

CERTIFICATE COURSE
2021 - 2022



DEPARTMENT OF BUSINESS ADMINISTRATION

COURSE TITLE- BUSINESS SKILLS

COURSE OBJECTIVES:

To uplift managerial and entrepreneurial skills among the students and helps to assess the capabilities & skills in entrepreneurial career.

SYLLABUS:

- 1. Introduction :** Introduction – Assess the Individual, What business Should we start (idea Conceiving), Tapping skills need for the business.
- 2. Skills & Opportunities :** Selling, Negotiation and Persuasion Skills and Profile of Dharmapuri District and its Opportunity.
- 3. Risk Taking and Budgeting Taping :** Resources needed, Startup capital planning (Schemes available for the young entrepreneurs-MSME, NSIC, NSDC, DIC opportunities) & Risk Estimation.
- 4. Model :** Model projects from MSME, NSIC and successful schemes and successful entrepreneurs motivational videos.

PG & RESEARCH DEPARTMENT OF CHEMISTRY

COURSE TITLE- WATER ANALYSIS

COURSE OBJECTIVES:

1. Collection of water samples
2. Determination of salinity of water
3. Determination of Dissolved Oxygen (DO) in water
4. Determination of BOD of water
5. Determination of COD of water

SYLLABUS:

Theory: Water Quality Parameters and Standards- Quality of drinking water, Quality of irrigation water, COD, BOD - Water Microbiology - TOC E-coli and total bacteria and Sewage analysis.

Practical: Analysis of water parameters including total hardness, Ca, Mg, Total alkalinity, DO, Chloride, temperature...

Analysis of Effluent having metal ions Cu, Cd, Pb, Zn, Cr, Mn...

PG & RESEARCH DEPARTMENT OF COMMERCE

COURSE TITLE- TALLY 9.2

COURSE OBJECTIVES:

The courses of tally features through transaction made according to the types of organization it desired enable the students to learn to the basis of accountancy, different types of business organization and various financial accounting and inventory report generating features of tally accounting software applicable to each of the business organization.

SYLLABUS:

Unit – I Company Information

- a. Company Creation
- b. Select Company
- c. Shut Company
- d. Alter Company
- e. Split Company Data
- f. Backup and Restore

Unit – II Gateway of Tally

- a. Accounts Info
 - a. Groups
 - b. Ledgers
 - c. Voucher Types
- b. Inventory Info
 - a. Stock Group
 - b. Stock Category
 - c. Stock item
 - d. Unit of Measures
 - e. Godown
- c. Accounting Vouchers
- d. Inventory Vouchers

Unit – III: Statutory and Taxation

- a. Value Added Tax (VAT)
- b. Tax Deducted at Source (TDS)
- c. Tax Collected at Source (TCS)
- d. Goods and Service Tax (GST)

Unit – IV Display

- a. Trial Balance
- b. Day Book
- c. Accounts Book
- d. Statement of Accounts
- e. Inventory Books
- f. Statement of Inventory
- g. Statutory Info
- h. Statutory Reports
- i. Cash flow and Fund flow Statements

Reference Books:

1. Financial Accounting – Reddy and Murthy – Margham Publication, Chennai – 17.
2. Financial Accounting – Dr. S. Ganesan and Kalavathi, S.R.Elangovan, Tirumali
Publication, Nagercoil.
3. Financial Accounting – Narayanaswamy, PHI learning A Managerial Perspective,
Private Limited, New Delhi.
4. Financial Accounting – Mukherjee & Hanif, Megraw Hill Companies, UP.

PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE

COURSE TITLE- JAVA (MIDDLEWARE)

COURSE OBJECTIVE:

- To give basic information about the computer system.
- To give knowledge about computer hardware and computer software.
- To familiarize students with the use of MS Windows, Internet and E-mail.
- To familiarize students with the use of MS Office-MS Word, MS Excel & MS PowerPoint

SYLLABUS

1. CLIENT / SERVER CONCEPTS

Client – Server – File Server, Database server, Group server, Object server, Web server .Middleware – General middleware – Service specific middleware. Client / Server Building blocks – RPC – Messaging – Peer – to- Peer.

2. EJB ARCHITECTURE

EJB – EJB Architecture – Overview of EJB software architecture – View of EJB – Conversation – Building and Deploying EJBs – Roles in EJB.

