

PDEA'S

# WAGHIRE COLLEGE SASWAD.

Add on Course

COMPUTER FUNDAMENTALS

Department of Physics

**Course Duration :** 15 weeks

**Total hours :** 30 Periods (2 Credits ,  $15 \times 2 = 30$ , Theory Periods 10, Practical periods 20, Total periods 30)

**Course frequency :** Once in an academic year .

**Eligibility :** XII<sup>th</sup> (Science) Pass . (Any Student admitted for F.Y/S.Y.B.Sc )

**Intake:** Minimum 30 students.

**Objective in terms of learning outcome :** After completion of training , participants would be able to understand basic concept of computer system, computing system ;classification of computers; various generation of computers; various functions of CPU; concepts of virtual memory ;Input/output devices;auxillary storage devices; computer networks;types of networks;evaluation ;devices;topologies;nodes in network communication ;web and internet;domain system.

### **Tools & Equipment: Hardware required**

PCs 05 – Server and clients with latest configuration, Networking tool ie Hub , Switch , Cables , Modem , Router etc. Internet Connection.

**Software:** - Microsoft Windows Server, Windows OS, Linux Server Antivirus and Network trouble shooting utilities.

### COURSE CONTENT

#### 1. COMPUTER CONCEPTS

5 periods

#### LEARNING OBJECTIVES

1.1 COMPUTER

1.2 USES OF COMPUTER

1.3 ELEMENTS OF THE COMPUTING PROCESS

1.3.1 Hardware

1.3.2 Software

1.4 CHARACTERISTICS OF COMPUTERS

1.5 CLASSIFICATION OF COMPUTERS

- 1.6 HISTORICAL PERSPECTIVE
- 1.7 CENTRAL PROCESSING UNIT (CPU)
- 1.8 FUNCTIONS OF CPU
- 1.9 VIRTUAL MEMORY

## 2. INPUT/OUTPUT AND AUXILIARY STORAGE DEVICES

5 periods


### LEARNING OBJECTIVES

- 2.1 INPUT DEVICES
- 2.2 OUTPUT DEVICES
- 2.3 AUXILIARY STORAGE DEVICES
- 2.4 MAGNETIC TAPE
- 2.5 WINCHESTER DISK
  - 2.5.1 Hard Disk
- 2.6 FLOPPY DISK
- 2.7 ZIP DISK
- 2.8 JAZ DISK
- 2.9 SUPERDISK
- 2.10 OPTICAL DISK
  - 2.10.1 CD-ROM
  - 2.10.2 CD-R Drive
  - 2.10.3 CD-RW Disks
- 2.11 MAGNETO-OPTICAL (MO) DRIVES
- 2.12 DVD
- 2.13 USB FLASH DRIVE

### 3. LABORATORY SESSION

Sr no	Experiment / Topic	Periods
1	<b>Various Components of computer</b> CPU-Parts of CPU, Arithmetic logic unit, control unit, <b>Key board</b> , mouse, monitor-CRT, Flat panel. <b>Printers</b> -Impact and Non impact printers-Character, dot matrix, drum chain, Laser, Inkjet printers. <b>Storage devises</b> - USB, Flash drive, memory cards, CD,DVD,HDD	3

2	<b>Windows Operating System</b> Starting the Windows Starting a program, running a program Running multiple programs and switching between windows Customizing the Task bar Recycle bin, restoring the deleted files	4
3	<b>MS Word</b> Working with Documents Formatting Documents Setting Page style Creating Tables Drawing Tools Printing Documents	3
4	<b>MS Excel</b> Entering & Deleting Data Setting Formula Formatting Spreadsheets Working with sheets Creating Charts Printing- Using Tools	4
5	<b>MS Power Point</b> Creating a presentation Formatting a Presentation Adding Effects to the Presentation Printing Handouts	3
6	<b>Web Browser And E-mail</b> Popular Browser- Fire fox, Internet explorer, Google, others E-mail- How to create a e-mail, creating account, use of email	3
	<b>Total Periods</b>	20

  
Course Co-ordinator  
(Prof. Kumphakar 3/3)

  
  
Dept. of Physics  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.

  
18/7/2023  
PRINCIPAL  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

PDEA's Waghire College of Arts, Commerce and Science, Saswad

Department of Chemistry

Add on course in "Basic Instrumental Techniques in Chemical Analysis"

Syllabus

Add on course in "Basic Instrumental Techniques in Chemical Analysis"	2 Credits
---	-----------


Unit No	Topic	Lectures
<b>Section-I (Theory)</b>		
1	Introduction: a) Sampling of solids, liquids and gases: Definition, types of samples, quality of sample. b) Instrumental methods of analysis, their classification and advantages of instrumental methods, the limitations, precision and accuracy.	(03 Lectures)
2	Introduction, principle, parts of pH meter, types of electrodes and applications pH meter	(03 Lectures)
3	Introduction, principle, Beer-Lamberts law, parts of colorimeter and applications Colorimetry	(03 Lectures)
4	Introduction, principle, parts of conductometer, conductivity cell and applications Conductometry	(03 Lectures)
5	Introduction, principle, parts of potentiometer, types of electrodes and applications Potentiometry	(03 Lectures)
6	Chromatographic methods: Paper, Partition, Ion exchange, Thin layer, and Column chromatography	(05 Lectures)
<b>Section-II (Practical)</b>		
1	Analysis of Soil sample (pH, Conductance)	(03 Hours)
2	Analysis of Water sample ((pH, Conductance, TDS)	(03 Hours)
3	Colorimetric estimation of CuSO <sub>4</sub>	(03 Hours)
4	Determination of iron by thiocyanate colorimetry	(03 Hours)
5	Detection of dyes in food by paper/thin layer chromatography method	(03 Hours)


**Objectives:**

The primary objective of this course is to acquire basic concepts, principles, and basic techniques of chemical analysis. On successful completion of this course, students will be able:

1. To develop an understanding of the range and uses of analytical techniques in chemical analysis.
2. To develop an understanding of the broad role of the chemist in measurement and problem solving for analytical tasks.
3. To provide experience in some scientific methods employed in chemical analysis.
4. To develop some understanding of the professional and safety responsibilities residing in working on chemical analysis.

  
Coordinator

  
**HEAD**  
Dept. of Chemistry  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.

  
**PRINCIPAL**  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.



## Course No.2–Employability Skill Enhancement Programme



### Objectives of the course:

This programme is designed to aid candidates in their preparation for recruitment through campus or outside campus. The course will enable students to be better professionals through effective communication. Students will learn skills to present themselves in an effective manner while facing interviews or similar test for placements.

### Course Contents:

- Basic Communication Skills
- Reasoning Ability
- Verbal Ability
- Personal Grooming
- Personality Development
- CV Writing Skills
- Interview Techniques

### Methods of Instruction

- Lecture
- Class discussion
- Role plays
- Guest speakers
- Written assignments
- Videos

### Certification:

The college needs to provide 'Course Completion Certificate' to every student who completes the course successfully. The certificate must contain the grade obtained by the student in the examination.

\*\*\*\*\*

Pune District Education Association's  
**Waghire College of Arts, Commerce and Science, Saswad**  
 Department of Commerce  
 Add On Course (2022-23)  
**Syllabus**  
**Subject: Communication Skills**  
**Class:- S.Y. B.com**



**Total Lectures : 30**

Topic No.	Content	Objectives	No of Lecture
1	Introduction of Business Communication:	To understand various communicative aspects	1
2	Methods and Channels of Communication:	To know about various communication Channels	1
3	Oral & Written Communication	To study the Functioning of various types of oral communication	1
4	Overcoming barriers of Communication	To find out solutions on communication problems	1
5	Soft Skills: Grooming Manners and Etiquettes, Effective Speaking Interview Skills, Listening Group Discussion Oral Presentation	To create awareness of students about self communication problems for implementation of proper guidelines	2
6	Non Verbal Communication, Dress Code, Self Awareness and Self Presentation	To develop self awareness among students	2



7	Personality Development, Pillars Of Personality Development	To create mindset of students for self development	1
8	Goal Setting –Aiming high setting goals, zeal and passion building	To enhance awareness among students about self responsibilities	1
9	Habits and Traits , Meaning and concept of habits Developing effective Habits: Behaviour and Character.	To develop introspection among students	1
10	Self Introspection Self-Assessment: Meaning, importance, self Discovery, Self Actualization and self development	To develop introspection among students To create self awareness among students	2
11	Effective Speaking, Stage Skills, Public Speaking, Interview Skills	To develop confidence	1
12	Resume Writing, Interview Skills	To develop presentation skills	1
13	Drafting of Job Application Letters, Portfolio etc	To enhance writing skill	1
14	Drafting of Business Letters: 1) Enquiry Letters 2) Replies to Enquiry Letters 3) Order Letters 4) Credit and Status Enquiries 5) Sales Letters	To improve writing skill	2

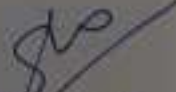





15	New Technologies in Business Communication:	To develop technological ability	1
	Various social medias of communication	To Study the pros and cons of social media	1
16	Self Introduction: Meaning, tips for effective self introduction, Self Acceptance, Awareness, Self Knowledge, belief, confidence, criticism and self examination.	To enhance confidence and self duties for personnel growth	1
17	Defining Success and Failure : Real or Imaginative, obstacles to success, factors and qualities that make person successful	To generate interpersonal skill among students	1
18	Self Esteem and Empathy	To create self awareness among students	1
19	Learning and Study Skills	To enhance self-responsibilities among students	1
20	Building Professional personality and Communication	To generate self-liabilities among students	1

21	Report Writing and Internal Correspondence	Meaning and Significance; Structure of Reports; Negative, Persuasive and Special Reporting; Press Releases , Import Export Trade.	2
		Informal Report – Proposals; Formal Reports; Project Report	
		Introduction and Essential elements of Report writing.( Reporting for a meeting)	
		Organization of Press Report. Office Memo (Memorandums) Office Orders.	
22	Recent Trends in Business Communication	Internet: Email, Websites, Social Media Network (Twitter, Face book, LinkedIn, You tube, Whats App) Google Sheet, Google Slide, Google Class Room, , Video. Google Doc, Google Form, conferencing, Meeting through Zoom App, Google meet App ,Cisco Webex meetings App. Online Conference.	2
23	Types and Drafting of Business Letters	Enquiry Letters ,Replies to Enquiry Letters Order Letters	1
		Credit and Status Enquiries, Sales Letters: Complaint Letters	
		Collection Letters: Circular Letters	
24	Writing Formal Mails and Blog writing.	Essential elements of mail, Format of mail.	1
		Introduction and meaning of Blog. Writing a blog.	

  
 Head-Department of Commerce  
 Waghire College, Saswad

  
**Vice-Principal**  
 Waghire College, Saswad  
 Tal. Purandar, Dist. Pune.

  
**PRINCIPAL**  
 Waghire College, Saswad,  
 Tal. Purandar, Dist. Pune

# ADD ON COURSE : TY B.COM

## FINANCE INVESTMENT & GST SYLLABUS WITH INTERVIEW SKILL



### CHAPTER 1: SCOPE AND OBJECTIVE OF FINANCIAL MANAGEMENT

- Meaning of Financial Management
- Considerations /Aspects Involved In Procurement of Funds
- Objectives of Financial Management

### CHAPTER 2: TYPES OF FINANCING

- Business Finance
- Methods of Raising Short-Term Finance
- The Methods of Raising Medium/ Long Term Finance Are

### CHAPTER 3: FINANCIAL MARKETS

- Capital Market
- Money Market
- Debt Market
- Equity Market (Also Called Common Stock)
- Derivative Market
- Commodity Market

### CHAPTER 4: CAPITAL STRUCTURE & CAPITAL BUDGETING

- Time Value of Money
- Net Present Value (NPV)

### CHAPTER 5: RATIO ANALYSIS

- Types of Ratio
- Liquidity Ratios
- Profitability Ratios
- Turnover / Activity/ Performance Ratio

### CHAPTER 6: INVESTMENT OPTIONS

- Public Provident Fund
- Equity Shares (Stocks)
- Company Fixed Deposits
- Unit linked Insurance Plans (ULIP)
- Investment in Bonds
- Senior Citizens' Saving Scheme (SCSS)

CHAPTER 7:

## MUTUAL FUNDS

- Mutual Funds
- A Systematic Investment Plan (SIP)



CHAPTER 8:

## DERIVATIVES

- What Is the Use of Derivatives?
- What Are the Different Types of Derivative Contracts?

CHAPTER 9:

## TYPES OF ACCOUNTS/DEPOSITS IN BANK/ TYPES OF LOANS/ TYPES OF INSURANCE/ GOVERNMENT SCHEMES

- Current Account; Savings Account; Recurring Deposit Account; Fixed Deposit Account; Flexi Fixed Deposit Account
- Home Loan; Education Loan; Car Loan or Vehicle Loan
- Post Office Savings Account; 5-Year Post Office Recurring Deposit Account (Rd); Post Office Time Deposit Account (TD); Post Office Monthly Income Scheme Account (MIS); Senior Citizen Savings Scheme (CSS); 15-Year Public Provident Fund Account (PPF)
- National Savings Certificates (NSC); Kisan Vikas Patra (KVP); Sukanya Samridhi Accounts (SSA)
- Insurance Policies — Categorization 1. Life Insurance 2. General Insurance
- Atal Pension Yojana
- Pradhan Mantri Gramin Awaas Yojana
- Pradhan Mantri Matritva Vandana Yojana

CHAPTER 10:

## SCRUTINY & ANALYSIS OF BALANCE SHEET AND P&L A/C

CHAPTER 11:

## FREQUENTLY ASKED QUESTIONS IN AN INTERVIEW

- Tell me a little about yourself. ...
- What are your biggest weaknesses? ...
- What are your biggest strengths? ...
- Where do you see yourself in five years? ...
- Out of all the other candidates, why should we hire you? ...
- How did you learn about the opening? ...
- Why do you want this jobs?
- What do you consider to be your biggest professional achievement?
- Describe your dream job
- What is your leadership style?
- Tell me about a time you disagreed with a decision. What did you do?
- Tell me how you think other people would describe you?
- What can we expect from you in your first three months?

Head-Department of Commerce  
Waghire College, Saswad

Vice-Principal  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

PRINCIPAL  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune

Pune District Education Association's

**Waghire College of Arts, Commerce and Science,  
Saswad**

**Department of Commerce**

**Add On Course (2023-24)**

**Syllabus**

**ADD ON COURSE : F.Y.B.I.A.**

**Add On Course: Sem 1-Value education and gender equality 2**



**Objectives of the scores:**

the course is designed to the indicate the values which are an utmost need of the hour to the overcome various challenges. the students will learn to the adopt and implement the suitable values at appropriate time. Understand various challenges in value adoption in this contemporary world. use the reflection method to explore values from inside out.

The court is expected to aquatint student with the core values such as physical mental and spiritual aspect of personality developing respect for the dignity of individual and society inculcation of spirit of the Patriotism and national integrity and developing tolerance I should understanding of different it religious Faiths as well. The course will help students to be a better human being and a strong pillar of society.

**Course contents:**

**1.Values excellence in life:**

Developing values, personal values, family values, and professional values.

**2.Life Skills:**

Motivational skills communication skill lifestyle modification. Accessibility and addiction. Environmental Awareness.

**3. Spiritual Education:**

Different schools of meditation., exploring the self, universal concept of the supreme, changing the belief system. Self Esteem free living.

## Methods of Instruction


1. Lecture
2. Class discussion
3. Role plays
4. Guest speakers
5. Written assignments Videos



## Certification:

The college needs to provide 'Course Completion Certificate' to every student who completes the course successfully. The certificate must contain the grade obtained by the student in the examination.

