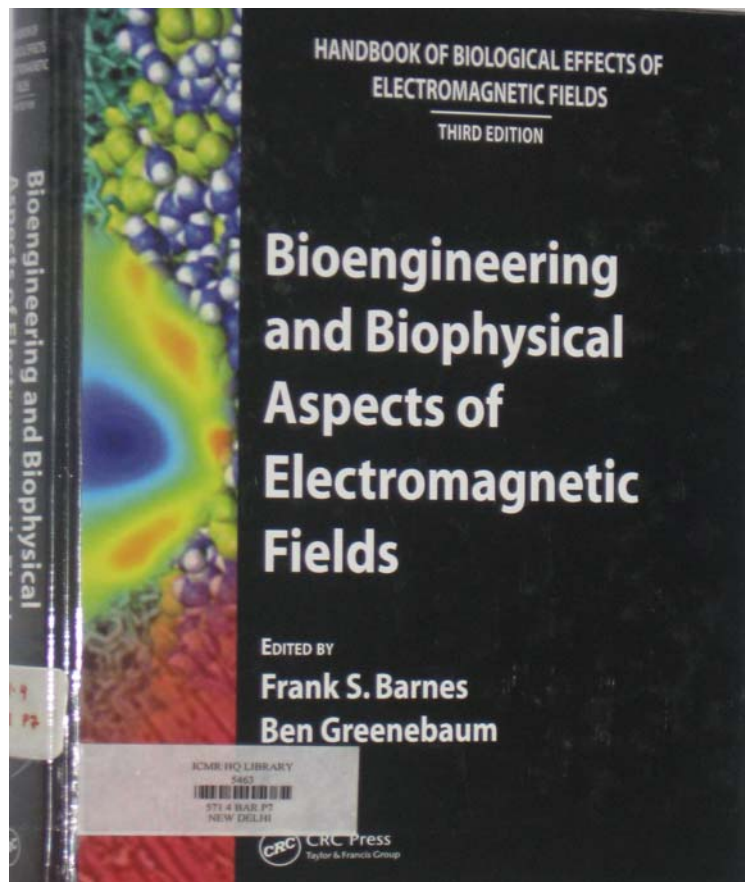
Abstract:

This revised and updated edition of handbook of Biological effects of electromagnetic fields has expanded coverage that includes more material on diagnostic and therapeutic applications. As a handbook and not an encyclopedia this work does not intend to cover all aspects of bioelcetromagnetics. The increased amount of material has led to; the publication of the handbook as two separate. Research in bioelectromagnetics stems from three sources, all of which are important and various chapters treat both basic physical science and engineering aspects and the biological and medical aspects of these.
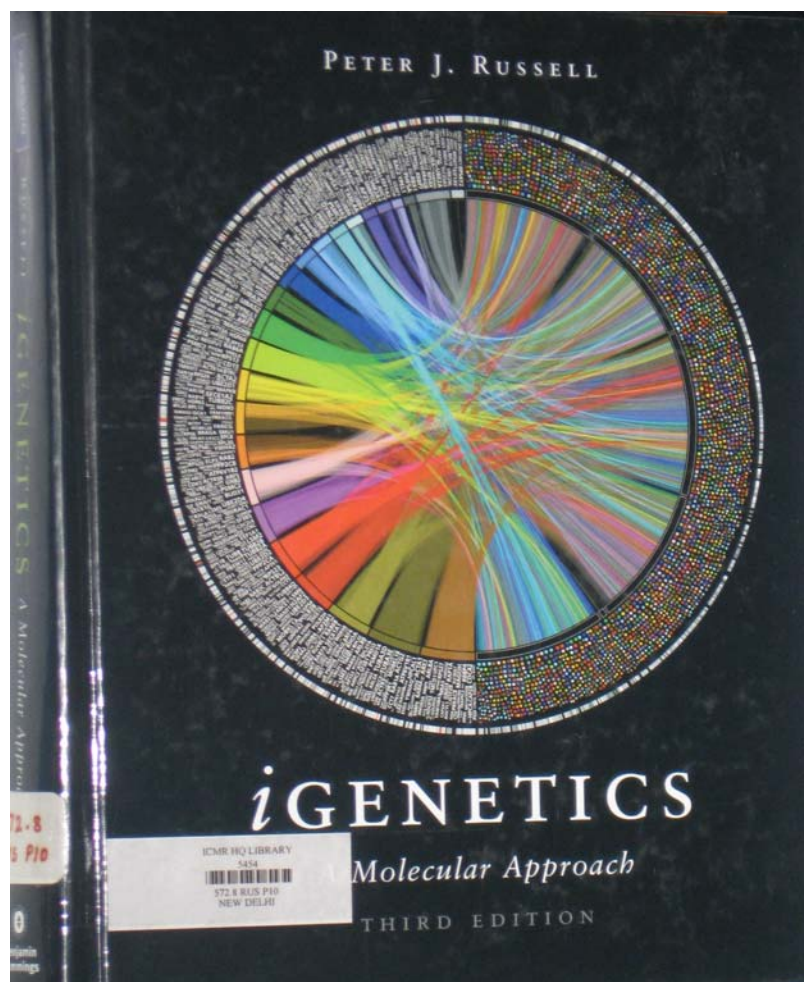**Keywords: Bioengineering; Biophysics.**