3. EJB APPLICATIONS

EJB Session Beans – EJB entity beans – EJB clients – EJB Deployment – Building an application with EJB.

4. CORBA

CORBA – Distributed Systems – Purpose – Exploring CORBA alternatives – Architecture overview – CORBA and networking model – CORBA object model – IDL – ORB – Building an application with CORBA.

5. COM

COM – Data types – Interfaces – Proxy and Stub – Marshalling – Implementing Server / Client – Interface Pointers – Object Creation, Invocation , Destruction – Comparison COM and CORBA – Introduction to .NET – Overview of .NET architecture – Marshalling – Remoting.

TEXT BOOKS

1. Robert Orfali, Dan Harkey and Jeri Edwards, “The Essential Client/Server Survival Guide”, Galgotia Publications Pvt. Ltd., 2002. (Unit 1)
2. Tom Valesky, ”Enterprise Java Beans”, Pearson Education, 2002.(Unit 2 & 3)
3. Jason Pritchard, ”COM and CORBA side by side”, Addison Wesley, 2000 (Unit 4 & 5)
4. Jesse Liberty, “Programming C#”, 2nd Edition, O’Reilly Press, 2002. (Unit 5)

REFERNCES

1. Mowbray, ”Inside CORBA”, Pearson Education, 2002.
2. Jeremy Rosenberger, ” Teach yourself CORBA in 14 days”, Tec media, 2000

COURSE TITLE- PYTHON PROGRAMMING

COURSE OBJECTIVE:

- To understand why Python is a useful scripting language for developers.
- To learn how to design and program Python applications.
- To learn how to use lists, tuples, and dictionaries in Python programs.
- To learn how to identify Python object types.
- To learn how to use indexing and slicing to access data in Python programs.
- To define the structure and components of a Python program.
- To learn how to write loops and decision statements in Python.

SYLLABUS

Module 1 - Introduction to Python and Computer Programming

- Python - a tool, not a reptile
- There is more than one Python
- Let's start our Python adventure

Module 2 - Data Types, Variables, Basic Input-Output Operations, Basic Operators

- Your first program

- Python literals
- Operators - data manipulation tools
- Variables - data-shaped boxes
- How to talk to computer?

Module 3 - Boolean Values, Conditional Execution, Loops, Lists and List Processing, Logical and Bitwise Operations

- Making decisions in Python
- Python's loops
- Logic and bit operations in Python
- Lists - collections of data
- Sorting simple lists - the bubble sort algorithm
- Lists - some more details
- Lists in advanced applications

Module 4 - Functions, Tuples, Dictionaries, and Data Processing

- Writing functions in Python
- How functions communicate with their environment?
- Returning a result from a function
- Scopes in Python
- Let's make some fun... sorry, functions
- Tuples and dictionaries

Module 5 - Modules, Packages, String and List Methods, and Exceptions

- Using modules
- Some useful modules
- What is package?
- Errors - the programmer's daily bread
- The anatomy of exception

- Some of the most useful exceptions
- Characters and strings vs. computers
- Python's nature of strings
- String methods
- Strings in action
- Four simple programs

Module 6 - The Object-Oriented Approach: Classes, Methods, Objects, and the Standard Objective Features; Exception Handling, and Working with Files

- Basic concepts of object programming
- A short journey from procedural to object approach
- Properties
- Methods
- Inheritance - one of object programming foundations
- Exceptions once again
- Generators and closures
- Processing files
- Working with real files

DEPARTMENT OF DIGITAL PRINT MEDIA

COURSE TITLE-ADOBE PHOTOSHOP

OBJECTIVE:

By the end of the course, the student will be able to:

1. Identify the five categories of Adobe Photoshop tools.
2. Identify the 18 Primary Tools of the Adobe Photoshop toolbar.
3. Identify the 39 Secondary Tools of the Adobe Photoshop toolbar.
4. Identify each tools corresponding keyboard shortcut.

SYLLABUS:

Lesson 1. Getting to Know the Work Area, Using the tools, Using the options bar and other panels, Undoing actions in Photoshop, Customizing the workspace, Tools panel overview Lesson.

2. Basic Photo Corrections Strategy for retouching, Resolution and image size, Adjusting the color in Camera Raw, Straightening and cropping the image in Photoshop, Replacing colors in an image, Adjusting saturation with the Sponge tool, Repairing areas with the Clone Stamp tool, Using the Spot Healing Brush tool, Using content-aware fill, Applying the Unsharp Mask filter.