  
Head-Department of Commerce  
Waghire College, Saswad

  
Vice-Principal  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

  
PRINCIPAL  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

Pune District Education Association's

**Waghire College of Arts, Commerce and Science, Saswad**

**Department of Commerce**

**Add On Course (2023-24)**

**Syllabus**

**ADD ON COURSE : F.Y.B.B.A.  
Sem-II Communication Skills For Managers**



Sr.No.	Subject Name
1	Communication importance, process and elements
2	Organizational Communication
3	Verbal Communication
4	Written communication
5	Nonverbal Communication
6	Communication Styles
7	Feedback in communication
8	Listening in Communication
9	Assertive Communication
10	Persuasion Skills
11	Presentation skills
12	Problems or Barriers to Effective Communication
13	Effective communication

  
Head-Department of Commerce  
Waghire College, Saswad

  
Vice-Principal  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

  
PRINCIPAL  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.

## Social Economic Development

### INDEX

Sr. No.	Chapter	Practical	Hours
1	<b>Introduction to Social Economic Development</b> <ul style="list-style-type: none"> <li>• Definition and Scope of Social Economic Development</li> <li>• Historical Perspectives and Theoretical Frameworks (e.g., Modernization Theory, Dependency Theory, Sustainable Development)</li> <li>• Key Indicators of Development (GDP, HDI, Gini Coefficient, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Case Study Analysis:</b> Examine a successful and a challenging case of social economic development from different countries. Discuss the outcomes and lessons learned.</li> <li>• <b>Group Activity:</b> Identify key indicators and challenges in different countries/regions using provided data.</li> </ul>	4
2	<b>Policy and Planning</b> <ul style="list-style-type: none"> <li>• Policy Formulation and Implementation</li> <li>• Strategic Planning for Economic Development</li> <li>• Role of Government, NGOs, and Private Sector</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Workshop:</b> Develop a mock economic development plan for a specific region or community, addressing key challenges and opportunities.</li> <li>• <b>Guest Speaker:</b> Local policy maker or development expert shares insights on real-world policy and planning experiences.</li> </ul>	4
3	<b>Economic Theories and Models</b> <ul style="list-style-type: none"> <li>• Micro and Macro Economic Models</li> <li>• The Role of Markets and Institutions</li> <li>• Economic Growth vs. Economic Development</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Simulation Exercise:</b> Use a simulation tool to model economic scenarios and observe the impacts of different policy decisions on economic indicators.</li> <li>• <b>Data Analysis:</b> Analyze economic data using software (e.g., Excel) and interpret findings.</li> </ul>	6
4	<b>Social Development and Equity</b> <ul style="list-style-type: none"> <li>• Concepts of Social Justice and Equity</li> <li>• Gender, Poverty, and Education</li> <li>• Health and Well-being</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Field Research:</b> Conduct a survey or interviews on a social development issue in a local community. Analyze and present findings.</li> <li>• <b>Debate:</b> Discuss policies that effectively address social equity and inclusion.</li> </ul>	4
5	<b>Sustainable Development and Environmental Considerations</b> <ul style="list-style-type: none"> <li>• Principles of Sustainable Development</li> <li>• Environmental Impact and Management</li> <li>• Climate Change and Economic Development</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Project Work:</b> Create a sustainability plan for a community or organization, including environmental, social, and economic dimensions.</li> <li>• <b>Site Visit:</b> Visit a local sustainability initiative or green project and discuss its impact and challenges.</li> </ul>	4
6	<b>Monitoring, Evaluation, and Impact Assessment</b> <ul style="list-style-type: none"> <li>• Methods for Monitoring and Evaluation (M&amp;E)</li> <li>• Key Performance Indicators (KPIs) and Impact Assessment</li> <li>• Reporting and Accountability</li> </ul>	<ul style="list-style-type: none"> <li>• <b>M&amp;E Plan Development:</b> Develop an M&amp;E plan for a hypothetical or real development project.</li> <li>• <b>Case Study Review:</b> Analyze a completed project's M&amp;E report and evaluate its</li> </ul>	4
7	<b>Integrative Project and Presentations</b> <ul style="list-style-type: none"> <li>• Overview of Project Integration and Presentation Skills</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Final Project:</b> Groups or individuals present a comprehensive development plan that integrates all course components. This project should include an analysis of economic, social, and environmental factors.</li> <li>• <b>Feedback Session:</b> Peer and instructor feedback on presentations and projects.</li> </ul>	4

**HEAD**

**Dept. of Economics**  
Waghire College, Saswad,  
Dist. Pune





**Pune District Education Associations  
Waghire College of Arts, Commerce and Science, Saswad  
Department of Tourism And Hospitality Management**



**T.Y. B Voc. Tourism And Hospitality Management**

**A) Title of the Course: Add on Certificate Course in Tourist Guide ship**

**B) About:** To collect skills in Tourist Guide ship to help you stand out from other applicants during your job search or take on additional responsibilities in your current position or if you want to run tourism business. Tourism experts teach you key concepts like Tour, Tourism And Tourist .A tourist Guide is someone who points out the way and leads others on a tour .Generally a tourist guide will work at a specific location, city and provenance .in some cases, guides qualify to guide throughout an entire country.

**Learning Objectives:**

- Read and interpret parameters/documents, plan and organize work processes, identify necessary materials and tools;
- Perform tasks with due consideration to safety rules, accident prevention regulations and environmental protection stipulations;
- Apply professional skill, knowledge & employability skills while performing jobs.
- Document the parameters related to the task undertaken
- Good skill levels and accuracy in the field of work/ assignments.
- A good level of neatness and consistency to accomplish job activities.
- Little support in completing the task/job.

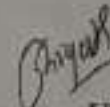
A) Content/ Syllabus:

Sr. No.	Chapter	Topics	Lectures
1	Enumerate the Duties and responsibilities of Tourist Guides.	Familiarize with the Significance of Training in the Tourist industry	2 hrs
2	Assess the types of tourists visiting different places and ascertain their needs.	The demand, infrastructure facilities, types of tourist visiting different places & prepare a report  Make a survey of any 10 places of tourist interest in state to know about their perceptions about availability of accommodation, transportation & other infrastructure facilities	2 hrs
3	Motivate tourists visiting different places and promote tourism	Motivation of different types of Tourists visiting different places Visit to Railway Station/Airlines to find out different packages offered to promote tourism	2 hrs
4	Identify different categories of accommodation available in the city and different modes of transport available for tourist	Study of tourist facilities available in state  Collect the information regarding different categories of accommodation available in the city  Collect information regarding different modes of Transport Available for the tourist	2 hrs
5	Prepare a project report on travel destinations	Prepare project report on travel destinations covering history	3 Hrs
6	Interact with different transportation agencies like airline, Railways, taxies etc. to find out their routes, timings of flights and Trains, The fares of different classes of airlines, trains& rental taxis including Radio cabs.	Operations & understand organization & role of travel Agency  Interact with different transportation agency like airline, Railways, taxies etc. to find out their routes, timings of flights and Trains, The fares of different classes of airlines, trains& rental taxis including Radio cabs	2 hrs
7	Plan the inbound and out bound Tour programmer for Indian Nationals in India	Tour planning inbound and out bound Programme for Indian National in India depending upon cost, mode of transport etc	2 hrs

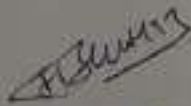
8	Plan tour programme for inbound and out bound foreign nationals taking into consideration factors such as (food habit, sensitivity, interpreter, caterer etc	<p>Practical exercises/ field visits to know the procedure for booking accommodation in a hotel for a tourist</p> <p>Visit to the Passport Office to learn the procedure of obtaining passport for a tourist.</p> <p>Tour planning programme for inbound and out bound foreign nationals taking into consideration factors such as (food habit, sensitivity, interpreter, caterer etc</p>	2 hrs
9	Perform bookings, cancellation, changing of tickets & concession given in Railways	<p>Exercises in reading timetable to know the types of trains, class of travel, types of fare &amp; use of Railway Time Table</p> <p>Visit to a Railway station to study the procedure for bookings, cancellation, changing of tickets &amp; concession given in different respect</p>	2 hrs
10	Prepare handouts on present & future tourism zones as specified by WTO, IATA, Geography, PATA areas	<p>Prepare handouts on present &amp; future tourism zones as specified by WTO, IATA, Geography, PATA areas</p> <p>Tourist generating regions to India and preferred tourist destination</p>	2 hrs
11	Carryout survey of tourists at a tourist place to prepare their profile and arrange site-seeing tours to local boys and girls to a tourist place	<p>Make a survey of tourists at a tourist place to prepare their profile</p> <p>Arrange site-seeing tours to local boys and girls to a tourist place</p> <p>Communication skill, imparting running comments of the area concerned.</p>	3 hrs
12	Plan and prepare the advertisements for newspapers, magazines etc. and make brochures for tourist office, hotels, etc. for tour promotion of tourist activities	<p>Collection of advertisements from newspapers, magazines and making an analysis of the same</p> <p>Collection of brochures from tourist office, hotels, etc. to understand tour promotion of tourist activities is being done</p>	3 hrs
13	Draw charts on tourism systems interrelating tourism market, transportation, destination and marketing in the context of India's popular tourism states	<p>Draw map of India and locate major tourist destination and adjoining tourism market</p> <p>Study tours to locate tourist organization tourist offices, regional tourist offices, Directorate of Tourism, etc. to analyse their strength and weaknesses in attracting serving tourists</p> <p>Draw charts on tourism systems interrelating tourism market, transportation, destination and marketing in the context of India's popular tourism states</p>	3 hrs

**B) Learning outcomes:**

1. Enumerate the Duties and responsibilities of Tourist Guides.
2. Assess the types of tourists visiting different places and ascertain their needs.
3. Motivate tourists visiting different places and promote tourism.:
4. Identify different categories of accommodation available in the city and different modes of transport available for the tourists.
5. Prepare a project report on travel destinations covering history.
6. Interact with different transportation agencies like airline, Railways, taxies etc. to find out their routes, timings of flights and Trains, the fares of different classes of airlines, trains & rental taxis including Radio cabs.
7. Plan the inbound and out bound Tour programmer for Indian Nationals in India.
8. Plan tour programme for inbound and out bound foreign nationals taking into consideration factors such as (food habit, sensitivity, interpreter, caterer etc.)
9. Perform bookings, cancellation, changing of tickets & concession given in Railways.
10. Perform bookings, cancellations and changing of air tickets & the concessions given.



**Prof. Sangram Vishwas Nigade**



**Head**

Dept. of Tourism & Hospitality Management  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune



**Principal**

Waghire College, Saswad,  
Tal. Purandar, Dist. Pune



**Pune District Education Associations**  
**Waghire College of Arts, Commerce and Science, Saswad**  
**Department of Tourism And Hospitality Management**



**S.Y. B Voc. Tourism and Hospitality Management**

**A) Title of the Course: Addon Certificate Course in Rural Tourism**

**About:** The objectives of the course is to familiarize students with principles and relationship between tourism and agricultural activities. The basic terminology used in these very complex phenomena. We carefully analyze different countries' development experiences during the course.

**A) Learning Objectives:**

- i. To introduce the students to the basic concepts in Agro-Tourism.
- ii. To orient the students about significance of Agro-Tourism.
- iii. To Aware the students about different perspectives of Agro-Tourism.
- iv. Understand the role of value added products to both tourism and agricultural products.
- v. Identify multiple career opportunities in Tourism and Agro-Tourism.

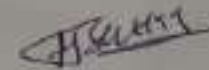
**A) Content/ Syllabus:**

Sr. No.	Chapter	Topics	Lectures
1	Introduction to the course	Concept of agro-tourism-definition, nature and scope of agro tourism	3hrs
2	Introduction to the background	Concept of rural tourism	2 hrs
3	Agro-Tourism	Types of agro-tourism, Concept of rural tourism, Concept of food and agriculture tourism.	3 hrs

4	Profiling the tourist	Age, sex, life cycle, education, employment, income, satisfaction and expectations, values, purpose of visit, accommodation, duration of stay, preferences and perceptions regarding area management, environmental concerns, involvement and responsibility, motivations, etc.	3hrs
5	Type of resources	What kind and type of resources are provided by agricultural traditions and their potentials for sustainable tourism development?	2 Hrs
6	Requirements facilities for Agro-TourismCenters.	Who Can Start Agro-Tourism Centers. Requirements for Agro-Tourism Centers- Infrastructure Facilities, Facilities should Provide, Other Miscellaneous.  Benefits of Agro-Tourism Centers. Problems of the Agro-Tourism centers.	3hrs
7	Activities in Agro-Tourismcenters.	A) Daily activity in the agricultur farm/AgroTourismcenters like, Animal Feeding. Guided Crop/vegetables/fruits farms visits and tour. Watching domestic animals and how to care for cattle. Harvest Festival. Rural Festival/Jatra. Farmer's markets. Milking the Cow and Buffalos. Religious Temple visits.	3 hrs
8	New type of offers	Festivals, agricultural exhibitions and shows, tasting events and programs, the maticroutes,special markets and restaurants,etc.	3hrs
9	Case studies	new approaches to community development and marketing management and programs.	3 hrs
10	Agro-Tourism policies.	Agro-Tourism policies in India. Agro-Tourism policies in Maharashtra state. a. Maharashtra krishi paryatan vistar yojana- b. Role of Agro-Tourism Development Corporation.	3 hrs
11	Field Visit/Study Tour.	Field visits to major local agro-tourism centers. On completion of each tour the students have to submit a tour report along with an oral presentation. These reports will be treated as assignments, which would carry scores.	2 hrs

**Programme outcomes:**

- Define agro-tourism and food tourism and articulate the latest trends and changing demographics.
- Discuss interdisciplinary academic approaches, theories and critical lenses on tourism.
- Explain the regulations, impediments, key organizations and partnerships required for small scale farmers to get involved with tourism opportunities.
- Understand the role of value added products to both tourism and food security.
- Link the promotion of sustainability and community resilience to agri- and food tourism.
- Identify multiple career opportunities in Tourism and Agro-Tourism

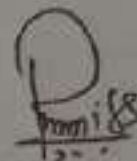


**Prof. Bhutkar Harish Vijaykant**



**Head**

Dept. of Tourism & Hospitality Management  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune



**Principal**

Waghire College, Saswad  
Tal. Purandar, Dist. Pune

Pune District Education Association's

**Waghire College of Arts, Commerce and Science, Saswad.**

Department of B.Voc.

**Retail Management**

Title of the Course: Add on Certificate Course in E-Commerce

**A. Objectives:**

- To understand the fundamental principles of e-commerce.
- To learn about different e-commerce business models and strategies.
- To gain insight into the technological infrastructure supporting e-commerce.
- To explore the legal, ethical, and security issues in e-commerce.
- To develop skills for designing and managing e-commerce websites.
- To analyse current trends and future directions in e-commerce.

**B. Syllabus:**

Unit No	Topic	Lectures
1	<b>Introduction to E-Commerce</b> - Definition and scope of e-commerce - History and evolution of e-commerce - Benefits and limitations of e-commerce - Current trends and future outlook of e-commerce	5hrs
2	<b>E-Commerce Business Models</b> - Business-to-Consumer (B2C) - Business-to-Business (B2B) - Consumer-to-Consumer (C2C) - Consumer-to-Business (C2B) - Case studies of successful e-commerce businesses	5hrs
3	<b>Technological Infrastructure for E-Commerce</b> - Internet and Web protocols - E-commerce software and platforms - Web hosting and cloud services - Payment systems and gateways	5hrs
4	<b>Designing E-Commerce Websites</b> - Principles of effective web design - User experience (UX) and user interface (UI) design - Tools and platforms for web development	5hrs



	- Search Engine Optimization (SEO) strategies	
5	<b>Online Payment Systems</b> - Types of online payment methods - Credit card transactions and digital wallets - Cryptocurrencies and blockchain technology - Security and fraud prevention in online payments	5hrs
6	<b>Legal and Ethical Issues in E-Commerce</b> - E-commerce regulations and compliance - Intellectual property rights - Privacy and data protection laws - Ethical issues in online business	5hrs

F 

**Head**

Dept. of Retail Management  
 Waghire College, Saswad,  
 Tal. Purandar Dist. Pune.



