

S-25 March, 2013 AC after Circulars from Circular No.153 & onwards

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DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY**CIRCULAR NO.ACAD/NP/B.Sc.-Ist Yr./SEM.-I & II/173/2013**

It is hereby notified for information of all concerned that, on the recommendations of the Board of Studies/Ad-hoc Boards/Committee under the Faculty of Science, the Hon'ble Vice-Chancellor has accepted the **following revised syllabi for B.Sc. First Year progressively and Syllabus of B.Sc. Textile and Interior Decoration, Semester-V & VI** on behalf of the **Academic Council Under Section-14(7) of the Maharashtra Universities Act, 1994 as appended herewith.**

Sr. No.	Revised Syllabus	
[1]	B.Sc. [Instrumentation Practice]	Semester- I & II,
[2]	B.Sc. [Forensic Science]	Semester- I & II,
[3]	B.Sc. [Bio-Chemistry]	Semester- I & II,
[4]	B.Sc. [Networking & Multimedia]	Semester- I & II,
[5]	B.Sc. [Agro Chemical Fertilizer]	Semester- I & II,
[6]	B.Sc. [Analytical Chemistry]	Semester- I & II,
[7]	B.Sc. [Polymer Chemistry]	Semester- I & II,
[8]	B.Sc. [Environmental Science]	Semester- I & II,
[9]	B.Sc. [Textile & Interior Decoration]	Semester- V & VI,

This is effective from the **Academic Year 2013-2014** and onwards.

These syllabi are available on the University Website **www.bamu.net**

All concerned are requested to note the contents of this circular and bring the notice to the students, teachers and staff for their information and necessary action.

University Campus,
Aurangabad-431 004.
REF.NO.ACAD/NP/B.SC.-IST YEAR/
Sem-I & II/2013/10191-640
V.C.14[7] A-03.

Date:- 03-06-2013.

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S. K. Ambekar
Director,
Board of College and
University Development.

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S-25 March, 2013 AC after Circulars from Circular No.153 & onwards

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Copy forwarded with compliments to :-

- 1] **The Principals, affiliated concerned Colleges,
Dr. Babasaheb Ambedkar Marathwada University.**
- 2] **The Director, University Network & Information Centre, UNIC, with
a request to upload the above all syllabi on University Website
www.bamu.net.**

Copy to :-

- 1] The Controller of Examinations,
- 2] The Superintendent, [B.Sc. Unit],
- 3] The Superintendent, [Eligibility Unit],
- 4] The Programmer [Computer Unit-1] Examinations,
- 5] The Programmer [Computer Unit-2] Examinations,
- 6] The Director, [E-Suvidha Kendra], in-front of Registrar's Quarter,
Dr. Babasaheb Ambedkar Marathwada University,
- 7] The Public Relation Officer,
- 8] The Record Keeper,
Dr. Babasaheb Ambedkar Marathwada University.

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**D.R. BABASAHEB AMBEDKAR
MARATHWADA UNIVERSITY,
AURANGABAD.**



Revised Syllabus of
B. Sc. Ist Year (Networking and Multimedia)
Semester-I & II

[Effective from 2013-2014 & onwards]

B.Sc. Networking and Multimedia**Semester-I**

Course Code	Course Title	No of Hour /Week	Max Marks
MN301	Computer Fundamentals	2	50
MN302	Communication Skills	1	50
MN303	Graphics	3	50
MN304	Desktop Publishing	3	50
MN305	Digital Art Photography (Part 1)	3	50
MN351	Practical Based on MN303 & MN304	4	50
MN352	Practical Based on MN305	4	50
Total		20	350

Semester-II

Course Code	Course Title	No of Hour /Week	Max Marks
MN306	Digital Art Photography (Part 2)	3	50
MN307	Web Designing and Java Script	3	50
MN308	Advertising	3	50
MN309	HTML Basics	3	50
MN353	Practical Based on MN306 & MN307	4	50
MN354	Practical Based on MN308 & MN309	4	50
Total		20	350

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD.