3. Working with Selections, About selecting and selection tools, Using the Quick Selection tool, Moving a selected area, Manipulating, selections Using the Magic Wand tool, Selecting with the lasso tools, Rotating a selection, Selecting with the Magnetic Lasso tool, Cropping an image and erasing within a selection, Refining the edge of a selection.

4. About layers, Using the Layers panel, Rearranging layers, Applying a gradient to a layer, Applying a layer style, Flattening and saving files.

5. Working with masks and channels, Creating a mask, Refining a mask, Creating a quick mask, Manipulating an image with Puppet Warp, Working with channels.

PG & RESEARCH DEPARTMENT OF ENGLISH

COURSE TITLE- COMMUNICATIVE ENGLISH

COURSE OBJECTIVES:

- This course offers theoretical as well as analytical training to develop student's professional skills required to work in a relevant field for English teaching, editing and professional writing.
- The course imparts in-depth knowledge on the history of English Language, language acquisition, composition, reading, grammar and language development.
- This course is specially designed to learn the different aspects of the English language to develop reading and writing skills and English vocabulary.
- According to the research, it has been proven that students with better proficiency in the English Language can avail the opportunity to find prospective jobs in Multinational companies.
- After completing this course, the students can avail potential job positions in Language Departments, Government Offices, Embassies, and Translation Departments etc.

SYLLABUS:

UNIT I- LISTENING AND SPEAKING

- Introducing self and others,
- Listening for specific information,
- Pronunciation
 1. Essentials of pronunciation
 2. American and British pronunciation
- Reading and Writing
- Skimming and Scanning
- Diction and Tone
- Reading aloud
 1. Article
 2. Report
 3. Using Dictionaries, Encyclopaedias and Thesaurus

UNIT II -READING AND WRITING

- Types of reading:

1. Extensive reading
 2. Intensive reading
- Reading a prose passage
 - Reading a poem
 - Reading a short story

STUDY SKILLS

- Using the internet as a Resource
 1. Online search
 2. Guidelines for using the resources
 3. E-learning resources

UNIT III GRAMMAR IN CONTEXT

- Nouns
- Pronouns
- Adjectives
- Verbs
- Tenses

PG & RESEARCH DEPARTMENT OF MATHEMATICS

COURSE TITLE- QUANTITATIVE APTITUDE

COURSE OBJECTIVE:

1. This course on quantitative aptitude is expected to be an asset to those who plan to appear in competitive exams.
2. To empower the aptitude skills and logical reasoning skills among the students.
3. To solve questions in a fraction of a minute, using short-cut methods.

SYLLABUS:

1. TIME AND DISTANCE
2. CHAIN RULE
3. PROBLEMS ON TRAINS AND AGES
4. NUMBERS AND SEQUENCE OF NUMBERS
5. TIME AND WORK
6. SIMPLE AND COMPOUND INTEREST

PG DEPARTMENT OF PHYSICS
COURSE TITLE- LED BULB MAKING

COURSE OBJECTIVE:

- Students are able to assemble and also able to manufacture bulb in less expense way.
- Initiates students to startup a small scale industry and to induces them to be a good entrepreneurs.

SYLLABUS:

- ✓ Understanding of the basics of power electronics and its usages in lighting controls
- ✓ LED power supplies and LED drivers
- ✓ Special safety and handling precautions to be taken during LED luminary testing.
- ✓ To understand various electronic and electrical components, materials and their specific properties and usages.

முதுகலைத் தமிழ்த்துறை
போட்டித்தேர்வு பயிற்சி (TNPSC)

நோக்கம் :

1. மாணவர்களை அரசு தேர்வுக்குத் தயார்ப்படுத்துதல்.
2. இப்பயிற்சி மூலம் மாணவர்களின் தனித் திறமைகள் வெளிக்கொண்டு வரல்.
3. இப்பயிற்சி வகுப்பின் மூலம் மாணவர்களுடைய ஆளுமைத் திறனை மேம்படுத்துதல்
4. தற்போதையச் சூழலுக்கேற்பத் திட்டமிட்ட கல்விமுறையைப் பின்பற்றுதல்.