572.8　　BIOCHEMICAL GENETICS

Abstract:

The book covers all major areas of genetics, balancing classical and molecular aspects to give students and integrated view of generic principles. Gene therapy, gene mapping, genetic disorders, genetic screening, genetic engineering and the human genome, directly impact human lives. This book provides concepts of human genetics with numerous examples; students are attracted by a natural curiosity to learn about themselves and our species.
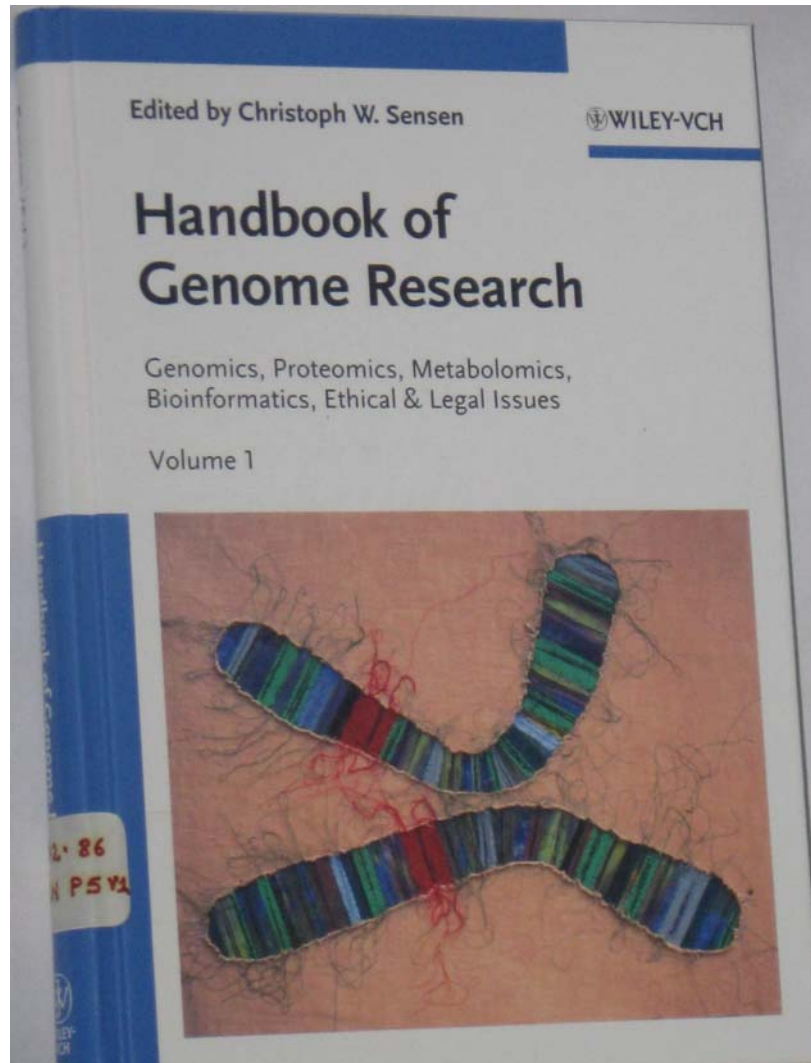**Keywords: Molecular Genetics**
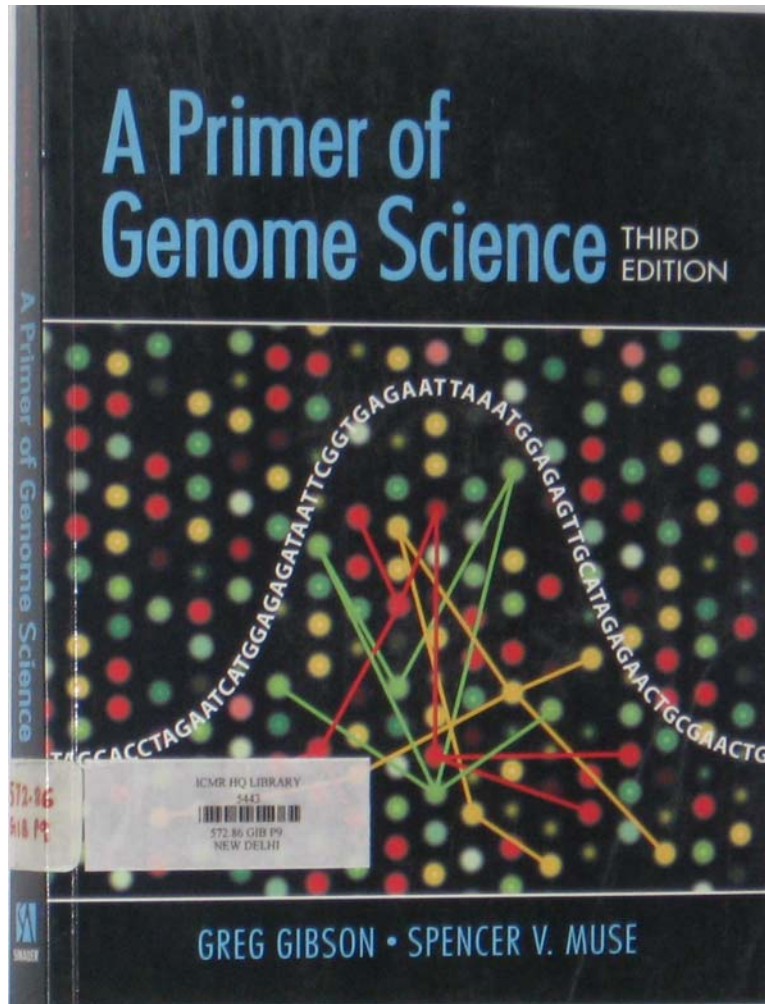
Abstract:

This book is an introduction to genome science intended for UG or graduate students who
are new to the field. Computational biology and statistical analysis play a central role in
genome research, and to capture this trend towards a merger of molecular and theoretical
biology. It also include some exiciting new developments in the field of metabolomics
(also known as metabonomics) and system biology. It provides the basis of bioinformatics
and experimental methods in one text to encourage students to develop a familiarity with
genomics that will be useful in pursue careers in science, law, journalism and marketing.
Key Words: Genomics; Computational Biology- Methods.