**Syllabus For
B. Sc. (Networking and Multimedia)**

- O.-875** The name of the course shall be “B.Sc. **Networking and Multimedia**”.
The degree of B.Sc. **Networking and Multimedia** shall be awarded on a candidate who has pursued a full time Course of three years.
- O.-876[a]** A candidates seeking admission to B.Sc. **Networking and Multimedia** shall have passed 12th (10+2) Science, or any other course equivalent thereto and must have Obtained 40% marks at 12th level (35% for reserved category).
- [b]** Admission process should be through CET.
- [c]** Reservation in admission should be as per University and Government rules.

Standards of Passing and award of Division.

R.-1867

- a) The Minimum marks for passing in each paper / practical shall be 40% of the marks prescribed for the paper / practical.
- b) A candidate who secures 40 % or more but less than 50 % of the aggregate marks prescribed for three years taken together shall be awarded **PASS DIVISION**.
- c) A candidate who Secures 50% or more marks but less than 60% of the aggregate marks prescribed for three years taken together, shall be awarded **SECOND DIVISION**.
- d) A candidates who secures 60% or more of the aggregate marks prescribed for three years taken together, shall be awarded **FIRST DIVISION**.
- e) The Practical / Project shall be assessed by the two examiners out of which one external and one internal appointed by the University.
- f) The intake capacity of the course in each year shall not exceed 60.

R.-1868 The Qualification of faculty member be as per UGC Rules and Regulations:-

- a) Qualification and Experience Of the Faculty is as per UGC and University norms in the relevant subject.

R.-1869 Number of Hours workload per week for each Year is 68,

hence number of full time Faculty required for each year

are 04. Therefore total 12 full time faculties will required for all three years.

R.- 1870 LABORATORY REQUIREMENTS:-

One batch of 20 Students

1. A LAN system with one server and 20 Computer with multimedia related Software's like Maya, Macromedia Flash, Adobe Illustrator, Photoshop, 3D Max etc. and having internet facility with lease line / ISDN line / broad band with (512kbs). All software used should be legal / public domain.
2. Licensed Software either avail through internet or commercially available.
3. For teaching one LCD projector be available for each year.

R.-1871 The library :

1. Library should have 5:1 number of books, journals and periodicals like: IETE, IEEE, CSIR, Computer Today etc.

Semester-I

MN-301 : Computer Fundamentals

Unit 1. Fundamentals of Computer System

- Introduction.
- Characteristics & features of Computers.
- Components of Computers.
- Organization of Computer.

Data Representation

- Introduction to Number System
 - Decimal Number System
 - Binary Number System
 - Hexadecimal Number System
- Conversion within Numbers Systems
- Arithmetic Operation on Binary and Hexadecimal Numbers

- Normalized Floating point Number
- Representation of Character in Computers
- Representation of Integer Numbers
- Representation of Fraction Numbers
- Hexadecimal Representation of Number

Unit 2. Algorithm and Flowcharts

- Algorithm
 - Definition
 - Characteristics
 - Advantages and disadvantages
 - Examples
- Flowchart
 - Definition
 - Define symbols of flowchart
 - Advantages and disadvantages
 - Examples

Computer Generation & Classification

- Generation of Computers : First to Fifth
- Classification of Computers
- Distributed & Parallel computers

Unit 3. Computer Languages

- Types of Programming Languages
 - Machine Languages
 - Assembly Languages
 - High Level Languages
- Assembler, Linker, Loader, Interpreter & Compiler.

Computer Memory

- Memory Cell & Organization
- Types of Memory (Primary And Secondary)
 - RAM
 - ROM
 - PROM
 - EPROM
 - Secondary Storage Devices (FD, CD, HD, Pen drive, DVD, Tape Drive, DAT)

Unit I/O Devices

4.

- Input Devices :
 - Touch screen , OMR, OBR , OCR, Light pen
- Output Devices :
 - Scanners, Digitizers, Plotters, LCD
 - Plasma Display, Printers

Processor

- Structure of Instruction
- Description of Processor
- Processor Features
- RISC & CISC

Unit Operating system Concepts

5.

- Why Operating System
- Functions of Operating System
- Types of Operating System
 - Batch O.S.
 - Multiprogramming O.S.
 - Time Sharing O.S
 - Personal Computers O.S.
 - Network O.S.

