Home About Us Course Details Admission Procedures General Rules Contact

## Course Details

| S.No | Name of Course   | Department              | Seats | Duration<br>(In hrs.) | Course<br>fee in Rs. | Link       |
|------|--|-------------------------|-------|-----------------------|----------------------|------------|
| 1    | Certificate course in Android Apps Development                         | Computer<br>Application | 20    | 120 hrs.              | 7500/-               | Click Here |
| 2    | Certificate Course in Mushroom<br>Cultivation                          | Botany                  | 40    | 105 hrs.              | 2000/-               | Click Here |
| 3    | Certificate Course in Herbal Gardening<br>and Organic Farming          | Botany                  | 40    | 105 hrs.              | 2000/-               | Click Here |
| 4    | Certificate Course in Human Rights<br>and Humanitarian Action          | Political<br>Science    | 30    | 30 hrs.               | 1500/-               | Click Here |
| 5    | Certificate Course in Spoken English<br>and Personality Development    | English                 | 50    | 45 hrs.               | 1000/-               | Click Here |
| 6    | Certificate Course in Personality<br>Development and Stress Management | Psychology              | 40    | 45 hrs.               | 2000/-               | Click Here |

| 7  | Certificate Course in Banking; Finance<br>and Insurance (CPBFI) in collaboration<br>with Bajaj Finserv | Commerce                | 50 | 100 hrs. | 1000/- | Click Here |
|----|--|-------------------------|----|----------|--------|------------|
| 8  | Certificate Course in Computerized Accounting  | Commerce                | 30 | 100 hrs. | 2000/- | Click Here |
| 9  | Certificate Course in Urdu   | Urdu                    | 20 | 45 hrs.  | 1000/- | Click Here |
| 10 | Certificate Course in Communicative<br>English for Legal Professionals                                 | Law                     | 40 | 80 Hrs.  | 3000/- | Click Here |
| 11 | Certificate Course in Basics in<br>Research  | Education               | 50 | 60 Hrs   | 1000/- | Click Here |
| 12 | Certificate Course in Diagnostic<br>Laboratory Techniques  | Zoology                 | 30 | 90 hrs.  | 3000/- | Click Here |
| 13 | Certificate Course in Vedic Culture,<br>Literature, Religion, Philosophy &<br>Values                   | Philosophy              | 20 | 45 hrs.  | 1000/- | Click Here |
| 14 | Certificate Course in Yoga and<br>Meditation   | Philosophy              | 30 | 60 hrs.  | 1200/- | Click Here |
| 15 | Certificate Course in Computer<br>Hardware and Networking  | Computer<br>Application | 20 | 60 hrs.  | 2500/- | Click Here |

| 16 | Certificate Course in Vermiculturing and Vermicomposting of Biowaste | Zoology | 40 | 75 hrs.  | 1500/- | Click Here |
|----|--|---------|----|----------|--------|------------|
| 17 | Short-Term Course in Microbial<br>Biotechnology                      | Botany  | 30 | 100 hrs. | 3000/- | Click Here |

## Awareness/Certificate Courses (Mandatory)

| S.No | Name of Course  | Department | Seats   | Duration (In<br>hrs.)                                  | Course<br>fee in<br>Rs. | Link       |
|------|---|------------|---|--|-------------------------|------------|
| 1    | Certificate Course in Water<br>Literacy (1. General<br>Certificate Course in Water<br>Literacy; 2. Advanced<br>Certificate Course in Water<br>Literacy) | Chemistry  | Compulsory<br>(General) 50<br>Seats<br>(Advanced) | 30 hrs. (for<br>General); 3<br>Months for<br>Advanced) | NIL                     | Click Here |
| 2    | Certificate Course in Energy<br>Literacy  | Physics    | Compulsory  | 30 hrs.  | NIL                     | Click Here |
| 3    | Certificate Course in<br>Environmental Literacy   | Botany     | Compulsory  | 30 hrs.  | NIL                     | Click Here |

## Details of Special Courses

| S.No | Name of Course                                    | Department  | Seats | Duration<br>(In hrs.) | Course<br>fee in Rs. | Link       |
|------|---|---|-------|-----------------------|----------------------|------------|
| 1    | GS Foundation Course<br>for Civil Services        | Centre for Vocational<br>Studies & Skill<br>Development | 100   | 150 hrs.              | 3000/-               | Click Here |
| 2    | Crash Course for CSIR-<br>UGC NET in Life Science | Botany  | 100   | 90 hrs.               | 5000/-               | Click Here |



Centre for Vocational Studies and Skill Development C.M.P Degree College (University of Allahabad) Prayagraj Brochure (Information and Guidelines)
Helpdesk Email: botanydeepakgond@gmail.com
Helpdesk No. 9506088366

#### ABOUT THE COLLEGE

The college was established in the year 1950 with a vision to contribute to the national development by providing quality education. The college is a co-educational institute and it has been associated to the University of Allahabad since its establishment and it became Constituent College of the University of Allahabad in 2005 when the central status of the university was restored. The college has highly qualified and experienced faculty; good quality of staff with excellent infrastructure facility and three huge campuses in the city.

#### CENTRE FOR VOCATIONAL STUDIES AND SKILL DEVELOPMENT

CMP Degree College (A Constituent Postgraduate College of the University of Allahabad) has established a Centre for Vocational Studies and Skill Development which aims to create a large pool of trained personnel to address vital skill development gaps in our country, crucial for economic growth and self-sufficiency.