**Vice-Principal**

Waghire College, Saswad  
 Tal. Purandar, Dist. Pune.



**PRINCIPAL**

Waghire College, Saswad,  
 Tal. Purandar, Dist. Pune.

Pune District Education Association's

**Waghire College of Arts, Commerce and Science, Saswad.**

**Department of B.Voc.**

**Computer Software Development**

**Title of the Course: Add on Certificate Course in Digital Communication and Networking**

**A. Objectives:**

1. To introduce to all aspects of data communication system
2. To introduce various digital modulation schemes
3. To identify the need of data coding and error detection/correction mechanism.
4. To study bandwidth utilization techniques : multiplexing and Spectrum spreading
5. To know data link layer protocol: Media Access Control
6. To study OSI and TCP/IP models of Networking.

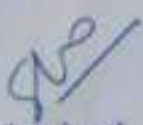
**B. Syllabus:**

Sr. No.	Chapter	Topics	Lectures
1	Introduction to Electronic Communication	Introduction to Communication: Elements of Communication system, types of noise sources, Electromagnetic spectrum, signal and channel bandwidth, Types of communication: simplex, half duplex, full duplex, baseband and broadband, Serial communication: asynchronous and synchronous,	6 hrs
2	Introduction to computer networks	Types of networks : LAN, MAN, WAN, Wireless networks, Switching, Internet, Network topology : point to point, Star, Ring, Bus, Mesh, Tree, Daisy Chain, Hybrid Network devices : Repeater, Switch, Networking cables, Router, Bridge, Hub, Brouter, Gateway. Wired LANs:- Ethernet: Ethernet protocol, standard Ethernet, 100 MBPS Ethernet, Gigabit Ethernet.,	8 hrs

3	Lower Layers	<p>2.1 Communication at the physical layer, data rate limits - Noiseless channel (Nyquist bit rate), noisy channel (Shannon capacity), Performance - bandwidth, throughput, latency, bandwidth-delay product, jitter</p> <p>2.2 Design issues of Data Link Layer, Services - Framing, flow control, error control, congestion control, Link layer addressing</p> <p>2.3 Framing Methods - Character Count, Flag bytes with Byte Stuffing, Flags bits with Bit Stuffing, Physical Layer Coding Violations</p> <p>2.4 The Channel allocation problem, Static and dynamic allocation, Media Access Methods - Taxonomy of multiple-access protocols</p> <p>2.5 Switching and TCP/IP layers, Types - circuit switching, packet switching and message switching</p> <p>2.6 Wired LANs - Standard Ethernet characteristics, Addressing, Access method, implementation, Fast and Gigabit Ethernet</p> <p>2.7 Wireless LANs - Architectural comparison, Characteristics, Access control, IEEE 802.11 architecture, Physical layer, MAC sublayer, Bluetooth architecture, Layers .</p>	8 hrs
4	Network Layer	<p>3.1 Network layer services - Packetizing, Routing and forwarding, other services</p> <p>3.2 Open and closed loop congestion control</p> <p>3.3 IPv4 addressing- Address space, classful addressing, Subnetting, Supernetting, classless addressing, Network address resolution (NAT)</p> <p>3.4 Forwarding of IP packets- based on destination address, based on label</p> <p>3.5 Network Layer Protocols- Internet Protocol (IP), IPv4 datagram format, Fragmentation, options</p> <p>3.6 Mobile IP-addressing, agents, Three phases</p> <p>3.7 Next Generation IP- IPv6 address representation, address space, address types, IPv6 protocol, packet format, extension header, Difference between IPv4 and IPv6</p> <p>3.8 Routing - General idea, Algorithms - Distance vector routing, link state routing, path-vector routing</p>	8 hrs
<b>Total</b>			30

  
Head

B.VOC in Department of Computer Software  
Development, Waghire College of Arts,  
Commerce & Science, Saswad - 412301.



**Vice-Principal**  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.



**PRINCIPAL**  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune

Pune District Education Association's  
**Waghire College of Arts, Commerce and Science, Saswad**  
**Department of BBA [CA]**  
**Add On Course T.Y. B.B.A (CA)**  
**Project Development Skills**



**Total Contact Hours: -30**

**Total Credits: - 2**

Pre requisite: Knowledge of Computer Languages

Objectives:

- To understand how to write Resume
- To understand how to draft Business Letter & synopsis
- To understand SDLC

Unit	Topics	No. of Lectures
1	<b>Business Communication</b> Methods and Channels of Communication Oral & Written Communication Overcoming barriers of Communication Soft Skills: Grooming Manners and Etiquettes, Effective Speaking Interview Skills, Listening Group Discussion Oral Presentation Non Verbal Communication, Dress Code, Self Awareness and Self Presentation	5
2	<b>Drafting Skills</b> Introduction to Biodata, Resume and Curriculum Vitae Drafting of Job Application Letters, Portfolio etc Drafting of Business Letters: 1) Enquiry Letters 2) Replies to Enquiry Letters 3) Order Letters 4) Credit and Status Enquiries 5) Sales Letters Self Introduction: Meaning, tips for effective self introduction, Self Acceptance, Awareness, Self Knowledge, belief, confidence, criticism and self examination	7
3	<b>Project Development Skills</b> Project topic introduction Synopsis Introduction Synopsis Writing Introduction to Front End/Back End Technology Introduction to Programming Software program writing skill Interview techniques	5
4	<b>SDLC Techniques</b> Software analysis Software design Software Coding Software Implementation Software Testing Software Deployment Software Maintenance	13

  
**Head**  
**B.C.A. Department**  
**Waghire College Saswad**

  
**PRINCIPAL**  
**Waghire College, Saswad**  
**Tal. Purandar, Dist. Pune.**



Pune District Education Association's  
**Waghere College of Arts, Commerce and Science, Saswad**  
**Department of BBA[CA]**  
**Add On Course S.Y.B.B.A (CA)**  
**Basics of Angular JS**

Total Contact Hours:-30

Total Credits:- 2

**Pre-requisite / Target Audience:** Working knowledge of HTML and JavaScript.


**Objectives:**

- Understand Client Side MVC and SPA
- Explore Angular JS Component
- Develop Angular JS Single Page Application
- Create and bind controllers with Javascript
- Apply filter in Angular JS application

Unit	Topics	No. of Lectures
1	<b>AngularJS Core Concepts:</b> 1.1 What is Angular JS? 1.2 Difference between Javascript and AngularJS. 1.3 Advantages of Angular	5
2	<b>AngularJS Directives and Expressions:</b> 2.1 Understanding attributes ng-app, ng-init, ng-model, ng-controller, ng-bind, ng-repeat, ng-show, ng-readonly, ng-disabled, ng-if, ng-click 2.2 Working with directives	10
3	<b>AngularJS Modules, Controller, View and Scope:</b> 3.1 Angular Modules 3.2 Angular Controller 3.3 Angular View 3.4 Scope hierarchy	5
4	<b>Filter, Forms and Ajax Filters</b> 4.1 Built-in filters -uppercase and lowercase filters, date, currency and number formatting. 4.2 AngularJS Forms -Working with angularJS forms, model binding, form controller Using CSS classes, form events, custom model update triggers, custom validation, \$http service, 4.3 Ajax implementation using \$http	10

**Reference Books:**

1. Beginning Angular with Typescript (updated to Angular by Greg Ekin)
2. Mastering Web Application Development with Angular JS by Pawel Kozłowski, Peter Bacon Darwin

  
**Head**  
**B.C.A. Department**  
**Waghere College, Saswad**

  
**PRINCIPAL**  
**Waghere College, Saswad**  
**Tal. Purandar, Dist. Pune.**

Pune District Education Association's  
**Waghire College of Arts, Commerce and Science, Saswad**  
**Department of Commerce**  
**Add On Course (2023-24)**  
**Syllabus**  
**Subject: Office Management**  
**Class:- F.Y. B.B.A(CA)**

<b>Topic No.</b>	<b>Content</b>	<b>Objectives</b>
1	Introduction of Business Communication:	To understand various communicative aspects
2	Methods and Channels of Communication:	To know about various communication Channels
3	Oral & Written Communication	To study the Functioning of various types of oral communication
4	Overcoming barriers of Communication	To find out solutions on communication problems
5	Soft Skills: Grooming Manners and Etiquettes, Effective Speaking Interview Skills, Listening Group Discussion Oral Presentation	To create awareness of students about self communication problems for implementation of proper guidelines
6	Non Verbal Communication, Dress Code, Self Awareness and Self Presentation	To develop self awareness among students
7	Resume Writing	To make Resume
8	Drafting of Job Application Letters, Portfolio etc	To enhance writing skill
9	Drafting of Business Letters: 1) Enquiry Letters 2) Replies to Enquiry Letters 3) Order Letters 4) Credit and Status Enquiries 5) Sales Letters	To improve writing skill
10	Self Introduction: Meaning, tips for effective self introduction, Self Acceptance, Awareness, Self Knowledge, belief, confidence, criticism and self examination	To enhance confidence and self duties for personnel growth
11	Introduction to Biodata, Resume and Curriculum Vitae	To understand difference between them
12	Interview Skills	To enhance skill to face interview
13	Project topic introduction	To learn project name and its importance in IT sector.
14	Project topic choice	To understand which type of project is to be developed
15	Synopsis Introduction	To understand the concept of synopsis
16	Synopsis Writing	To understand how to write synopsis.
17	Introduction to Technology	To understand software technology
18	Introduction to Front end Technology	To Introduction to Front end Technology
19	Introduction to Back end Technology	To Introduction to Back end Technology
20	Introduction to Programming	To learn basics of Programming .

Pune District Education Association's  
Waghire College of Arts, Commerce & Science, Saswad.

**Department of Geography**

**Add-on Course in Geography for FYBSc.**

**Name of Subject : Fundamentals of Commercial Geography.**

**(Total 30 Lectures)**

**(2 Credits)**

**Objectives:**

1. Develop a clear understanding of key concepts such as trade, commerce, markets, and economic activities within geographical contexts.
2. Analyze global trade patterns, including the flow of goods, services, and capital across regions and countries.
3. Study the spatial distribution of economic activities such as agriculture, industry, services, and their impact on regional and global economies.
4. Investigate market structures, market segmentation, consumer behavior, and their implications for commercial geography.
5. Evaluate the challenges and opportunities in commercial activities within different spatial contexts.

**Course Outcome:**

- CO1:** Demonstrate a thorough understanding of key concepts such as trade, commerce, markets, and economic activities within geographical contexts.
- CO2:** Analyze global trade patterns, including the flow of goods, services, and capital across regions and countries. Understand the factors influencing trade routes, trade agreements, and global supply chains.
- CO3:** Examine the spatial distribution of economic activities such as agriculture, industry, services, and their impact on regional and global economies.
- CO4:** Investigate market structures, market segmentation, consumer behavior, and their implications for commercial geography.

S.No.	Topic	Sub-topic	Total Lectures	Credit
1.	Introduction to Commercial Geography	1. Definition, scope, and importance of commercial geography. 2. Evolution of commercial geography as a discipline	10	2
2.	Globalization and Economic Geography	1. Impact of globalization on commercial activities 2. Multinational corporations and their role in global trade	5	
3.	Commercial Activities	1. Primary, secondary, and tertiary economic activities 2. Distribution and changing patterns of economic activities	5	
<b>Practical Course Work</b>				
4.	Practical Courses work & Field studies	1. To collect and analyze data related to commercial geography. 2. Collecting data through surveys, interviews, or secondary sources on topics such as trade flows, market dynamics, or regional economic development. Analyzing data using basic statistical techniques. 3. To apply GIS tools for spatial analysis in commercial geography. 4. Using GIS software to map and analyze commercial data, such as market penetration, transportation networks, or regional economic disparities. Conducting spatial analysis to understand patterns and relationships.	10	



**Dr. Tushar B. Ghorpade**  
(In-charge Faculty)

**Dr. Sampat D. Jagdale**  
Head of the Department  
Geography.



Pune District Education Association's  
Waghire College of Arts, Commerce & Science, Saswad.

**Department of Geography**

**Add-on Course in Geography for Arts Faculty.**

**Name of Subject : Fundamentals of Human Geography**

**(Total 30 Lectures)**

**(2 Credits)**

**Objectives:**

1. To comprehend the spatial distribution of human activities, such as population, settlement patterns, economic activities, and cultural landscapes.
2. To analyze how human activities shape and are influenced by the physical environment, including landforms, climate, vegetation, and natural resources.
3. To familiarize students with key geographical concepts such as location, place, region, scale, and spatial interaction, and how these concepts apply to human geography.
4. To examine the patterns and processes of population growth, distribution, migration, and demographic transitions, and their implications for societies and environments.
5. To investigate the characteristics and dynamics of urban and rural areas, including the functions of cities, urbanization processes, and the challenges associated with rural development.
6. To understand the spatial distribution of economic activities, including agriculture, industry, services, and trade, and their impact on local, national, and global scales.
7. To encourage critical thinking and analytical skills in evaluating geographic patterns, processes, and issues related to human-environment interactions, sustainability, and global interdependencies.

**Course Outcome:**

- **CO1: Knowledge of Geographical Concepts:** Demonstrate understanding of key geographical concepts such as location, place, region, scale, and spatial interaction.
- **CO2: Understanding Human-Environment Interactions:** Analyze how human activities shape and are influenced by the physical environment, including landforms, climate, vegetation, and natural resources.
- **CO3: Ability to Interpret Spatial Patterns:** Interpret spatial patterns of human activities such as population distribution, settlement patterns, economic activities, and cultural landscapes.
- **CO4: Analysis of Population Dynamics:** Analyze patterns and processes of population growth, distribution, migration, and demographic transitions at various scales.

S.No.	Topic	Sub-topic	Total Lectures	Credit
1.	Introduction to Human Geography	1. Definition and scope of geography 2. Branches of geography 3. Importance of geography in understanding human-environment interactions.	10	2
2.	Human Settlements	1. Types and patterns of settlements 2. Rural-urban fringe 3. Problems of urbanization and remedial measures.	5	
3.	Human Activities	1. Primary, secondary, and tertiary activities 2. Distribution and changing patterns of economic activities	5	
<b>Practical Course Work</b>				
3.	Practical Courses work - Field work and Observation	1. Conducting field visits to observe and analyze geographical features and phenomena. 2. Field sketches and annotation of field observations. 3. Collecting geographical data through surveys, interviews, or secondary sources. 4. Analyzing data using basic statistical techniques and geographic information systems (GIS).	10	

**Dr. Sampat D. Jagdale**  
Head of the Department  
Geography.

**PDEA'S**  
**WAGHIRE COLLEGE OF ARTS, COMMERCE & SCIENCE, SASWAD**  
**TAL-PURANDAR, DIST-PUNE**

**Add on course: Counseling Skill**

Academic Year: 2023-24

**Introduction:** This comprehensive 30-hour course is designed to enhance the student's skills and knowledge in Counseling Skill.

**Objectives of certificate course**

1. Understand the fundamentals of active listening and empathetic communication.
2. Demonstrate proficiency in basic counseling techniques appropriate for peer support.
3. Recognize and apply ethical principles and boundaries in peer counseling relationships.
4. Identify common issues and challenges faced by peers and develop strategies to address them.
5. Cultivate self-awareness and self-care practices to maintain personal well-being while supporting others.
6. Collaborate effectively with peers and professionals in referring individuals to appropriate resources.

