

Department of Biotechnology

LIST OF ADD ON PROGRAMMES -2015-20

Name of the value added courses (with 30 or more contact hours) offered during last five years	Course Code	Year of offering	No. of times offered during the same year	Year of discontinuation	Number of students enrolled in the year	Number of Students completing the course in the year
Tissue culture	ADBT -III	2015-16	Once	-	13	12
Sterilization techniques	ADBT -II	2015-16	Once	-	10	10
Cell engineering and Molecular pharming for Biopharmaceuticals	ADBT-III	2016-17	Once	-	12	12
Products derived from Microbes	ADBT-II	2016-17	Once	-	10	10
Protein structure and sequencing	ADBT-III	2017-18	Once	-	14	13
Sterilization techniques	ADBT-II	2017-18	Once	-	15	14
Antibacterial activity of Plant extracts	ADBT-III	2018-19	Once	-	12	12
Products derived from Microbes	ADBT-II	2018-19	Once	-	10	10
Tissue culture	ADBT-III	2019-20	Once	-	20	
Chromatography	ADBT-II	2019-20	Once	-	15	Running
Secondary metabolite screening of plant extracts	ADBT-I	2019-20	Once	-	14	Running

Syllabus

ADBT -III

Tissue culture

UNIT - I

Plant tissue culture, Introduction to culture room, Culture vessels, their working. Sterilization of nutrient medium, callus cultures, subculture.

UNIT - II

Somatic embryogenesis, meristem culture, somatic hybridization, micro propagation, somatic hybrids & cybrids.

UNIT - III

Invitro pollination, parthenogenesis, Embryo culture technique.

UNIT - IV

Applications of tissue culture both in agriculture Animal husbandry

ADBT-III Practical -TISSUE CULTURE

1. Preparation of plant tissue culture medium
2. Initiation of callus from any one selected plant species
3. Micro propagation of plants

Sterilization techniques

ADBT -II

UNIT - I

Microbial Control: Terminologies - Sterilization, disinfection, antiseptic, sanitization, germicide, microbistasis, preservative and antimicrobial agents.

UNIT - II

Mechanism of cell injury: Damage to cell wall, cell membrane, denaturation of proteins, inhibition of protein synthesis, transcription, replication, other metabolic reactions and change in super coiling of DNA.

UNIT - III

Physical control: Temperature (moist heat, autoclave, dry heat, hot air oven and incinerators), desiccation, surface tension, osmotic pressure, radiation, UV light, electricity, ultrasonic sound waves, filtration.

UNIT - IV

Chemical control: Antiseptics and disinfectants (halogens, alcohol, gaseous sterilization. Concept of biological control. Air filtration.

ADBT –II Practical Sterilization techniques

1. Demonstration, Use and care of microbiological equipments
2. Preparation of media, sterilization and isolation of bacteria
3. Isolation of bacteria from water, soil and vegetables
4. Isolation of pure culture by Pour plate method

ADBT-III

Cell engineering and Molecular pharming for Biopharmaceuticals

UNIT - I

The fast moving fields of tissue engineering and regenerative medicine are considered to have transformative implications for future biomedical applications and the future health care.

UNIT - II

This course should give an overview on the current state in tissue engineering and regenerative medicine, for example stem cell bioengineering and cell therapy, at the level of basic principles and of specific applications, with additional focus on clinical trials.

UNIT - III

Tissue Engineering: Basics and Applications - Cell Reprogramming - Biomaterials for Regenerative Medicine.

UNIT - IV

Regenerative Medicine: From Research to Clinical Practise - Overview of Enabling Technologies - Ethics and Patentability Course
Schedule: see Additional Information

Products derived from Microbes

There are various industrial products that are derived from microbes such as beverages, food additives, products for human and animal health, and biofuels.

UNIT - I

Beverages
Antibiotics

UNIT - II

Organic acids
Amino Acids

UNIT - III

Enzymes
Vitamins

UNIT - IV

Biofuels
Single Cell Proteins

ADBT-II-Practical - Products derived from Microbes

1. Preparation of Fruit juices
2. Preparation of wine

Rajitha - comp - 998583

St. Hoseena - Mathematics - 9885430837

DUVVURU RAMANAMMA WOMEN'S COLLEGE, GUDUR.