#### **OBJECTIVE**

The main objective of the Centre for Skill Development is to offer various Vocational Studies and skill development courses so as to provide the students to improve their employability and promote entrepreneurship. The courses offered also contribute to strengthen the managerial and technical knowledge of the students so as to elevate their standards socially and economically.

#### COURSE DETAILS

Programme, Course, Duration, Eligibility, No. of Seats and Fee Structure Details

| S.No. | Programme   | Course  | Duration                      | Eligibility                           | Seats | Fee Structure |
|-------|-------------|---|-------------------------------|---------------------------------------|-------|---------------|
| 1.    | Certificate | Herbal<br>Gardening and<br>Organic<br>Farming | 3 months<br>(twice a<br>year) | 10 <sup>th</sup> Pass<br>and<br>above | 40    | Rs.3000       |

#### Note:

- 1. Above course will be started only when minimum 75% of the number of seats given is admitted otherwise that course will not be started, in this case the fees deposited by the students will be fully refunded.
- 2. Keeping in mind the requirements of any course, 10% of the classes can also be conducted in online mode.

For detailed information please visit the institute's website: https://cmpcollege.ac.in

#### **AVAILABILITY OF RELEVANT INDUSTRY**

Himalaya Patanjali Dabour Baidyanath Nature Bio Foods Ltd Geo-Fresh Organic Bansi Gir Gauveda Ambrosia Organic Farm Elworld Agro & Organic Foods

#### JOB TYPES

Entrepreneur / Self-employed Herbal Expert Agro Expert Organic Farm Trainee Supervisor Marketing Intern

#### **SYLLABUS**



#### Module-1: HGOF-01 Gardening: Techniques

- 1. Introduction. History, Scope, and objectives of gardening.
- 2. Style of gardens: Formal, Informal.
- 3. Components of Herbal Garden, Planning of outdoor gardens: Small, Residential, Larger Home Garden, Roof Garden, Terrace Garden, School and Institutional and Indoor gardening.
- 4. Garden Features and Ornamentation.
- 5. Principles of landscape design, elements, planning and layout.
- 6. Plant material for landscaping, symbols and tools.
- Landscape design for specific areas: residence, commercial buildings, educational institutes.
- 8. Selection of Medicinal Plant according to Places.

#### Module-2: HGOF-02 Organic Farming & Skills and Practices

- Introduction: Farming, organic farming, concept and development of organic farming.
- 2. Principles of organic farming & need for organic farming, Agencies and institutions related to organic agriculture.
- 3. Scope and Present state of organic farming.
- 4. Types of organic farming, Biodynamic farming, Benefits of organic farming.
- 5. Bio-fertilizers-methods of application, advantages and disadvantages
- 6. Botanical pesticides.
- 7. Organic crop production methods- vegetables & Fruits, spices-cardamom and ornamental crops.
- 8. Entrepreneurship Development.
- 9. Current Government schemes related to organic farming.

#### Module-3: Practical course based on HGOF-01

- 1. Field surveys for familiarization with local plants.
- 2. Collection of specimens.
- 3. Familiarized the garden tools and implements mentioned
- 4. Trained to do Cutting/layering/grafting/budding
- 5. Trained in the preparation of manures and fertilizer

#### Module-4: Practical course based on HGOF-02

- 1. Demonstration of Organic Forming
- 2. Preparation of Soil.
- 3. Propagation-seed, planting materials methods
- 4. Water management.

Convener Sex

- 5. Bio-fertilizers-methods
- 6. Weed management.
- 7. Organic crop production methods.
- 8. Livestock Management in organic farming

#### Module-5: Garden/Industrial visit

- 1. One-day visit to Herbal Garden and Organic forming site.
- 2. Exposure to the field and market.

#### ADMISSION PROCEDURES

THE ADMISSION FOR THE ACADEMIC SESSION 2022-23 SHALL BE DONE STRICTLY ON THE BASIS OF FIRST COME, FIRST SERVED BASIS ONLY.

Registration Form: All the procedures regarding admission will be done online mode.

#### **Last Date:**

- (I) The last date for the online form submission is 5/8/2022. No form shall be entertained after the last date.
- (II) The name of the selected candidates shall be announced on 20/9/2022.
- (III) The last date for the online fee submission is 15/9/2022.

## DOCUMENTS TO BE PRESENTED AT THE TIME OF ADMISSION

(Without these documents applicant's claim will not be entertained):

- (a) Self attested photocopy of mark-sheet and certificate of High School or equivalent examination.
- (b) Self attested photocopy of mark-sheet and certificate of Intermediate or equivalent examination mark-sheet and Certificate.
- (c) Self attested photocopy of Identity Card (for regular student of CMP Degree College).

#### GENERAL RULES FOR STUDENTS



 The students whose attendance in the prescribed subjects of study, seminar, classes and computer training or any other course prescribed in the course falls short of the required 75% shall not be

allowed to appear in the examination.

• Students will have to abide by the rules and regulations of the Centre for Vocational Studies and

Skill Development, CMP Degree College (A Constituent Postgraduate College University of

Allahabad, Prayagraj.

· Students must note that they should not indulge in ragging in or outside the premises of the

College. In case of any complaint of ragging, the student complained against will face immediate

suspension, enquiry and punishment which may extend up to expulsion from the College and

lodging of criminal proceedings.