**Certificate Course Outcomes**

- 1) Student improves their active listening, empathy, and non-judgmental communication.
- 2) Students improve their Skill.
- 3) Students improve their communication skills
- 4) Students improve their mental health
- 5) Develop self-awareness and self-care practices to maintain emotional well-being while supporting peers.

No. of Hours= 30

Sr.no	Topic	Sub topic	Learning points	Periods
1	<b>Introduction to Counselling Psychology</b>	Meaning, Definition & Goals Historical Background	Origin of Counseling within Philosophy and Medicine. Influence from Psychology. Mental health development. The guidance movement and other influences Difference between Counseling and other associated helping professions (psychotherapy, psychiatry, social work, guidance etc.)	6

2	<b>Counseling Process</b>	Settings for counseling Steps in counseling Therapeutic relationship	The importance of relationship, components of relationship, Facilitative conditions for the counseling relationship	6
3	<b>Counseling Approach</b>	Insight oriented Psychodynamic Approach Action oriented & other approaches Behavioral Approach	Psychoanalytic, Adlerian Humanistic Approach: Existential, Client-centered, Gestalt Operant-Conditioning, Classical-Conditioning, Cognitive Approach: Cognitive Therapy, Rational emotive therapy, Other Approaches: Narrative Therapy, Expressive Therapy, and Biofeedback.	6
4	<b>Current Issues in Counseling</b>	Ethical Issues, recent trends Legal Issues, counseling diverse population	Professional Codes, Our divided loyalties, Areas of ethical difficulty, Advice for the passionately committed counseling student Mental Health Counseling, Gender bias, counseling the aged, the ethnic minorities, and the physically challenged	6
5	<b>Counsellor and Psychotherapist</b>	understand some distinguishing features of professional counsellors and psychotherapists	Gain an introduction to professional counselling and psychotherapy requirements; gain an appreciation of the variety of helpers who use counselling skills; know some of the differences between counsellors, psychotherapists and helpers; and understand five categories of goals for using counselling skills.	6

Total Theory Lectures (in hours) =30

Method of teaching=Lecture, PPT, Use of ICT, Seminars etc.

Total Fee= Rs. 200/- per student

Number of sanctioned seats=55

**References:-**

kirt s.h. & clark: cognitive behaviour therapy for psychiatric problems.

gurman & kniskern: handbook of family therapy.

kahn m.,: between therapist and client- the new relationship- revised edition.

bryant, r.a.; moulds, m.l.; guthrie, r.m.; nixon, r.d.v. (2005). "The additive benefit of hypnosis and cognitive-behavioral therapy in treating acute stress disorder.



Course **HEAD** dinator  
DEPARTMENT OF PSYCHOLOGY  
WAGHIRE COLLEGE, SASWAD



Principal  
**PRINCIPAL**  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.

**Add-on Course**  
**Recent Trends in IT**

Course Name: Recent Trends in IT		Total Lectures (30 Hours)
<b>Course Prerequisites:</b>	<ul style="list-style-type: none"> <li>▪ Concepts of Data Structures and Design and Analysis of algorithms.</li> <li>▪ Strong Data analytics skills.</li> <li>▪ A strong mathematical background</li> </ul>	
<b>Course Outcomes:</b>	<ul style="list-style-type: none"> <li>▪ To learn about applications of AI, Search and control strategies and various AI problems .</li> <li>▪ To develop the skills to design, analyze and perform experiments on real life problems using different Neural Learning Algorithms</li> <li>▪ To conceptualize fuzzy logic and its implementation for real world applications</li> </ul>	
Chapter	Course Contents	No. of lectures
1	Introduction to recent trends 1.1 Artificial Intelligence 1.2 Neural Network 1.3 Fuzzy Set Theory	2
2	Artificial Intelligence 2.1 Introduction & Concept of AI 2.2 Applications of AI 2.3 Artificial Intelligence, Intelligent Systems, Knowledge –based Systems, AI Techniques 2.4 Early work in AI & related fields. 2.5 Defining AI problems as a State Space Search 2.6 Search and Control Strategies 2.7 Problem Characteristics 2.8 AI Problem: Water Jug Problem, Tower of Hanoi, Missionaries & Cannibal Problem	4
3	Neural Network 3.1 Introduction to ANN, 3.2 History of Neural Network, 3.3 Structure and working of Biological Neural Network 3.4 Neural net architecture, 3.5 Models of neuron-Mc Culloch & Pitts model, Perceptron 3.6 Applications of neural networks	6

4	<b>Fuzzy Set Theory</b> 4.1 Overview of Conventional Set Theory 4.2 Introduction to Fuzzy Sets, Properties of Fuzzy Sets 4.3 Operations on Fuzzy Sets, Crisp Relation, Fuzzy Relation 4.4 Tolerance and equivalence relation, Fuzzy Tolerance and equivalence relation 4.5 Fuzzy Max-Min and Max-Product Composition 4.6 Membership Functions	6
	Practical	12

## Practical

Sr. no.	Assignments
1.	a) Write a python program to add two numbers provided by user. b) Write a python program to print multiplication table for given number. c) Write a python program to find factorial of given number. d) Write a python program to print Fibonacci series.
2.	a) Write a python program to check whether the given number is prime or not. b) Write a python program to check if a number is positive, negative or 0. c) Write a python program to check if a number is even or odd. d) Write a python program to check if given number is Armstrong or not.
3.	a) Write a program to implement Fuzzy Operations Union, Intersection, Complement, Algebraic sum, Algebraic product, Cartesian product
4.	a) Write a program to implement Max-Min Composition and Max-Product Composition. b) Build simple Neural network in Python from scratch

**References:**

<b>Sr. No.</b>	<b>Title of the Book</b>	<b>Author/s</b>	<b>Publication</b>
1	Artificial Intelligence: A New Synthesis	Nilsson	Elsevier Publication
2	Artificial Intelligence with Python	Prateekjoshi	Packt Publishing Ltd
3	1. Neural Networks,	Satish Kumar	Tata McGraw Hill
4	2. Introduction to Soft Computing	Deepa&Shivanandan	Wiley Publication

  
Co-ordinator

**Co-Ordinator**  
Computer Science Faculty  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.

  
Principal

**PRINCIPAL**  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.



P.D.E.A.'s  
Waghire College of Arts, Commerce & Science, Saswad

**Department of Electronics (Computer Science)**

**F.Y.B.Sc. (Computer Science) & S.Y.B.Sc. (Computer Science)**

**Add On Course Syllabus**

(Academic Year 2023-24)

**CERTIFICATE COURSE IN**  
**INTRODUCTION TO ARDUINO UNO, IoT AND IT'S**  
**PROGRAMMING**

**SYLLABUS**



## Add-on Course

### Introduction To Ardiuno Uno, IoT And It's Programming

<b>Course Name: Introduction To Ardiuno Uno, IoT And It's Programming</b>		<b>Total Lectures (30 Hours)</b>
<b>Course Objectives:</b>	<ul style="list-style-type: none"> <li>▪ To learn and understand basics of Internet of Things.</li> <li>▪ To study applications of IoT</li> </ul>	
<b>Course Outcomes:</b>	Students will be able to <ul style="list-style-type: none"> <li>• Understand working principles of short range communication application.</li> <li>• Get introduce to upcoming technology of Internet of Things.</li> <li>• Explore themselves and develop new IoT based applications</li> </ul>	
<b>Chapter</b>	<b>Course Contents</b>	<b>No. of lectures</b>
<b>1</b>	<b>Introductionto Arduino.</b>  1.1 Introduction to Arduino. 1.2 Architecture of Arduino Uno 1.3 Software installation and Interfacing of Arduino Uno with Computer/ Laptop,	<b>4</b>
<b>2</b>	<b>Arduino Uno Interfacing-I</b>  2.1 Arduino Uno Pin Description & on board LED interfacing, Basic Syntax & Programming with Arduino Uno 2.2 Interfacing of LED & Push button with Arduino 2.3 Interfacing of Bluetooth with Arduino, Interfacing of GSM/ Zigbee with Arduino 2.4 Interfacing RF -ID card with Arduino Uno 2.5 Interfacing of DC Motor/ Stepper Motor with Arduino	<b>6</b>
<b>3</b>	<b>Arduino Uno Interfacing-II</b>  3.1 Interfacing of Temperature & Humidity Sensor with Arduino, 3.2 Interfacing of 16 X 2 LCD with Arduino 3.3 Interfacing of Potentiometer with Arduino, Interfacing of 7 – Segment Display with Arduino, LORA interfacing.	<b>6</b>
	<b>Practical</b>	<b>14</b>

## Practical

perform any seven from the following practical.

(2 Hr./Practical)

Sr. No.	Assignments
1.	Software installation and Interfacing of Arduino Uno with Computer/ Laptop.
2.	Arduino Uno Pin Description & on board LED interfacing.
3.	a) Interfacing of LED & Push button with Arduino. b) Interfacing of 7 – Segment Display with Arduino.
4.	Interfacing of Temperature & Humidity Sensor with Arduino.
5.	Interfacing of 16 X 2 LCD with Arduino.
6.	Interfacing of DC Motor/ Stepper Motor with Arduino
7.	Interfacing RF –ID card with Arduino Uno.
8.	Interfacing of GSM/ Zigbee with Arduino.
9.	Interfacing of Bluetooth with Arduino.
10.	LORA interfacing.

*Mani*  
**Co-Ordinator**  
Computer Science Faculty  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.

*P. Amis*  
**PRINCIPAL**  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

**P.D.E.A.'s**  
**Waghire College of Arts, Commerce and Science, Saswad**  
**Department of Microbiology**  
**Add on course – ' Bioinoculants- General Awareness**  
**For S.Y.B.Sc. Students**  
**(2023-2024)**

Sr. No.	Course Details	
1	<b>Duration of course</b>	Two months
2	<b>Course fees</b>	500/-
3	<b>Intake capacity of students</b>	50
4	<b>Student's eligibility</b>	S.Y.B.Sc.
5	<b>Syllabus</b>	
	<b>Theory</b>	<b>No. of lectures</b>
	1. Introduction – Bioinoculants and it's significance	01
	2. Screening and Isolation of	
	a) N <sub>2</sub> fixers	01
	b) Phosphate solubalizers	01
	c) Potassium solubalizers	01
	d) Other plant growth promoting properties	02
	3. Concept of Biofertilizers, biocontrol agents, plant growth promoters	02
	4. Laboratory level production	01
	5. Downstream processing of Biomass and Formulation	01
	<b>A) Total no. of hours required for theory</b>	10
	<b>Practical</b>	
	1. Screening and Isolation of	01
	a) N <sub>2</sub> fixers	
	b) Phosphate solubalizers	
	c) Potassium solubalizers	
	d) Other plant growth promoting properties	01
	2. Characterization and maintenance of Isolates	01
	3. Flask level production of Bioinoculants	01
	4. DSP and Formulation	01
	5. Application of Bioinoculants (Pot trial)	01
	<b>B) Total no. of hours required for practical</b>	05 x 02 Hrs x 2Days= 20
	<b>C) Total no of lecture hours required (A+B)</b>	10+20 = 30 hours

  
**Head**  
 Department of Microbiology  
 Waghire College, Saswad

  
**PRINCIPA**  
 Waghire College, Saswad  
 Tal. Purandari, Dist. Pune.



Pune District Education Association  
**Waghire College of Art's, Commerce & science, Saswad**  
Tal: Purandar, Dist: Pune 412301  
**Department of Commerce**

Name of the course : Add on Certificate

**Course in Basics of Stock Market**

**Objectives :**

- To aware students about stock market.
- To understand the Basic terminologies used in Stock Market.
- To aware about different types of analysis.
- To aware the about technical analysis and decision making

**Syllabus :**

Unit No.	Topic	No. of Lectures(in Hrs)
1	Stock Market	4
2	Different Segments of Stock Market	4
3	Types of Charts	3
4	Chart Analysis	4
5	Trend Lines	4
6	Candle stick Patterns	4
7	Indicators	4
8	Setups	3

*Gejoshi*  
Co-ordinator

*[Signature]*  
Head-Department of Commerce  
Waghire College, Saswad

*[Signature]*  
Principal  
Waghire College, Saswad

**P.D.E.A.'s**  
**Waghire College of Arts, Commerce and Science, Saswad**  
**Department of Microbiology**  
**Add-On Course – 'Techniques in Microbiology'**  
**(2022-2023)**  
**For F.Y.B.Sc. Students**

Syllabus Details	No. of lectures
<b>Theory</b>	
Learn basic techniques useful in Microbiology Laboratory	
Concept of sterilisation and Disinfection	01
Aseptic transfer techniques	01
Checking efficiency of autoclave (Chemical indicator)	01
Preparation of percent solutions (Volumetric flask)	01
Enumeration of yeasts using improved Neubauer chamber	01
Calibration of pH meter & checking of pH of natural samples - Fruit juices, milk, nutrient broth, distilled water, rain water, etc.	01
Preparation of laboratory media – Milk agar and potato dextrose agar (PDA)	01
Growth of microorganisms on natural surfaces – coconut, potato, bread	01
Cultivation and observation of protozoa – Hay infusion broth	01
Cultivation and observation of microorganisms from fermented foods (Idli batter, curd) through 100x objective – Monochrome staining	01
<b>Practical:</b>	
Learning basic techniques in microbiology: Wrapping of glassware, making cotton plugs and plugging different glassware, cleaning and washing of glassware	01
Check motility using Craige's tube method	01
Lipid granule staining	01
Demonstration of antibiotic sensitivity by disc diffusion method	01
Aseptic transfer techniques: Solid and liquid media	01
<b>Total no. Of lectures</b>	<b>30</b>

  
**Head**  
 Department of Microbiology  
 Waghire College, Saswad

  
**PRINCIPAL**  
 Waghire College, Saswad  
 Tal. Purandar, Dist. Pune

**Course No. 2 – Employability Skill Enhancement Programme**



**Objectives of the course:**

This programme is designed to aid candidates in their preparation for recruitment through campus or outside campus. The course will enable students to be a better professional through effective communication. Students will learn skills to present themselves in an effective manner while facing interviews or similar test for placements.

**Course Contents:**

- Basic Communication Skills
- Reasoning Ability
- Verbal Ability
- Personal Grooming
- Personality Development
- CV Writing Skills
- Interview Techniques

**Methods of Instruction**

- Lecture
- Class discussion
- Role plays
- Guest speakers
- Written assignments
- Videos

**Certification :**

The college needs to provide 'Course Completion Certificate' to every student who completes the course successfully. The certificate must contain the grade obtained by the student in the examination.

\*\*\*\*\*

# Waghire College of Arts, Commerce & Science Saswad

A/P - Saswad, Tal - Purandar, Dist - Pune, Pin - 412301



## Department of Commerce Academic Year-(2022-23)

### Add on Course syllabus- Entrepreneurship Development

#### UNIT I Introduction to Entrepreneurship Development

The concept Entrepreneurship - Dimensions of personality - Theories of Freud & Erickson- Significance of personality development. The concept of success and failure: What is success? - Hurdles in achieving success - Overcoming hurdles - Factors responsible for success - What is failure - Causes of failure. SWOT analysis.

#### UNIT II Self-Development Skills

Concept - Significance - Factors affecting attitudes - Positive attitude - Advantages - Negative attitude- Disadvantages - Ways to develop positive attitude - Differences between personalities having positive and negative attitude. Concept of motivation - Significance - Internal and external motives - Importance of self- motivation- Factors leading to de-motivation

#### UNIT III Entrepreneurship Self-esteem

Term self-esteem - Symptoms - Advantages - Do's and Don'ts to develop positive self-esteem - Low self-esteem - Symptoms - Personality having low self esteem - Positive and negative self esteem. Inter personal Relationships - Entrepreneurship.