(Autonomous)

Re-accredited by NAAC with 'A' Grade Recognized by UGC as
'College with Potential for Excellence'



Syllabus for

Diploma Course in Reprography and Book binding

For the student admitted from the academic year 2017 – 2018.

Department of Library & Information Science

Diploma Course List conducted in the years 2017-18 and 2018-19

Sno	Name of the Course	Year of offering	No. of times offered during the year	No. of Students enrolled	No. of students completed the course in the year
1.	Diploma in Reprography & Book binding	2017-18	Once	42	42
2.	Diploma in Reprography & Book binding	2018-19	Once	28	27

Eligibility:

The students of the First year UG are eligible for this diploma course.

Duration of the course:

Duration of the course is 120 hours.

Objective

To impart elementary Knowledge to students about different aspects of printing and binding services so as to prepare them for the jobs of professional nature in Print Media.

Medium of Instruction:

The medium of instruction and examination shall be English.

No. of seats: 30

Examination pattern:

Max: 50 Min: 20

PAPER-I: Office Automation

PAPER II: Desk Top Publishing: Image editing and Page Makeup using Adobe Photoshop, PageMaker

PAPER III: Anu Telugu Script and binding works

Model Question Papers:

Total Marks = 50

Write 5 short answers out of seven questions each carry 2 Marks: $5 * 2 = 10M$

Essay answers carry 10M with Unit wise internal choice questions = $4 * 10 = 40M$

Learning Objectives:

To prepare learners to understand.

- The basic philosophy of Library and information Sciences.
- The significant role of information for the knowledge Society.
- Various Documentary and Non-Documentary sources of information.
- Different types of Library and Information Services.
- The need of Library Classification for Knowledge Organization.
- The importance of effective utilization of Library Resources and Services.

PAPER – I

Office Automation

Total Marks: 50: 2 hours

Unit I

Computer Basics: Computer block diagram, input and output devices, Memory units, Operating systems

Unit II

Windows: file saving-cut-copy - paste- rename- deletion of files, Internet concepts : emails - irecte ticket booking - online banking transactions – online applications – material search - online shopping

Unit III Ms-word

Word processing basics - Common tools - Page setup - Editing & formatting – Tables – Charts – Macros - Mail merge - Index printing – visiting cards

Unit IV Ms- Power point

Slides - slide layouts - Design templates - Slide master - Animation timings - Action buttons

Unit V Ms- Excel

Basics – Formulas - Working on charts - Sort - filter - Goal seek - Pivot tables

Recommended Books

1. Professor Satish Jain & M. Geetha Microsoft Office 2007 Training Guide BPB Publications
2. Dreamtech Press: office 2007 in simple steps
3. Ramesh Bangia: Learning Office 2007

PAPER II

Desk Top Publishing

Total Marks: 50; 2 hours

Unit I Text editing in Photoshop

Text editing, types of text, background gradients, text gradients, cut, copy, paste, Filters to Text and Background

Unit II Image editing in Photoshop

Selection tools: marquee tools, lasso tools, pen tools, card design, Flex design

Unit III Colour Conversion

Colour modes: Gray scale, RGB, CMYK, Black & White to Colour conversion, Printing output and TV output

Unit IV Text editing in PageMaker

Text editing, cut, copy, paste, tool palette: rectangle, ellipse, polygon, rectangle text box, elliptical text box, Polygon text box

Unit V Working with images – PageMaker

Image placement, Page numbering, insert and remove pages, master Pages, Paper advertisements, Text Wrapping.

Books Recommended:

1. The Photoshop CS Book for Digital Photographers : Scott Kelby
2. Adobe Photoshop CS6 Classroom in a Book: Brie Gyncild
3. Graphic Design with PageMaker : Bill Parsons
4. Adobe PageMaker 7.0 class room in a book: Adobe Staff

PAPER - III

Anu Telugu script and binding

Total Marks: 50; 2 hours

Unit-I

Anu script – Telugu typing with APPLE Keyboard

Unit –II

Anu script – Telugu typing with DOE Keyboard

Unit-III

Anu script – Telugu typing with ROMA Keyboard

Unit – IV

Different types of binding for library materials; binding materials and their varieties.