· Students must behave properly in and outside the classes. Any students, who misbehaves,

indulges in misconduct and indiscipline, uses unfair means in the examinations shall be strictly

dealt with as per rules.

· Chewing of Tobacco, Pan-Masala, Gutkha etc. and smoking or indulging in any kind of

intoxication in or outside the campus shall be dealt with strictly.

FOR THE CONVENIENCE OF THE APPLICANTS

**Help Desk Details** 

Helpdesk No.:+91-9506088366

Helpdesk Email: botanydeepakgond@gmail.com

10:00 AM to 05:00 PM (All working Days)

Convener Ego

(A Constituent PG College, University of Allahabad)
M.G. Marg, Prayagraj-211002

Website: cmpcollege.ac.in

## **SHORT-TERM CERTIFICATE COURSE**

Name of Course

Certificate Course in Mushroom Cultivation

Course Code

MCT

**Course Category** 

Skill Development

**Department** 

Botany

Description of the Course: (150 words): Mushrooms are healthy food and their demand is increasing day by day due to the changing food habits, demand for quality food, urbanization, and globalization. As our cultivable land is shrinking, traditional agriculture is proving to be non remunerative and our farmers want sustainable additional on farm income. Therefore, to ensure that our farmers get good and sustainable income, there is a need for diversification in agriculture, value addition, and marketing of farm produce. Mushroom cultivation is a novel component of agriculture that can be easily integrated with the farming system to enhance the income of the farmers or can be taken up as an independent activity on a commercial scale. Mushrooms are not only quality food but also a way of utilizing agricultural wastes and generating wealth from the waste. Returns and productivity in mushroom cultivation are very high because of the vertical nature of its farming. The vocation of Mushroom Production is getting popular tremendously over the last few years. It is one of the few professions that require less labour and can be taken up as a profession by men and women, young and old, both literate and illiterate. As there are less initial investments and quick returns, hence families and unemployed youth can be encouraged to adopt this vocation.. The foremost aim of this course is to promote self-employment. The course components comprise theory and practical components covering important topics such as spawn production, cultivation of button

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Website: cmpcollege.ac.in

mushroom, oyster mushroom, paddy straw and milky mushroom and management of insect pest and diseases of mushroom, value addition, entrepreneurial skills and health and safety at workplace etc.

This course offers a comprehensive hands-on training for learning the basics with an insight to laboratory practices along with exposure to "lab-to-land" transfers.

Objective of the Course: (150 words)

- 1. Dissemination of knowledge for Lab to Land
- 2. Basic and applied training in the subject for development of skills for a successful career in entrepreneurship.
- 3. Generate technically trained human resource as instructors in schools and junior colleges.
- 4. To understand the history of mushroom cultivation and also the benefits of growing of mushrooms to the farmers and environment;
- 5. Advantages of consuming mushrooms as a health food.
- 6. Summaries basic steps in mushroom cultivation.

7.

## Outcome Of the Course (150 words):

- 1. The course will be a value-added course for each and every person of society.
- 2. To start as Entrepreneurs in Mushroom Cultivation and can establish their own labs.
- 3. Researchers or interested trainees can also be able to cultivate medicinally as well as more economically important mushrooms.
- 4. Mushroom production will improve the socio-economic status and solve the employment problems of rural economy by generating income and job opportunities.
- 5. Use of Agriculturally waste as substrate mostly waste material from farms, plantations and factories.
- 6. Mushroom is rich in protein and contains all essential amino acids, amides, lycine, calcium, folic acid etc.
- 7. Consumption of mushrooms slows down the spread and effect of cancer, and heart diseases and also boosts the immune system.

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#### **Outline of the Course**

| S.No.  | Course Modules | Title                                       | Hours    |
|--------|----------------|---|----------|
| 1.     | TMCT-1         | Button Mushroom Cultivation: Techniques (T) | 12 hrs   |
| 2.     | TMCT-2         | Oyster Mushroom Cultivation: Techniques (T) | 12 hrs   |
| 3.     | TMCT-3         | Milkey Mushroom Cultivation: Techniques (T) | 11hrs    |
| 4.     | PMCT-1.1       | Practical course based on MCT -1.1          | 30 hrs   |
| 5.     | PMCT-2.1       | Practical course based on MCT -2.1          | 20 hrs   |
| 6.     | PMCT-3.1       | Practical course based on MCT -3.1          | 20 hrs   |
| 7.     | VMCT           | Laboratory/Industrial visit                 | Two days |
| 20     |                | Theory/Lecture Hours:                       | 35hrs    |
| =1 - 2 |                | Practical/Tutorial/Field Study Hours:       | 70hrs    |
|        | . 1            | Total Hours:                                | 105hrs   |

#### **Details of Course Modules:**

Module I: Basic theory of Mushroom Cultivation Techniques

## TMCT-1.1: Mushroom Cultivation Techniques

- Introduction. History. Scope. Advantages. Applications. Limitations.
- Guidelines for establishing academic and commercial laboratory.
- Mushrooms- An Agri-business.
- Nutritional and medicinal value of mushrooms.
- Competitor moulds/fungal and viral diseases of mushrooms.
- Bacterial diseases and abiotic disorders of mushrooms.

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Website: empcollege.ac.in

- Insect, pests & nematodes of mushrooms and their management
- Uses and/or disposal of spent mushroom substrate.
- Postharvest handling, value-addition and marketing of mushrooms.
- Round the year cultivation of mushrooms.
- Financial assistance from Banks for mushroom project.
- Sources of information for various inputs and guidance on mushroom cultivation.