Abstract:

Handbook of genome research enables the establishment of the complete genetic information of organisms. The organisms selected for genome research were mostly those which are already important in scientific analysis and thus can be regarded as model organisms. An introduction to the ever expanding technology of the subject is a major part of this book, which includes detailed description of the technology used to characterize genomic organization, gene expansion, patterns, protein complements and the past translational modification of proteins.
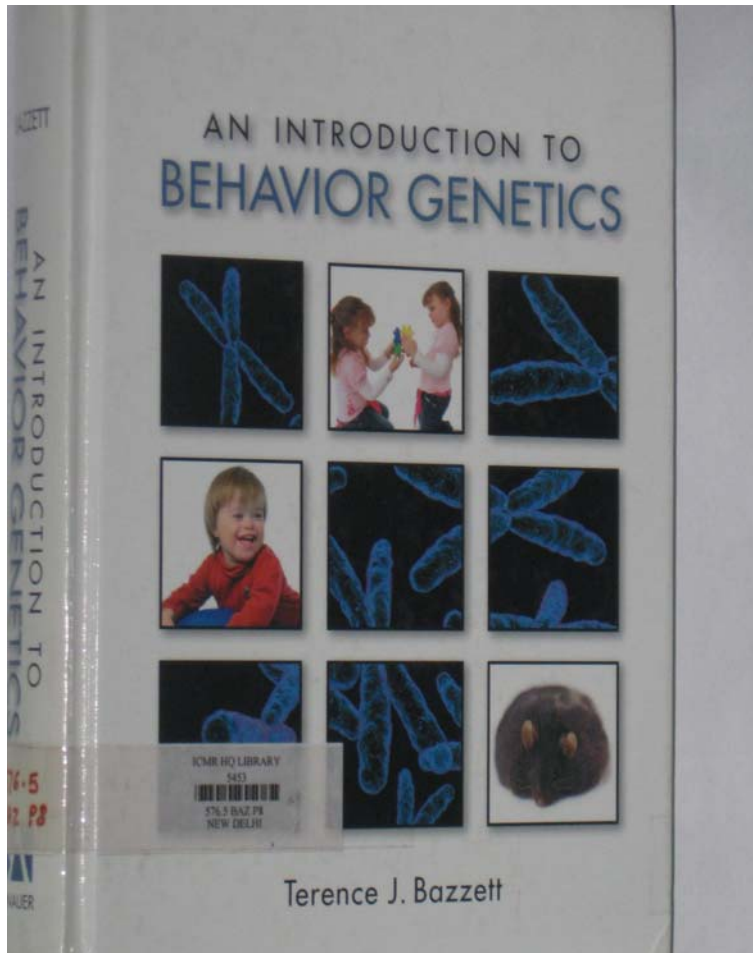**Keywords: Molecular Genetics; Genome- Research.**

576.5 GENETICS

Bazzett, Terence J.
  An Introduction to Behaviour Genetics / Terence J. Bazzett. – Massachusetts: Sinauer Associates, 2008. 476p. ISBN: 9780878930494.
**576.5 BAZ P8   5453**

Abstract:

An introduction of behavior genetics proved to be highly challenging because the interesting of scientific disciplines is so complex. Even with the assumption that students entering the course will have source background in the basic concepts of biology and chemistry, the range of general information also allows instructors to select and elaborate upon the topics they feel are most essential for meeting the learning objectives of their individual course? After reading this text, some readers are inspired to pursue a more advanced education in the field of behavior genetics.
Keywords: Behavior genetics; Genetics.

