

**BHARATHIAR UNIVERSITY: COIMBATORE 641 046**  
**DEPARTMENT OF EDUCATIONAL TECHNOLOGY**

**VISION**

Enshrined with the motto “Educate to Elevate”, the Department aims to train a new generation of tech savvy scholars who will contribute to the domain of technology enhanced education.

**MISSION**

- To be innovative, committed to excellence in teaching, research and knowledge transfer
- To impart knowledge, skills to students and equip them to face the emerging challenges

**M.Sc. E-LEARNING TECHNOLOGY**  
**REGULATIONS AND SYLLABUS (CBCS)**

**(For the candidates admitted from academic year 2018-19 onwards)**

**1. PROGRAMME EDUCATIONAL OBJECTIVES (PEO)**

Post graduates of M.Sc. E-Learning Technology will be:

- Inculcated with the theories in education, educational psychology, instructional designing, media & communication and information technology.
- Trained on skills in Educational Video Production, e-learning package development and web designing.
- Encouraged to independently and collaboratively work in e-learning production and administrative environments.

**2. PROGRAMME OUTCOMES (PO) FOR M.Sc. E-LEARNING TECHNOLOGY (2018-19)**

On completion of M.Sc. E-Learning Technology, the students are expected to:

- Apply theoretical knowledge and practical skills acquired
- Design instructional package
- Produce educational videos
- Design, develop and implement websites
- Create multimedia contents
- Prepare e-content for e-learning environments
- Install and administer learning management systems
- Manage the existing e-learning environments in industry and educational institutions
- Perform research activities in e-learning industries and educational intuitions

**3. ELIGIBILITY**

Any Under Graduate Degree including professional courses from a recognized University.

**4. DURATION OF THE COURSE**

This programme shall consist of four Semesters covering a total of two academic years. Each academic year shall be divided into two Semesters; the first and third Semesters; July to November and the second and the fourth Semesters; December to April respectively.

**5. REGULATIONS**

The regulations of the Choice Based Credit System of Bharathiar University is applicable to this programme.

**6. MEDIUM OF INSTRUCTION AND EXAMINATIONS**

The medium of instruction and Examinations shall be English.

## **7. SUBMISSION OF RECORD NOTEBOOKS FOR PRACTICAL EXAMINATIONS**

Candidates taking the Practical Examinations should submit bonafiderecord note books prescribed for thePractical Examinations. Otherwise the candidates will not be permitted to take the Practical Examinations.

## **8. QUESTION PAPER MODEL**

### **Core and Elective – Theory Papers (Maximum 75 Marks)**

- Section A: 10 questions (10 x1 mark = 10 marks);  
Multiple choice questions with four options  
2 questions from every unit
- Section B: 5 questions (5 x 5 marks =25 marks)  
Short answer questions of either / or type (like 1.a (or) b)  
1 question from every unit
- Section C: 5 questions (5 x 8 marks = 40 marks)  
Essay-type questions of either / or type (like 1.a (or) b)  
1 question from every unit

### **Supportive – Theory Papers (Maximum 38 Marks)**

- Section A: 10 questions (10 x1 mark = 10 marks)  
Multiple choice questions with four options  
2 questions from every unit
- Section B: 4 questions (6 x 3 marks = 18 marks)  
Short answer questions of either / or type (like 1.a (or) b)
- Section C: 4 questions (2 x 5 marks = 10 marks)  
Essay-type questions of either / or type (like 1.a (or) b)

## 9. CURRICULUM & SCHEME OF EXAMINATION

Paper Code	Title of the Paper	Inst. Hrs. / Week	Credits	Examination Duration & Marks			
				Hrs.	CIA <sup>®</sup>	ESE <sup>®</sup>	Total
SEMESTER – I							
18EDUCC01	Introduction to E-learning Technology	4	4	3	25	75	100
18EDUCC02	Psychology of Learning	4	4	3	25	75	100
18EDUCC03	Curriculum: Principles and Foundations	4	4	3	25	75	100
18EDUCC04	Educational Video Production	4	4	3	25	75	100
18EDUCP01	Educational Video Production – Practical	8	4	3	40	60	100
	Elective – I*	4	4	3	25	75	100
	Supportive – I**	2	2	2	12	38	50
SEMESTER – II							
18EDUCC05	Systems Approach to Instructional Media	4	4	3	25	75	100
18EDUCC06	Instructional Technology	4	4	3	25	75	100
18EDUCC07	E-Content Writing	4	4	3	25	75	100
18EDUCC08	Interactive Multimedia Design	4	4	3	25	75	100
18EDUCC09	E-Learning Environment Design	4	4	3	25	75	100
18EDUCP02	Instructional Package Development – Practical	8	4	3	40	60	100
	Elective – II*	4	4	3	25	75	100
	Supportive – II**	2	2	2	12	38	50
SEMESTER – III							
18EDUCC10	Learning Management System: Moodle	4	4	3	25	75	100
18EDUCC11	E-Learning Process and Standards	4	4	3	25	75	100
18EDUCC12	E-Governance and Educational Administration	4	4	3	25	75	100
18EDUCC13	Research Methods and Statistics	4	4	3	25	75	100
18EDUCP03	Web Designing – Practical	8	4	3	40	60	100
	Elective – III*	4	4	3	25	75	100
	Supportive – III**	2	2	2	12	38	50
SEMESTER – IV							
18EDUCS01	Project Work	-	8	-	50	150 <sup>\$</sup>	200
Total			90	-	606	1644	2250

\* Elective courses shall be selected from the list of electives offered by our department.

\*\* Supportive courses must be opted from other departments.

@ 25% and 40% of Continuous Internal Assessment (CIA) marks for theory and practical respectively. 75% and 60% of End semester Examination (ESE) marks for theory and practical respectively.

\$ 80% marks for the project report presentation and 20% marks for the viva-voce.

## **18EDUCC01: INTRODUCTION TO E-LEARNING TECHNOLOGY**

(4 CREDITS)

### **Objectives**

1. To enable the students to understand the concept of e-learning and integrating the technology.
2. To inculcate knowledge in planning the role of information technology in virtual classroom and university.
3. To make the students to understand the technology mediated communication and its applications.

### **Learning Outcomes: (OBE)**

1. Learner will gain insight of the history and evolution of e-learning technologies.
2. Foundation of instructional psychology will be acquired.
3. Comprehension and application of e-learning models.
4. Knowledge of co-operation and collaborative learning strategies using hyper media.
5. Insight of the future of e-learning in the Indian context.

### **UNIT – I: Concept of E-Learning**

Meaning, Evolution of E-Learning –Components of E-Learning – Virtual classroom: Teleconferencing, Audio and Video conferencing.

### **UNIT – II: Strategies of E-Learning**

Process of E-Learning: Knowledge Acquisition and Creation, Sharing of Knowledge, Utilization of Knowledge – E-Learning Instructional Grounds: Behaviourism, Cognitivism and Constructivism.

### **UNIT – III: Models of E-Learning**

Role of Web-Based Instruction in Learning – Models of Instructional Design ISD Model & Hyper Media Design Model (HMD) – Computer Languages for Designing WBI – Future of E-Learning.

### **UNIT – IV: Multi/Hyper Media for E-learning**

Concept, Meaning, Characteristics and Applications – Teaching Techniques through Multi/Hyper Media – Multimedia & Learning – Multimedia for Co-operative and Collaborative Learning Strategies – General Guidelines for Multi/Hyper Media Applications – Advantages & Disadvantages of Multi/Hyper Media.

### **UNIT – V: Future of E-learning Technology**

21<sup>st</sup>Century Education – Challenges of Distance Education – Electronic Media in Distance Education – Open Educational Resources / Open Learning – Internet in Distance Education – Virtual University System.E-Patashala, Indian Institutes Developing E-Content.

### **References**

1. Badrul Khan and Mohamed Ally( Edited ),(2015),International Hand book of E-Learning:Volume-1 Theoretical Perspectives and Research, Routledge.
2. Robyler,(2007), Integrating Educational Technology into Teaching, 4th Edition, Pearson Education India .
3. Richard Andrews and Caroline Heythornthwaite(Edited ),( 2007), The SAGE Hand Book of E-Learning Research, SAGE,Delhi.
4. Bryn Holmes and John Gardiner, (2006),E-Learning Concepts and Practice,,Pine Forge Press.
5. Y.R. Ramaiah,(2002),Distance Education and Open Learning,,Mittal Publications.
6. Pradeep Mandav, (2001), Visual Media Communication,,Authorspress.
7. Michael D. Williams, Prentice Hall, (2000),Integrating Technology into Teaching and Learning: Concepts and Applications.
8. Laura Parker Roerden, O'Reilly, (1997),Net Lessons: Web-based Projects for Your Classroom, Volume 1.
9. Paul F. Merrill, Allyn and Bacon, (1996),Computers in Education, 3rd Edition.
10. Joan Riedl, Allyn and Bacon,(1995),The Integrated Technology Classroom.

## **18EDUCC02: PSYCHOLOGY OF LEARNING**

(4 CREDITS)

### **Objectives**

1. To understand the meaning, principles and methods of Educational Psychology.
2. To understand the process of learning and the factors / conditions that facilitates the learning process.
3. To design learning situations that enables the learners to use various styles and strategies of learning.

### **Learning Outcomes: (OBE)**

1. Meaning, principles and methods of Educational Psychology will be understood.
2. The concepts and principles of Behavioral, Cognitive and Information and processing theories will be understood.
3. The factors / conditions that facilitate the learning process will be understood.
4. Various styles and strategies of learning will be analyzed.
5. Concepts of education & measurement will be understood.

### **Unit – I: Educational Psychology**

Psychology: Meaning, Branches and Scope – Major Schools of Psychology – Structuralism, Functionalism, Behaviorism, Gestalt School and Psycho Analysis – Emerging Areas of Educational Psychology – Methods of Psychology – Introspection, Observation, Experimental, Clinical, Case Study, Differential and Psycho Physical.

### **UNIT – II: Learning**

Learning – Concept and Principles – Behavioral Theory: Classical and Operant Conditioning, Bandura's Social Learning Theory – Cognitive Theory: Gagne's Theory, Bruner's Theory and Piaget's Cognitive Development: Information Processing Theory – Donald Norman.

### **UNIT – III: Factors Affecting Learning**

Perception: Factors Influencing Perception, Role in Cognition – Attention: Factors, Role of Attention in the Cognitive Process – Memory: Acquisition, Storage and Retrieval of Information, Sensory Memory, Short Term and Long Term Memory, Forgetting – Motivation: Types and Factors.

### **UNIT – IV: Individual Difference**

Intelligence: Definition, Nature – Theories of Intelligence: Spearman, Thurston, Guilford and Gardener – Creativity: Nature, Factors Affecting Creativity, Creative Thinking and Guidelines for Teaching Creativity – Personality: Meaning – Theories of Personality – Type Theory, Trait Theory and Psycho-Analytic Theory.