## Module-2: TMCT 1.2 Button Mushroom Cultivation Techniques:

- Preparation of pure culture and preservation techniques in mushrooms.
- Instrumentation and culture preparation of spawn and its storage.
- Formulations and recent advances in compost production for button mushroom.
- Recent advances in crop management of white button mushroom.
- Farm-design and infrastructure for a commercial mushroom growing unit.
- Economics of button mushroom cultivation under controlled conditions

## Module-3: TMCT-2.1: Oyster Mushroom Cultivation Techniques(11L)

- Introduction: Cultivation of oyster mushroom (*Pleurotus* spp.).
- Spawn production technology.
- Mushroom Substrate selection, Substrate soaking, pasteurization, bagging, spawning, incubation and harvesting. Pest and diseases of mushrooms and their management.
- Farm designing and infrastructure for a commercial mushroom growing unit.
- Economics of oyster mushroom cultivation under controlled conditions.

## Module-4: TMCT-3.1: Cultivation & economics of milky mushroom ( Calocybe indica )

- Introduction: Cultivation of milky mushroom.
- Spawn production technology.
- Mushroom Substrate selection, Substrate soaking, pasteurization, bagging, spawning, incubation and harvesting. Pest and diseases of mushrooms and their management.
- Casing and crop management in Milky mushroom
- Farm designing and infrastructure for a commercial mushroom growing unit.
- Economics of oyster mushroom cultivation under controlled conditions

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Module-5: Hands on training in basic Mushroom Cultivation Techniques

PMCT-1.1, 1.2, 2.1, 3.1: Practical of Mushroom Cultivation:

- 1. Handling and Instrumentation for Mushroom Cultivation.
- 2. Glassware Washing & Sterilization Techniques.
- 3. Preparation of nutrient media.
- 4. Surface sterilization.
- 5. Mushroom Culture preparation
- 6. Mushroom Spawn production
- 7. Compost preparation for white button mushroom
- 8. Substrate preparation for oyster mushroom
- 9. Substrate preparation for Milky mushroom
- 10. Casing and crop management in button mushroom.
- 11. Casing and crop management in Milky mushroom
- 12. Diseases /mould/insect pests, their identification and management
- 13. Post-harvest handling and value addition of mushrooms.
- 14. Video film on mushroom cultivation/ harvesting/ processing.

Module 6: Exposure to the industrial and lab setup

VMCT 3: Visit to the mushroom farm. of one day.

**Course Coordinator** 

: Dr. Alok Kumar Singh

Course Co-Coordinator

: Dr. Yashwant Kumar

(if any)

**Course Office** 

: Department of Botany

(Dr. Yas Lwant Kumar)
(Signature with Name)

Course Co-Coordinator

MUSHROOM CULTIVATION
Department of Botany

C. M. P Degree College Prayagrai (Dr. Alok kurnar Singh)
(Signature with Name)

Course Coordinator
MUSHROOM CULTIVATION
Department of Botany
C. M. P Degree College

Prayagraj

#### COURSE DESIGN

The College offers two types of Awareness/Certificate Courses in Water Literacy

- General Awareness/Certificate Course in Water Literacy (Mandatory for all students of UG first year, PG first & third-semester, and Ph.D.)-Course Duration; 30 hrs.
- Advanced Awareness/Certificate Course in Water Literacy (Field-based Study)- 50 Seats; Course Duration: 3 Months

#### REGISTRATION IN THE COURSE

Online registration is open and free for the course. Students can register for the course at college website under the Centre for Vocational Studies and Skill Development portal.

Link of the Registration: https://skilldevelopment.cmpcollege.ac.u/mdex.pm/course-details

#### CERTIFICATE OF THE COURSE

1. General Awareness/Certificate Course in Water Literacy

E-Certificate shall be provided after successfully completion of the course. Evaluation shall be based on an online awareness quiz. Those students who scores more than 50% marks shall be entitled for the E-Certificate.

 Advanced Awareness/Certificate Course in Water Literacy

Certificate shall be provided after successfully completion of the course. Those students who submits the field-based study report after completing, the course shall be awarded certificate.

#### DEPARTMENT OF CHEMISTRY

Department of Chemistry has 19 teaching and 9 non-teaching staff. The research areas in which work is being pursued are in the field of Water, Synthetic Organic Chemistry, Polymene Materials, Solar cell, and Coordination Chemistry, Materials Chemistry, Supra-molecular Chemistry and Medicinal chemistry. Faculty members of the Department have undertaken projects worth Rs. 1.1 Crore from various funding agencies like UGC, DST, CSIR, etc.

#### ABOUT WATER LITERACY

A crucial step towards attaining water sustainability and social water equality is building a solid, multidisciplinary, ubiquitous base of water knowledge among all water users. An educated and involved citizenry requires knowledge of the cognitive, affective/emotional, and behavioral domains of water, according to educational psychology. This aligns with the learning objectives outlined by the Education for the Sustainable Development Goals (ESDGs). Therefore, water literacy is the culmination of water-related knowledge, attitudes, and actions, distinguishing it from other more often used terms like ecological or environmental literacy and highlighting its significance. Water literacy is being used more and more, although the definition, implementation, and evaluation of the idea vary greatly depending on the application.



Registration for

Awareness/Certificate Course

## WATER LITERACY

2022-23



Department of Chemistry

C. M. P. Degree College
University of Allahabad
Prayagraj –211 002 (INDIA)



What is Water Literacy?