Reference Books:

1. Fundamentals of Information Technology
By ChetanSrivastava, Kalyani Publishers
2. Fundamentals of Computers
By V.Rajaraman, PHI Publication ,IVth Edition.
3. Fundamentals of Programming
By Raj K.Jain, S.Chand Publication

MN-302 : Communication Skill**UNIT – 1**

Concept of Communication: Attributes of Communication, Process of Communication, Feedback, Objective of Communication, Upward Communication, Downward Communication, Horizontal Communication, Method of Communication, Verbal, Oral, Written

UNIT – 2

Written Communication: Punctuation marks, Capitals, Abbreviations, Grammar: Parts of Speech, tenses, vocabulary building, reduction of sentence length, summarization, constructing para, CS of good communication, Language of business writing, Oral Communication, Speeches and Presentation, Dialogues

UNIT – 3

Listening Comprehension: Listening and typing – Listening and sequencing of sentences – Filling in the blanks – Listening and answering the questions, Reading Comprehension and Vocabulary, Filling in the blanks - Cloze Exercises - Vocabulary building – Reading and answering questions. Speaking Phonetics: Intonation – Ear Training – Correct Pronunciation – Sound recognition exercises - Common Errors in English
_ Conversations: Face to Face Conversation - Telephone conversation – Role play activities (Students take on roles and engage in conversation)

Unit 4: Communication with Media, Written media of Communication: Letters, Notices, Minutes, annual, Leaflet, Complaints & Suggestion, Job Application. Visual Media of communication: slide presentation, pictures & Photographs, Posters & Advertisement. Non-Verbal Media of Communication, Written Communication: Reports, Types of Report, characteristics of Good Report, Essential Requisites of Good Report- Writing, Planning the Report, Outlining Issues for Analysis, Writing the Reports.

UNIT 5:

Group Communication, Problem of Group Communication- Meeting -types of meeting, Advantages & Disadvantages of Meeting, - Preparation for Meeting – conduct of a Meeting – Responsibility of participants. Interview, Purpose, Types of interviews – promotion, appraisal, exit, telephone. Employment or selection Interview: Candidate's preparation, Question commonly asked in interview, role of interviewer, Interviewer's preparation.

Reference Books

1. Business Communication , By urmila Rai & S.M. Rai. Himalaya Pub.
2. Communication Skill for Effective Management By Dr. Anjali Ghanekar. Everest Pub. House.
3. Developing Communication Skill By Krishna Mohan, Meera Banerji. McMillan
4. Business Communication, By urmila Rai & S.M. Rai. Himalaya Pub. (Tenth Ed.)
5. Communication Skill for Effective Management By Dr. Anjali Ghanekar. Everest Pub. House.

MN-303 : Graphics

Unit 1: Introduction to Computer Graphics: History of Computer Graphics, Pixel, Resolution, Rendering, Shading.

Unit 2: Graphic Application and Hardware : Need of Graphics, Display and Input Devices. Transformation, Matrix Representation and Homogeneous Coordinates : Basic Transformations-2-dimensions and 3-dimensions : Translations, Scaling and Rotations.

Unit 3: Output Primitives : Line Drawing Algorithms : DDA Bresenham Line Drawing, Circle Drawing Midpoint Algo, Ellipse Generating Midpoint Algo.

Unit 4: Clipping : Sutherland – Cohen Algo, Cyrus, Beck Algo.

Unit 5: Hidden Surface Removal : Back Face Detection, Depth Buffer, Depth Sorting, Scan Line and A Buffer Techniques.

Reference Books

1. Computer Graphics C Version 1996 2Ed Donald:- Hearn M Pauline Baker, Computer Graphics-Donald Hearn, M. Pauline Baker.
2. Computer Graphics: Principles and Practice in C, James D. Foley and Andries Van Dam, 2nd Ed., Addison -Wesley Professional, ISBN-10: 0201848406.
3. Computer Graphics: Principles and Practice, Hearn and Baker, 3rd edition in C. ISBN 02013985590.

Practical: At least Two practical on each unit.