#### UNIT IV Other Aspects of Entrepreneurship Development

Body language - Problem-solving - Conflict and Stress Management - Decision-making skills -Leadership and qualities of a successful leader - Character building -Team-work - Time management - Work ethics -Good manners and etiquette.

#### UNIT V Entrepreneurship Employability Quotient

Resume building- The art of participating in Group Discussion - Facing the Personal (HR & Technical) Interview -Frequently Asked Questions - Psychometric Analysis - Mock Interview Sessions.

#### UNIT VI: Self-Development Skills

Concept of Self-Development Skills - Significance - Internal and external motives - Importance of self- motivation- Factors leading to de-motivation

Head-Department of Commerce  
Waghire College, Saswad

Vice-Principal  
Waghire College, Saswad  
Tal Purandar, Dist. Pune.

PRINCIPAL  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.



Pune District Education Association's  
**Waghire College of Arts, Commerce and Science, Saswad**  
**Department of Commerce**  
Add On Course (2022-23)  
Add on Syllabus  
**Subject: Computerized Accounting**  
**Class:- T.Y. B.com**



**UNIT-I: Introduction to Computerized Accounting**

Introduction – Importance - Application - Advantages and disadvantages – Difference between Manual Accounting and Computerized Accounting — Cash and Bank Books- Rectification of Errors altering the transactions- Bank Reconciliation Statement.

**UNIT-II: Accounts with Inventory**

Creation of Stock Groups --Display of inventory reports & statements. Final Accounts and Report Generation Final Accounts of Sole Traders; Trial Balance - Profit and Loss Account - Balance Sheet Preparation of Final Accounts-Generation of Reports-Account Books - Registers - Statement of Accounts

**UNIT-III: Introduction to E-commerce**


What is E-commerce - E-commerce frame work - E-commerce consumer applications - e-commerce organization applications - Network for E-commerce - short cut keys- Voucher Entry-display - alter – delete – Features – Accounting what is information way

**Unit- IV: . E-commerce and World wide web**

E-commerce application services - display-alter-delete-Stock categories – creation - Stock items create-display-alter-delete – Godowns - Units of Measure - Inventory Vouchers Consumer to Business Transaction - Business to Business Transaction - Security on the web - Categories of Internet data and transactions

**Unit-V: - E-commerce security Issues - Secure Socket layer - Types of Electronic payment systems - E-cash - Electronic checks - Smart cards and electronic payment systems - Credit card and debit cards payment and their authentication- Features of Accounting packages. Company Creation and Accounting Masters Creation of Company- steps-selecting a company-closing a company-alter -delete a company – Accounts Groups-Predefined Groups- Ledgers – create-alter- delete, voucher types –Features- Inventory Features-Configuration menu-- Day Book.**

  
Head-Department of Commerce  
Waghire College, Saswad

  
**Vice-Principal**  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

  
**PRINCIPAL**  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.

# Career Opportunities in Banking & Finance

## Index

Sr.No.	Chapter	Activities	Hours
1	<b>Introduction to Banking and Financial Systems</b> <ul style="list-style-type: none"> <li>History of banking,</li> <li>types of financial institutions, and market structures</li> <li>Balance sheets, income statements and cash flow statements</li> </ul>	<ul style="list-style-type: none"> <li>Case studies and market analysis exercises.</li> <li>Analyzing sample financial statements.</li> </ul>	4
2	<b>Financial Analysis and Modeling</b> <ul style="list-style-type: none"> <li>Ratio analysis</li> <li>trend analysis</li> <li>financial metrics</li> <li>Financial modeling techniques.</li> </ul>	<ul style="list-style-type: none"> <li>Creating and interpreting financial ratios.</li> <li>Constructing a basic financial model for a company</li> </ul>	4
3	<b>Risk Management and Compliance</b> <ul style="list-style-type: none"> <li>Types of financial risks and risk assessment methods</li> <li>Key regulations and compliance requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Risk assessment exercises and case studies.</li> <li>Compliance scenario simulations.</li> </ul>	4
4	<b>Investment and Portfolio Management</b> <ul style="list-style-type: none"> <li>Types of investments, risk vs. return.</li> <li>Asset allocation, portfolio and diversification.</li> </ul>	<ul style="list-style-type: none"> <li>Analyzing different investment options.</li> <li>Constructing and managing a sample portfolio</li> </ul>	4
5	<b>Practical Skills and Tools</b> <ul style="list-style-type: none"> <li>Excel for financial analysis, financial software tools.</li> <li>Presenting financial information, report writing.</li> </ul>	<ul style="list-style-type: none"> <li>Hands-on exercises using financial software.</li> <li>Creating and presenting financial reports.</li> </ul>	4
6	<b>Career Development and Industry Insights</b> <ul style="list-style-type: none"> <li>Crafting a finance-focused resume, preparing for finance interviews.</li> <li>Networking strategies, current trends in finance.</li> </ul>	<ul style="list-style-type: none"> <li>Resume workshops and mock interviews.</li> <li>Networking events and industry trend discussions.</li> </ul>	4
7	<b>Capstone Project</b> <ul style="list-style-type: none"> <li>Developing a financial analysis or investment strategy project.</li> </ul>	<ul style="list-style-type: none"> <li>Project presentation and feedback session.</li> </ul>	6

CHAPTER 1 -

Introduction to Banking and Financial Systems

*[Signature]*  
**HEAD**

Dept. of Economics  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.

**Add on course: Basics of English Grammar**  
**Academic Year: 2022-23**  
Syllabus

**Introduction:**

This 30-hour course on Basics in English Grammar is designed to provide learners with a solid foundation in English grammar. It is ideal for individuals seeking to improve their grammatical skills for academic, professional, or personal purposes. Over 15 days, participants will engage in interactive lessons, practical exercises, and assessments to ensure a comprehensive understanding of English grammar.

**Objectives of the Course:**

1. To introduce fundamental grammatical concepts and rules.
2. To enhance the ability to construct grammatically correct sentences.
3. To improve written and spoken communication skills.
4. To develop an understanding of common grammatical errors and how to avoid them.

**Learning Outcomes:**

**By the end of this course, participants will be able to:**

1. Understand and apply basic grammatical rules in English.
2. Construct sentences with proper syntax and structure.
3. Identify and correct common grammatical errors.
4. Demonstrate improved writing and speaking skills.

Sr no	Course Details	
1	Duration of the course	30 Hours
2	Course Fees	Rs 500 taken at the time of admission
3	Intake capacity	60
4	Student's Eligibility	FYBA

Day 1: Introduction to English Grammar

- Importance of Grammar
- Overview of Parts of Speech

Day 2: Nouns and Pronouns

- Types of Nouns (Common, Proper, Abstract, Collective, Countable, Uncountable)
- Pronoun Usage (Personal, Possessive, Reflexive, Relative, Interrogative)

Day 3: Verbs

- Types of Verbs (Action, Linking, Helping)
- Verb Tenses (Present, Past, Future)

Day 4: Adjectives and Adverbs

- Types and Usage of Adjectives
- Types and Usage of Adverbs

Day 5: Prepositions and Conjunctions

- Types and Usage of Prepositions
- Coordinating and Subordinating Conjunctions

Day 6: Sentence Structure

- Simple, Compound, and Complex Sentences
- Sentence Fragments and Run-ons

Day 7: Punctuation

- Periods, Commas, and Semicolons
- Quotation Marks and Apostrophes

Day 8: Articles and Determiners

- Definite and Indefinite Articles
- Demonstratives and Quantifiers

Day 9: Active and Passive Voice

- Conversion between Active and Passive Voice
- Usage and Examples

Day 10: Direct and Indirect Speech

- Rules and Examples
- Practice Exercises

Day 11: Modals and Auxiliaries

- Types and Usage of Modals (can, could, may, , must, shall, will, would)
- Practice Exercises

Day 12: Conditional Sentences

- Types (Zero, First, Second, Third, Mixed)
- Formation and Usage in Context

Day 13: Common Grammatical Errors

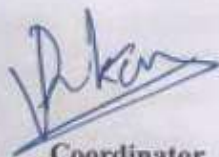
- Identifying and Correcting Errors
- Practice Exercises

Day 14: Review and Practice

- Comprehensive Review of Topics Covered
- Practice Tests and Feedback

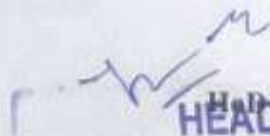
Day 15: Final Assessment

- Course Feedback
- Certification



Coordinator

Dr. V.R. Punekar



HEAD


DEPARTMENT OF ENGLISH  
WAGHIRE COLLEGE SASWAD



PRINCIPAL

Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

- Day 5: Prepositions and Conjunctions
- Types and Usage of Prepositions
  - Coordinating and Subordinating Conjunctions
- Day 6: Sentence Structure
- Simple, Compound, and Complex Sentences
  - Sentence Fragments and Run-ons
- Day 7: Punctuation
- Periods, Commas, and Semicolons
  - Quotation Marks and Apostrophes
- Day 8: Articles and Determiners
- Definite and Indefinite Articles
  - Demonstratives and Quantifiers
- Day 9: Active and Passive Voice
- Conversion between Active and Passive Voice
  - Usage and Examples
- Day 10: Direct and Indirect Speech
- Rules and Examples
  - Practice Exercises
- Day 11: Modals and Auxiliaries
- Types and Usage of Modals (can, could, may, , must, shall, will, would)
  - Practice Exercises
- Day 12: Conditional Sentences
- Types (Zero, First, Second, Third, Mixed)
  - Formation and Usage in Context
- Day 13: Common Grammatical Errors
- Identifying and Correcting Errors
  - Practice Exercises
- Day 14: Review and Practice
- Comprehensive Review of Topics Covered
  - Practice Tests and Feedback
- Day 15: Final Assessment
- Course Feedback
  - Certification

  
Coordinator  
(Dr. V.R. Puneekar)

  
HEAD  
DEPARTMENT OF ENGLISH  
WAGHIRE COLLEGE SASWAD

  
PRIYANKA!  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

**Waghire College of Arts, Commerce and Science, Saswad.**

Department of B.Voc.

**Retail Management**

Title of the Course: Add on Certificate Course in Digital Marketing

**A. Objectives:**

1. To know the services provided by Operating System
2. To know the scheduling concept
3. To understand design issues related to memory management and various related algorithms.
4. To understand design issues related to File management and various related algorithms

**B. Syllabus:**

Unit No	Topic	Lectures
1	<b>Introduction to Digital Marketing</b> - Definition and scope - Traditional vs. digital marketing - The digital marketing landscape	5hrs
2	<b>Digital Marketing Strategy</b> - Setting objectives and KPIs - Understanding target audience and buyer personas - Competitor analysis - Digital marketing plan development	5hrs
3	<b>Website Planning and Creation</b> - Importance of a website - User experience (UX) and user interface (UI) design - Content management systems (CMS) - SEO-friendly website design	5hrs
4	<b>Search Engine Optimization (SEO)</b> - Basics of search engines - On-page SEO techniques - Off-page SEO techniques - Technical SEO - SEO tools and analytics	5hrs
5	<b>Content Marketing</b> - Content strategy	5hrs

	<ul style="list-style-type: none"> <li>- Types of content (blogs, videos, infographics, etc.)</li> <li>- Content creation and curation</li> <li>- Content distribution and promotion</li> </ul>	
<b>6</b>	<ul style="list-style-type: none"> <li>Social Media Marketing</li> <li>- Overview of major social media platforms</li> <li>- Developing a social media strategy</li> <li>- Social media content planning</li> <li>- Social media advertising</li> <li>- Analytics and measuring success</li> </ul>	5hrs

F   
**Head**  
 Dept. of Retail Management  
 Waghire College, Saswad,  
 Tal. Purandar Dist. Pune.

  
**Vice-Principal**  
 Waghire College, Saswad  
 Tal. Purandar, Dist. Pune.

  
**PRINCIPAL**  
 Waghire College, Saswad,  
 Tal. Purandar, Dist. Pune

**Waghire College of Arts, Commerce and Science, Saswad.**

**Department of B.Voc.**

**Computer Software Development**

**Title of the Course: Add on Certificate Course in Operating System**

**A. Objectives:**

1. To know the services provided by Operating System
2. To know the scheduling concept
3. To understand design issues related to memory management and various related algorithms.
4. To understand design issues related to File management and various related algorithms

**B. Syllabus:**

Unit No	Topic	Lectures
1	<b>Introduction to Operating System</b> 1.1 What is operating system 1.2 Computer system architecture 1.3 Services provided by OS 1.4 Types of OS 1.5 Operating System Structure – - Simple structure - Layered approach - Micro kernels - Modules 1.6 Virtual Machines – Introduction, Benefits	5hrs
2	<b>System Structure</b> 2.1 User operating system Interface 2.2 System Calls– - Process or job control - Device Management - File Management 2.3 System Program 2.4 Operating System Structure Wired LANs:-	5hrs



	<p>Ethernet: Ethernet protocol, standard Ethernet, 100 MBPS Ethernet, Gigabit Ethernet, 10 Gigabit Ethernet,          Computer network model: OSI and TCP/IP.</p>	
3	<p><b>Process Management</b></p> <p>3.1 Process Concept –          - The process          - Process states          - Process control block</p> <p>3.2 Process Scheduling –          - Scheduling queues          - Schedulers          -Context Switch</p> <p>3.3 Operation on Process –          - Process Creation          -Process Termination</p>	5hrs
4	<p><b>CPU Scheduling</b></p> <p>4.1 What is scheduling          4.2 Scheduling Concepts –          - CPU- I/O Burst Cycle          - CPU Scheduler          -Preemptive and Non-preemptive scheduling          - Dispatcher</p> <p>4.3 Scheduling criteria          4.4 Scheduling Algorithms –          - FCFS          - SJF ( Preemptive&amp; non-preemptive)          - Priority Scheduling (Preemptive&amp; Non-preemptive)          - Round Robin Scheduling          - Multilevel Queues          - Multilevel Feedback queues</p>	5hrs
5	<p><b>Process Synchronization</b></p> <p>5.1 Introduction          5.2 Critical section problem          5.3 Semaphores –          - Concept          - Implementation          - Deadlock &amp; Starvation          - Types of Semaphores</p> <p>5.4 Classical Problems of synchronization –          -Bounded buffer problem          - Readers &amp; writers problem          - Dining Philosophers problem</p>	5hrs
6	<p><b>Memory Management</b></p>	5hrs

	<p>6.1. Background –</p> <ul style="list-style-type: none"> <li>- Basic hardware</li> <li>- Address binding <ul style="list-style-type: none"> <li>- Logical versus physical address space</li> <li>- Dynamic loading</li> <li>- Dynamic linking and shared libraries</li> </ul> </li> </ul> <p>6.2 Swapping</p> <p>6.3 Contiguous Memory Allocation –</p> <ul style="list-style-type: none"> <li>- Memory mapping and protection</li> <li>- Memory allocation</li> <li>- Fragmentation</li> </ul> <p>6.4 Paging –</p> <ul style="list-style-type: none"> <li>- Basic Method</li> <li>- Hardware support</li> <li>- Protection</li> <li>- Shared Pages</li> </ul> <p>6.5 Segmentation –</p> <ul style="list-style-type: none"> <li>- Basic concept</li> <li>- Hardware</li> </ul> <p>6.6 Virtual Memory Management –</p> <ul style="list-style-type: none"> <li>- Background</li> <li>- Demand paging</li> <li>- Performance of demand paging</li> </ul>	
--	--	--

  
**Head**

B.VOC in Department of Computer Software  
Development, Waghire College of Arts,  
Commerce & Science, Saswad. - 412301.