"Water Literacy means knowing realization of where your water comes from and how you use it."

Pramod Kumar/ Chemistry Deptt. C.M.P. Degree College.

BROCHURE

#### THE THEME OF WATER LITERACY

Water literacy, or the culmination of water-related information, attitudes, and behaviors, is a relatively new area of research that is becoming increasingly significant for social water equality and sustainable water management. Its usage and definition, nevertheless, vary widely and often in current literature. In light of this, we propose a fresh, allencompassing framework for water literacy to direct a more broad-based, useful use of the idea. We looked at previous research on water knowledge. attitudes, and behaviors in student and adult populations using the framework, and we compiled global water literacy levels and knowledge gaps. We advocate the use of a variety of strategies, including place-based learning. better graphics, multidisciplinary curriculum, and reflective and iterative creation of future water literacy programmes, to overcome knowledge gaps.

#### MAJOR AREAS OF STUDY

- > Water Quality and Life Expectancy
- > Water footprint
- > Types of water pollutants and its effects on environment
- Addressing, Assessing and Improving Water Security
- Cultural Values in Water Management and Governance
- Water related diseases
- Sources of water in Prayagraj- related problems and remedies
- Conservation of water including traditional methods
- Innovative idea on any water related issues like popularization/development of filter/water purification/conservation etc.

#### DEVELOPMENT OF A WATER LITERACY FRAMEWORK

- Science and systems knowledge
- > Local knowledge
- > Hydro-social knowledge
- Functional knowledge



#### **COURSE MODULE**

1: Water and development

(Relation of water with social, cultural, economic, physical and democratic development, impact on each other and current challenges)

2: Water Pollution

Purity - the standard of impurity, source. Identification methods, techniques and their practical knowledge. Side effects of water pollution and Water Quality Management (Policy and Technical Aspects)

3: Group Based Field Work (Only for Advanced Certificate Course Students)

Overall study of a pond/well/lake/small river, planning his resurrection.

OI

Prepare a water management plan of a village/small town and hand it over to the college and the concerned gram panchayat/town committee or local administration.

#### ORJECTIVES OF WATER LITERACY

To make students and youth aware and educated about the significance of water, its resources, preservation and purity.

To form a permanent unit of literacy by connecting selected students and teachers in

CMP College.

- Repair of at least one pond by a batch either clearing a lake or (It would be better if this work can also be made such a necessary task for the participants of the course, on completion of which the concerned participant should be given a water literacy course certificate in the hands of a special person with a mention of special appreciation; otherwise part of the follow-up program so be it)
- To play the role of nodal college by CMP College to connect selected teachers interested in other schools/colleges for spreading water literacy work.

A big seminar by the college And A series of talks on water issues in small groups in village panchayats and schools by the participating students at their convenience.

To present itself as a water model college by CMP College through rainwater harvesting, disciplined and reuse of water in the campus.

Coordinator: Co-coordinator: Dr. Pramod Kumar Dr. Deepanjali Pandey

Dr. Ranjeet Kumar

Dr. Babita Agrawal Prof. Ajay Prakash Khare Convener Principal

Pramod Kumar Chemistry Deptit.
Chemistry Deptit.
C.M.P. Degree College,



☐ Dashboard

☐ Course Management

☐ Lesson Management

② Course Q&A

☐ Discussions

☐ Assessment

☐ Assignment

☐ Quiz

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# Awareness/Certificate Course in Water Literacy

Unit/ Module No.: 1

Unit/ Module Title: Water Literacy

**Description of Course:** 

#### AWARENESS/CERTIFICATE COURSE IN WATER LITERACY

Water literacy, or the culmination of water-related information, attitudes, and behaviors, is a relatively new area of research that is becoming increasingly significant for social water equality and sustainable water management. Its usage and definition, nevertheless, vary widely and often in current literature. In light of this, we propose a fresh, all-encompassing framework for water literacy to direct a more broad-based, useful use of the idea. We looked at previous research on water knowledge, attitudes, and behaviors in student and adult populations using the framework, and we compiled global water literacy levels and knowledge gaps. We advocate the use of a variety of strategies, including better graphics, place-based learning, multidisciplinary curriculum, and reflective and iterative creation of future water literacy programmes, to overcome knowledge gaps.

# The course covers the following major areas of awareness/study;

- · Water Quality and Life Expectancy
- Water footprint
- · Types of water pollutants and their effects on the environment
- Addressing, Assessing and Improving Water Security
- Cultural Values in Water Management and Governance
- · Water-related diseases
- Sources of water in Prayagraj related problems and remedies
- · Conservation of water including traditional methods
- Innovative ideas on any water-related issues like popularization/development of filters/water purification/conservation etc.

