

**Module I- Materials Science:**

Introduction-Materials Science-Levels of structure- Classification of engineering materials – Metallurgy- Selection of Materials.

(Book 1, Chapter 1) 6hrs; Marks: Minimum 4

**Module II- Properties of Materials:**

Introduction-Physical properties-Types of Mechanical properties – thermal properties-electrical properties-dielectric properties-magnetic properties-fabrication characteristics

(Book1, Chapter2) 10hrs; Marks: Minimum 6

**Module III -Imperfections in solids:**

Introduction-Crystal Growth- undercooling - homogenous nucleation- heterogenous nucleation- dendritic growth-grains-single crystal & polycrystals -Types of imperfections- Point Defects- line defects- surface defects- volume defects- Sources of Dislocation - Movement of dislocation- Solidification of crystalline materials.

(Book1, Chapter 4) 16hrs; Marks: Minimum 12

**Module IV-Solid solutions:**

Diffusion in solids- Diffusion couple-Definitions of terms-Classification of diffusion process-Mechanism of diffusion- Fick's laws of diffusion- Applications of diffusion-Solid solutions-Alloys –Ferrous and non-ferrous alloys (brief /qualitative).

(Book1, Chapters 5,12) 10hrs; Marks: Minimum 8

**Module V- Engineering Materials:**

Semiconducting materials- semiconductor devices- Insulating materials- Polarization in an insulating material- dielectric strength- Ferroelectric material- Magnetic materials-classification of magnetism in magnetic materials-Magnetic hysteresis-classification of magnetic materials –Organic materials- organic compounds- polymers- polymerization-strengthening mechanism of polymers-plastics-thermoplastics- thermosetting plastics-synthetic rubbers- composite materials- Ceramics- glasses- smart materials- nano materials-optical fibres- super alloys –Biomaterials - Materials for hip joint replacement. (Book2, PartIV) 12hrs; Marks: Minimum 10

**Books for study:**

1. Metallurgy and Materials science-[Revised Second Edition, 2012] S Jose and E V Mathew (Pentagon Educational services, Kollam)
2. Materials Science- R S Khurmi and R S Sedha [Fifth revised and enlarged Edition 2007,

**Books for references:**

1. Materials science and engineering- V Edn- V Raghavan (PHI)
2. Materials Science- G K Narula, K S Narula and V K Gupta (TMH).

**Kannur University**  
**BA English Language and Literature**  
**Discipline Specific Elective Courses Curriculum, Syllabus and Scheme for**  
**6B16(3) ENG: Writing for Media**

**Content Specifications**

**Module I (1 hour)**

**Introduction to Mass Communication:**

Evolution of communication - Definitions of Communication- Types of communication –  
\_Characteristics of mass communication\_ Effects of mass communication\_ Barriers to  
communication\_ Brief history of mass media communication in India

**Module II (2 hours)**

**Mass Media:** Nature and characteristics of mass media - the rise of modern mass media -print,  
radio, film, TV and internet - Functions of media - Media effects - Media Culture-Media in  
transition-Cyber culture -Folk and traditional media

**Print Media**

Introduction to Print Media: Definitions of News – Classification of News: Regional, National,  
International - Pamphlets—Magazines--Newspapers

News Reporting: Idea generation- Gathering background information- Building contacts-News  
Sources- News Agencies

Forms of reporting: Features- Profiles- Interviews- In depth analysisInvestigative Reporting  
Curtain raisers- Running stories- Citizen Reporting. EditorialColumns

## **Electronic Media**

Radio: Radio Skills, Broadcast Writing, Broadcast Terms, Scripting for Radio, Story Structure, Lead, Body, Ending, Writing, Radio News and Features, Programmes for Radio (Features, News, Interviews, Skits, Music Programmes, etc.)

**Television** : Television Skills – Scripting for TVProgrammes for TV (Features, News, Interviews, Music Programmes, ads etc.)

## **Digital Media**

Basic concepts of digital media .Finding and Using Online Information, news gathering via digital media tools: mobile phones, internet etc, -digital media platforms. Social media networksWeb Writing - Technical Writing – Blogging-Online Classes

## **Module III (1 hour)**

### **Media Writing and Editing**

Writing for print and electronic media – Various types of leads- News story structure (Inverted pyramid style, Hour glass style, Nut graph style)- editing process - correcting language – condensing stories - style sheet - headlines -sub heads - writing captions and outlines – editing in the electronic media

### **Books for Reference:**

1. Marshall McLuhan, Understanding Media: The Extensions of Man.
2. James Carey, "Mass Communication and Cultural Studies," in Communication as Culture: Essays on Media and Society
3. William J. Mitchell, "How to Do Things with Pictures," in The Reconfigured Eye: Visual Truth in the Post-Photographic Era.
4. John Fiske and John Hartley, "Bardic Television," in Reading Television.

5. De Fluer & Dennis. Understanding Mass Communication. Delhi: GoyalSaab Publishers
- 6.. Keval J Kumar. Mass Communication in India
7. J V Vilanilam. Mass Communication in India: A Sociological Perspective. Delhi, Sage Books
8. Shaju P P. Principles and Practice of Journalism. Calicut Uty.Co Op Store, 2007.
9. John C Merrilet al. Modern Mass Media. Harper Collins
10. James Watson. Media Communication. Palgrave
11. John Fiske. Introduction to Communication Studies. Routledge
12. Harry Henderson. Communication and Broadcasting. Hyderabad: Orient Longman, 1997.
13. Klaus Bruhn Jensen, A handbook of Media and Communication Research, Routledge, 2003.