MN-304 : Desktop publishing

Unit 1: Use desktop publishing software and manage files:

Use computer hardware and access the desktop publishing software application, Create a new desktop publishing file and save it, save a desktop publishing file

Unit 2: Set up page and publication layout

Set up a page with specified margins: Top, bottom, left, right, Set up a text box (frame) or page with 1 or 2 columns, with gutters where appropriate, Use different page sizes: A4, A5 & change page orientation: portrait, landscape, Apply typesetting conventions and desktop publishing terminology: spacing, quotation marks, ligatures, hyphenation, font versions, small caps, typefaces, White space, widows & orphans etc.

Unit 3: Manipulate text

Import prepared text, Input text and edit, Align or justify text : left, right, center aligned or fully justified, Change the attributes of a font: serif, sans serif, size, color, Change the text formats : bold, italic, underline, dropped caps, Select, move or copy text, Apply fills to a selected area, Use text wrapping settings, Balance columns and position/align text appropriately

Unit 4: Manipulate graphic objects

Import a digital, bitmap or vector graphic object, Select, move and copy a graphic object, Delete a graphic object, Draw lines, circles, boxes, arrows and polygons, Add a box around text or place text inside a graphic box, Apply flip/mirror, scale, rotate and crop to a graphic object

Unit 5: Produce printed and files outputs

Use the application preview facility to view and check that output is suitable, for printing, Produce a draft copy for checking before final printing, Proofread and correct spelling, grammar and punctuation, Demonstrate consistency in use of typeface, type size, margins and layout, throughout all pages of the publication, Produce final output where the quality of the print is appropriate for the standard of work required.

Reference Books: -The Ultimate Desktop Publishing Book:-Bill Rosoman Dip CS.

Practical: At least Two practical on each unit.

MN-305 : Digital Art Photography (Part 1)

Unit 1: Inside the digital camera: Image sensor and types, In-Built memory and memory cards.

Unit 2: The Principles of Photography: The General Principles of Photography, Types of cameras: Miniature Cameras, medium format cameras, large format camera and digital cameras. Comparative study of digital and analogue (SLR) camera. Advantages and applications of digital photography.

Unit 3: Lenses: Normal, wide, Tele, zoom, PC and TS lens. Working of lens and angle of view of a lens. Camera Controls: Shutter speed aperture exposure control, auto winder or motorized camera, depth of field, selective focus.

Unit 4: Exposure Meter: Incident meter and reflected meter, Metering System: Center weighted Spot and Matrix metering. Filters: UV Filter, Polarizing filter, special effect filters and tripod. Composition: Creative Composition, rule of thirds and Golden section. Managing Your Digital Assets: Managing digital cameras, Cleanliness, Precautions, Managing Images printouts, Burning CDs.

Unit 5: Photographing people: Photography aesthetics of people (Male, females, couples, groups & child Photography) in studio and outdoor and available light. Product Photography: Using Selective Focus, Exposure affects you Images, Controlling Brightness and Contrast, Close up Photography. Interior and Exteriors: Architectural photography, Industrial shooting (Internal & external) and use of various wide angle lenses. Landscape photography, science shorts. Action and Sports Photography: To capture the action in different ways to know the game first Selecting the equipment's according to the game. (Usage of various zoom and tele- lenses and tripods)

Reference Book

1. The Digital Photography Book by Scott Kelby, Digital Art Photography for Dummies By Matthew Bamberg.

Practical: At least Two practical on each unit.

Semester-II

MN-306 : Digital photography (part 2)

Unit 1: Transferring Devices: ATA-Flash-Cards, The exchange of digital information between two or more computers. Data is usually transmitted via a direct cable connection, a computer network, AD conversion, I.C Cards PC-Card, ID Photo MO Disk. The smallest rewritable optical storage medium for digital cameras. A joint development from Olympus, Sanyo and Hitachi Maxell. It features an amazing capacity of 730 MB. This means about 2,000 photos can be taken before the media needs to be changed. Image converter Semiconductor-image converter (CCD chip). Image transmission/ transfer the digitization of images means they can be transmitted via data carriers or networks without the loss of quality or copied an infinite number of times.

Unit 2: Blue Tooth: Blue tooth carries a WAN concept to a small scale, low power 10 m range, also known as personal is networking (pan) Bluetooth Profile Dependencies, data transferring, connection, wireless signals. Bluetooth file transfer profile (FTP) - enables browsing of the file system of other Bluetooth devices which support Bluetooth FTP, serial port (SPP) provides a wireless serial connection to other Bluetooth devices, human interface device (HID) enables the use of Bluetooth input devices (key board band mice).

