




VALUE ADDED COURSES

2018-2019

BROCHURE




**ACADEMIC YEAR
2018 - 2019**

**LIST OF COURSES
&
SYLLABUS**



P.K.R. ARTS COLLEGE FOR WOMEN
 Accredited with 'A' Grade by NAAC
 Autonomous Institution – Affiliated to Bharathiar University
 Gobichettipalayam

DEPARTMENT	COURSE CODE	COURSE NAME
PHYSICS	18VAPHU1	Basic Electricity and Electronics
COMPUTER SCIENCE	18CAUVA02	Software Foundation Advanced
	18CSUVA02	IBM CE – Enterprise Applications for Cloud Environment (J2EE) using IBM Rational Application Developer & IBM Blue Mix
	18CSPVA02/18CAPVA02	IBM CE – Application Development for Cloud Deployment using IBM Blue Mix
	18CAPVA01	IBM CE – Basics of Information Management with DB2
COMMERCE	18CGUVA1/18CCUVA1/ 18CPUVA1	Tally ACE
	19GPVA01	Photoshop & Corel Draw



**DEPARTMENT
OF
PHYSICS**

COURSE

- **Basic Electricity & Electronics**

SYLLABUS

BASIC ELECTRICITY AND ELECTRONICS

UNIT I – INTRODUCTION

History of Electronics – Evolution of Electronics - Impact of Electronics in the Modern World – Need to understand Basic Principles of Electronics

UNIT II- ELECTRICITY

Introduction - Basic Electricity – Electricity and Magnetism Basics- Sine waves-AC vs. DC- AC Voltage- Single- Phase and Three –Phase – Electric power - Watt

UNIT III – BASIC ELECTRONIC COMPONENTS

Resistors and Capacitors: Types, Specifications – Resistors-Standard values, Marking, Colour Coding-Inductors and Transformers: Types, Specifications, Principle of Working

UNIT IV – LEARNING BY DOING

Test equipments - Soldering- Construction of Basic Electronic Circuits

UNIT V – FAULT FINDING AND REPAIR OF PERIPHERALS

Fault finding and Repair of Peripherals in Basic Electronic and Electric Devices – Repair of Advanced Devices (UPS, Mobile Phones, Mixer Grinder) - Device – I- Device – II

Reference:

1. Concepts of Physics – Volume I & II- H.C.Verma- Bharathi bhavan Patna
2. Basic Physics – Second Edition – Karl F.Kuhn



**DEPARTMENT
OF
COMPUTER
SCIENCE**

COURSES

- **Software Foundation Advanced**
- **IBM CE – Enterprise Applications for Cloud Environment (J2EE) using IBM Rational Application Developer & IBM Blue Mix**
- **IBM CE – Application Development for Cloud Deployment using IBM Blue Mix**
- **IBM CE – Basics of Information Management with DB2**

SOFTWARE FOUNDATION ADVANCED

Unit-I:

Introduction to Course- IBM Technologies, Why Programming(Related to department) Introduction to C- Programming and other concepts of C language.

Unit-II:

C++-Introduction , Basics of C++, Practical's on Basics Concepts of C++, OOPs Concepts

Class & Objects, Abstraction & Encapsulation, Polymorphism

Unit-III:

Functions, Call by value & Call by reference, Function overloading, Operator overloading, Practical's on above C++ Concepts

Unit-IV:

Operators, Looping, Control Structure, Inheritance, Practical's on Inheritance and other Concepts

Unit-V:

Constructors, Destructors, Types of constructors, Practical's on above C++ Concepts, Refreshment, Project submission and Evaluation

ENTERPRISE APPLICATIONS FOR CLOUD ENVIRONMENT (J2EE) USING IBM RATIONAL APPLICATION DEVELOPER & IBM BLUE MIX

Unit-I:

IBM Introduction, Offering Courses (Description along with its tools), History of Computing.
Introduction to cloud computing- History of cloud computing, Needs of cloud computing,
Benefits of cloud computing, Characteristics of Cloud, How does cloud computing works