### **UNIT – V: Psychological Measurement**

Concept of Evaluation, Measurement and Assessment – Psychological Tests – Nature Characteristics and Types – Norm Referenced Test – Criterion Referenced Test.

### **References**

1. S. K. Mangal, , (2007), Essentials of Educational Psychology. PHI- Publication
2. Robert A. Baron and Donn Erwin Byrne, (2004), Pearson, Social Psychology: With Research Navigator, 10th Edition.
3. Robert A. Baron, (2001), Psychology,, Pearson Education India.
4. Clifford Thomas Morgan et al., McGraw-Hill, (1986), Introduction to Psychology.
5. Charles Edward Skinner, (1984), Educational Psychology, Prentice Hall.
6. John P. De Cecco and William R. Crawford, (1982), The Psychology of Learning and Instruction, Prentice Hall.
7. John M. Stephens; Holt, (1965), The Psychology of Classroom Learning,, Rinehart and Winston Publishing.
8. Henry Clay Lindgren, (1960), Educational Psychology in the Classroom,, Asia Publishing House, Bombay.

### **18EDUCC03: CURRICULUM: PRINCIPLES AND FOUNDATIONS**

(4 CREDITS)

#### **Objectives**

1. To analyze and evaluate current approaches to Curriculum design and engineering.
2. To design curriculum with appropriate syllabuses, tasks and texts.
3. To understand the foundations of curriculum, anatomy of curriculum, curriculum design and engineering.

#### **Learning Outcomes: (OBE)**

1. Learners will understand the origin and historical development of the curriculum.
2. Different Learning Theories will facilitate the learners insight.
3. Curriculum Laws and Principles will lead the learners to a futuristic learning design.
4. Learners can understand the various agencies of curriculum development.
5. Curriculum evaluation that enhances the benchmarks and standards.

#### **UNIT – I: Basics of Curriculum**

Curriculum: Meaning and Definitions. Historical Evolution of Curriculum Studies – Possibilities – Curriculum Policy – Origin and Development of Curriculum as a Field Study.

#### **UNIT – II: Foundations of the Curriculum and Curriculum Theory**

Philosophy and Curriculum – Culture, Values and the Curriculum – Curricular Applications of the Synoptic View of Man – Curriculum Theory: Meaning, Rationale and Importance – Perspectives in Curriculum Theory: Herbartian Theory, Social Efficiency Movement (Edward L. Thorndike, W.W. Charters), Progressive Reform Movement (John Dewey), Multicultural Education Movement and Critical theory.

#### **UNIT – III: Curriculum Design**

Laws and principles of curriculum construction, Curriculum Design: Curriculum Administration, Curriculum Planning, Curriculum Development, Curriculum Implementation, Curriculum Organization, Curriculum Supervision, Curriculum design for the future – Future in Education: School Design, Educational Technology Design, Humanistic Design, Vocational Design, Social Re-Construction Design.

#### **UNIT – IV: Crucial Issues in Curriculum Development**

Curriculum Developers – Required Skills and Training – Role of Teacher in Curriculum Development – Curriculum Engineering as a Research and Development – Curriculum Development Agencies in India.

#### **UNIT – V: Evaluation of Curriculum**

Curriculum Evaluation: Need and Importance – Curriculum Evaluation: Principles – Curriculum Evaluation: Benchmarks & Standards, Qualitative Evaluation, Testing and Measurement.

#### **References**

1. Craig Kridel, (2010), Encyclopedia of Curriculum Studies, SAGE Publications.
2. Null J.W, F.M. Connelly (Ed.), (2008), Curriculum Development in Historical Perspective, In the Sage Handbook of Curriculum and Instruction, Sage Publications.
3. Peter S. Hlebowitsh, Allyn & Bacon, (2005), Designing the School Curriculum.
4. Reader, David J. Flinders and Stephen J. Thornton, (2004), The Curriculum Studies, Psychology Press.
5. Tanner D and Tanner L, Interchange, 19(2), (1988), The Emergence of a Paradigm in the Curriculum Field: A Reply to Jickling.
6. Ronald C. Doll, Allyn and Bacon, (1982) Curriculum Improvement: Decision Making and Process.
7. Robert S. Zais, Crowell, (1976), Curriculum: Principles and Foundations.
8. Fred Nichols Kerlinger, (1964), Foundations of Behavioral Research, Hott Rineont and Winston Publishing.
9. Hilda Taba, (1962), Curriculum development: Theory and Practice, Harcourt, Brace & World Publishing.
10. Werrett Wallace Charters, Macmillan, (1923), Curriculum Construction.
11. John Dewey, (1920), The Child and the Curriculum, Library of Alexandria.

## **18EDUCC04: EDUCATIONAL VIDEO PRODUCTION**

(4 CREDITS)

### **Objectives**

1. To introduce the basics of educational video pre-production, production and post-production.
2. To provide adequate knowledge on script writing, storyboarding, video cameras and audio equipment.
3. To introduce various lighting equipment used in video production.

### **Learning Outcomes: (OBE)**

1. Write suitable script for educational videos.
2. Select appropriate production environment, recording formats and output formats.
3. Choose the audio recording systems, microphones and other audio equipment for recording audio.
4. Understand various types of cameras and camera operation techniques.
5. Set optimal lightings for the production environment.

### **UNIT – I: Introduction to Production and Script Writing**

Role of Video in Education – Phases of Production: Preproduction – Production – Postproduction – Audio Vs Video Scripts – Visual Writing – Role of Scriptwriter – Script Format: Master Scene, Dual-Column – Concepts, Formats and Types of Storyboard – Copywriting Vs Scriptwriting – Script for Fiction and Non-Fiction – Types of Documentaries – Writing Commentaries – Writing for Long-Form Scripts – Script for Training and Educational Video: Show and Tell – Job and Task Description – Dramatization – Instructional Video – How-to-do Videos.

### **UNIT – II: Basics of Audio-Video Production**

Types of Audio & Video Studio – Control Room – Stage properties – History of Audio & Video Recording – Audio Formats – Audio Tape Formats – Video Formats – Video Tape Formats – Digital Audio & Video – Roles of Video Production Team – Roles of Audio Production Team.

### **UNIT – III: Audio Systems and Production**

Types of Sound – Types of Recording – Recording Systems – Microphones – Cables and Connectors – Monitoring Equipments – Mixing Equipments – Remote Audio Production Equipments – MIDI – Acoustics.

### **UNIT – IV: Video Systems and Production**

Types of Camera – Parts of Camera – Mounting Equipments – Lenses: Types, Optical Characteristics – Filters – Camera Operation Techniques – Color Balancing – Camera Movements – Multiple Camera Production – Types of Shots.

### **UNIT – V: Lighting in Video Production**

Types of Lighting – Types of Lamps – Studio Lighting Instruments – Field Lighting Instruments – Lighting Control Equipments – Quality of Light – Color Temperature – Light Intensity – Light Balancing – Lighting Techniques – ENG/EFP Lighting.

### **References**

1. Herbert Zettl, (2015), Television Production Handbook, 12<sup>th</sup> Edition,, Cengage Learning.
2. Michael O'Donoghue, (2013), Producing Video For Teaching and Learning: Planning and Collaboration, Routledge.
3. Bruce Bartlett and Jenny Bartlett, (2013), Practical Recording Techniques, 6<sup>th</sup> Edition, Focal Press.
4. Donald L. Diefenbach, (2009), Video Production Techniques, Routledge.
5. Taylor & Francis, (2008), Video Production Handbook, Gerald Millerson and Jim Owens.
6. Anthony Friedmann, (2006), Writing For Visual Media, Second Edition, Focal Press.
7. Des Lyver, Graham Swainson, (1999), Basics of Video Lighting,, Focal Press.
8. Gerald Millerson, (1994), Video Camera Techniques, Focal Press.

**18EDUCP01: EDUCATIONAL VIDEO PRODUCTION – PRACTICAL**  
(4 CREDITS)

**Objectives**

1. To prepare the students to write production script and post-production script for an educational video.
2. To inculcate storyboarding skills.
3. To train and allow to practice video production skills using the video cameras.
4. To train and allow to practice audio recording/mixing and video editing in Avid ProTools and Avid Media Composer.

**Learning Outcomes: (OBE)**

1. Write suitable audio/video script for video production and post-production of the chosen learning video.
2. Draw storyboards for the prepared script.
3. Handle video cameras and tripods along with suitable operation techniques.
4. Record, edit and mix audio in Avid ProTools audio editing system.
5. Edit and mix video in Avid Media Composer video editing system.

**Exercises**

1. Writing an audio script and video script to produce an educational video.
2. Preparing storyboards for the script written.
3. Shooting the video based on the above script.
4. Recording and editing audio in ProTools.
5. Editing and mixing visuals and audio in Avid Media Composer.

**18EDUCC05: SYSTEMS APPROACH TO INSTRUCTIONAL MEDIA**  
(4 CREDITS)

**Objectives**

1. To enable the students understand the concept of system approach to educational communication.
2. To enable the students to analyze the principles of system analysis and instructional design and media.
3. To help the student to understand the importance of feedback and other control mechanism.

**Learning Outcomes: (OBE)**

1. The concept of system approach to educational communication will be understood.
2. The principles of system analysis and instructional design will be analyzed.
3. The importance of feedback and other control mechanism will be understood
4. Educational implications of system analysis will be understood.
5. The feedback and evaluation of system will be understood.

**Unit – I: Concept of System Approach**

System: concept and definition – Types and Classification – Properties, Components and Principles – Stages in System Analysis – Qualities of a System Analyst – System Analysis in Different Fields.

**Unit – II: Analysis of Sub-Systems**

Education as a sub-system: a system with sub-system – Significance of Systems Approach to Education – Curriculum Development: Personnel, Selection of Materials and Methods & Evaluation



### **Unit – III: Instructional Systems**

Systems View of Instruction – Systems Approach for Developing Instructional System – Models of Systems Approach to Instruction: Glacier Model – Formulation of Instructional Objectives

### **Unit – IV: Design & Educational Media**

Principles of Learning System Designing: Individualized Procedures in Learning and Programmed Instruction – Learning Module – Significance of Systems Approach to Educational Communication and Learning

### **Unit – V: Feedback & Evaluation of System**

Importance of Feedback in System Design Process: Cybernetic, control mechanisms and implications – Criteria for assessing the efficiency of a system – Educational implications of systems analysis.