Unit – V

Binding Process: Tools, Techniques and standards for library binding

Recommended Books

Lewis,A.W. Basic Book Binding,NewYork: Dover Publications,1957.
ISBN :0-486-20169-4

NEED FOR PRACTICALS

The practicals are essential for full comprehension of Designing, Desk Top Publishing is also not complete without practical work. Practical not only help the student to understand different concepts clearly, but also make experience more concrete and thereby enable to learn faster.

Module 1 Office Management on Computer

Module 2 Graphics designing

Module 3 Binding Practicewes

PRACTICAL EXAMINATION

The time allotted for the practical examination is 3 hours and maximum marks are 100. Practical examination will be conducted separately. The marks distribution is given below:

- (i) One Practical from Each and every module: 5M* 15types of practical's= 75M
- (ii) Viva-Voce: 15Marks
- (iii) Practical File: 10Marks

During the practical examination, follow the instructions mentioned in this manual. In the viva you will be asked questions related to the practical are performed by you. Must be complete practical book produced at the time of Viva-voce.

DEPARTMENT OF ENGLISH, D.R.W.COLLEGE,GUDUR

Syllabus of Add on Program 2014-15

Name of the Topic: LEADERSHIP QUALITIES

1. Introduction of Leadership Skills.
2. Procedure of : Getting accepted as a leader.
3. What are team leaders Responsible for ?
4. How to respect others.
5. Co operative goals.
6. Encouraging participation.
7. Building Trust.
8. Managing Differences within the team.
9. A divide and Rule strategy.
10. Suppressing Differences.
11. How to run meetings & Conferences.

Syllabus of Add on Program 2015-16

Name of the Topic: STRESS MANAGEMENT

1. Introduction
2. Understanding causes of Stress in our life.
3. Techniques of Stress Management.
4. Relaxation Techniques.
5. Time management.
6. Techniques for setting priorities.
7. Instrumentation.

Syllabus of Add on Program 2016-17

Name of the Topic: WOMEN EMPOWERMENT THROUGH HIGHER EDUCATION

1. Introduction
2. Need of Higher Education
3. Women writers of the last millennium
4. Greatness of Women Scientists
5. Brief explanation about Woman achievers in different fields "as first woman in that field".

Syllabus of Add on Program 2017-18

Name of the Topic: COMMUNICATION SKILLS

1. Introduction of LSRW Skills.
2. The Importance of Listening.
3. The Process of Listening.
4. Types of Listening.
5. Barriers to Listening.
6. Strategies for effective Listening.
7. Comprehension Skills.
8. Skimming and Scanning.
9. Non – verbal Communication.

Syllabus of Add on Program 2018-19

Name of the Topic: SOFT SKILLS

1. Meeting and Greeting
2. SWOT Analysis
3. My family
4. My Opinions
5. Positive Attitude
6. Dealing with Change
7. Gestures and body language
8. Motivation
9. Success at work.
10. Work Ethics
11. Goal setting
12. Building self confidence
13. Speaking well
14. Listening well
15. Grooming
16. Interpersonal skills
17. Interview skills.
18. Leadership
19. Being a good friend
20. Handling Rejection

Fashion Technology (Tailoring)

(Syllabus)

1. 6 ముక్కల శారీ పెట్టికోట్ (లోపలి లంగా)
2. శారీ బ్లౌస్
3. పంజాబీ కమిజ్
4. సల్వార్ (ఫ్యాంట్)
5. స్కర్ట్ బ్లౌజు
6. టేబి ఫ్రాక్
7. ఫ్లెయిన్ నిక్కర్
8. గాగ్రా (అం బ్రెల్లా ఫ్రాక్)

Fashion Technology (Hand Embroidering)

Syllabus

1. Leaf Stitch
2. Chain Stitch
3. Button Hole Stitch
4. Haring Bone Stitch
5. Rose Stitch
6. Katch Work
7. Kamal Work
8. Lazy , Dazy Stitch
9. Franch Not Stitch
10. Patch Work
11. Mirror Work

Fashion Technology (Machine Embroidering)

Syllabus

1. Leaf Stitch
2. Chain Stitch
3. Mirror Work
4. Katch Work
5. Haring Bone Stitch

Fashion Technology (Painting)

(Syllabus)

- 1. Free hand Painting**
- 2. Glass Painting**
- 3. Goat painting (Bird Painting)**
- 4. Double Color Painting**
- 5. 3d painting**
- 6. Pot painting**
- 7. Embojing Painting**
- 8. Double free hand Painting**
- 9. Saree Printing**

VISUAL BASIC

UNIT-I:

Object Oriented Programming: Introduction to OOPS-Difference between pop and oops- Basic Concepts of OOPS:-Objects and Classes Concepts, Inheritance, Encapsulation and Polymorphism.