Unit 3: Data Cable: USB based wires with both ends with the commutability of USB with computers, palmtops, Ipods, to transfer the data from one device to another, compatibility with memory card readers pro, different devices in which data cable is used, use of data cable in internet browsing.

Unit 4: Pen Drive: Temporary storage devices, attach with computer, having USB head compatible plug and play utility. I-pods, Pen drives with music player option, pen drive capacity of data storage, software's of pen drive for win 98, formatting the pen drive, labeling the pen drive, handling and caring of the pen drive, diff brands dealing with pen drive.

Unit 5: CD Burning: CD writing, cd writing software's, making video of still images, making data cd, making the labels for the cd, formatting the re-writable cd, diff types of CD available, storage capacity of CD's , labeling the CD's, storing and handling the CD's, CD Burning.

Reference Book

1. The Digital Photography Book by Scott Kelby, Digital Art Photography for Dummies By Matthew Bamberg.

Practical: At least Two practical on each unit.

MN-307 : Web designing & Java Script

Unit 1: The Fundamentals of Web Design: The web we know today, working of web, history of web, evolution of world wide web, now days the use of internet, sample web pages, how did they are constructed, function and stand point, hands on good web sites ,

Unit 2: browsing good web sites, analyzing a sample site, Element of WEB ,Element of Web-Browser ,Plug-Ins and Active controls Electronic Commerce ,Introduction of web page ,Creating Web Pages: using Editors,

Unit 3: Web Graphics: image and Special Effects, Introduction to web multimedia, Loading and Unloading WEB Pages, Publishing and publicizing site, structuring web site, HTML tags, Introduction web traffic.

Unit 4: Introduction of java script,JavaScript Introduction ,JavaScript Variables ,JavaScript Popup Boxes ,JavaScript events JavaScript Redirect ,JavaScript String ,JavaScript math ,JavaScript Date,

Unit 5: JavaScript Array JavaScript form validation ,JavaScript Email validation ,JavaScript Phone validation.

Reference Book:

1. Beginning Java Script, 3rd Ed., Paul Wilton & Jeremy McPeak, Wrox Publisher, 2000.
2. JavaScript Programmers Reference, Cliff Wootton, Wrox Publisher, 2001

Practical: At least Two practical on each unit.

MN-308 : Advertising

Unit 1: Advertising: Meaning, Nature, Functions, Benefits, History, Nature (Art, Science, and Profession), Ethics in Advertisement. Social and Economic aspects in advertising.

Unit 2: Types of Advertising: (Classified advertisements, Display advertisements, Hard Sell advertisement, Soft sell advertisements, Reminder advertisements, Prestige advertisements, Humorous advertisements,

Unit 3: Professional advertisements, National advertisements, Local advertisements, Global advertisements, Product Advertising, Service Advertising, Institutional Advertising, Consumer Advertising, Distributor Advertising, Retail Advertising, industrial Advertising, Educational Advertising, Financial Advertising,

Unit 4: Travel and Entertainment Advertising, Co-operative Advertising, Advertising, by Government and Public Bodies).Advertisement relationship with the product life cycle.Advertisement as a communication tool.Marketing communication process.

Unit 5: Advertisement as a Marketing Tool: Marketing, Marketing Mix, Advertisement and Product (Positioning and Packaging), Place, Price, Promotion. AIDA Model.

Reference Book:

1. The Advertising concept by Pete Barry.

Practical: At least Two practical on each unit.

MN-309 : HTML Basics

Unit 1: HTML Fundamentals : Introduction to HTML, HTML tags and attributes ,

Unit 2: Text Formatting Links Media Elements ,Table Design ,Div Design ,

Unit 3: Embedding CSS documents, Creating HTML Pages, incorporating Horizontal Rules and Graphical Elements,

Unit 4: Hyper-links, Creating HTML Tables,Creating HTML Forms, HTML and Image Techniques. .

Unit 5: Embedding JavaScript documents ,Frames.

Reference Book:

1. Basic HTML by Andrew Whyte

Practical: At least Two practical on each unit.

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