### **References**

1. William et al., Wiley, (2015) Mastering the Instructional Design Process: A Systematic Approach 4th Edition.
2. Martin Reynolds and Sue Holwell, (2010), Systems Approaches to Managing Change: A Practical Guide,, Springer.
3. Robert Maribe Branch, (2009), Instructional Design: The ADDIE Approach, Springer.
4. Kerry Dunn, (2007), The Contemporary Applications of a Systems Approach to Education: Models for Effective Reform, University Press of America.
5. G.S. Pillay, (1991), Instructional Designing,, Nirmal Publications, Madurai.
6. Methuen, (1978), Aspects of Educational Technology, Volume 1 to 12, Association of Programmed Learning and Educational Technology.
7. James D. Russell, (1974), Modular Instruction: A Guide to the Design, Selection, Utilization, and Evaluation of Modular Materials,, Burgess Publishing Company.
8. Edgar Faure, (1972), Learning to be: The World of Education Today and Tomorrow, UNESCO.
9. Gordon Pask and Brian Lewis, (1972), Teaching Strategies: A Systems Approach, Compiled by, Open University Press, UK.
10. Jerry Pocztar, (1972), Theory and Practice of Programmed Instruction,, UNESCO.

## **18EDUCC06: INSTRUCTIONAL TECHNOLOGY** (4 CREDITS)

### **Objectives**

1. To understand the meaning and significance of Instructional Technology.
2. To relate instructional objectives to instructional technology.
3. To learn the importance of instructional theories and models in Instructional System Design.
4. To understand the evaluation of instructional materials and assessment of learning

### **Learning Outcomes: (OBE)**

1. Understand the clear history and development of Instructional Technology.
2. Educational Objectives and writing objectives of Instructional Design will be understood.
3. Different Learning Theories will be understood by the learners.
4. Instructional media and methods of Instructional Design can be analyzed.
5. Instructional Design will enhance the evaluation and assessment formats.

### **UNIT – I: Introduction to Instructional Technology**

Definition – History of Instructional Technology – Concept of Systems Approach – System Analysis – Curriculum Development and Process – Need Assessment – Task Analysis – Taxonomies of Educational Objectives: Bloom's Cognitive Domain, Krathwohl's Affective Domain, Dave's Psychomotor Domain, Harrow's Psychomotor Domain, Simpson's Psychomotor Domain – Bloom's taxonomy verbs - Writing Objectives: Mager Method, Gagne and Briggs Method, ABCD Method.

## **UNIT – II: Instructional Models**

Instructional Development Models: Kemp Model – Instructional Development Institute Model – Interservice Procedures for Instructional Systems Development Model – CRI Model – ADDIE Model - Rapid ISD, SAM, Dick and Carey Models.

## **UNIT – III: Instructional Theories**

Gagne-Briggs' Instructional Events – Gropper's Behavioral Approach to Instructional Prescription – Landa's Algo-Heuristic Theory – Scandura's Structural Learning Theory – Collins-Stevens' Cognitive Theory of Inquiry Teaching – Merrill's Component Display Theory – Reigeluth-Stein's Elaboration Theory of Instruction – Keller's Motivation Design of Instruction - Ruth Clark six effective e-Learning principles.

## **UNIT – IV: Instructional Media & Strategies**

Instructional Methods and Media – Instructional Strategies for Declarative Knowledge, Concepts, Procedures, Principles, Problem-Solving, Cognitive Strategy, Attitude, Psychomotor Skill.

## **UNIT – V: Evaluation and Assessment**

Evaluation of Instructional Materials: Overview – Evaluation Process – Evaluation Models – Assessment of Learning: Overview – Purposes – Types of Assessment – Models of Assessment of Learners' Achievement – Characteristics of Good Assessment Instruments – Formats of Assessment.

## **References**

1. Robert M. Gagne,(2013),Instructional Technology: Foundations, Routledge.
2. Charles M. Reigeluth, (2013),Instructional-Design Theories and Models: An Overview of Their Current Status, Routledge.
3. Rita C. Richey et al., (2010), The Instructional Design Knowledge Base: Theory, Research, and Practice, Routledge.
4. Gary R. Morrison et al., Wiley,(2006),Designing Effective Instruction, 7th Edition.
5. L. Smith and Tillman J. Ragan, Wiley,(2005), Instructional Design, Patricia.
6. David H. Jonassen et al,(1999), Task Analysis Methods for Instructional Design, Book by., Lawrence Erlbaum Associates.
7. RobertM.Hashway,(1998),Assessment andEvaluation of Developmental Learning,,Greenwood Publishing Group.
8. Frederick G. Knirk, and Kent L. Gustafson; Holt, (1986),Instructional Technology: A Systematic Approach to Education, Rinehart and Winston.

## **18EDUCC07: E-CONTENT WRITING** (4 CREDITS)

### **Objectives**

1. To familiarize the basics of writing.
2. To learn the skills required for a multimedia/web writer.
3. To know the styles of writing for different types of documents.
4. To understand the architecture of multimedia/web.

### **Learning Outcomes: (OBE)**

1. Understanding of the basics of English Grammar and tenets of writing.
2. Knowledge of interactive writing and narrative strategies.
3. Understanding of writing formats.
4. Knowledge of writing narration for different types of websites.
5. Understanding of specific cases.

## **UNIT – I: Basics of Writing**

LSRW Skills (Listening, Speaking, Reading Writing). Traditional Content, E-Content. Language Use- Parts of Speech, Tenses, Coherence, Cohesion, Accuracy, Brevity, and Clarity.

## **UNIT – II: Interactivity and Writing**

Interactive Multimedia – Interactive Writer – Inter activity and Control – Thinking Interactively – Interactive Devices – Information and Interactive Architecture – Narrative Design – Content Expertise and Strategy– Writing for Search Engines – Technical Skills: Flowcharting – Other Organizational Tools.

## **UNIT – III:Writer & Formats**

Defining Goals-Techniques to Achieve Common Goals-Audience-Proposal Formatting: Outlines-Proposals-Storyboards-Scripts- Final Documents Role of Content Writer, Role of Subject Matter Expert, Role of Instructional Designer.

## **UNIT – IV: Writing Narration**

Architecture: Linear – Linear with Section Branching – Hierarchical Branching – Parallel/Multiple Path Architecture – Dynamically Generated Websites – Active and Passive Information Delivery – Writing Non-Narrative, Linear Narrative, Interactive Narrative – Interactive Narration: Character and Role of the Player – Structure and Navigation – Exposition

## **UNIT – V: Case Studies**

Writing a corporate website – Writing a museum kiosk – Writing interactive lessons – Writing learning content for a simulation – Writing classic lessons to a computer game.

## **References**

1. Peter Donnelly et al., (2012),How to succeed at E-Learning,,Wiley.
2. Caroline Haythornthwaite and Richard Andrews,(2011), E-Learning Theory & Practice, SAGE.
3. Timothy Garrand,(2006), Writing for Multimedia and the Web: A Practical Guide to Content Development for Interactive Media, Elsevier.
4. Katy Campbell, (2004), Effective Writing for E-Learning Environments (Cases on Information Technology), Information Science Publishing.
5. Irene Hammerich and Claire Harrison,(2002), Developing Online Content: The Principles of Writing and Editing for the Web, John Wiley & Sons Inc.
6. Sunny Thomas,(2000), Writing for the Media,, Vision Books Pvt. Ltd..
7. NP Ahuja,(2013), Dictionary of Grammer-, Anurol Publications Pvt.Ltd., New Delhi-110002.

## **18EDUCC08: INTERACTIVE MULTIMEDIA DESIGN**

(4 CREDITS)

### **Objectives**

1. To provide insights on the fundamentals of multimedia and tools used to produce multimedia.
2. To introduce the characteristics of multimedia components and inculcate the guidelines for preparing educational multimedia.
3. To provide adequate knowledge on interface designing, interaction devices and usability testing.

### **Learning Outcomes: (OBE)**

1. Understand the fundamental concepts on multimedia and tools used to create multimedia.
2. Apply guidelines during the preparation of educational multimedia packages.
3. Understand the basics of interface and screen designing which are applied while designing storyboards for interactive instructional packages.
4. Create interactive and attractive interface components for the interaction devices in which instructional packages are utilized.
5. Choose, create and apply suitable icons, graphics and colors for the instructional package, and perform usability testing to confirm the interface design.

### **UNIT – I: Introduction to Multimedia**

Components – History – Hypermedia – Multimedia Hardware – Multimedia Software Tools: Painting and Drawing Tools – Image Editing Tools – Animation Tools – Audio and Video Editing Tools – Authoring Tools – Raster and Vector Graphics – Compression/Decompression and Formats – Multimedia Networks – Multimedia Project Management: Issues – Testing – Delivery.

### **UNIT – II: Multimedia in Instruction**

Text: Guidelines for Creating Text, Spacing, Justification, Fonts, Variable Spacing, Scrolling, Display Speed, Screen Focus Points, Hypertext and Hypermedia – Images: Images and Learning, Displaying Images, Appearance, Costs, Digitization – Animation: Types of Animation, Animations and Learning, Displaying Animations, Costs, Rendering – Audio: Audio and Learning, Scriptwriting Guidelines, Speech, Sounds, Music, Audio Quality, MIDI, Digitization – Video: Video and Learning, Strengths of Video, Difficulties with Professional Quality Video.

### **UNIT – III: Introduction to Interface Design**

User Interface – Graphical User Interface – Web User Interface – Usability Design: Problems, Measures – Human Characteristics in Design – Principles of Interface and Screen Design.

### **UNIT – IV: Interface Designing**

Interaction Devices – Menu Design: Structure, Functions, Format – Navigation Design – Window Design: Components, Types, Operations – Controls Design: Operable controls, Selection Controls.

### **UNIT – V: Accessibility Design**

Icons and Graphics: Types, Characteristics – Colors: Uses, Choosing Colors – Screen Organization – Usability Testing: Purpose, Scope – Interactive Paper Prototypes – VR Interfaces.

### **References**

1. Nelly Foreman, (2015), Interactive Multimedia: Insight, Clanrye International.
2. Jason Jerald, (2015), The VR Book: Human-Centered Design for Virtual Reality, Morgan & Claypool Publication.
3. Tay Vaughan, (2014), Multimedia: Making it Work, Ninth Edition, McGraw Hill Professional.
4. Jenifer Tidwell, (2010), Designing Interfaces: Patterns for Effective Interaction Design, O'Reilly Media Inc. Publication.
5. Wilbert O. Galitz, (2007), The Essential Guide to User Interface Design: An Introduction to GUI Design Principles and Techniques, Third Edition, John Wiley & Sons Publication.
6. Peter Fenrich, (2005), Creating Instructional Multimedia Solutions: Practical Guidelines for the Real World, Informing Science Publication.
7. Ray Kristof, Amy Satran, (1995), Interactivity by Design: Creating & Communicating with New Media, Pearson Education Publication.

## **18EDUCC09: E-LEARNING ENVIRONMENT DESIGN**

(4 CREDITS)

### **Objectives**

1. To inculcate the basic knowledge of e-learning package design.
2. To introduce various e-learning environments in which the e-learning packages are deployed.
3. To present the design characteristics of learning activities used in the e-learning packages.
4. To provide awareness on designing topics and lessons in the e-learning packages.
5. To familiarize the purpose of tests, questions and feedback implemented in e-learning packages and environments.