UNIT-II:

Fundamentals of Visual Basic-Features of VB- applications of VB-Integrated development environment-VB IDE elements-VB working environment and various menus on menu bar-save,debug,and distribute VB application

UNIT-III: Designing Aspects Of Vb Forms,Elements Of User Interface-Controls: Text Box - Check Box-Combo Box-Command Button- Drive list Box- File List Box--Image Box-Label-List Box-Option Button-Picture Box.

UNIT- IV

Variables- -Different Data Types-Functions- Array-Control Structure in VB.

REFERENCE BOOKS:

1. 'VISUAL BASIC 6.0N PROGRAMMING'-Content Development Group-Tata McGraw-Hill Publishing Company Limited-2002-New Delhi.
2. 'INTRODUCTION TO OOP AND VB'-V.K.JAIN-VIKAS Publishing house-New Delhi.
3. VISUAL BASIC6'-PAUL SHERIEF-PRENTICE HALL OF INDIA Pvt. Ltd-New Delhi.

ORACLE

UNIT-1:

SQL introduction –Difference between SQL and SQL + - SQL data types-SQL Commands-

Operators-Aggregative Functions –Character Functions –Views –Indexes--Sequences-Synonyms

UNIT-2

Joins-Sub queries-Constraints-ADT And Clauses: Group By Clauses, Order By Clauses, Having Clause, Objects-Users And Privileges

UNIT-3

PL/SQL introduction- introduction of programming in PL/SQL – SQL in PL/SQL ,Control Statements:if,if..Else, Simple Loop, For ..Loop, Reverse,Goto,Exception handling.

UNIT-4

Functions, Procedures, Triggers, Packages

REFERENCE BOOKS:

1. Oracle by Dr, k. kiran kumar
2. SQL, PL/SQL by Ivan Bayross

INTERNET AND HTML

UNIT-I

Introduction to internet: Definition of internet-History of internet-Advantages & Disadvantages of internet

Unit-II

Introduction to WWW :Definition of WWW-Web terminology-web browser-web server, protocols : TCP/IP,HTTP, Email: Definition of E mail- Advantages & Disadvantages of E-mail

UNIT-3

Introduction to HTML:Basic Html-Html document structure –HTML Tags-Base font tags-Title tag-Body tag-Text formatting Tags-Character tags

Unit-4

HTML Lists: Order List ,Un-Order List & Definition List- Horizontal Rule Tags

Unit-5

HTML Tables- -Hyper links -frames -Forms

Prescribed books:

- 1.Chris Bates, Web Programming Building Internet Applications, Second Edition, Wiley.
- 2.Deitel&Deitel,Goldberg "Internet And World Wide Web-How To Program",Pearson Educations Asia

WEB DESIGNING

UNIT-I

Introduction to WWW :Definition of WWW-Web terminology-web browser-web server, protocols : TCP/IP,HTTP

UNIT-II

Email: Definition of E mail- Advantages & Disadvantages of E-mail-How to work with Accounts-email inner working :Store and forward method- message components

UNIT-III

Introduction to HTML:Basic Html-Html document structure –HTML Tags-Base font tags-Title tag-Body tag-Text formatting Tags-Character tags

UNIT-IV

HTML Lists: Order List ,Un-Order List & Definition List- Horizontal Rule Tags

Unit-V

HTML Tables- -Hyper links: -frames -Forms

Prescribed books:

- 1.Chris Bates, Web Programming Building Internet Applications, Second Edition, Wiley.
- 2.Deitel&Deitel,Goldberg "Internet And World Wide Web-How To Program",Pearson Educations Asia

MULTIMEDIA SYSTEMS

UNIT – I: Introduction to Multimedia: Media and Data Streams: Main Properties of Multimedia System – Multimedia – Traditional data streams Characteristics – Data streams Characteristics for continuous Media – Information.

UNIT – II: Video and Animation: Basic Concepts – Television – Computer based Animation – Data Compression: Storage Space – Coding Requirements – Source, Entropy and Hybrid Coding.