614   INCIDENCE & PREVENTION OF DISEASE

Magnus, Manya
   Essential Readings in Infectious Disease Epidemiology/ Manya Magnus.—
Massachusetts: Jones & Bartlett, 2009. 289p ISBN: 97807637385.
**614.5 MAG P9**   **5466**
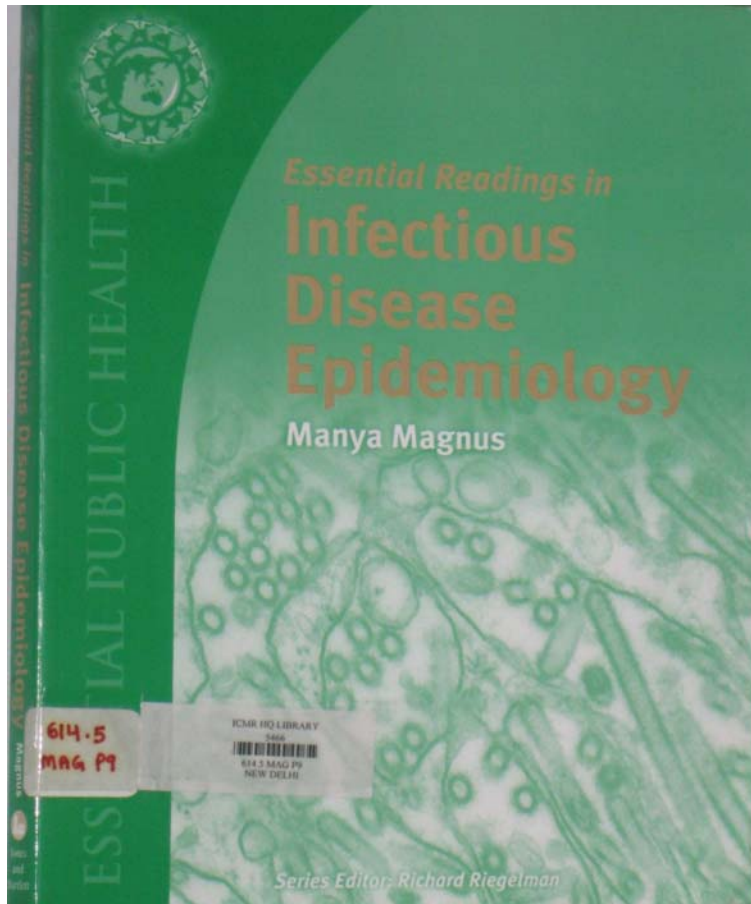
Abstract:

This book provides skills for the development of studies their implementation analysis, interpretation and dissemination. It also provides a literature review to understanding and sharing their public health implications. It provides all about epidemiology concepts, thought, Investigating HIV/AIDS, food borne disease and analytic methods, different approaches to examining bias in infectious disease epidemiology. The format of this text is to provide us with focused readings; guiding questions and exercises based upon the reading the thinking process will give us practice in critical evaluation.
Key Words: Communicable Diseases- Epidemiology; Epidemiology

615.5   THERAPEUTICS

CCRAS
   Research Study Profile of Rasamanikya /CCRAS. — New Delhi: CCRAS, 2009.212p.
615.53 P9   C-2727
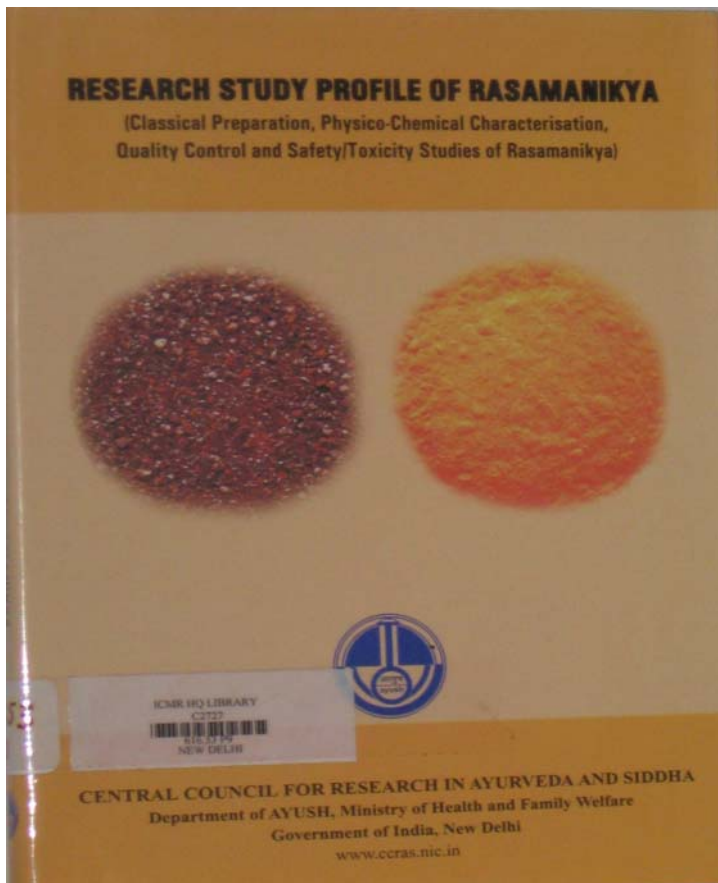
Abstract:

It provides metallic preparations in Ayurveda a Yogavahi having catalytic action. It provides usage of metals and minerals as medicines, a novel approach of Ayurveda. Ayurvedic materia medica is one of the largest among the traditional helath sciences. The CCRAS has prepared some of the herbo-metal, herbo-mineral classical preparations following into classical methods and screened for their safety/ toxicity studies at different institutes as per the standards guidelines, essential to ensure the safety/ efficacy, standardization, pharmacokinetic profile of these herbo-mineral medicines before clinical trails.
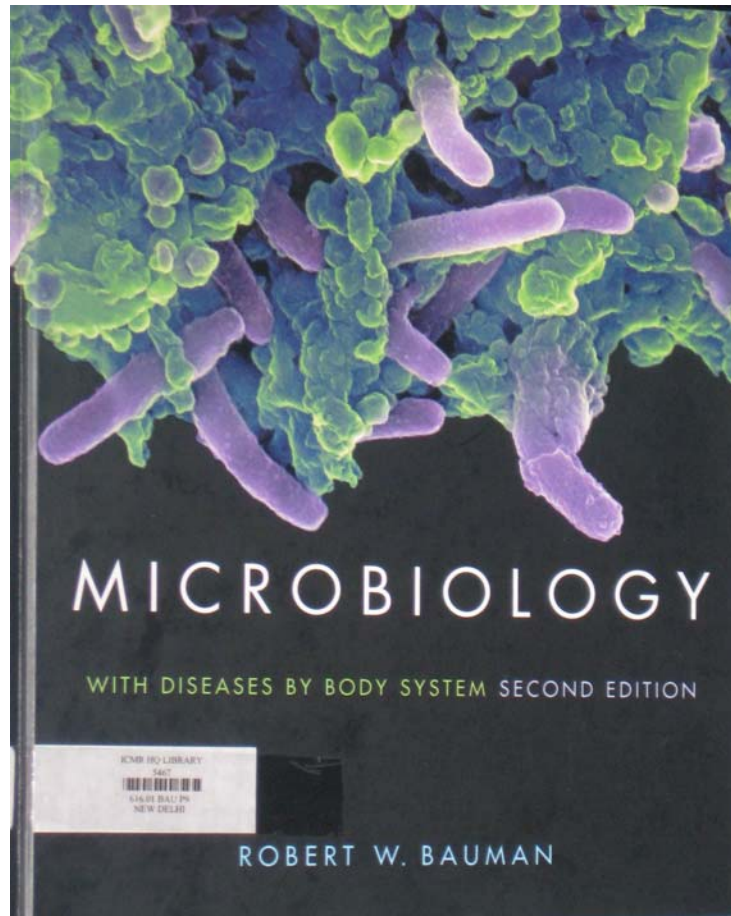**Keywords: Rasamanikya; Ayurveda.**

616.01   MEDICAL MICROBIOLOGY

Bauman, Robert W.
  Microbiology: with Diseases by body system / Robert W Bauman; contributions by Elizabeth Machunis- Masuoka.—2nd ed. — New York: Pearson, 2009. 792p. ISBN: 9780321513410
616.01 BAU P9   5467