### **Learning Outcomes: (OBE)**

1. Know the fundamental perspectives and components of e-learning packages/ environment designing.
2. Understand the different design aspects of e-learning packages needed for various e-learning environments.
3. Design suitable absorb, do and connect activities for a given subject.

4. Design the structure of lessons and topics under which the activities are included.
5. Select appropriate type of questions, and choose suitable test characteristics.

### **UNIT – I: Introduction to E-Learning Design**

Perspectives of E-Learning Design – Identifying Goal – Writing Learning Objectives – Identifying Prerequisites – Teaching Sequences – Creating Learning Objects – Learning Activities – Redesigning.

### **UNIT – II: E-Learning Environments**

E-Learning Devices – Locations of Learning – Blended Learning – Embedded E-Learning – Virtual Classroom: Collaboration Tools, Online Meetings, Discussion Activities, and Virtual Courses.

### **UNIT – III: Designing Activities**

Presentations – Sharing Stories – Readings – Field Trips – Drill and Practice – Hands-on Training – Guided Analysis – Virtual Laboratories – Case Studies – Role-Playing – Learning Games – Ponder Activities – Job Aids – Research Activities – Original Work Activities.

### **UNIT – IV: Designing Topics and Lessons**

Topics: Components of Topic – Designing Reusable Topic – Foreign Modules – Lessons: Classic Tutorials – Books – Scenario-Centered Lessons – Essential Tutorials – Exploratory Tutorials – Subject-Specific Lessons.

### **UNIT – V: Testing**

Meaning and Definition – Types of Test Questions – Writing Effective Questions – Pre-Test – Advanced Testing – Combining Questions – Feedback – Scoring – Alternative to Formal Tests.

### **References**

1. William J. Rothwell et al., (2015), Mastering the Instructional Design Process: A Systematic Approach, Wiley.
2. Rita C. Richey et al., (2010) The Instructional Design Knowledge Base: Theory, Research, and Practice, Routledge.
3. Gary R. Morrison et al., (2006), Designing Effective Instruction, 7th Edition, Wiley.
4. William Horton, (2006), E-Learning by Design, Pfeiffer.
5. John M. Keller, (2005), Principles of Instructional Design, Thomson/Wadsworth.
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7. Bruce R. Ledford and Phillip J. Sleeman, (2002), Instructional Design: System Strategies, IAP.

## **18EDUCP02: INSTRUCTIONAL PACKAGE DEVELOPMENT – PRACTICAL** (4 CREDITS)

### **Objectives**

1. To inculcate the knowledge and skill of applying various features available in Adobe Photoshop, Adobe Flash/Animate and Adobe Captivate.
2. To train instructional package designing and development skills such as storyboarding, prototyping, creating components and authoring.

### **Learning Outcomes: (OBE)**

1. Design storyboards for a proposed instructional package.
2. Construct prototypes based on the designed storyboards.
3. Edit graphics and create interactive animations using Adobe Photoshop and Adobe Flash/Animate.

4. Prepare audio and video contents, for this instructional package, using the skills acquired during 'Educational Video Production – Practical' course.
5. Develop an instructional package in Adobe Captivate, according to the storyboard, by integrating all multimedia contents.

### **Exercises**

1. Designing storyboardsto develop two interactive instructional packages in Adobe Captivate and Adobe Flash.
2. Constructing prototypes for the instructional packages.
3. Writing text content and creating othermultimedia contents required for the packages.
4. Developing instructional packages by integrating the components from above exercises.

## **18EDUCC10: LEARNING MANAGEMENT SYSTEM: MOODLE**

(4 CREDITS)

### **Objectives**

1. To introduce the concept of Learning Management System (LMS) and explain the features of Moodle LMS.
2. To familiarize the administrative capabilities and permissions available in Moodle.
3. To provide details about the flexible collaborative tools, learning activities and assessment features offered in Moodle.

### **Learning Outcomes: (OBE)**

1. Explain the importance of LMS in educational institutions. Install and configure Moodle in a standalone/networked environment. Create users, courses and provide permissions for the users in LMS.
2. Enroll students, add content and manage content in various administrative/user roles.
3. Effectively utilize the Text Editors, Chats, Messaging and Discussion Forums.
4. Create, manage and grade the Quiz, Assignment and Glossary activities.
5. Create, manage and grade the Lesson, Wiki, Blog and Database activities.

### **UNIT – I: Introduction**

Meaning of LMS, CMS and LCMS – LMS: Purpose, functions and Tools –Moodle: History and Educational Philosophy – Course Design Patterns: Introductory Survey Course, Skill Development Course, Theory/Discussion Course and Capstone Course – Installations – Architecture – File Management – Creating Account – Editing User Profile – User Accounts and Permissions.

### **UNIT – II:Content Management**

Course Formats and Settings – Enrolling Students – Adding Content – Managing and Updating Content – File Formats – File Compression – Adding Creative Content – Roles – Assigning Roles – Enrollment Methods – Capabilities and Permissions – Student Groups – Backup and Restore.

### **UNIT – III:Collaboration Tools**

Text Editors: HTML Editor, Equation Editor, Plugins – File Picker – File Repositories – Chat – Messaging –Discussion Forums: Searching, Managing, Archiving, Capabilities and Grading.

### **UNIT – IV:Quiz and Assignment**

Creating Quiz – Building Question Bank – Managing Quizzes – Quiz Security and Capabilities – Assignments: Types, Capabilities, Managing, Grading – Phases of Workshop – Adding and Grading Workshop Activity – Glossaries: Adding, Searching, Categories, Capabilities, Auto linking, Importing, Exporting, Commenting, Collaborative Glossaries.

### **UNIT – V:Lessons, Wikis, Blogs and Database**

Lessons: Creating, Managing, Ending – Wikis: Creating, Editing – Blogs: Adding, Viewing, Visibility, Preferences, Tags – Database: Creating, Managing, Capabilities – Survey – Choices – Feedback – Grading: Interfaces, Categories, Calculations, Importing, Exporting

## References

1. Alex Buchner, (2016), Moodle 3 Administration, Third Edition, Packt Publishing.
2. Jaswinder Singh, (2014), How to Use Moodle 2.7, Moodle.
3. Katrina Baker, (2014), LMS Success: A Step-by-Step Guide to Learning Management System Administration, Resources of Fun Learning.
4. Yefim Kats, (2013), Learning Management Systems and Instructional Design: Best Practices in Online Education, IGI.
5. Yefim Kats, (2010), Learning Management System Technologies and Software Solutions for Online Teaching: Tools and Applications, IGI Global.
6. Jason Cole and Helen Foster, (2008), Using Moodle, O'Reilly.
7. Colleen Carmean and Ali Jafari, (2005), Course Management Systems for Learning: Beyond Accidental Pedagogy, IGI,

## **18EDUCC11: E-LEARNING PROCESS AND STANDARDS**

(4 CREDITS)

### Objectives

1. To understand the concept of e-learning and standards to develop e-learning environments.
2. To know the process of learning objects in the courseware.
3. To acquire the knowledge of importing, exporting and assessment models to develop courseware.

### Learning Outcomes: (OBE)

1. Knowledge of the basic tenets of standards and their role.
2. Knowledge of e-learning standards.
3. Understanding of specific models of interoperability.
4. Comprehension of schemas for data interchange.
5. Understanding of assessment models.

### UNIT – I: Introduction to E-Learning and Standards

Role of Standards in E-Learning – Life Cycle of a Standard – Standard Bodies: ADL, AICC, IMS Global Consortium, IEEE, ISO/IEC.

### UNIT – II: E-Learning Standards and Courseware

Courseware: Standards for Courseware, Assessment Tools, Administrative Systems – AICC Conformant LMS – SCORM Conformant LMS – XAPI and LTI standards – SCORM Cloud – Assessment Systems – Managing Vendors.

### UNIT – III: Interoperable Data

Authoring Content: Intra Course Navigation – Remediation – Mechanics of Data Tracking – API: Specifications, Data Exchange Method, Launching Learning Object (LO), Data Model – Development Problems.

### UNIT – IV: Importing and Exporting Courses

Self Describing Los & Sharability – XML: Elements & Attributes, Data Types & Vocabularies, Document Type Definition & Schema – SCORM Meta Data Information Model – Portable Courses – SCORM Content Packaging Model – AICC Course Interchange Files – Launching & Sequencing of Los – Certification & Self Testing.

### UNIT – V: Assessment Models

Questions & Test Interoperability – ASI Information Model: Assessment Engine, Response Processing, Selection & Ordering, Outcomes Processing – Result Reporting – Information Model – Establishing Conformance.

## References

1. Carol Fallon and Sharon Brown, (2016), E-Learning Standards: A Guide to Purchasing, Developing, and Deploying Standards-Conformant E-Learning, CRC Press.

2. Ulf-Daniel Ehlers and Jan Martin Pawlowski, (2010), Handbook on Quality and Standardisation in E-Learning, Springer Berlin Heidelberg.
3. Fotis Lazarinis, (2010), Handbook of Research on E-Learning Standards and Interoperability: Frameworks and Issues: Frameworks and Issues, IGI.
4. Miguel-Angel Sicilia, (2007), Competencies in Organizational E-learning: Concepts and Tools, Information Science Publications.
5. Katy Campbell, (2004), Effective Writing for E-Learning Environments (Cases on Information Technology), Information Science Publishing.
6. Gaurav Chadha, S.M. Nafay Kumail, (2002), E-Learning: An Expression of the Knowledge Economy, Tata McGraw-Hill Publication.

## **18EDUCC12: E – GOVERNANCE AND EDUCATIONAL ADMINISTRATION** (4 CREDITS)

### **Objectives**

1. To develop an understanding of the concepts, techniques and practice of management as applicable to their work.
2. To recognize the importance of management of resources and effective use of ICT in the context of educational management.

### **Learning Outcomes: (OBE)**

1. Learners understood the Knowledge of e-governance and techniques.
2. E-governance policies and principles will be analysed.
3. Competence of Administration will be enhanced by the e-governance theories.
4. Educational Administration concepts, methods and stages can be identified by the learners.
5. How ICT is applied in educational administration can be understood.

### **UNIT – I: INTRODUCTION**

E-Governance: Meaning, Concepts and Implementation – Techniques of E-Governance: GIS based Management, Citizen Database, Human Development and Video Conferencing.

### **UNIT – II: E-GOVERNANCE IN INDIA**

E-Governance: Policy, Projects and Challenges at National Level – Prerequisite of Good Governance: Infrastructure and Security concerns.

### **UNIT – III: INDIAN THEORY**

Utilizations of Indian Theory in Public Administration, Raising Competence of Administration: Role of Indian Theory, Good Governance, Administrative Culture in India.