**Vice-Principal**  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.



**PRINCIPAL**  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune



**Pune District Education Associations**

**Waghire College of Arts, Commerce and Science, Saswad**

**Department of Food processing and Technology**

**F.Y. B. Voc Food processing and Technology**



**Course Title: Add on Certificate Course in Food Additives, Contaminants and Toxicology**

**A) Learning Objectives:**

- Identify common food contaminants: Define food contamination and distinguish between various types, such as chemical, microbial, and physical contamination.
- Understand the concept of food additives: Define food additives and their purpose in food production.
- Discuss the potential risks associated with certain food additives, including allergies, intolerances, and adverse reactions

**B) Content/Syllabus:**

Sr. No	Unit	Topics	Lectures
1	Unit-1	Introduction to food additives. Types of additives. Functions of food additives. Food additives intake assessment. Food Preservatives – Classification (Class I, Class II and Grass)	08hrs
2	Unit-2	Natural food additive (Vitamins, Minerals, Pigments, Amino Acids, Essential Fatty Acids). Food fortification and supplementation. Fat substitute and replacers. Sweeteners.	06 hrs
3	Unit-3	Sequestering and chelating agents. Emulsifying, Stabilizing and Thickening agents. Antioxidants. Antifoaming and Anticaking agents. Desiccants and Humectants.	08 hrs
4	Unit-4	Contamination of food. Types of food contaminants and sources. Food Allergens. Food Toxicology. Toxicity – Acute, Subacute, Subchronic, Chronic. Toxicology study – In-vitro and In-vivo. Dose and Responses -NOEL, LD50	08 hrs

Pune District Education Association's  
**Waghire College of Arts, Commerce and Science, Saswad**  
**Department of Commerce**  
**Add On Course (2022-23)**  
**Syllabus**  
**Subject: Software Project Development Skills**  
**Class:- F.Y. B.B.A(CA)**

Topic No.	Content	Objectives
1	Introduction of Business Communication:	To understand various communicative aspects
2	Methods and Channels of Communication:	To know about various communication Channels
3	Oral & Written Communication	To study the Functioning of various types of oral communication
4	Overcoming barriers of Communication	To find out solutions on communication problems
5	Soft Skills: Grooming Manners and Etiquettes, Effective Speaking Interview Skills; Listening Group Discussion Oral Presentation	To create awareness of students about self communication problems for implementation of proper guidelines
6	Non Verbal Communication, Dress Code, Self Awareness and Self Presentation	To develop self awareness among students
7	Resume Writing	To make Resume
8	Drafting of Job Application Letters, Portfolio etc	To enhance writing skill
9	Drafting of Business Letters:1)Enquiry Letters 2) Replies to Enquiry Letters 3) Order Letters 4) Credit and Status Enquiries 5) Sales Letters	To improve writing skill
10	Self Introduction; Meaning, tips for effective self introduction, Self Acceptance, Awareness, Self Knowledge, belief, confidence, criticism and self examination	To enhance confidence and self duties for personnel growth
11	Introduction to Biodata, Resume and Curriculum Vitae	To understand difference between them
12	Interview Skills	To enhance skill to face interview
13	Project topic introduction	To learn project name and its importance in IT sector.
14	Project topic choice	To understand which type of project is to be developed
15	Synopsis Introduction	To understand the concept of synopsis
16	Synopsis Writing	To understand how to write synopsis.
17	Introduction to Technology	To understand software technology
18	Introduction to Front end Technology	To Introduction to Front end Technology
19	Introduction to Back end Technology	To Introduction to Back end Technology
20	Introduction to Programming	To learn basics of Programming .

21	Software program writing skill	To understand structure of program
22	Software language and their nature	To learn different types of languages
23	Software analysis	To understand Software analysis
24	Software design	To understand Software design
25	Software Coding	To learn how to make Software Coding
26	Software Implementation	To learn Software Implementation
27	Software Testing	To learn how to do Software Testing
28	Software Deployment	To learn process of Software Deployment
29	Software Maintenance	To learn how to update Software.
30	Interview techniques introduction	Interview techniques introduction
31	Types of interview	Types of interview
32	Personality Development	Personality Development

*[Signature]*

Head

B. C. A. Department  
Vaghire College, Saswad

*[Signature]*  
Vaghire

Vice-Principal

Vaghire College, Saswad  
Tal. Purandar, Dist. Pune.

**PDEA'S**  
**WAGHIRE COLLEGE OF ARTS, COMMERCE & SCIENCE, SASWAD**  
**TAL-PURANDAR, DIST-PUNE**

**Add on course: Personality Development**  
Academic Year: 2022-23

**Introduction:** This comprehensive 30-hour course is designed to enhance the student's skills and knowledge in personality development.

**Objectives of certificate course**

- 1) To understand the concept of Personality.
- 2) To understand the misconception about Personality
- 3) To help the students in developing their personality
- 4) Create awareness about Mental Health among students.

**Certificate Course Outcomes**

- 1) The student understands the meaning of the concept of personality
- 2) Students improve their personality
- 3) Students improve their communication skills
- 4) Students improve their mental health
- 5) Awareness is created among students about mental health.

No. of Hours= 30

Sr.no	Topic	Sub topic	Learning points	Periods
1	Introduction of personality	Definition, Factors, theories	A) Personality - nature and definition B) Factors influencing on personality. C) Misconception about personality D) Theories of personality E) Emotional intelligence	6

2	Stress and Stress Management	Definition, Source, Stress management and swot analysis	<p>A) Stress-definition, nature and sources</p> <p>B) Stress and its effect</p> <p>C) Stress Management</p> <p>D) SWOT analysis</p>	6
3	Motivation and Motivational Conflicts	Definition, motivation cycle, types, conflict	<p>A) Motivation: Definition, Nature and Motivational Cycle</p> <p>B) Types of Motivation:- Biological, Social and Psychological</p> <p>C) Frustration and Types of Motivational Conflicts</p>	6
4	Communication Skills	Definition. communication process, types of communication and communication skills	<p>A) Communication: Definition, Communication process.</p> <p>B) Types of Communication: Verbal and Non- Verbal Communication</p> <p>C) Communication skills</p>	6
5	Mental Health	Definition, Importance, causes, improve mental health and meditation	<p>A) Nature and Definition of Mental Health</p> <p>B) Importance of Mental Health</p> <p>C) Causes of Mental Health Problems</p> <p>D) How to improve Mental Health</p> <p>E) Mental Health and Meditation.</p>	6

Department of Geography

**Add-on Course in Geography for FYBSc.**

**Name of Subject : Fundamentals of Geography.**

(Total 20 Lectures)

(2 Credit)

**Objectives:**

1. To create the awareness about dynamic environment among the student.
2. To acquaint the students with fundamental concepts of environment geography for development in different areas.
3. The students should be able to integrate various factors of Environment and dynamic aspect of Environmental geography.
4. To make aware the students about the problems of environment, their utilization and conservation in the view of sustainable development.
5. To prepare students to give competitive contributions.

**Course Outcome:**

1. Create awareness about subject Geography among the student.
2. To acquaint the students with fundamental concepts of geography for development in different areas.
3. The students should be able to integrate various factors of Geographical development and dynamic aspect of geography.
4. To make aware the students about the problems of environment, their utilization and conservation in the view of sustainable development.
5. To Prepare students with updated knowledge in Geography from global perspective.

S.No.	Topic	Sub-topic	Total Lectures	Credit
1.	Physical Geography	1. How to study Grid references. 2. Interior of Earth- 3. Oceanography. 4. Climatology - (Structure of Atmosphere) 5. Types of Landforms. 6. Concept of Environment (Eco-system and Biodiversity). 7. Effects of Climate Change	10	2
2.	Geography of India with references to	1. Physiography of India (Maharashtra) 2. Climate of India with reference to	10	



	<b>Maharashtra</b>	<p>Maharashtra.</p> <ol style="list-style-type: none"> <li>3. Rivers of India with reference to Maharashtra.</li> <li>4. Types of Soils of India with reference to Maharashtra.</li> <li>5. Resources in India with reference to Maharashtra.</li> <li>6. Population of India with reference to Maharashtra.</li> <li>7. Transportation &amp; Communication Network with reference to Maharashtra.</li> <li>8. Agriculture of India with reference to Maharashtra.</li> </ol>		
<b>Practical Course Work</b>				
3.	<b>Practical Course work &amp; Field studies</b>	<ol style="list-style-type: none"> <li>1. Fundamentals of GIS &amp; RS</li> <li>2. Concepts in GIS &amp; RS</li> <li>3. Collection of Data using (DBMS - Data Base Management System)</li> <li>4. Processing of Data using DBMS.</li> <li>5. Application of GIS</li> <li>6. GPS (Global Positioning System) application &amp; its use.</li> </ol>	10	

  
 Dr. Tejnar B. Gharpade  
 (In-charge Faculty)

  
 Dr. Sankar Ghosh  
**HEAD**  
 Head of Department  
 Dept. of Geography  
 Wajunji College, Dahanu,  
 Tal. Parner, Dist. Pune.

**Add-on Course**  
**Mobile Technologies**

Course code:	Course Name: Mobile Technologies	Total Lectures (30 Hours)
Course Prerequisites:	<ul style="list-style-type: none"> <li>▪ Concepts of Networking and Conversant with OS internals</li> <li>▪ Familiar with the java programming will be an added advantage</li> <li>▪ Knowledge about different mobile platform</li> </ul>	
Course Outcomes	<ul style="list-style-type: none"> <li>▪ Students should learn the Android Fundamentals and Android architecture framework.</li> <li>▪ Students should understand GUI Design concepts and design Android GUI Layout.</li> <li>▪ Students should be able to design visually appealing and intuitive user interfaces for Android apps, using appropriate layouts, widgets, and styles.</li> </ul>	
Chapter	Course Contents	No. of lectures
1	<b>Introduction Mobile Technologies</b>  1.1. Introduction to Mobile Computing- Features, Advantages, Disadvantages and Applications 1.2. Factors in Developing Mobile Applications 1.3. Mobile Apps and Types of Mobile Apps 1.4. Mobile Apps Design & Development Process 1.5. Mobile Operating System: IOS, BlackBerry, Android, Windows Phone, PlamOS, SymbianOS, PhoneGap etc.	4
2	<b>Fundamentals of Android Programming</b>  2.1. Introduction to Android - Overview and Evolution of Android , Features of Android 2.2. Android Architecture 2.3. Android Environment Setup Android-SDK, Eclipse, Emulators /Android AVD 2.4. First Android Application. 2.5. Introduction to Components of an Android Application 2.6. Resources and Manifest File 2.7. Android App / Project Folder Structure	6

3	<p>Android UI Layouts and Controls for GUI Design</p> <p>3.1. Android View, View Groups- Linear Layout, Relative Layout, Table Layout, Frame Layout, Web View, List View, Grid View</p> <p>3.2. Android UI Controls – TextView, EditText, AutoCompleteTextView, Button, ImageButton,ToggleButton, CheckBox, RadioButton, RadioGroup, ProgressBar, Spinner, TimePicker, DatePicker, SeekBar, AlertDialog, Switch, RatingBar</p> <p>3.3. Event-driven Programming in Android, List and Adaptors</p> <p>3.4. Android Styles and Themes</p>	8
	Practical	12

### Practical

Sr. no.	Assignment
1	<p>a) Java Android Program to demonstrate login form with validation.</p> <p>b) Java Android Program to demonstrate Registration form with validation.</p>
2.	<p>a) Create the simple calculator and perform appropriate operation</p> <p>b) By using Spinner, Buttons. Write a program to draw GUI.</p>
3.	<p>a) Create an Android application, which show to the user 5-10 quiz questions. All questions have 4 possible options and one right option exactly. Application counts and shows to the user how many answers were right and shows the result to user.</p>
4.	<p>a) Write an application to accept two numbers from the user, and displays them, but reject input if both numbers are greater than 10 and asks for two new numbers.</p>

References:

Sr. No.	Title of the Book	Author/s	Publication
1	Android Cookbook by	Ian F. Darwin	O'Reilly Media, Inc
2	Beginning Android by,	Mark L. Murphy	Wiley India Pvt Ltd publication.

  
HOD  
**Head**  
Department of Computer Science  
Waghire College, Saswad, Pune.

  
Principal  
**PRINCIPAL**  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

Pune District Education Association's  
**Waghire College of Arts, Commerce and Science, Saswad.**  
 Department of B. Voc.

**Title of the Course: Add on Course in Team Building**

**A. Objectives:**

At this end of this 'Team Building Course', you will be able to:

1. Diagnose the health of the team
2. Understand skills required to implement effective changes in the workplace
3. Create positive synergy amongst the team members
4. Figure out the purpose and direction of the team
5. Understand team skills and dynamics

**B. Syllabus:**

Unit No	Topic	Lectures
1	<b>Communication Skills-</b> - Active listening exercises. - Role-playing scenarios to practice clear and concise communication. - Group discussions on communication challenges and strategies.	6 hrs.
2	<b>Trust Building</b> - Trust fall exercises. - Blindfolded obstacle course to build trust and reliance on teammates. - Sharing personal stories to create bonds.	6 hrs.
3	<b>Problem Solving and Decision Making</b> - Group problem-solving challenges - Brainstorming sessions on common ADD-related challenges and solutions. - Decision-making games to practice collaborative decision-making.	6hrs
4	<b>Conflict Resolution</b> - Role-playing conflict scenarios and practicing resolution techniques. - Group discussion on handling conflicts in constructive ways. - Building empathy through perspective-taking exercises.	6hrs
5	<b>Creativity and Innovation</b> - Creative brainstorming sessions (e.g., mind mapping). - Group art projects or collaborative building tasks. - Discussion on how ADD can enhance creative thinking.	6hrs
6	<b>Goal Setting and Time Management</b> - SMART goal-setting workshop. - Time management games and exercises. - Group discussion on managing time	6hrs

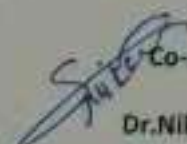
  
**Vice-Principal**  
 Waghire College, Saswad  
 Tal. Purandar, Dist. Pune.


  
**PRINCIPAL**  
 Waghire College, Saswad,  
 Tal. Purandar, Dist. Pune.


PDEA'S  
Waghire College Saswad  
Watershed Development Program

Syllabus

Introduction
Soil-water relation
Watershed development-problems and prospects, investigation, topographical survey, soil characteristics, vegetative cover, Present land use practices and socio-economic factors
Water footprint and virtual water flows
Water-watershed, community and ecology Calculation of WFP and virtual water
Water budget- Prepare a Mock budget
Principles of Watershed management
Water conservation and efficiency
Participatory watershed management - role of watershed associations, user groups and self-help groups.
Dry farming techniques - inter-terrace and inter-bund land management.
Watershed management - concept, objectives, factors affecting, Integrated watershed management - concept, components
Water harvesting and recycling
Drought and its management-, ESD House
Planning and formulation of project proposal for watershed management programme including cost-benefit analysis.

  
Co-ordinator  
Dr. Nikam S.S & Prof. Kolate Sunita

  
Vice Principal  
Vice-Principal  
Dr. Whaynal Subhash  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

  
Principal  
PRINCIPAL  
Dr. Pradip Shelar  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

**Pune District Education Association's  
Waghire College of Arts, Commerce & Science, Saswad.**

**Department of Geography**

**Add-on Course in Geography for Arts Faculty.**

**Name of Subject : Competitive Geography.**

**(Total 30 Lectures)**

**(2 Credits)**

**Objectives:**


1. To create the awareness about dynamic environment among the student.
2. To acquaint the students with fundamental concepts of environment geography for development in different areas.
3. The students should be able to integrate various factors of Environment and dynamic aspect of Environmental geography.
4. To make aware the students about the problems of environment , their utilization and conservation in the view of sustainable development .
5. To prepare students to face competitive examinations.