Abstract:

Microbiology with diseases by body system an updating it with latest research and data available and incorporating the many terrific suggestions. In this text especially focus on the metabolism, genetics and immunology in a way that beginning students can understand and at the same time present a through and accurate overview of microbiology. This book also to high light the many positive affects of microorganisms that causes disease. It covers brief history of microbiology, beneficial effects of microbes, the clinical & applied side of microbiology etc. It also provides website for microbiology.
Keywords: Microbiology; Bacterial Infections- microbiology.

NEWS

General

New Database of Alzheimer's Trials

A new standardized database, containing information on 11 clinical trials and more than 4000 patients with Alzheimer's disease (AD), has been released by the Coalition Against Major Diseases (CAMD) — a consortium of pharmaceutical companies, research foundations, and patient advocacy/voluntary health associations, with advisers from agencies such as the www.c-path.org/**CAMD**.cfm

US Food and Drug Administration (FDA) and European Medicines Agency.

According to CAMD, the aims of the shared database will be to accelerate research on all neurodegenerative diseases and to help in the development of new medications. Trial information on Parkinson's, Huntington's, and other brain diseases will be added later.

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and search. One can download a single chapter, the whole book, the podcast or play chapters on the site using the integrated flash audio player.

Seminars/Workshops

ICDK 2011

International Conference on Digital Libraries and Knowledge Organization (ICDK-2011) will be held at Management Development Institute (MDI), Gurgaon, from February 14-16, 2011. This

Conference Sub- themes are

- Digital Libraries Development

Conference is Jointly Organized by Management Development Institute, and Indian Association of Special Libraries & Information centers.

- Tools and Techniques for Managing Digital Repositories
- Digital Resource Management Strategies
- Evaluation of Digital Libraries
- Content Development: Tools and Techniques
- Cultural Issues of Online Services
- Technology Issues in Online Services
- Standards and Specifications for Digital Objects
- Metadata Standards, Interoperability and Crosswalks
- Case Studies of Digital Libraries and Institutional Repositories
- Multilingual Digital Libraries
- Digital Preservation Strategies
- Web Retrieval Tools and Strategies
- Information Retrieval in Indian Languages
- User Interface and Patron Interactions Tools
- Open Source Software Tools for Digital Library Development
- Open Access Initiatives, Open Access Repositories
- Open Access for Scholarly Contents
- Information Management Using Web 2.0/3.0 Technologies
- Social Networking Tools for Information Services
- Knowledge Organization Techniques
- Knowledge Representation Models
- Emergent Techniques for Search Algorithms and Context Sensitive Indexing
- Semantic Web Technologies for Knowledge Representation and Management
- Ontologies and Approaches to Building Ontologies

http://www.mdi.ac.in/ICDK/Home.html

Sixth International Conference on Webometrics, Informetrics and Scientometrics (WIS) & Eleventh COLLNET Meeting

Sixth International Conference on Webometrics, Informetrics and Scientometrics (WIS) will be held at University of Mysore, Mysore from October 19-22, 2010. Theme of this conference are Webometrics, Informetrics and Scientometrics.

Conference Sub- Themes are-

- Emerging issues in Scientometrics / Informetrics /webometrics and history Science Policy and collaboration
- Collaboration Studies for Science & Society
- Collaboration, Knowledge Management & Industrial Partnership
- Collaborative Bridge between Academic Research and Industry
- Techniques for Collaboration Studies

- Visualization Techniques in Collaboration Studies
- Quantitative analysis of S&T innovations
- Informetrics laws and distributions, mathematical models of communication or collaboration
- Nature and growth of science and of collaboration in science and its relation with technological output
- Evaluation indicators
- Collaboration in science and in technology from both quantitative and qualitative points of view

http://www.uni-mysore.ac.in/