### **UNIT – IV: EDUCATIONAL ADMINISTRATION**

Concept and Scope – Concept of Educational Administration and Stages in the Educational Administration Process, Basic functions of administration: Planning, Organizing, Directing and Controlling – Theories of Educational Administration – Administrative Structure of Education at different levels – Transparency in Educational Administration.

### **UNIT – V: ICT IN EDUCATIONAL ADMINISTRATION**

ICT in Educational Administration – Maintenance of Resources in Institution – ICT Tools for Educational Administration – Challenges to effective use of ICT – Software for Record Keeping.

### **References**

1. Zhiyuan, (2014), E-Government in Digital Era: Concept, Development, and Practice, Fang, International Journal of the Computer.
2. Jaegar, (2008), Citizen Centered E-Government Services: Benefits, Costs, and Research Needs, Bertot, and McClure.
3. B. Saugata, and R.R. Masud, (2007), Implementing E-Governance Using OECD Model (Modified) and Gartner Model (Modified) Upon Agriculture of Bangladesh, IEEE.



4. D.G. Garson, (2006), Public Information Technology and E-Governance, Jones and Bartlett Publishers.
5. G.D. Garson, (2006), Public Information Technology and E-Governance: Managing the Virtual State, Jones & Bartlett Publishers.
6. EJSIDC, (2004). E-Government for Developing Countries: Opportunities and Challenges, The Electronic Journal on Information Systems in Developing Countries
7. Jan Erik Lane, (2000), New Public Management, Routledge.
8. IIPA Special, (2000), Indian Theory and Public Administration, (July-September).
9. M.G. Gupta and R.K. Tiwari, (1998), Reinventing the Government, IIPA.
10. Richard Hecks, Implementing and Managing E-Governance, Vistar Publications.
11. World Bank Report, (1997), Good Governance: The Business of Government.

### **18EDUCC13: RESEARCH METHODS AND STATISTICS**

(4 CREDITS)

#### **Objectives**

1. To understand research methods and statistical tools in education.
2. To understand the principles of evaluation, research and statistics and computer application.
3. To prepare model research proposals for research studies and report writing.

#### **Learning Outcomes: (OBE)**

1. Various types of research methods will be understood.
2. Various types of statistical tool and their application will be understood and analyzed.
3. Different types of sampling techniques will be analyzed.
4. Principles of evolution, research statistics will be understood model.
5. Research proposed and Research report will be prepared.

#### **UNIT – I: Research Methods**

Research: Meaning, Nature and Scope and agencies of Educational research – Research Trends in Education, Educational Technology – Qualitative Research Methods: Historical Research, Case Study, Participatory and Ethnography Research Methods – Quantitative Research Methods: Survey, Experimental, Action and Longitudinal Research Methods

#### **UNIT – II: Tools, Variables and Scales of Measurement**

Tools for Data Collection: Observation, Interview, Schedule, Checklist, Questionnaire, Achievement test, Socio-metric, Attitude Scale– Construction and Standardization of Tools – Variables: Discrete and Continuous Variables, Independent and Dependent Variables, Intervening and Manipulating Variables – Scales of Measurement: Nominal, Ordinal, Interval and Ratio Scales

#### **UNIT – III: Sampling Techniques and Hypotheses**

Meaning of Population and Samples – Sampling Method: Purposive Sampling, Simple Random Sampling, Multi Stage Sampling, Systematic Sampling, Stratified Random Sampling and Cluster Sampling, Sampling Error – Hypotheses: Meaning, Scope and Types – Hypotheses Formulation and Testing: Statistical Significance, One-Tailed and Two-Tailed Tests

#### **UNIT – IV: Advanced Statistical Techniques for Research**

Introduction to Statistics: Meaning, Scope, Importance and Limitations of Statistics and Data – Descriptive and Inferential Statistics, Parametric and Non-Parametric Statistics – Diagrammatic and Graphical Presentations: Bar Diagrams, Pie Diagrams, Histogram, Frequency Polygon, Smoothed Frequency Polygon, Cumulative Frequency Graph or Ogive -Normal Probability Curve: Characteristics of Normal Probability Curve- Skewness and Kurtosis – Range, Variance, Frequency, Percentile, Standard Scores, Z Scores, Type-I and Type-II error, Sampling error, Statistical Significance – Univariate Analysis: Mean, Median, Mode – Measures of Central Tendency and Standard Deviation – Bivariate Analysis: Correlation Methods, Chi-Square, t-test.

### **UNIT – V: Computer Application and Report Writing**

Computer applications: Statistical Package for Social Sciences (SPSS), Microsoft word, Excel, etc. – Writing Research Proposal and Research Report.

#### **References**

1. John W. Best and James V. Kahn, (2014), Research in Education, 10th Ed., Pearson.
2. Alan C. Elliott, Wayne A. Woodward, (2014), IBM SPSS by Example: A Practical Guide to Statistical Data Analysis, 2nd Edition, SAGE.
3. LokeshKoul, (2009), Methodology of Educational Research, 4th Edition, Vikas.
4. Fred Nichols Kerlinger and Howard Bing Lee, (2000), Foundations of Behavioral Research, 4th Edition, Harcourt College Publishers.
5. Allen Louis Edwards, (1985), Experimental Design in Psychological Research, Harper & Row Publishing.
6. Pauline Young, (1966), Scientific Social Survey and Research, Prentice-Hall.
7. William Goode and Paul K. Hatt, (1952), Methods in Social Research, McGraw Hill.

### **18EDUCP03: WEB DESIGNING – PRACTICAL** (4 CREDITS)

#### **Objectives**

1. To introduce web page/site designing in Adobe Dreamweaver.
2. To impart the website construction skills using the tools and features available in Adobe Dreamweaver.
3. To train building HTML 5.0 based webpages.
4. To inculcate the basic skills on creating dynamic webpages using PHP and MySQL.
5. To present the characteristics of webserver and train implementing a website on webserver.

#### **Learning Outcomes: (OBE)**

1. Design storyboards and draw hierarchical diagram for the proposed website.
2. Construct a website using Adobe Dreamweaver.
3. Develop webpages having HTML 5.0 features.
4. Incorporate dynamic webpages using PHP and MySQL.
5. Install the Apache webserver and upload the developed website into the configured webserver.

#### **Exercises**

1. Designing storyboards for developing an educational website.
2. Designing webpages using Adobe Dreamweaver for the educational website.
3. Developing the webpages with suitable HTML 5.0 features.
4. Constructing dynamic webpages using PHP that interact with MySQL database.
5. Uploading the developed website into Apache webserver

**BHARATHIAR UNIVERSITY**  
**DEPARTMENT OF EDUCATIONAL TECHNOLOGY**

**ELECTIVE COURSES**  
**(EFFECTIVE FROM ACADEMIC YEAR 2018-19 ONWARDS)**

**CURRICULUM & SCHEME OF EXAMINATION**

Paper Code	Title of the Paper	Inst. Hrs. / Week	Credits	Examination Duration & Marks			
				Hrs.	CIA <sup>®</sup>	ESE <sup>®</sup>	Total
ELECTIVE COURSES							
18EDUGE01	Mobile Learning	4	4	3	25	75	100
18EDUGE02	Knowledge Management	4	4	3	25	75	100
18EDUGE03	Lifelong Learning and Heutagogy	4	4	3	25	75	100
18EDUGE04	Writing for Media	4	4	3	25	75	100
18EDUGE05	Visual Communication	8	4	3	40	60	100
18EDUGE06	Test, Measurement and Evaluation	4	4	3	25	75	100

<sup>@</sup> 25% and 75% of marks for Continuous Internal Assessment (CIA) and End semester Examination (ESE) respectively.

**18EDUGE01: MOBILE LEARNING**  
(4 CREDITS)

**Objectives**

1. To understand the unique characteristics of learning through mobile devices.
2. To know various learning activities used in mobile learning.
3. To analyze the socio-cultural ecology of learning with mobile devices.
4. To analyze the issues of certain real-time cases of mobile learning.

**Learning Outcomes: (OBE)**

1. Knowledge of basics of mobile learning application.
2. Understanding of mobile learning theories.
3. Knowledge of socio cultural aspects of mobile learning.
4. Insight of contextual learning.
5. Knowledge of specific cases.

**UNIT – I: Introduction**

Mobile Learning: Definition, Characteristics, History, Opportunities and Challenges – Mobile Learning Applications – Promotions: Events, Organizations and Journals – Mobile Devices: Trends, Characteristics, Opportunities and Challenges – Security and Privacy.

**UNIT – II: Learning with Mobile Devices**

Protecting Learners and Challenging Learners – Narrow, Teacher-Led Use, Constructivist and Open Settings – Adhoc, Delayed, Determined and Free Space Usage – Individualized Learning Space – Activity Theory – Contextual and Reflexive Activity – Continuity of Learning Activities – Subject-Centered and Context-Related Practices – Ecological Approach – Participative, Interactive, Situated and Contextual Learning.

**UNIT – III: Social Analysis**

Hardware/Software Affordances – Multimedia and Multimodal Communications – Ubiquity and Mobile Identity – Triangle Model of Socio-Cultural Development – Cultural Products and Child Development – Mass Communication – Media Activities and Individualization.

**UNIT – IV: Content and Contexts**

At-Risk Learners – Hedonistic Milieu and Learning – Mobile Media and Learning Contexts – Flexibility of Contexts – User-Generated Content – Individualized Knowledge Building – Reflexive Contexts – Parameters for Analysis and Planning.

**UNIT – V: Case Studies**

Project ‘Handy’ – Project ‘Learning Lab Initiative’ – Project ‘Cyrill’ – Case Analysis of a Provocative Mobile Video.

**References**

1. Helen Crompton and John Traxler; (2015), Mobile Learning and STEM: Case Studies in Practice, Routledge.
2. Scott McQuiggan et al; (2015), Mobile Learning: A Handbook for Developers, Educators and Learners, Wiley.
3. Chad Udell and Gary Woodwill; (2014), Mastering Mobile Learning: Tips and Techniques for Success, Wiley.
4. Gary Woodwill; (2011), The Mobile Learning Edge; McGraw Hill.
5. Norbert Pachler et al, (2010), Mobile Learning: Structures, Agency, Practices; Springer.
6. Mohamed Ally, (2009), Mobile Learning: Transforming the Delivery of Education and Training, Athabasca University Press.
7. HokyounRyu, (2008), Innovative Mobile Learning: Techniques and Technologies, IGI Global.
8. David S. Metcalf,(2006), MLearning: Mobile Learning and Performance in the Palm of Your Hand, Human Resource Development.

## **18EDUGE02: KNOWLEDGE MANAGEMENT**

(4 CREDITS)

### **Objectives**

1. To understand the applications of Knowledge Management in Education.
2. To familiarize the students about knowledge capturing and sharing.
3. To know models of Knowledge Management.
4. To learn about the application of Knowledge Management tools in learning environment.