UNIT – III: Optical Storage Media Basic Technology – Video Disks and Other WORMs Compact Disk Digital Audio – Compact Disk Read Only Memory – Further CD- ROM based Developments – Compact Disk Write Once – Compact Disk Magneto Optical .

UNIT – IV : Multimedia operating Systems : Real Time – Resource Management – Process Management – File Systems – Additional Operating System Issues – System Architecture.

UNIT – V : Multimedia Communication Systems : Application Sub system – Transport Subsystem – Quality Subsystem – Quality of Service and Resource Management – Database Systems : Multimedia Database Management.

TEXT BOOK:

1. Raif Steinmetz and Klara Nahrstedt, Multimedia: Computing, Communications and Applications, Pearson Education Asia.

REFERENCE BOOKS:

1. Tay Vaghan, Multimedia making it work, Tata McGraw-Hill, Edition, 2001.
2. Judith Jeftcoate, Multimedia in Practice Technology and Application Prentice Hall, 1995.

INTERNET OF THINGS



Unit-I

Definition and Characteristics of IoT, Physical Design of IoT – IoT Protocols, IoT enabled Technologies – Wireless Sensor Networks, Cloud Computing, Big data analytics, Communication protocols, Embedded Systems, IoT Levels and Templates

Unit-II

Software defined networks, network function virtualization, IoT Basics of IoT System Management

Unit-III

Language features of Python, Data types, data structures, Control of flow, functions, modules, packaging, file handling, data/time operations, classes, Exception handling

Unit-VI

Domain Specific IoTs – Home, City, Environment, Energy, Retail, Logistics, Agriculture, Industry, Health and Lifestyle

Office Automation Fundamentals

Unit-I: Definition of a Computer - Characteristics and Applications of Computers – Block Diagram of a Digital Computer – Classification of Computers based on size and working..

Unit-II:

Features of MS-Word – MS-Word Window Components – Creating, Editing, Formatting and Printing of Documents – Headers and Footers

Unit-III: Insert/Draw Tables, Table Auto format – Page Borders and Shading – Inserting Symbols, Shapes, Word Art, Page Numbers, Equations – Spelling and Grammar – Mail Merge

Unit-IV:

Features of PowerPoint – Creating a Blank Presentation - Creating a Presentation using a Template - Inserting and Deleting Slides in a Presentation – Adding Clip Art/Pictures– Custom Animation.

Unit-V: MS-Excel

Overview of Excel features – Creating a new worksheet, Selecting cells, Entering and editing Text, Numbers, Formulae, Referencing cells – Inserting Rows/Columns – Changing column widths and row heights, auto format, changing font sizes.

References:

1. Reema Thareja, Fundamentals of Computers, Oxford University Press, India
2. V.Raja Raman, Fundamentals of Computers, Prentice Hall of India.
3. John Walkenbach, Herb Tyson, Michael R.Groh and Faithe Wempen, Microsoft Office 2010 Bible Wiley Publishers

Web Tools

Unit-I: Fundamentals of Internet : Networking Concepts, Data Communication – Types of Networking, Internet and its Services, Internet Addressing – Internet Applications – Computer Viruses and its types – Browser –Types of Browsers.

Unit-II: Internet Applications: Using Internet Explorer, Standard Internet Explorer Buttons, Entering a Web Site Address, Searching the Internet

Unit-III: Introduction to Social Networking: Twitter, Tumblr, LinkedIn, Facebook, Flickr, Skype, Yelp, Vimeo, Yahoo!, Google+, Youtube, WhatsApp, etc.

Unit- IV: E-Mail :Definition of E-mail - Advantages and Disadvantages – User IDs, Passwords, Email Addresses, Domain Names, Mailers, Message Components, Message Composition, Mail Management, Email Inner Workings.

Unit V: WWW- Web Applications, Web Terminologies, Web Browsers, URL – Components of URL, Searching WWW – Search Engines and Examples.

HYPER TEXT MARKUP LANGUAGE

UNIT-1: The World Wide Web (WWW)- HTML History - Hypertext and Hypertext Markup Language- Tags- Elements of an HTML Document-Text Elements-Tag Elements.

UNIT-2 STRUCTURAL ELEMENTS OF HTML DOCUMENTS: Header tags- Body tags- Paragraphs-Titles-Lists-Numbered list-Non-Numbered lists- Definition lists.