Unit-II:

Introduction to Cloud Foundry- Architecture of Cloud Foundry, Cloud Foundry-Application
staging, Practical Session

Unit-III:

Develop services for Blue mix, Architecture; Register a service in Blue mix, Practical
Session

Unit-IV:

Building and Deploying Blue mix Applications ,Service Model, Deployment Model,
Practical Session

Unit-V:

Project on Cloud, Viva

IBM CE - APPLICATION DEVELOPMENT FOR CLOUD DEPLOYMENT USING IBM BLUE MIX

Unit-I:

Introduction to Virtualization- Types of Virtualization, Data center, Hypervisor, Installing VMware with ubuntu, Introduction to IBM Cloud, Creating cloud account and workspace in region.

Tasks based on above topics.

Unit-II:

Introduction to cloud computing- History of cloud computing, Needs of cloud computing, Benefits of cloud computing, How does cloud computing works? IBM Watson Assistant -

Introduction to Watson Assistant, Intent, Entity, Dialog, Content Dialog, Tasks based on above topics

Unit-III:

Types of cloud computing models- Deployment model, Service model, working on Chatbot (IBM Assistant) Tasks based on above topics

Unit-IV:

Working with cloud app - Demonstration on Google drive, One drive, AWS, IBMcloud, Skydrive, drop box, Cloud Computing architecture, SOA,IBM Cloud, Front end, Back end, Deployment of app on cloud

Unit-V:

Project on Cloud, Viva

IBM CE - BASICS OF INFORMATION MANAGEMENT WITH DB2

Unit-I:

Introduction to IBM, Value added courses, Introduction to data, information, How the data are stored, what is database, Relational Model, Describe about the DBMS & RDBMS, Types of databases, tools used to manage the database, introduction to DB2, uses & advantages of DB2

Unit-II:

IBM-Cloud Introduction, Services and the components in IBM Cloud, Using Databases in IBM Cloud- Using SQL Query and DB2 Serves

Unit-III:

About queries, types of languages (DDL, DML, DCL), Practical session on SQL basic commands (DDL).

Unit-IV:

Tasks on DML and DCL languages, Keys, constraints, operators in RDBMS, Practical tasks using the clauses and key, constraints and operator concepts.

Unit-V:

Functions, Normalization, Joins, Views, triggers, procedures, Practically worked on all the concepts, Project implementation.



**DEPARTMENT
OF
COMMERCE**

COURSES

- **Tally ACE**
- **Photoshop & Corel Draw**

SYLLABUS

TALLY ACE

This beginner level certification will recognize skills of a candidates learning Tally.ERP 9. Online assessment will be conducted and successful candidates will earn a verifiable digital certificate from Tally.

Tally ACE certifies candidate as job ready and opens up multiple career opportunities. A certified candidate can opt to become an entrepreneur as well.

Syllabus

- Fundamentals of Accounting
- Maintaining Chart of Accounts in Tally.ERP 9
- Maintaining Stock Keeping Units (SKU)
- Recording Day-to-Day Transactions in Tally.ERP 9
- Accounts Receivable and Payable Management
- MIS Reports
- Goods and Services Tax (GST)
- Recording Vouchers with TDS (Tax Deducted at Source)

Assessment Features

- Assessment Format : Online
- Duration : One Hour
- No. of Exams : One Exam
- Certification Type : Digital

CORAL DRAW AND PHOTOSHOP

- Lesson 1: Getting to know the workspace and fonts/Creating a simple report cover
- Lesson 2: Using the toolbox/Using color
- Lesson 3: Drawing and editing objects/Creating a greeting card
- Lesson 4: Using photographs in a motivational poster
- Lesson 5: Using a template to create a two-page newsletter
- Lesson 6: Introduction to Adobe Photoshop CS6
- Lesson 7:Layers, Drawing and Painting
- Lesson 8: Selection tool
- Lesson 9: Painting tools and Colour Basics
- Lesson 10:Manipulation Image, Create passport size photos