### **Learning Outcomes: (OBE)**

1. History and cycle of knowledge management will be understood.
2. Various models of Knowledge Model will be perceived by the Learners.
3. Types of Knowledge Management and Management tools can be identified.
4. How to Knowledge share, distribute and disseminate will be discussed.
5. How Knowledge application at individual level will be understood.

### **UNIT – I: Introduction and KM Cycle**

Knowledge Management: Introduction – History – Knowledge Hierarchy – KM Team – Future Challenges. KM Cycle: Knowledge Creation – Knowledge Storage and Retrieval – Knowledge Transfer – Knowledge Application

### **UNIT – II: Knowledge Management Models**

Von Krogh and Roos Model – Nonaka and Takeuchi Spiral Model – Choo Model – Wigg Model – Boisot I-Space Model.

### **UNIT – III: Knowledge Capturing**

Contents: Types, Structure, Quality, Media and Size – Knowledge Capture and Codification: Tacit Knowledge, Explicit Knowledge – Methods to Capture Tacit Knowledge: Interviewing, Learning by Told, Learning by Observation – Methods to Capture Explicit Knowledge: Cognitive Maps, Decision Trees, Knowledge Taxonomies – Knowledge Capture, Creation and Management Tools.

### **UNIT – IV: Knowledge Sharing**

Knowledge Sharing: Social Nature of Knowledge, Knowledge Sharing Communities, Obstacles of Knowledge Sharing – Systems: Centralized and Distributed Architecture, Knowledge Sharing, Dissemination Tools.

### **UNIT – V: Knowledge Application**

Knowledge Application at Individual Level: Characteristics of Individuals, Bloom's Taxonomy in Knowledge Application, Task Analysis and Modeling – Knowledge Application at Group Level: Knowledge Reuse, Knowledge Repositories, Knowledge Application Tools.

### **References**

1. Jay Liebowitz and Michael Frank, (2016), Knowledge Management and E-Learning, CRC Press.
2. Kimiz Dalkir, (2013), Knowledge Management in Theory and Practice, Routledge.
3. Ronald Maier, (2013), Knowledge Management Systems: Information and Communication Technologies for Knowledge Management, 2nd Edition, Springer.
4. Jean-Eric Pelet, (2013), E-Learning 2.0 Technologies and Web Applications in Higher Education, IGI Global.
5. Gary Jones and Edward Sallis, (2013), Knowledge Management in Education: Enhancing Learning & Education, Routledge.
6. Joseph M. Firestone and Mark W. McElroy, (2012), Key Issues in the New Knowledge Management, Routledge.
7. Marc Rosenberg, (2000), E-Learning: Strategies for Delivering Knowledge in the Digital Age, McGraw Hill Professional.

**18EDUGE03: LIFELONG LEARNING AND HEUTAGOGY**  
(4 CREDITS)

**Objectives**

1. Understand the Conceptual framework of Pedagogy, Andragogy, Heutagogy and Lifelong Learning.
2. Gain insight into the relationship between Literacy and Lifelong Learning.
3. Understand the Role of Lifelong Learning in the context of Globalization.
4. Understand International practices across the world.

**Learning Outcomes : (OBE)**

1. Knowledge of pedagogy & Andragogy
2. Knowledge of the basic principles of heutagogy and lifelong learning.
3. Understanding of open system in learning
4. Insight into emerging trends of learning in the global arena.
5. Knowledge of future prospects in lifelong learning.

**UNIT – I: Perspective of Pedagogy**

Perspective of Pedagogy, Concept, Principles, Formal Education, and Non-Formal Education – Andragogy: Concept, Perspectives, Principles, Incidental Learning, and Illiteracy.

**UNIT – II: Introduction to Heutagogy**

Heutagogy: Concept and Principles, Self-determined Learning, Heutagogy and Vocational Education, Advantages, Challenges, Training in school Vs Training in the Workplace, Andragogy Vs Heutagogy, Social Media and Heutagogy.

**UNIT – III: Lifelong Learning**

Lifelong Learning, Concept, Principles, Continuing Education, Traditional Learning Vs Lifelong Learning, Prerequisites for Effective Lifelong Learning System, Advantages, Limitations.

**UNIT – IV: Lifelong Learning Environment**

Environments in Support of Lifelong Learning, Open System, Collaborative System, Modes of Learning, Domain Oriented Design Environments.

**UNIT – V: Trends of Lifelong Learning**

Problems in the Information Age, Emerging Needs and Future Perspectives of Lifelong Learning in the Context of Globalization, Future Trends.

**References**

1. Begona Gros et al., (2016), The Future of Ubiquitous Learning: Learning Designs for Emerging Pedagogies, Springer.
2. Amber Dailey Herbert and Kay S Dennis, (2015), Transformative Perspectives and Processes in Higher Education, Springer.
3. Steve and Vicky, (2013), Enhancing Learning through Technology in Lifelong Learning: Fresh Ideas: Innovative Strategies, McGraw-Hill.
4. Stewart Hase and Chris Kenyon, (2013), Self-Determined Learning: Heutagogy in Action, A&C Black.
5. George Veletsianos, (2010), Emerging Technologies in Distance Education, Athabasca University Press.
6. Peter Mortimer, (1999), Understanding Pedagogy: And its Impact on Learning, Edited by SAGE.
7. Hammond and Collins, (1991), Self-Directed Learning: Critical practice, Kogan Page.

**18EDUGE04: WRITING FOR MEDIA**  
(4 CREDITS)

**Objectives**

1. To make them to understand the Principles, Characteristics and Techniques of Media Writing.
2. To enable the students to write a scripting for different Media.
3. To inculcate skills in writing for media with reference to Print and Broadcasting.

**Learning Outcomes: (OBE)**

1. Knowledge of the basic skills in language.
2. Knowledge of the tenets of writing and media
3. Understanding of the different styles in writing for print broadcast and PR.
4. Knowledge of legalities in writing for media.
5. Knowledge of broadcasting regulations in India.

**UNIT – I: Introduction to Writing for Media**

Language – Language skills – LSRW – Productive vs. Receptive skills – Writing skill: Meaning, Types, Characteristics, Purposes, Merits, Demerits, Mechanism and Techniques.

Futures of writing for Media – Basics and Styles of Writing – Elements of good writing – Sources of Writing: Historical Information, Personal Sources, Interviewing and Observations – Types of Writing for media: for ear, eye and both – Print, Broadcasting, Telecasting and Modern communication technology, Information Technology.

**UNIT – II: Writing for Print**

Meaning, Types, Structure and Characteristics of Writing for Print – Different types of print media – Story Board, Features – Editorial – News Release – Copywriting – Commercials – Magazines – Book Review – Play Writing – Computer Aids.

**UNIT – III: Writing for Broadcast**

Meaning, Types Structures and Characteristics of Writing for Radio / Audio and Video / Television – News Writing – Play and Serial Writing – Advertising and Commercial – Digital Format and Computer Software

**UNIT – IV: Writing for Public Relations**

Nature, Characteristics and Types of Work of Public Relations – Writing News Release – Letters – Publications – Oral Presentations – Maintaining information – New Information Technology – Web Designing.

**UNIT – V: Law & Ethics in Writing for Media**

Ethical and Legal Considerations in Writing – Amendments and Defamation – Affirmative Defence and Privacy – Copyrights and Trade Mark – Advertising and Broadcasting Regulations – Employment Prospects in Print, Broadcast, Advertising and Information Technology.

**References**

1. Alan B. Albarran, (2016), Management of Electronic and Digital Media, 6th Edition, Cengage Learning.
2. Anthony Friedmann, (2014), Writing for Visual Media, 2nd Edition, Taylor & Francis.
3. James Glen Stovall, (2011), Writing for Mass Media, 8th Edition, Pearson Education.
4. Paddy Scannell, (2007), Media and Communication, SAGE.
5. Anne Frances Wysocki, (2004), Writing new media: theory and applications for expanding the teaching of composition, Utah State University Press.
6. Melvin Lawrence DeFleur and Everette E. Dennis, Houghton Mifflin, (2002), Understanding Mass Communication: A Liberal Arts Perspective, 7th Edition.
7. Sunny Thomas, (2000), Writing for the Media, Vision Books Pvt. Ltd..

## **18EDUGE05: VISUAL COMMUNICATION** (4 CREDITS)

### **Objectives**

1. To bring out an understanding on visual process and visual communication theories.
2. To elucidate the necessity of visual literacy and visual perspectives in visual communication.
3. To introduce the aspects of print and electronic visual design.

### **Learning Outcomes: (OBE)**

1. Understand about visual process and visual communication theories.
2. Classify various aspects of visual literacy.
3. Recognize the visual communication perspectives in advertising, journalism and media coverage.
4. Utilize suitable typography and graphics in print design.
5. Utilize suitable photography and motion visuals in electronic media design.

### **UNIT – I: Introduction**

Visual Process – Light, Eye, Retina and Brain – Color, Form, Depth and Movement – Sensual and Perceptual Theories.

### **UNIT – II: Visual Literacy**

Intuitive illiteracy: Repetition Techniques & Perception, Rational Bias & Visual Response – Multiple Intelligence and Non-conscious Biases – Visual Literacy and Education.

### **UNIT – III: Perspectives**

Perspectives of Visual Communication – Visual Persuasion in Advertising, Public Relations and Journalism – Media Coverage and Prejudicial Thinking.

### **UNIT – IV: Print Visual Design**

Typography – Graphic Design – Informational Graphics – Cartoons.

### **UNIT – V: Electronic Visual Design**

Photography – Motion Pictures – Television – Computers – Internet.

### **References**

1. Anthony Friedmann, (2014), Writing for Visual Media, 2nd Edition, Taylor & Francis.
2. Friedrich O. Huck et al., (2013), Visual Communication: An Information Theory Approach, Springer.
3. Paul Martin Lester, (2013), Visual Communication: Images with Messages, 6th Edition, Cengage Learning.
4. Rick Williams and Julianne Hickerson Newton, (2009), Visual Communication: Integrating Media, Art and Science, Routledge.
5. Bo Bergstrom, (2009), Essentials of Visual Communication, Laurence King Publications.
6. Ralph E. Wileman, (1993), Visual Communicating, Educational Technology.
7. John W. Cataldo, (1966), Graphic Design & Visual Communication, International Textbook Company.



**18EDUGS04: TEST, MEASUREMENT AND EVALUATION**  
(4 CREDITS)

**Objectives**

1. To make the students to understand the basic concepts and types of Test, Measurement and Evaluation.
2. To enable the students to assimilate the strategies of measurement and evaluation and design the tools.
3. To acquire mastery over the development and use of measurement and evaluation tools.

**Learning Outcomes: (OBE)**

1. Basic concepts and types of test measurement & education will be understood.
2. The strategies of measurement & evaluation will be analyzed.
3. The skill of development of various types of tools will be equalized.
4. Basic concepts of statistical will be understood.
5. The concepts of aptitude and intelligence test will be understood.