**Course Outcome:**

1. Create awareness about subject Geography among the student.
2. To acquaint the students with fundamental concepts of geography for development in different areas.
3. The students should be able to integrate various factors of Geographical development and dynamic aspect of geography.
4. To make aware the students about the problems of environment, their utilization and conservation in the view of sustainable development.
5. To Prepare students with updated knowledge in Geography from global perspective.

S.No.	Topic	Sub-topic	Total Lectures	Credit
1.	Physical Geography	<ol style="list-style-type: none"><li>1. How to study Grid referecnces.</li><li>2. Interior of Earth.</li><li>3. Oceanography.</li><li>4. Climatology – (Structure of Atmosphere).</li><li>5. Types of Landforms.</li><li>6. Types of Soils.</li><li>7. Concept of Environment (Eco-system and Biodiversity)</li><li>8. Climatology – (Temperature &amp; Atmospheric pressure)</li></ol>	10	2

		9. Eclipses & Tides. 10. Effects of Climate Change		
2.	<b>Geography of India with references to Maharashtra</b>	1. Physiography of India. (Maharashtra) 2. Climate of India with reference to Maharashtra. 3. Rivers of India with reference to Maharashtra. 4. Types of Soils of India with reference to Maharashtra. 5. Resources in India with reference to Maharashtra. 6. Population of India with reference to Maharashtra. 7. Transportation & Communication Network with reference to Maharashtra. 8. Socio-Cultural environment with reference to Maharashtra. 9. India and its neighbours. 10. Agriculture of India with reference to Maharashtra.	10	
<b>Practical Course Work</b>				
3.	<b>Practical Courses work &amp; Field studies</b>	1. Fundamental of GIS & RS 2. Concepts in GIS & RS 3. Collection of Data using (DBMS - Data Base Management System.) 4. Processing of Data using DBMS. 5. Application of GIS 6. GPS (Global Positioning System) application & its use.	10	

  
 Dr. Sampat D. Jagdale  
**HEAD**  
 Head of the Department  
**Dept. of Geography**  
**Waghire College, Saswad,**  
**Tal. Purandar, Dist. Pune.**



Pune District Education Association  
**Waghire College of Art's, Commerce & science, Saswad**  
Tal: Purandar, Dist: Pune 412301  
**Department of Commerce**

Name of the course : Add on Certificate Course on Legal Awareness

**Objectives :**

To provide foundational knowledge about the legal system, relevant laws, and students' rights and responsibilities.


To familiarize students with the basic structure and functioning of the legal system in their country, including the judiciary, legislature, and executive.

To educate students about their rights and responsibilities as citizens, consumers, and employees, promoting a better understanding of how the law affects their daily lives.

To provide students with a basic understanding of legal terminology, court procedures, and the functioning of various legal institutions.

**Syllabus :**

Unit No.	Topic	No. of Lectures (in Hrs)
1	Rights of Children with special emphasis on Cyber Law	4
2	Overview of The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal)	4
3	Right to Information Act 2005	6
4	Right of Daughters in Hindu Joint family property post Hindu Succession (Amendment) Act,2005	4
5	Overview of Laws for Protection of Women	4
6	Overview of Indian Criminal Justice System	4
7	Overview of Maintenance and Welfare of Parents and Senior Citizens Act, 2007	4

  
Dr. Madhavi Kauthe  
(Co-ordinator)

  
Head-Department of Commerce  
Waghire College, Saswad

  
Principal  
Waghire College, Saswad

Pune District Education Association's  
**Waghire College Of Art, Commerce and Science, Saswad**  
**Faculty of Science (PG)**  
**Add-on Course in Good Laboratory Practices and Industrial Safety**  
**Academic Year : 2022-2023**

Syllabus

- **Title** : Good Laboratory Practices and Industrial Safety
- **Eligibility** : Bachelor's degree in Science Faculty
- **Objectives** :
  - 1) To create understanding of Good Laboratory Practices and Industrial Safety
  - 2) To create General Awareness of Industrial Safety
  - 3) To create manpower related to Industrial Safety
- **Course Structure** :
 

The course is equivalent to 2 credits (30 hr)

A) Theory - 15 hr  
 B) Practical- 15 hr

Sr. No	Name of Topic	Hours
<b>Theory</b>		
1.	➤ Importance of Safety and general precautions to be observed in the chemical plant	1 hr
2.	➤ Personal safety and use of personal protective equipment	1 hr
3.	➤ Good housekeeping, ➤ Fire prevention and fire fighting equipment	2 hr
4.	➤ Properties of hazardous and toxic chemicals and safe handling procedures	2 hr
5.	➤ Cause and prevention of accidents, first aid.	1 hr
6.	➤ Materials safety data sheets (MSDs), material handling.	2 hr
7.	➤ General introduction of Chemical Plant, raw materials, intermediates and final products.	2 hr
8.	➤ Introduction of different pumps, pipes, valves, vessels, heat exchanges, dryers, evaporator, filtration unit etc.	2 hr
9.	➤ Familiarization with plant utilities and service lines such as - steam, water, vacuum, compressed air, fuel line, refrigeration and air conditioning.	2 hr
<b>Practical</b>		
1.	➤ To study the different types of fire extinguisher. Selection of fire extinguisher to put off different types of fires in chemical plant. To study fire detection system, alarms, smoke detector, heat detector and flame detector.	3 hr
2.	➤ Identification of hazardous and toxic Chemicals/gases. Handling of gases/cylinders colour codes/regulators Fume hoods	3 hr
3.	➤ Study of materials/chemicals safety data sheet of handling of various chemicals. Disposal of waste chemicals	3 hr
4.	➤ Study of flow sheets of manufacturing of chemicals by using audio-visual aids for familiarization with pumps, valves, pipes, heat exchanger, etc. and plant utilities.	3 hr
5.	➤ General Awareness about length, width, height, area, volume, pressure, flow, temperature, level, pH density, viscosity, current, specific gravity, Elements, formula of chemicals, gases, compounds, mixture, types of reactions & metals, non metals, metalloids, alloy	3 hr

*[Signature]*  
Coordinator

*[Signature]*  
**Vice-Principal**  
**Waghire College of Art, Commerce and Science, Saswad,**  
**Tal. Purandar, Dist. Pune**

*[Signature]*  
**Principal**  
**Waghire College, Saswad**  
**Tal. Purandar, Dist. Pune**

**P.D.E.A.'s**  
**Waghire College of Arts, Commerce and Science, Saswad**  
**Department of Microbiology**  
**Add-On Course – 'Comparative Study of various disinfectants**  
**(2021-2022)**

For F.Y.B.Sc. Students

Syllabus Details	No. of lectures
<b>Theory</b>	
Learn basic techniques useful in Disinfection	
Concept of sterilisation and Disinfection : Definition and Agents	02
Checking efficiency of autoclave (Chemical indicator)	01
Checking sterilization efficiency of autoclave using a biological indicator ( <i>B. stearothermophilus</i> )	01
Study of normal flora of skin: i. Cultivating and observing different morpho-forms of bacteria from skin.	02
ii. Study of effect of washing on skin with soap and disinfectant on it's microflora.	
Checking of efficacy of chemical disinfectant: Determination of Phenol Coefficient by Rideal-Walker method, Chick Martin method	02
Study of action of various disinfectants available in market	01
<b>Practical:</b>	
Checking efficiency of autoclave (Chemical indicator)	01
Checking sterilization efficiency of autoclave using a biological indicator ( <i>B. stearothermophilus</i> )	01
Checking of efficacy of chemical disinfectant: Determination of Phenol Coefficient by Rideal-Walker method, Chick Martin method	02
Comparison of various disinfectants	01
<b>Total no. Of lectures</b>	<b>30</b>

*H. S. Sawade*  
**Head**  
 Department of Microbiology  
 Waghire College, Saswad

*H. S. Sawade*  
**PRINCIPAL**  
 Waghire College, Saswad  
 Tal. Purandar, Dist. Pune



## Course No.2–Employability Skill Enhancement Programme



### Objectives of the course:

This programme is designed to aid candidates in their preparation for recruitment through campus or outside campus. The course will enable students to be better professionals through effective communication. Students will learn skills to present themselves in an effective manner while facing interviews or similar test for placements.

### Course Contents:

- Basic Communication Skills
- Reasoning Ability
- Verbal Ability
- Personal Grooming
- Personality Development
- CV Writing Skills
- Interview Techniques

### Methods of Instruction

- Lecture
- Class discussion
- Role plays
- Guest speakers
- Written assignments
- Videos

### Certification:

The college needs to provide 'Course Completion Certificate' to every student who completes the course successfully. The certificate must contain the grade obtained by the student in the examination.

\*\*\*\*\*

28	19/11/20	20/11/20	21/11/20	22/11/20	23/11/20	24/11/20	25/11/20	26/11/20	27/11/20	28/11/20	29/11/20	30/11/20	31/11/20	1/12/20	2/12/20	3/12/20	4/12/20	5/12/20	6/12/20	7/12/20	8/12/20	9/12/20	10/12/20	11/12/20	12/12/20	13/12/20	14/12/20	15/12/20	16/12/20	17/12/20	18/12/20	19/12/20	20/12/20	21/12/20	22/12/20	23/12/20	24/12/20	25/12/20	26/12/20	27/12/20	28/12/20	29/12/20	30/12/20	31/12/20
----	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	---------	---------	---------	---------	---------	---------	---------	---------	---------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

## Course No. 5- Value Education

### Objectives of the course:

The course is designed to inculcate the values which are an utmost need to overcome various challenges. The students will learn to adopt and implement the suitable values at appropriate time, understand various challenges in value adoption in this contemporary world, use the 'Reflection method' to explore values from inside out.

The course is expected to acquaint students with the core values such as physical, mental and spiritual aspects of personality, developing respect for the dignity of individual and the society, inculcation of spirit of patriotism and national integrity and developing tolerance towards understanding of different religious faiths as well. The course will help students to be a better human being and a strong pillar of society.



### Course Contents :-

#### 1. Values for excellence in life:

Developing Values, Personal Values, Family Values, Professional Values.

#### 2. Life Skills :

Motivational Skills, Communication Skills, Lifestyle modification, Accessibility and Addiction, Environmental Awareness.

#### 3. Spiritual Education :

Different schools of meditation, exploring the self, universal concept of the supreme, changing the belief system, Self Esteem, Stress free living.

### Methods of Instruction

- Lecture
- Class discussion
- Role plays
- Guest speakers
- Written assignments
- Videos

### Certification:

The college needs to provide 'Course Completion Certificate' to every student who completes the course successfully. The certificate must contain the grade obtained by the student in the examination.

\*\*\*\*\*

Pune District Education Association's

# Waghire College of Arts, Commerce & Science, Saswad

A/P - Saswad, Tal - Purandar, Dist - Pune, Pin - 412303

## Department of Commerce Academic Year-(2021-22)



### Add on Course syllabus- Personality Development

#### UNIT I Introduction to Personality Development

The concept of personality - Dimensions of personality - Theories of Freud & Erickson- Significance of personality development. The concept of success and failure: What is success? - Hurdles in achieving success - Overcoming hurdles - Factors responsible for success - What is failure - Causes of failure, SWOT analysis.

#### UNIT II Attitude & Motivation

Attitude - Concept - Significance - Factors affecting attitudes - Positive attitude - Advantages - Negative attitude- Disadvantages - Ways to develop positive attitude - Differences between personalities having positive and negative attitude. Concept of motivation - Significance - Internal and external motives - Importance of self- motivation- Factors leading to de-motivation

#### UNIT III Self-esteem


Term self-esteem - Symptoms - Advantages - Do's and Don'ts to develop positive self-esteem - Low self-esteem - Symptoms - Personality having low self esteem - Positive and negative self esteem. Inter personal Relationships - Defining the difference between aggressive, submissive and assertive behaviours -Lateral thinking.


#### UNIT IV Other Aspects of Personality Development

Body language - Problem-solving - Conflict and Stress Management - Decision-making skills -Leadership and qualities of a successful leader - Character building -Team-work - Time management - Work ethics -Good manners and etiquette.

#### UNIT V Employability Quotient

Resume building- The art of participating in Group Discussion - Facing the Personal (HR & Technical) Interview -Frequently Asked Questions - Psychometric Analysis - Mock Interview Sessions.

  
Head-Department of Commerce  
Waghire College, Saswad

  
Vice-Principal  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

  
PRINCIPAL  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.

Pune District Education Association's  
**Waghire College of Arts, Commerce and Science,**  
**Saswad**

**Department of Commerce**  
**Add On Course (2022-23)**  
**Syllabus**

**ADD ON COURSE : TY B.COM**

**Financial Market & INTERVIEW SKILL**



Sr. No.	Modules / Units
1	<b>Introduction to Commodity Market</b> <ul style="list-style-type: none"><li>• Emergence of Commodity Market</li><li>• Dynamics of global commodity markets</li></ul>
2	<b>Commodity Market in India</b> <ul style="list-style-type: none"><li>• Commodity Exchanges in India</li><li>• Role of Information in Commodity Markets</li><li>• Linkages between equity markets and commodity markets</li><li>• Commodity markets - Logistics and Warehousing</li></ul>
3	<b>Commodity Exchanges</b> <ul style="list-style-type: none"><li>• Function &amp; Role</li><li>• Trading &amp; Clearing methods</li><li>• Commodity futures</li><li>• Commodity Specific Exchanges Vs Multi Commodity Exchanges</li></ul>
4	<b>Strengthening commodity markets in India.</b> <ul style="list-style-type: none"><li>• Role of Government</li><li>• Role of Commodity Exchanges</li><li>• Other Institutions</li><li>• Training &amp; development of Dealers</li></ul>
5	<b>Equity Markets- Introduction</b> <ul style="list-style-type: none"><li>• Meaning and Definition of equity shares</li><li>• Growth of Corporate Sector and the simultaneous growth in the number of equity shareholders</li><li>• Separation of ownership and management in companies</li><li>• Development of equity culture in India- Current position</li></ul>
6	<b>Primary Market</b> <ul style="list-style-type: none"><li>• IPO - Methods followed, Book Building, Offer for sale</li><li>• Role of Merchant bankers in fixing the price</li><li>• Red - Herring Prospectus - it's unique features</li><li>• ASBA and its features</li><li>• Green Shoe option</li><li>• Sweat equity, ESOP</li><li>• Rights issue of shares, Non voting shares ,ADR, GDR, IDR</li></ul>

7	<b>Secondary Market</b> <ul style="list-style-type: none"> <li>• Definition and functions of stock Exchanges</li> <li>• Evolution and Growth of Stock Exchanges in India</li> <li>• NSE, BSE, SME Exchanges and Overseas Stock Exchanges</li> <li>• Recent Development in Stock Exchanges, Merger of SEBI with FOKIC</li> <li>• Stock Market Indices</li> </ul>
8	<b>Importance of Equity Markets in developing country like India</b> <ul style="list-style-type: none"> <li>• Need for attracting more investors towards equity</li> <li>• Need for strengthening secondary markets</li> <li>• Link between Primary Market and Secondary Market</li> </ul>
9	<b>Unstructured Interview:</b> <p>It is a free-flowing conversation. In unstructured Interviews, generally questions are made and asked during the interview. This type of interview does not follow any formal rules and procedures. It is opposite of a structured interview.</p>
10	<b>Screening Interview</b> <p>Screening interview is often referred as data verification interview. It is typically the first interview in the recruitment process. During a screening interview, the recruiter might provide a brief description of the company and the job description.</p>
11	<b>Panel Interview</b> <p>Panel Interview involves one applicant and two or more members of recruitment team. The panel may involve representatives of different departments within a company/organization who then make the hiring decision.</p>
12	<b>Telephonic interview</b> <p>Telephonic interview is an interview process that is conducted through telephonic conversation. It is economical and less time-consuming interview process. It is a typical firstround screening process to identify whether you are suitable to come in for a full interview.</p>

Head-Department of Commerce  
Waghire College, Saswad

**Vice-Principal**  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.

**PRINCIPAL**  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.



**Add-on Course**  
**Artificial Intelligence**

<b>Course code:</b>	<b>Course Name: Artificial Intelligence</b>	<b>Total Lectures (30 Hours)</b>
<b>Course Prerequisites:</b>	<ul style="list-style-type: none"> <li>▪ Concepts of Data Structures and Design and Analysis of algorithms.</li> <li>▪ Strong Data analytics skills.</li> </ul>	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>▪ To learn various types of algorithms useful in Artificial Intelligence(AI)</li> <li>▪ To understand the numerous applications and huge possibilities in the field of AI that goes beyond the normal human imagination.</li> </ul>	
<b>Chapter</b>	<b>Course Contents</b>	<b>No. of lectures</b>
1	Introduction to Artificial Intelligence. 1.1 What is Artificial Intelligence 1.2 The history of Artificial Intelligence 1.3 Artificial Intelligence related fields 1.4 Artificial Intelligence applications 1.5 How AI is transforming our lives.	2
2	Searching 2.1 Search and control strategies 2.2 Blind Search Techniques: - BFS,DFS,DLS,Bidirectional search, Uniform cost search.	8
3	Introduction to AI with Python 3.1 Introduction to python, Why python with AI 3.2 Features of python,Basics of python 3.3 Python statements,Methods and functions using Python. 3.4 Examples.	8
	<b>Practical</b>	<b>12</b>

## Practical

Sr. no.	Assignment
1.	a) Write a python program to add two numbers provided by user. b) Write a python program to print multiplication table for given number. c) Write a python program to find factorial of given number. d) Write a python program to print Fibonacci series.
2.	a) Write a python program to check whether the given number is prime or not. b) Write a python program to check if a number is positive, negative or 0. c) Write a python program to check if a number is even or odd. d) Write a python program to check if given number is Armstrong or not.
3.	a) Write a python program to implement Depth First Search algorithm. b) Write a python program to implement Breadth First Search algorithm.
4.	a) Write a python program to illustrate different List operations. b) Write a python program to illustrate different set operations.