# The College offers two types of Awareness/Certificate Courses in Water Literacy:

- 1. General Awareness/Certificate Course in Water Literacy (Mandatory for all students of UG first year, PG first & third-semester, and Ph.D.) Course Duration: 30 hrs.
- 2. Advanced Awareness/Certificate Course in Water Literacy (Field-based Study)- 50 Seats; Course Duration: 3 Months

#### Course Module:

#### Lesson 1: Water and Development

(Relation of water with social, cultural, economic, physical and democratic development, impact on each other and current challenges)

# □ Dashboard □ Course Management □ Lesson Management ② Course Q&A □ Discussions □ Assessment □ Assignment □ Quiz □ Profile

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#### Lesson 2: Water Pollution

(Purity - the standard of impurity, source. Identification methods, techniques and their practical knowledge. Side effects of water pollution and Water Quality Management (Policy and Technical Aspects)

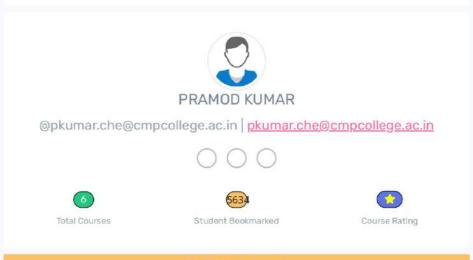
Lesson- 3: Group-Based Field Work (Only for advanced certificate course students)

(Overall study of a pond/well/lake/small river, planning his resurrection, or Preparing a water management plan of a village/small town and handing it over to the college and the concerned gram panchayat/town committee or local administration.)

#### **Objective of Course:**

#### MAJOR OBJECTIVES OF WATER LITERACY

- To make students and youth aware and educated about the significance of water, its resources, preservation and purity.
- To form a permanent unit of literacy by connecting selected students and teachers in CMP College.
- Repair of at least one pond by a batch either clearing a lake or (It would be better if this work can also be made such a necessary task for the participants of the course, on completion of which the concerned participant should be given a water literacy course certificate in the hands of a special person with a mention of special appreciation; otherwise part of the follow-up program so be it)
- To play the role of nodal college by CMP College to connect selected teachers interested in other schools/colleges for spreading water literacy work.
- A big seminar by the college And A series of talks on water issues in small groups in village panchayats and schools by the participating students at their convenience.
- To present itself as a water model college by CMP College through rainwater harvesting, disciplined and reuse of water in the campus.



#### Add to bookmark

#### Lessons:

|                            | Lesson-1: Water and Development   |
|----------------------------|---|
|                            | Lesson-2: Water Pollution   |
| n Dashboard                | <u>Lesson-3: Group-based Field Work (Only for Advanced Certificate Course)</u>                |
| Course Management          |   |
| ☐ <u>Lesson Management</u> | Ask Question to Teacher   |
| ② Course Q&A               | Go to Discussion Page   |
| □ Discussions              | Rate this course  |
| Assessment ^               |   |
| Assignment                 |   |
| Quiz                       | All Rights Reserved by <u>CMP Degree College</u> . Designed and Developed by <u>Kamtech</u> . |
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#### 2022-23

#### Certificate Programme in Banking, Finance and Insurance (CPBFI)

#### RELEVANT DOCUMENTS-

#### 3. NAME OF THE PROGRAMME (YEAR WISE)

Certificate Programme in Banking, Finance and Insurance (CPBFI)

## 2. DURATION OF THE COURSE (NOT LESS THAN 30 HRS):

96 hours

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#### 4. CURRICULUM

CPBFI (Certificate Program in Banking, Finance and Insurance) is a customized training programme conducted by Bajaj Finserv for graduates across India. CPBFI aims to make these graduates employable for the Banking, Financial Services and Insurance (BFSI) sector. CPBFI is a 96-hour training programme designed by Bajaj Finserv in collaboration with industry experts, educational institutes and a leading mental health institute.

| S.No. | Programme   | Course   | Duration | Eligibility                        | Seats | Fee Structure |
|-------|-------------|--|----------|------------------------------------|-------|---------------|
| 1.    | Certificate | Banking, Finance and Insurance (CPBFI) in collaboration with Bajaj Finsery | 96 Hrs.  | Final year<br>students of<br>UG/PG | 50    | Rs. 1000      |

#### MODULES COVERED DURING THE TRAINING:

#### a. 24 hours of Banking

| Introduction  | to Banking             |
|---------------|------------------------|
| Introduction  | to Branch Banking      |
| Customers a   | nd Their Needs         |
| Overview of   | Banking Products       |
| Liability Pro | ducts                  |
| Asset Produc  | cts                    |
| Third Party a | and Fee-based Products |
| Business De   | velopment              |
| Transaction I | Processing             |
| Customer Se   | rvice                  |

#### b. 24 hours of Insurance

Need for Insurance
Evolution of Insurance
Overview of an Insurance Company

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| 0  | verview of Retail Insurance Product |
|----|-------------------------------------|
|    | verview of Insurance Distribution   |
| Se | elling Insurance                    |
| In | surance Operations                  |
| Cı | stomer Service                      |
| Pr | ofitability Drivers for Insurance   |

#### c. 36 hours of Communication Skills

| W   | nat is communication              |
|-----|-----------------------------------|
| Go  | als and barriers in communication |
| Mo  | odes of communication             |
| Lis | tening skills and empathy         |
| No  | n-verbal expression skills        |
| Sur | mmarisation skills                |
| Eff | ective communication              |

d. 12 hours of Swaroop. Swaroop is based on the concepts of psychology and addresses aspects such as self-awareness, confidence to take decisions, assertiveness, stress management, positive regulation of emotions, etc.

#### 5. ASSESSMENT PROCESS

All assessment process will be taken by Bajaj Finserv after checking attendance and feedback by students.

Finally, a HR workshop and Interview will be taken by Bajaj Finserv.