UNIT-3: FORMATTING HTML DOCUMENTS: Logical styles (source code, text enhancements, variables)- Physical Styles (Bold, Italic, underlined, crossed)-Image format (quality, size, type, ...)- Importing images (scanners)-Tags used to insert images- Frames.

UNIT-4: TABLES IN HTML DOCUMENTS: -Tags used in table definition-Tags used for border thickness-Tags used for cell spacing-Tags used for table size-Dividing table with lines- Dividing lines with cells- Cell types- Titles cells- Data cells

UNIT-5: HYPERTEXT AND LINK IN HTML DOCUMENTS: URL/FTP/HTTP-Types of links.- Internal Links- External Links- Link Tags- Links with images and buttons- Links that send email messages.

PRESCRIBED BOOKS:

1. Chris Bates ,Web Programming Building Internet Applications .Second Edition ,Wiley(2007).
2. Deitel & Deitel Glogerg "Internet And World Wide Web-How To Program" Pearson Education Asia ,2001.

Internet Concepts

Unit-I: Networking Concepts, Data Communication – Types of Networking, Internet and its Services, Internet Addressing – Internet Applications – Computer Viruses and its types – Browser –Types of Browsers.

Unit-II: Using Internet Explorer, Standard Internet Explorer Buttons, Entering a Web Site Address, Searching the Internet

Unit-III: Twitter, Tumblr, LinkedIn, Facebook, Flickr, Skype, Yelp, Vimeo, Yahoo!, Google+, Youtube, WhatsApp, etc.

Unit- IV: Definition of E-mail - Advantages and Disadvantages – User IDs, Passwords, Email Addresses, Domain Names, Mailers, Message Components, Message Composition, Mail Management, Email Inner Workings.

Unit V: Web Applications, Web Terminologies, Web Browsers, URL – Components of URL, Searching WWW – Search Engines and Examples.

FUNDAMENTALS OF INFORMATION TECHNOLOGY

Unit-I:

Basics of Computers :

Definition, characteristics and limitations of computers-Elements of computers-Hardware-CPU-Primary and Secondary memory.

UNIT-II

Input- output devices

IT enabled services-BPO-KPO-Call centers

UNIT –III

Types of Operating System – Functions of an Operating System – MS-DOS – MS Windows – Desktop, Computer, Documents, Pictures, Music, Videos, Recycle Bin, Task Bar

Unit-IV

MS WORD

Features of MS-Word – MS-Word Window Components – Creating, Editing, Formatting and Printing of Documents – Headers and Footers –tables- Inserting Symbols- Mail Merge

Unit-V: MS-Excel

Overview of Excel features – Creating a new worksheet, Selecting cells, Entering and editing Text, Numbers, Formulae

References:

1. ReemaThareja, Fundamentals of Computers, Oxford University Press, India
2. V.Raja Raman, Fundamentals of Computers, Prentice Hall of India.
3. John Walkenbach, Herb Tyson, Michael R.Groh and Faithe Wempen, Microsoft Office 2010 Bible Wiley Publishers

WEB PROGRAMMING-I

UNIT-I

Introduction: Html, Xml and WWW.HTML: Basic HTML, The Document Body , Text, Hyperlinks ,Adding More, Formatting ,Lists, Tables, Using Colors And Images, Images.

UNIT-II

More HTML: Multimedia Objects, Frames, Forms-Towards Inter Activity, The Html Document Head In Detail. XHTML: editing XHTML, headers, linking, images, unordered list, order list.

UNIT- III

Cascading Style Sheets: Introduction, using styles: simple examples, defining you are own style ,properties and values in styles, style sheets-A worked example ,formatting blocks of information.

UNIT-IV

Java Script: Introduction, dynamic HTML, java script , java script-basics ,variable ,string manipulations ,mathematical functions ,statements, operators, arrays, functions.

UNIT-V

Objects in java script: data and objects in java script, regular expressions, exception handling, built in objects, events.

PRESCRI BED BOOKS:

1. Chris Bates ,Web Programming Building Internet Applications ,Second Edition ,Wiley(2007).
2. Deitel &Deitel Glogerg "Internet And Wold Wide Web-How To program" Pearson Education Asia ,2001