**UNIT – I: Concept of Test and Measurement**

Basic Terminology in Test and Measurement: Examination, Technique, Tool, Measurement, Test, Assessment, Appraisal and Evaluation – Types of Test: Test of Human abilities, Test of Interest, Personality and Emotional Intelligence – Test Construction, Administration and Scoring

**UNIT – II: Basics of Achievement Test & Measurement**

Achievement test and Measurement: Nature, Meaning, Purpose and needs – Key statistical concepts in measurement: Validity, Reliability and Practicability – Item Analysis and Selection of Items – Criterion and Norm Referenced Test – Factor Analysis – Types of Testing and their Interrelationship: Pre-Instructional / Placement, Instructional / Formative Testing, Post-Instructional / Summative Testing and Diagnostic Testing

**UNIT – III: Basics of Aptitude & intelligence test**

Aptitude Test: Meaning, Scope and Need – Types of Aptitude Test: Test of Single and Multiple Aptitudes and their Reliability and Validity

Intelligence Test: Meaning, Scope, Characteristics and Need – Types of Intelligence Test: Non-verbal & Verbal Test, External & Internal Test, and Group Intelligence Test.

**UNIT – IV: Basics of Assessment, Evaluation and Appraisal**

Evaluation: Nature, Purpose, Function and Types – Basic Difference between Evaluation and Assessment – Assessment: Nature, Criteria, Mode and Types – Appraisal: Overview, Standards vs. Norms, Solving Standards, Judging Standards and Improving Standards

**UNIT – V: Basic Statistics for Test, Measurement and Evaluation**

Basic concepts of Variables and Scaling Techniques – Graphical and Diagrammatic Presentation – Descriptive Statistics: Frequency, Mean, Median, Mode, Standard Deviation, Standard Score and Standard Error – Bivariate Statistics: Co-variation and Correlation – Statistical Packages.

**References**

1. John W. Best and James V. Kahn,(2014), Research in Education, 10th Ed., Pearson.
2. Jon S. Wilson et al., (2008), Test and Measurement: Know It All, Newnes.
3. Sharon E. Robinson Kurpius and Mary E. Stafford, (2005), Testing and Measurement: A User-Friendly Guide, SAGE.
4. Lewis R. Aiken, (1998), Tests and Examinations: Measuring Abilities and Performance, John Wiley & Sons, Inc..
5. Robert M. Hashway, (1998), Assessment and Evaluation of Developmental Learning, Greenwood Publishing Group.
6. Anthony J. Nitko, (1983), Educational Tests and Measurement: An Introduction, Harcourt Brace Jovanovich Publishing.
7. Benjamin Samuel Bloom et al., (1971), Handbook of Formative and Summative Evaluation of Student Learning, McGraw Hill.

**BHARATHIAR UNIVERSITY  
DEPARTMENT OF EDUCATIONAL TECHNOLOGY**

**SUPPORTIVE COURSES  
(EFFECTIVE FROM ACADEMIC YEAR 2018-19 ONWARDS)**

**CURRICULUM & SCHEME OF EXAMINATION**

Paper Code	Title of the Paper	Inst. Hrs. / Week	Credits	Examination Duration & Marks			
				Hrs.	CIA <sup>@</sup>	ESE <sup>@</sup>	Total
SUPPORTIVE COURSES							
18EDUGS01	Teaching Technology	2	2	2	12	38	50
18EDUGS02	Environmental Education	2	2	2	12	38	50
18EDUGS03	Digital Video Editing	2	2	2	12	38	50
18EDUGS04	Communicative English	2	2	2	12	38	50
18EDUGS05	Communicative French	2	2	2	12	38	50
18EDUGS06	Introduction to Flash	2	2	2	12	38	50
18EDUGS07	Web Designing	2	2	2	12	38	50

<sup>@</sup> 25% and 75% of marks for Continuous Internal Assessment (CIA) and End semester Examination (ESE) respectively.

**18EDUGS01: TEACHING TECHNOLOGY**  
(2 CREDITS)

**Objectives**

1. Understanding the basic concepts of teaching, learning process and evaluation.
2. Appreciation of conventional and modern methods and techniques of teaching in the classroom of any subject.
3. Realizing the importance of Educational Technology in making the teaching learning process more effective.

**Learning Outcomes: (OBE)**

1. The basic concepts of teaching learning process and evaluation will be understood
2. Conventional & modern methods of teaching techniques will be analyzed.
3. The importance of educational technology will be understood and analyzed.
4. The concepts of test and measurement in education will be understood.
5. The fundamentals on psychology of learning will be understood.

**UNIT – I: Foundations of Education**

Education: Definition, Meaning, Concept and Nature – Philosophy: Definition and Meaning – Sociology: Definition and Meaning – Relationship between philosophy and Education – Sociological Foundations of Education: Social Change and Social mobility.

**UNIT – II: Psychology of Learning**

Educational psychology: Nature, Meaning & Need – Growth and Development of the Learner: Principles and Stages – Heredity and Environment in Personality Development – Psychology of Adolescence.

**UNIT – III: Methods and Materials in Teaching**

Teaching: Definition and Stages – Conventional methods of teaching – Modern methods of Teaching – Teaching aids: Classification– Projected & Non-Projected Teaching aids  
Micro Teaching: Definition, Cycle and Merits

**UNIT – IV: Educational Technology**

Concept, Meaning, Scope and Development – Difference between Technology in Education and Technology of Education – Advanced Technology in Education

**UNIT – V: Test and Measurement in Education**

Concept, Meaning, Significance and importance – Criterion referenced and norm referenced tests.

**References**

1. Frank Banks, (2013), Teaching Technology, Edited by Routledge.
2. Steven G. Brint, (2006), Schools and Societies, Stanford University Press.
3. D.D. Aggarwal, (2004), Educational Technology, Sarup & Sons.
4. Starr Roxanne Hiltz and Ricki Goldman, (2004), Learning Together Online, Routledge.
5. Ram Nath Sharma and S.S. Chandra, (2003), Advanced Educational Technology, Atlantic Publishers and Distributors.
6. S.K. Mangal, (2002), Advanced Educational Psychology, 2nd Edition, PHI.
7. T.S. Saraswathy, (1999), Culture, Socialization and Human Development: Theory, Research, And Applications in India, Sage Publications.
8. J.H. Sawrey, and C. Telford, (1998), Educational Psychology, Prentice Hall of India.
9. John F. Travers et al., (1993), Educational Psychology: Effective Teaching and Effective Learning, Macmillan.
10. S.K. Kochar, (1992), Methods and Techniques of Teaching, Sterling Publishers.
11. Arabinda Biswas and Surendra Prasad, (1986), Development of Education in India, Concept Publishing Company.
12. K. Sampth, (1984), Introduction to Educational Technology, Sterling Publishers.
13. C. L. Anand and Panmana Ramacandrannayar, (1983), The Teacher and Education in Emerging Indian Society, NCERT.
14. Christian O. Weber, Holt, 1960, Basic Philosophies of Education, Rinehart and Winston.

**18EDUGS02: ENVIRONMENTAL EDUCATION**  
(2 CREDITS)

**Objectives**

1. To create environmental awareness among the learners regarding environment, its associated problems and its protection and preservation.
2. To inculcate environmental sensitivity among the learners and to orient them to the effect of technological and population impact upon the environment
3. To expose the students to the teaching-learning and curricular strategies in environmental education.

**Learning Outcomes: (OBE)**

1. The basic concepts of environmental education will be understood
2. The impact of psychological and sociological aspects on environment will be understood.
3. Knowledge of environmental problems.
4. The importance of environmental policy and programmes will be understood and analyzed.
5. Various national and international curriculum on environmental education will be understood.

**UNIT – I: Concept of Environmental Education**

Meaning and Scope of Environmental Education – Evolution of Environmental Education – Historical Setting of Environmental Education – Development of Environmental Education – Stock Holm Conference, Tbilisi Conference And Earth Summit – Instructional Objectives of Environmental Education: Primary, Secondary and Tertiary Level.

**UNIT – II: Environmental Problems**

Psychological Environment – Social Environment: Urbanization and Industrialization – Deforestation and their Impact upon Environment – Economic Problems of Environment – Pollution: Kinds of Pollution, Causes and Prevention – Environmental Management – Effects of Technological Explosion upon the Environment.

**UNIT – III: Environmental Policies**

Population Explosion and Environmental Quality – Depletion of Natural Resources –Developing Policies and Methods for Maintaining Ecological Balances – Creating Community Awareness: Community Action.

**UNIT – IV: Environmental Programme**

Conservation Education Movements: Chipco Movement, Social Forestry Scheme and Role Of UNESCO – National and International Movements: Silent Valley Project, Ganga Cleaning, Del Lake Study – A Few Case Studies – Health Hazards in Tamilnadu due to Industrialization and Pollution – Educative and Preventive Measures Adopted by Government, NGOs and other Voluntary Organization – Strategies for Development of Environmental Educational and Training Programme.

**UNIT – V: Curriculum Development & Environmental Education**

Curriculum Development: Inter-Disciplinary, Multi-Disciplinary, Formal And Non-Formal Approach – Learner Initiated Activities: Value Oriented, Problem Centered, Community Oriented, Present and Future Oriented – Teaching-Learning Strategies for Environmental Education – Evaluation Techniques in Environmental Education – Environmental Education through Universities – Role Of Electronic Media, Mass Media and Computers in Environmental Education.

## References

1. Robert B. Stevenson et al., (2014), International Handbook of Research on Environmental Education, Edited by Routledge.
2. Martin Storksdieck, (2011), Field Trips in Environmental Education, BWV Verlag.
3. V.C. Pandey, (2007), Environmental Education, Gyan Publishing House.
4. Edward A. Johnson and Michael J. Mappin, (2005), Environmental Education and Advocacy, Cambridge University Press.
5. Karpagam. M, (1999), Environmental Economics: A Textbook, Sterling Publishers.
6. V.S. Kaayar, (1997), Environmental Concerns, Depleting Resources and Sustainable Development, Pointer Publishers, Jaipur.
7. N.Manivasakam, (1995), We Breathe and Drink Poison, National Books Trust.

## **18EDUGS03: DIGITAL VIDEO EDITING**

(2 CREDITS)

### Objectives

1. To introduce the concept of digital video editing and its pre-production phase.
2. To present the different types of editing and its interlinked forms.
3. To clarify offline and online editing principles in digital video editing.
4. To familiarize the editing, mixing and output tools available in most of the digital video editing systems.

### Learning Outcomes: (OBE)

1. Identify the importance and significance of digital video editing in the present video production scenario.
2. Ascertain the different types of editing and its interlinked forms.
3. Understand the offline and online editing principles used in digital video editing.
4. Use the editing, mixing and output tools available in digital video editing systems.
5. Understand various input/output video formats supported by digital video editing systems.

### UNIT – I: Introduction

Editing: Definition, Principles, Stages – Budgeting – Post Production Team – Elements of Postproduction Schedule.