#### 6. SUMMARY REPORT WITH OUTCOMES:

# A summary report on Certificate Programme in Banking, Finance and Insurance (CPBFI)

C.M.P. Degree College organized a course on Certificate Programme in Banking, Finance and Insurance (CPBFI) in collaboration with Bajaj Finser. This CPBFI course started from 14<sup>th</sup> September 2022. The course covered all aspects of Banking, Finance and Insurance. The course covered 96 hours of learning through corporate trainers with 4 hours of training per day. 4 modules covered during the training:

c. 24 hours of Banking by trainers by Bajaj Finserv.

d. 24 hours of Insurance by trainers by Bajaj Finserv.

e. 36 hours of Communication Skills by trainers by Bajaj Finserv.

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12 hours of Swaroop by trainers by Bajaj Finserv.

The course ended on 27th October, 2022. Fifty-three (53) students completed the course and certificate are distributed to them.

The course was mainly intended to improve the overall knowledge of financial sector. The programme was successful in achieving following outcomes-

- Improving overall communication and personality development of students.
- 8. Improving overall communication skills, debating skill and decision-making skill.
- Improving overall financial knowledge such as banking and insurance sector.

# 7. MODEL CERTIFICATE ISSUED

It will be submitted soon.

## 8. ATTENDANCE SHEET

Attached

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## **SHORT-TERM CERTIFICATE COURSE**

Name of Course

: Certificate Course in\_

Personality Development and Stress Management

**Course Code** 

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**Course Category** 

: Skill Development/Soft Skill/Vocational

Department

: Psychology

Description of the Course: (150 words) Our personality is the strongest aspect of our life.

Personality of an individual develops as a result of interaction between individual's characteristics with the environmental factors. It is a unique way and specific pattern of thinking, feeling and behaving. Students grow in their life successfully if they have an impressive personality. This course is designed to help student understand the nature of their personality through theoretical and practical aspects. An attempt will also be made to help students understand the various ways in which their personality can be improved. One of the important dimension of personality is the ways in which we handle stress in our lives. In the technologically advanced world, stress enters in our lives from many sources, ranging from our day to day chores to the digital addiction. It is very important that we should not only identify various sources of stress in our lives, but also learn to deal with stress in an effective way. The present course will help us understand an in-depth understanding of the stress phenomenon, Hans Selye's contributions to stress description and



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differentiation, the physiology of stress, and various ways of active and defensive ways of coping with stress.

Objective of the Course: (150 words)

The course will have following objectives-

- 1. This certificate course on personality development and stress management will help students understand the nature of the personality and various ways of handling stress in life.
- 2. The course will address various ways in which personality can be groomed for success in life.
- 3. This course is designed to help individuals develop and implement effective strategies in dealing with stress at the personal or organisational level and manage stress in the workplace effectively.
- 4. This Stress Management course teaches participants to identify signs of stress and other mental health issues in individuals.
- 5. The course will also address issues related to the dangerous effects of stress in human life.
- 6. The course will be especially useful for those who are looking to develop techniques to manage stress effectively, who want to develop a balanced and stress-free culture and environment and helping individuals where stress is affecting their performance and their personality.

# Outcome of the Course (including potential for employment generation): (150 words)

Personality Development and Stress Management course will give participants an access to the best of knowledge related to the topic of Personality and stress as it is dealt in Psychology and behavioural sciences. After completion of the course, the participants will not only get a theoretical knowledge about nature of personality and stress, its causes and ways of coping, but will also come to know about the effective and healthy ways of coping with the stress. Some of the important outcomes of the course are that students will know that personality can be changed and groomed for success in life. They will start coping better with challenges of life. Body become healthier and shows signs of good immunity. Work and efforts become more productive. Mood become more positive. People get along with others in an easier way and start to draw in other positive people and great opportunities which makes life even more fun and inspiring. Developing this soft skill not only makes a person healthy physically but also mental health becomes better. The students having a certificate course on Personality development and stress management will definitely make them more skilled in job market especially in corporate world or they can also become a good soft skill trainer and life coach.



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**Duration of the Course** 

: 3 Months

(in hours)

**Frequency of Course** 

: Once a year

**Number of Seats** 

Course Fee (INR)

: 3,000/-

Eligibility for the Course : UG, PG and Ph.D students from all faculties

#### **Outline of the Course**

| S.No.                                 | Course Modules | Title                              | Hours |
|---------------------------------------|----------------|------------------------------------|-------|
| 1,                                    | I              | Understanding Personality          | 10    |
| 2.                                    | II             | Development of Personality         | 10    |
| 3.                                    | III            | Nature and Understanding of Stress | 10    |
| 4.                                    | IV             | Stress and its impact              | 10    |
| 5.                                    | V              | Coping with Stress                 | 10    |
| Theory/Lecture Hours:                 |                |                                    |       |
| Practical/Tutorial/Field Study Hours: |                |                                    |       |
|                                       |                | Total Hours:                       | 50    |

#### **Details of Course Modules:**

Module I- Understanding Personality- Concept, characteristics, person-environment fit, Brief theoretical background of personality, Success and failure. Handling failures, factors affecting failures, learning from failure. Personality Traits, Practical / activities on above topics

Module II- Development of Personality, Developing Effective Habits, Emotional Intelligence, Types of Personalities - Introvert, Extrovert & Ambivert person, Effective Communication & Its key aspects, Interpersonal Relationship, Good manners & Etiquettes, Netiquettes, Effective Speech, Understanding Body language, Attitude - Concept -Significance -Factors affecting attitudes -



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Positive attitude-Advantages -Negative attitude-Disadvantages. Practical / exercises on above topics.

