Semester	2
Paper	Multi-Disciplinary Course (MDC)
Paper Description	Media Science
Paper Code	UPOBMDC12033
Paper Type	Theory
Credit	3
Class hours	45
Distribution of Marks	75 (60 Marks in Theory + 10 CE + 5 ATT)
Duration of the Examination	2.5 hours

Brief Course Description:

This course introduces students to the technological and scientific progress in Media and Communication. It teaches the students how various technologies evolved and transformed history.

Prerequisite(s) and/or Note(s):

(1) Higher Secondary or equivalent certification from any recognized board.
(2) Note(s): The syllabus changes yearly and may be modified during the term itself, depending on the circumstances. However, students will be evaluated only on the basis of topics covered in the course

Course Objectives:

Knowledge acquired:

(1) Basic understanding of technological progress made in the field of Media and Communication

(2) Development and transformation of Media and Communication technologies.

Skills gained:

(1) Better understanding of media technologies.

Competency Developed:

(1) Students will be abreast with the latest developments in media technologies.

Course Syllabus

UNIT I - Print Technologies

Evolution of Print Media, Invention of the Printing Press, Gutenberg Printing Press, Flatbed and Letter Press, Offset Lithography, Flexography, Digital Printing, Large Format, Screen Printing, 3D Printing, LED UV; Newspapers and Magazines; modern Printing Processes, DTP (Desktop Publishing)

UNIT II -Audio Technologies

Emergence of Radio, Radio Technology, Types and Functions, AM, FM, Shortwave, Medium wave, Longwave, Satellite, Ham, DAB, and HD Radio, e-radio; Radio Broadcasting. Podcast. Basic understanding of acoustics, Input and Output Chain, Studio Console, Basics of Sound, Concepts of sound-scape, sound culture, Types of sound-sync, Non-Sync, Natural sound, Ambience Sound, Sound Design; Introduction to microphones. Characteristics of Radio as a medium; Radio Broadcast Formats (Programmes).

UNIT III - Audio Visual Technologies

Introduction to audio fundamentals and acquisition technologies, video fundamentals and acquisition technologies, live program production, coding and delivery, display technology; Video Acquisition technologies; Platform independent Audio; Semi-Automatic Content Annotation; Scalable Delivery of Navigable and Ultra-High Resolution Video.

UNIT IV - Convergence Media Technologies

The emergence of convergence, why and how convergence is emerging, business and revenue models for convergence, convergent journalism and multi-media storytelling, case studies of convergence, technology, and convergence; the smart newsroom: knowledge management and convergence; convergence and the future of journalism.

UNIT V - Web 2.0 and Information Architecture

Introduction to Web 2.0, Web 2.0 knowledge with patterns and architecture, Web 2.0 examples; DoubleClick and Google AdSense, Ofoto, Flickr, Akamai, BitTorrent, Personal Websites and Blogs, Screen Scraping, Web Services, Directories (Taxonomy) and Tagging (Folksonomy); Modeling Web 2.0; Specific Patterns of Web 2.0; Web 2.0 Offshoots

Continuous Evaluation

Any one of the following (10 Marks)

      a) Group Discussion
      b) Class Test.
      c) Assignment
      d) PowerPoint Presentation

Suggested Readings

Kipphan, Helmut (2014). *Handbook of Print Media: Technologies and Production Methods*. Germany: Springer Berlin Heidelberg.

Shirley, Ben, et al. (2013). *Media Production, Delivery, and Interaction for Platform Independent Systems: Format-Agnostic Media*. Germany: Wiley.

Kuznetsov, Y. V. (2021). *Principles of Image Printing Technology*. Germany: Springer International Publishing.

Keirstead, P. O. (2004). *Computers in Broadcast and Cable Newsrooms: Using Technology in Television News Production*. (n.p.): Taylor & Francis.

Pavlik, J. (2015). *Digital Technology and the Future of Broadcasting: Global Perspectives*. United Kingdom: Taylor & Francis.

Van Loon, J. (2007). *Media Technology*. United Kingdom: McGraw-Hill Education.

Yang, Li et al. (2023). *Innovative Technologies for Printing and Packaging.* Germany: Springer Nature Singapore.

Governor, J., Nickull, D., Hinchcliffe, D. (2009). *Web 2.0 Architectures: What Entrepreneurs and Information Architects Need to Know*. Taiwan: O'Reilly Media.

Shelly, G. B., Frydenberg, M. (2010). *Web 2.0: Concepts and Applications*. United States: Cengage Learning.

Talbot-Smith, M. (2013). *Broadcast Sound Technology*. United Kingdom: Elsevier Science.

Examination Question Pattern

For 60 Marks

Sl. No.	Questions to be answered	Out of	Marks of each question	Total Marks
1	4	6	3	4x3=12
2	4	6	6	4x6=24
3	2	4	12	2x12=24