பாடத்திட்டம் :

அலகு - 1

பொருந்துதல் - பொருத்தமான பொருளைத் தேர்வு செய்தல் - புகழ் பெற்ற நூலாசிரியர்கள் - தொடரும் தொடர்பும் அறிதல் - இத்தொடரால் குறிக்கப்படும் சான்றோர் - அடைமொழியால் குறிக்கப்பெறும் நூல் - விடைக்கேற்ற வினாவைத் தேர்ந்தெடுத்தல் - எவ்வகை வாக்கியம் எனக்கண்டெழுதுதல் - தன்வினை, பிறவினை, செய்வினை, செய்ப்பாட்டு வினை வாக்கியங்களைக் கண்டெழுதுதல் - விடைக்கேற்ற வினாவைத் தேர்ந்தெடுத்தல் - எவ்வகை வாக்கியம் எனக் கண்டெழுதுதல் - தன்வினை, பிறவினை, செய்வினை, செய்ப்பாட்டு வினை வாக்கியங்களைக் கண்டெழுதுதல்.

அலகு - 2

கம்பராமாயணம் தொடர்பான செய்திகள் மேற்கோள்கள், பா வகை, சிறந்த தொடர்கள் -

புறநானூறு, அகநானூறு, நற்றிணை, குறுந்தொகை, ஐங்குறுநூறு, கலித்தொகை செய்திகள், மேற்கோள்கள், அடிவரையறை, எட்டுத்தொகை, பத்துப்பாட்டு நூல்களில் உள்ள பிற செய்திகள் - அகர வரிசைப்படி சொற்களை சீர் செய்தல் - சொற்களை ஒழுங்குபடுத்தி செற்தொடராக்குதல்.

அலகு - 3

திருக்குறள் தொடர்பான செய்திகள், மேற்கோள்கள், தொடரை நிரப்புதல் (19 அதிகாரம் மட்டும்) - அன்பு-பண்பு-கல்வி-கேள்வி-அறிவு-அடக்கம்-ஒழுக்கம்-பொறை-நட்பு-வாய்மை-காலம்-வலி-ஒப்புரவறிதல்-செய்நன்றி-சான்றாண்மை-பெரியாரைத் துணைக்கோடல்-பொருள் செயல் வகை-வினைத்திட்டம்-இனியவை கூறல்.

அலகு - 4

பிரித்தெழுதுக - எதிர்ச்சொல்லை எடுத்தெழுதுக - பொருந்தாச்சொல்லைக் கண்டறிதல் - ஒலி வேறுபாடறிந்து சரியான பொருளையறிதல் - ஒரெழுத்து ஒருமொழிக்குரிய பொருளையறிதல் - பிழை திருத்தம்- சந்திப்பிழையை நீக்குதல், ஒருமை/பன்மை பிழைகளை நீக்குதல், மரபுப்பிழைகள், வழுவச் சொற்களை நீக்குதல், பிறமொழிச் சொற்களை நீக்குதல் - ஆங்கிலச் சொல்லுக்கு நேரான தமிழ்ச் சொல்லை அறிதல் - உவமையால் விளக்கப்பெறும் பொருத்தமான பொருளைத் தேர்ந்தெழுதுதல் - எதுகை, மோனை, இயைபு இவற்றுள் ஏதேனும் ஒன்றைத் தேர்ந்தெழுதுதல் - பெயர்ச்சொல்லின் வகையறிதல் - இலக்கணக் குறிப்பறிதல்.

அலகு - 5

அறநூல்கள்- நாலடியார், நான்மணிக்கடிகை, பழமொழி, முதுமொழிக்காஞ்சி, தரிகடுகம், இன்னா, இனியவை நாற்பது, சிறுபஞ்சமூலம், ஏலாதி, ஓளவையார் பாடல்கள் - வேர்ச்சொல்லைத் தேர்வு செய்தல் - வேர்ச்சொல்லைக் கொடுத்து/வினைமுற்று, வினையெச்சம், வினையாலணையும் பெயர், தொழிற்பெயரை உருவாக்குதல் - சமய முன்னோடிகள் - அப்பர், சம்பந்தர், சுந்தரர், மாணிக்கவாசகர், திருமூலர், குலசேகர ஆழ்வார், ஆண்டாள், சீத்தலைச் சாத்தனார், எச்.ஏ. கிருஷ்ணபிள்ளை, உமறுப்புலவர் தொடர்பான செய்திகள்.