### UNIT – II: Types of Editing

Physical & Electronic Editing – Linear & Non-Linear Editing – Continuity & Dynamic Editing – Offline and Online Editing.

### UNIT – III: Offline and Online Editing

Offline Editing: Types, EDL, Nonlinear – Online Editing: Formatting, Initial Set-ups, Automatic Assembly, Titles and Graphics.

### UNIT – IV: Editing Tools & Techniques

Editing System – Interfaces: Bin, Viewer, Timeline, Tool Palettes – Organization of Interfaces – Editing Clips: Overwrite, Insert – Trimming: Slip, Slide – Transition Effects – Special Effects – Motion Effects – Audio Adjustment Tools – Titling.

### UNIT – V: Input/Output

IEEE1394 & OHCI – Audio Formats – Video Formats – Exchange Formats: OMFI, AAF – TV Formats: MPEG, HD – Film.

## References

1. Ronald J. Compessi, (2015), Video Field Production and Editing, 7th Edition, CRC Press.
2. Taylor & Francis, (2013), Video Editing with Avid: Media Composer, Symphony, Xpress, Roger Shufflebottom.
3. Pearson Education, (2010) Editing with Avid Media Composer 5: Avid Official Curriculum, Avid Technology Inc..

4. Peter Wells,(2007), Digital Video Editing: A User's Guide, Crowood.
5. Robert M. Goodman and Patrick McGrath, (2002),Editing Digital Video: A Complete Creative and Technical Guide, McGraw Hill.
6. Gary H. Anderson, (1999), Video Editing and Post Production: A Professional Guide, Focal Press.

**18EDUGS04: COMMUNICATIVE ENGLISH**  
(2 CREDITS)

**Objectives**

1. Acquiring a new perspective on communicative English.
2. Improving and extending the range of communication in English.
3. Acquiring written and speech communication.

**Learning Outcomes: (OBE)**

1. Knowledge of basics of English Grammar.
2. Understanding of Language variety.
3. Knowledge of written communication styles.
4. Knowledge of interpersonal communication in official settings.
5. Knowledge of oral aspects of communication in formal settings.

**UNIT – I: Grammar in Use: Concepts**

Parts of Speech, Tense and Aspect, Mood, Cause, Reason and Purpose, Agreement, Degrees of Comparison, Conditional clauses – Seeking Permission, Request, Command, Reprimand, etc.

**UNIT – II: Types of Communication**

Verbal Communication – Non-Verbal Communication –Language Variety – Geographical, Formal/In formal, Register, Dialect etc.

**UNIT – III: Written Communication**

Technical Writing (Writing Reports) –Business Communication (Letters, Memos).

**UNIT – IV: Interpersonal Communication**

Dealing with Boss – Dealing with Subordinates.

**UNIT – V: Oral Communication**

Job Interviews –Public Speech –Group Discussions –Brain Storming.

**References**

**Books**

1. Bhatnagar Nitin, (2010), Communicative English for Engineers and Professionals, Pearson Education India.
2. Pearson Education India, (2010).Contemporary Communicative English for Technical Communication,
3. Mohan, (2009), Developing Communication Skills, Macmillan.
4. John Ellison Kahn, (1991), How to Write and Speak Better, Reader's Digest Association.
5. S.K. Verma and N. Krishnaswamy, (1989),Modern Linguistics: An Introduction, Oxford University Press.
6. Reader's Digest, (1985), The Right Word at the Right Time: A Guide to the English Language and How to Use It.

**Websites**

1. Conversation Practice: [www.focusenglish.com](http://www.focusenglish.com)
2. Grammar:[www.englishclub.com](http://www.englishclub.com), [www.usingenglish.com](http://www.usingenglish.com), [www.edufind.com](http://www.edufind.com), [www.english-the-easy-way.com](http://www.english-the-easy-way.com), Grammar Quizzes- [a4esl.org/q/j/](http://a4esl.org/q/j/)

**18EDUGS05: COMMUNICATIVE FRENCH**  
(2 CREDITS)

**Objectives**

1. The student will be able to pronounce the French alphabet and basic French words.
2. He /she will demonstrate an ability to understand basic French adequate for greetings, making acquaintances, asking for directions, telling time, and shopping as well as describing weather conditions, the seasons, meals, and travel.
3. The class will prepare the student for further language study and inspire interest in foreign travel, study, and work.

**Learning Outcomes: (OBE)**

1. Knowledge of basics of French Grammar.
2. Understanding of basic vocabulary
3. Knowledge of written communication styles.
4. Knowledge of interpersonal communication in official settings.
5. Knowledge of oral aspects of communication in formal settings.

**UNIT – I**

Alphabet, Words, Concept of Masculine and Feminine.

**UNIT – II**

Phrases, Basic Salutations, Numbers, Time, Weather, Days, Months, Seasons, Colors, Acronyms and Abbreviations, Definite & Indefinite Articles.

**UNIT – III**

Vocabulary building with relation to: Places, Home, School, College, Transport, Travel, Flora fauna, Introductions, Question Words, Parts of the Body and Health, Clothes, Occupations, Landscapes.

**UNIT – IV**

Parts of Speech (Noun, Verb, Adverb, Adjectives Prepositions, Pronouns, Conjunction, Interjection), Tenses (Past Present, Perfect and Future), Framing Sentences.

**UNIT – V**

Basics of Letter Writing – Business and Personal Communication, Translation of Unseen Passages, Descriptions of Places, Situations, People.

**References**

1. Margaret Lang and Isabelle Perez, (2008), Modern French Grammar Workbook, Routledge.
2. Roy Dunning, (1994), French for Communication: (1979-1990), Multilingual Matters.
3. A.Maria Gabriel, (1988), Modern French Grammar, 4th Edition, DomusMariae Publications.
4. Mathurin Dondo, (1989-6<sup>th</sup> Edition) Modern French Course, OUP Madras.

## **18EDUGS06: INTRODUCTION TO FLASH** (2 CREDITS)

### **Objectives**

1. To introduce the tools available in Adobe Flash.
2. To present the motion tweening, shape tweening and masking techniques.
3. To inculcate the techniques of importing and controlling the audio and video contents.
4. To impart the output features available in Adobe Flash.
5. To provide a hands-on training to impart practical skills in creating an interactive flash movie.

### **Learning Outcomes: (OBE)**

1. Utilize the tools available in Adobe Flash.
2. Apply motion tweening, shape tweening and masking techniques to develop a flash movie.
3. Import, edit and control audio and video contents inside a flash movie.
4. Export the developed flash movie for different environments.
5. Practically work in Adobe Flash to create a flash movie.

### **UNIT – I: Tools and Symbols**

Introduction – Timeline – Scenes – Layers – Frames – Keyframes – Tools – Grids and Guides – Symbols: Graphic, Button, Movie clip – Working with Text – Libraries – Components – Graphics: Importing Bitmaps and PNG, Bitmap Compression, Editing Bitmaps.

### **UNIT – II: Tween Animation**

Motion Tweening: Motion Tween Properties – Reversing Frames – Color Effects to a Tween – Animating along Motion Guide –Shape Tweening: Creating Shape Tween Form – Changing Shape Positions – Changing Shape Tween Color –Masking: Creating Mask Layer – Activating, Editing, Removing Mask – Animating Mask Layer.

### **UNIT – III: Sound and Video**

Working with Sound: Importing, Audio on Timeline, Controlling Sounds, Editing Sounds– Working with Video: Importing, Video on Timeline, Movieclips with Video Files, Controlling Video, Media Controller Component, Working with FLV.

### **UNIT – IV: Input / Output**

Import & Export File Formats – Publish Settings – Creating Projector – Testing Movie.

### **UNIT – V: Hands-on-Training**

1. Creating an interactive flash movie using the tweening techniques.
2. Developing a flash movie with sound and video components.

### **References**

1. Russell Chun, (2014), Adobe Flash Professional CC Classroom in a Book, Adobe Press.
2. Adobe Flash Professional CS6: Classroom in a Book: The Official Training Workbook from Adobe Systems, Adobe Systems, Adobe Press, (2012).
3. William Heldman, (2012), Adobe Flash Professional CS6 Essentials, John Wiley & Sons.
4. ActionScript 3.0 for Adobe Flash CS4 Professional Classroom in a Book, Adobe Creative Team, Peachpit Press,(2010).



**18EDUGS07: WEB DESIGNING**  
**2 CREDITS)**

**Objectives**

1. To introduce the fundamental knowledge on computer networks, internet functions and HTML programming language.
2. To provide insights of the features available in Adobe Dreamweaver to create websites.
3. To show the effect of CSS, templates and library items in constructing an attractive website.
4. To explain about working with images, navigation, animation, video and tables.
5. To inculcate the features available in Adobe Dreamweaver to create forms and dynamic pages.

**Learning Outcomes: (OBE)**

1. Identify the types of computer networks, understand functioning of internet, and write a simple HTML program.
2. Create webpages in Adobe Dreamweaver.
3. Suitably apply CSS, templates and library items to construct a website.
4. Import and work with images, animation and video. Utilize tables to effectively organize the structure of a webpage.
5. Incorporate forms to get user input, and create dynamic pages in PHP.

**UNIT – I: Introduction**

Computer networks: LAN, WAN, MAN, Internet, Intranet, Extranet, Client-Server Networks – Internet Connections – Anatomy of HTML file – HTML versions – HTML Editors.

**UNIT – II:Creating Webpage in Dreamweaver**

Features of Dreamweaver – Layouts – Workspace – Panels – Webpage Elements – Inserting Components – Changing Element Alignments –Modifying Existing Content and Formatting – Image Placeholder – Browser Compatibility.

**UNIT – III:CSS and Template**

CSS: CSS Rules, Interactive Menu, Hyperlink, External CSS, CSS for Media Elements – Templates: Creating Templates, Editable Regions, Producing Child Pages, Updating – Library Items.

**UNIT – IV:Working with Media**

Styling Text and Tables – Working with Images – Working with Navigation – Adding Interactivity – Web Animation and Video.

**UNIT – V: Advanced Design Features**

Working with Forms – Working with Dynamic Page – Building PHP Pages.

**References**

1. James J. Maivald, (2012), Adobe Dreamweaver CS6 Classroom in a Book, Adobe Press.
2. Jon Duckett, (2011), HTML and CSS: Design and Build Websites, John Wiley & Sons.
3. Jon Duckett, (2011), Beginning Web Programming with HTML, XHTML, and CSS, John Wiley & Sons.
4. Matthew MacDonald, (2011), HTML5: The Missing Manual, O'Reilly Media.
5. Paul J. Deitel et al.,(2011), Internet & World Wide Web: How to program, 3rd Edition, Pearson.
6. Mario Lurig,(2008), PHP Reference: Beginner to Intermediate.
7. Adobe Dreamweaver CS3: Classroom in a Book, Adobe Systems, Peachpit Press, (2007).