### References:

Sr. No.	Title of the Book	Author/s	Publication
1	Computational Intelligence	Eberhart	Elsevier Publication
2	Artificial Intelligence: A New Synthesis	Nilsson	Elsevier Publication
3	Artificial Intelligence with Python	Prateekjoshi	Packt Publishing Ltd
4	Artificial Intelligence	SarojKausik	Cengage Learning

  
HOD

**Head**  
Department of Computer Science  
Waghire College, Saswad, Pune.



Principal  
**PRINCIPAL**  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune.





## F.Y.B.Com Add on Course 2021-2022 Development of Insurance Skill

DURATION:30 Hrs.

### Objectives:

1. To acquaint Students with technical knowledge of Insurance.
2. To the develop personality of students in the field of insurance.
3. To acquaint the students with health and life insurance.
4. To train students to search for career opportunities in the field of insurance.

Sr. No.	Name of Topic
1	Concept of Insurance, Definition of Insurance
	History of Insurance, Types of Insurance
	Important Concept in Insurance
	Insurance Companies, Insurance Premium,
	Tenure of Insurance, Insurance Certificate, Different Kinds of Insurance Policies etc
2	Nature and Features of Insurance
	Nature of Insurance
	Features of Insurance Business
3	Importance of Insurance
	Functions of Insurance
	Advantages of Insurance
	Limitations of Insurance
4	Life Insurance Policy
	Process of Withdrawing Life Insurance Policy
5	Terms and Conditions
	Terms and Conditions of Insurance Policies
	Risk Management Age Proof Insurance Premium
	Loan on Insurance Policy
	Benefits on Different kinds of Policies Realisable Value
6	Life Insurance Policies and its types
	Different Kinds of Life Insurance Policies
	Life insurance Policies- Merits and Demerits
7	Term insurance Policies- Merits and Demerits
	Process of getting of Realisable Value
	Amount due after completion of term of Insurance Realisable Amount after death



8	Fire Insurance, Introduction Concept Features of Fire Insurance, Scope of Fire Insurance
9	General Insurance Fire Policy, Personal Accidental Policy Mediclaime Insurance, Vehicle Insurance

### **Course Outcome:**

After successfully completing this course, students will be able


- CO 1. To Acquire knowledge of Insurance
- CO 2. To get technical knowledge of Insurance
- CO 3. To develop personality of students in the field of insurance
- CO 4. To get acquainted with health and life insurance
- CO 5. To search for career opportunities in the field of insurance.

### **Job Opportunities:**

- 1. Investment Consultant
- 2. Insurance Consultant
- 3. Job Opportunities in Reputed Insurance Companies

### **Reference Books :**

- 1. Prof. Dr.C.J. Joshi and Prof. Sudhakar Mankar
- 2. "Vima Shastra ani Tatve" Dr.Medha Kanetkar
- 3. "Vimyavishayi Sary Kahi" by Kshitija Patkule
- 4. "E-Commerce" By Mrs. Nita Fadnis
- 5. Insurance- Principles and practices by M.N.Mishra S.Chand
- 6. Elements of Insurance by R.P.Malhotra
- 7. Insurance - R. S. Sharma

  
सहसंचालक  
( डॉ. बोरावेके भाग्यश्री )

  
Head-Department of Commerce  
Waghire College, Saswad

  
Principal  
Waghire College, Saswad

**P.D.E.A's Waghire College of Art's, Commerce and Science, Saswad**  
**Add-on Course in Chemical Analysis: Techniques Used**

**Syllabus**

**Academic Year: 2020-2021**

The Syllabus of "Add-on Course in Chemical Analysis: Techniques Used" has been of 2 Credits. It has been prepared taking into consideration its importance. The Theory and Practical syllabus of the Add-on Course in Analytical Instrumentation is as follow:

<b>Add-on Course in Chemical Analysis: Techniques Used</b>		<b>02 Credits (30 Hours)</b>
<b>Unit No</b>	<b>Topic</b>	<b>Lectures</b>
<b>Section-I (Theory)</b>		
1	Introduction: a) Sampling of solids, liquids and gases: Definition, types of samples, quality of sample. b) Instrumental methods of analysis, their classification and advantages of instrumental methods, the limitations, precision and accuracy.	(03 Lectures)
2	Theory and applications pH metry	(02 Lectures)
3	Theory and applications Colorimetry	(02 Lectures)
4	Theory and applications Conductometry	(02 Lectures)
5	Theory and applications Potentiometry	(02 Lectures)
6	Chromatographic methods: Paper, Partition, Ion exchange, Thin layer, and Column chromatography	(04 Lectures)
<b>Section-II (Practical)</b>		
1	Analysis of Soil sample (pH, Conductance)	(03 Hours)
2	Analysis of Water sample ((pH, Conductance, TDS)	(03 Hours)
3	Colorimetric estimation of CuSO <sub>4</sub>	(03 Hours)
4	Determination of iron by thiocyanate colorimetry	(03 Hours)
5	Detection of dyes in food by paper/thin layer chromatography method	(03 Hours)

  
Coordinator

  
HEAD  
Department of Chemistry  
Waghire College, Saswad,  
Dist. Pune.

  
PRINCIPAL  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune

## Course No. 2 – Employability Skill Enhancement Programme

### Objectives of the course:

This programme is designed to aid candidates in their preparation for recruitment through campus or outside campus. The course will enable students to be a better professional through effective communication. Students will learn skills to present themselves in an effective manner while facing interviews or similar test for placements.

### Course Contents:

- Basic Communication Skills
- Reasoning Ability
- Verbal Ability
- Personal Grooming
- Personality Development
- CV Writing Skills
- Interview Techniques

### Methods of Instruction

- Lecture
- Class discussion
- Role plays
- Guest speakers
- Written assignments
- Videos

### Certification :

The college needs to provide 'Course Completion Certificate' to every student who completes the course successfully. The certificate must contain the grade obtained by the student in the examination.

\*\*\*\*\*

  
Head - Department of Commerce  
Waghire College, Saswad

## Course No. 4 – Intellectual Property Rights Laws

### Objectives of the course:

The course is designed to create awareness about the laws relating to intellectual property rights. It aims at providing knowledge about the framework of intellectual property rights. Students will be able to understand various types of intellectual properties, its implications and significance. The case studies will help students understand practical side of intellectual property rights laws.

### Course Contents :-

- Intellectual Property Rights in India: Overview,
- Patents, Copyrights, Related Rights, Trademarks, Geographical Indications, Industrial Designs, New Patent Varieties, Unfair Competition
- Basic knowledge on the various branches of Intellectual Property Law
- holistic understanding of the legalities of Intellectual Property Rights
- Contemporary issues in Intellectual Property Laws
- Filings for Intellectual Property registration
- Steps of development of Intellectual Property

### Methods of Instruction

- Lecture
- Class discussion
- Role plays
- Guest speakers
- Written assignments
- Videos

### Certification :

The college needs to provide 'Course Completion Certificate' to every student who completes the course successfully. The certificate must contain the grade obtained by the student in the examination.

\*\*\*\*\*

  
Head - Department of Commerce  
Waghire College, Sawad

P.D.E.A'S

Waghire Art's Commerce & Science College, Saswad,  
Tal. Purandar Dist. Pune

Department of Commerce (Senior)

Subject: - Ability Enchantment Compulsory Course (AECC) (Environment Studies)  
S.Y.B.Com - Workload Distribution 2020-21 (Division A&B) SEM I



Sr.No.	Topic	Name of Teacher	Number of Periods
1	Introduction to Environmental studies	Prof. Kale P.D	02
2	Ecosystem	Prof. Kale P.D	08
3	Natural Resources	Prof. Ekke S.S	10
4	Biodiversity and Conservation	Dr.Nale B.R.	10
		Total	30

Workload Distribution 2020-21 (Division B Division C)

Sr.No.	Topic	Name of Teacher	Number of Periods
1	Introduction to Environmental studies	Prof. Zende A.D	02
2	Ecosystem	Prof.Zende A.D	08
3	Natural Resources	Prof.Prabhakar G.S	10
4	Biodiversity and Conservation	Dr. Jadhavran M.S	10
		Total	30

H.O.D

(Dr. Kishor Lipare)  
Head-Department of Commerce  
Waghire College, Saswad

Vice-Principal

(Dr. Subhash Wavhal)  
VICE-PRINCIPAL  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune

Principal

(Dr. Sushama Bhosale)  
PRINCIPAL  
Waghire College, Saswad  
Tal. Purandar, Dist. Pune



**P.D.E.A.'s**  
**WAGHIRE COLLEGE, Saswad**  
**Department of Microbiology**  
**Add-On Course –Instrumentation**  
**(2019-2020)**  
**For F.Y.B.Sc. Students**

**Syllabus Details**

Theory	No. of lectures
Principle, working and application of following Instruments	
a. Microscope: Monocular, Binocular	01
b. Autoclave	01
c. Hot air oven	01
d. Incubator: Static, Shaker	01
e. pH meter	01
f. Laminar air flow cabinet	01
g. Spectrophotometer and colorimeter	01
h. Clinical centrifuge	01
i. Gel electrophoresis	01
j. Soxhlet apparatus	01
<b>Practical:</b>	
Working and application of	
a. Microscope and pH meter	01
b. Autoclave and Laminar air flow cabinet	01
c. Hot air oven and Incubator	01
d. Spectrophotometer and colorimeter, Clinical centrifuge	01
e. Gel electrophoresis and Soxhlet apparatus	01
<b>Total no. Of lectures</b>	<b>30</b>

  
 Head  
 Department of Microbiology  
 Waghire College, Saswad

F.D.E.A'S  
WAGHIRE COLLEGE, SASWAD  
TAL- PURANDAR, DIST- PUNE

AD-ON CERTIFICATE COURSE  
ON  
"BASIC TECHNIQUES IN GARDENING"  
(DEPT. OF BOTANY)

Academic Year 2019-20

Distribution of Syllabus

W.E.F - 6/01/2020.

Sr. No.	Name	Theory	Practical
1.	Mr. Gurav N.V.	Introduction to Gardening: Scope and importance.	Study Garden tools and implements
		Garden implements and accessories	Propagation of plants through cuttings and grafting.
2.	Mrs. Sawant S.T.	Garden practices - Propagation methods, Pruning and training	Visit to commercial nursery and garden in the locality.
		Garden Containers	Study of containers - earthen containers, pots, polybags, cement pots and ceramic pots.
3.	Mrs. Beldar A.M	Types and features of gardens	Preparation of land for beds and planting of bedding plants.
		Soils preparation and management	Preparation of nursery beds and sowing of seeds.
4.	Miss. Borawake P.S	Area measurements, layout, planning designing	Identification and growing of indoor plants.
		Selection of plants: Indoor and Outdoor plants and pot culture	Propagation of plants through layering, budding.

W.E.F 5/1/2020.  
Dr. Jagtap S.S.  
HEAD,  
Department of Botany  
Waghire College, Saswad  
Dist. Pune



Pune District Education Associations

Waghire College of Arts, Commerce and Science, Saswad

Department of Food Processing and Technology

F.Y. B.Voc. Food Processing and Technology



A) Title of the Course: Add on Certificate Course on Food Plant Sanitation

B) Learning Objectives:

- Food Safety: Ensuring the design incorporates appropriate measures to prevent contamination, cross-contamination, and foodborne illnesses.
- Learn about the various types of sanitizers and disinfectants used in food plant sanitation and their appropriate application methods.
- Identify common sources of contamination in food plants.
- Develop strategies to control and prevent them.

C) Content/ Syllabus:

Sr No	Unit	Topics	Lectures
1	Unit 1	<b>Sanitation and food industry:</b> Sanitation, sanitation laws, regulations, and guidelines, establishment of sanitary Practices.	03 hrs
2	Unit 2	<b>Foodborne bioterrorism:</b> Potential risks and protection measures for bioterrorism	02 hrs
3	Unit 3	<b>The Relationship of microorganisms to sanitation:</b> Microbial growth in relation to spoilage and food borne out breaks and its control measures <b>The Relationship of allergens to sanitation:</b> Food allergens and its control measures	04 hrs

4	Unit 4	<b>Cleaning compounds and sanitizers:</b> Classification, selection of cleaning compounds and sanitizers, handling and storage, precautions <b>Pest and Rodent Control:</b> Insect infestation, cockroaches, insect destruction, rodents, birds, use of pesticides, integrated pest management	05 hrs
5	Unit 5	<b>Food contamination sources:</b> Sources of contamination, contamination of foods, protection against contamination	03 hrs
6	Unit 6	<b>Personal hygiene and sanitary food handling:</b> Personal hygiene, employee hygiene, sanitary food handling, role of employee supervision, employee responsibility	04 hrs
7	Unit 7	<b>Sanitary design and construction for food processing:</b> Site selection, site preparation, building construction considerations, processing and design considerations, pest control design <b>Waste product handling:</b> solid waste and liquid waste management	05 hrs
8	Unit 8	<b>Role of HACCP in sanitation:</b> Good manufacturing practices, current good manufacturing practices; Standard operating procedures, good laboratory practices	04 hrs

**D) Learning outcomes:**

- Understand the importance of food plant sanitation in ensuring food safety and quality.
- Learn about the role of sanitation in preventing foodborne illnesses and the potential impact on public health.
- Acquire the ability to assess sanitation practices and make recommendations for improvement.
- Develop skill in monitoring and maintaining cleanliness and hygiene standard in food plant.

*[Signature]*

**Head**

Dept. of Food Processing & Technology  
Waghire College, Saswad,  
Tal. Purandar, Dist. Pune.

*[Signature]*  
**PRINCIPAL**

Waghire College, Saswad,  
Tal. Purandar, Dist. Pune