Module III: Nature and Understanding of Stress- Hans Selye General Adaptation Syndrome and Model, Types of Stress- Eustress and Distress, Why people differ in their experiences of stress? The Subjective component of stress. Assessment of stress. Activities based sessions.

<u>Module - IV</u>: Stress and Its Impact- Sources of stress, Job, family and society, Burnout- concept and its impact on health, Physiological and Psychological impact of stress- behavioral, emotional and cognitive responses.

Module-V: Coping Mechanisms- definition of coping, Active Coping and Ego defensive Coping-Psychopathology and Coping Skills- an introduction. What is Stress management, Stress Management techniques. Activity sessions on coping - time management skills- time as a resource, utilizing time efficiently and aggression management.

#### Assessment of the Course: As per instructions from the Course Instructor

- A. Written Assessment
- B. Practical Assessment
- C. Viva-Voce Assessment

#### **Budget Requirements of the Course**

|        | Income  |               |              |
|--------|---|---------------|--------------|
| S. No. | Particular  | Unit Cost     | Amount (INR) |
| 1.     | Course Fee  | 3000          | 1,20,000     |
|        |   | Total         | 1,20,000/-   |
|        | Expenses  |               |              |
| S. No. | Particular  | Unit Cost     | Amount (INR) |
| 1.     | Honorarium  a) Resource Person outside the institution (No16_)  b) Resource Person within the institution (No10_) | 1000/-<br>Nil | 16, 000/-    |
|        | <ul><li>c) Course Coordinator</li><li>d) Course Co-Coordinator (if any)</li></ul>                                 |               | 12,000/-     |
| 2.     | Course Materials (if any)   | 500           | 20,000/-     |
| 3.     | Field Work/Field Study/Tutorial/Training/ Practical   | -             | 15,000/-     |
| 4.     | Tour & Travels  |               | 15,000/-     |



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| 5. | Contingency (including paper, stationary, printing, photocopying, etc)                    |       | 5,000/-                          |
|----|---|-------|----------------------------------|
| 6. | Office Expenses  a) Office Assistant (if any) b) Lab Technician (if any) c) Peon (if any) |       | As per instructions from college |
| 7. | Course Establishment & Development Expenses (if any)                                      |       | 12,000/-                         |
| 8. | Miscellaneous   |       | 13,000/-                         |
| 9. | Overhead Charges payable to the College   |       | 12,000/-                         |
|    |   | Total | 1,20,000/-                       |

Instructions for Budget (not to be mentioned in the proposal):

1. Honorarium for Resource Person (outside the institution) shall be Rs. 1000/- per lecture.

2. Honorarium for Resource Person (within institution) shall not be payable without the prior approval of the Principal of the College and in that case the time spent in teaching/training of the course shall be counted in the work load at the department.

 Honorarium of the Course Coordinator (including Co-Coordinator) shall not be more than 10 percent of the income from the course.

4. Overhead charges payable to the College shall be minimum 10 percent of the income from the course.

#### Other Requirements of the Course: (if any)

1.Nil

**Course Coordinator** 

: DR RUCHIKA VARMA, Assistant Professor, Department of

Psychology

Course Co-Coordinator

: NIL

(if any)

**Course Office** 

: As per college instructions

(Signature with Name)

Course Co-Coordinator

(Signature with Name)

Course Coordinator



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## SHORT-TERM CERTIFICATE COURSE

Name of Course

: Certificate Course in Spoken English and Personality

Development

**Course Code** 

: SEPD

**Course Category** 

: Soft Skill

Department

: English

#### **Description of the Course:**

English being the most common platform of communication and personality, needs to be made an integral part of speaking. Any language for communication should be well versed and spoken well. Thus, what is well spoken is understood well and carried out without flaw. English language holds a strategic place in the power of expression, medium of communication and grooming of personality so well versed in spoken English leads to enhance the personality of a person.

#### Objective of the Course:

The goals of the course are to develop cognitive abilities, self-discipline and means of communication with people from various backgrounds.

## Outcome of the Course (including potential for employment generation):

This course is going to enhance the capacity of the learner in order to learn new language and it will build confidence of the learner. It will heighten their awareness of correct usage of English grammar in writing and speaking. The learner will attain and enhance competence in the four modes of language teaching: listening, speaking, reading and writing. They will improve their speaking ability in English both in terms of fluency and comprehensibility. Through this course the learner will be able to paraphrase information from outside sources effectively and accurately and will be able to distinguish between main ideas and details. Through this course the learner will be also able to distinguish new dimension of competitiveness and will be able to stand skilled at its work place.

**Duration of the Course** 

: 45 Hours

(in hours)

Frequency of Course

Twice a year

Number of Seats

: 50

Course Fee (INR)

: 1000/-



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Eligibility for the Course : UG or Pursuing UG from recognised institution (Any Discipline)

#### **Outline of the Course**

| S.No. | Course Modules | Title                                 | Hours |
|-------|----------------|---------------------------------------|-------|
| 1.    | SEPD -01       | Basic English                         | 25    |
| 2.    | SEPD-02        | Corporate English                     | 10    |
| 3.    | SEPD-03        | Personality Development               | 10    |
|       |                | Theory/Lecture Hours:                 | 35    |
|       |                | Practical/Tutorial/Field Study Hours: | 10    |
|       |                | Total Hours:                          | 45    |

#### **Details of Course Modules:**

Module-1: Sentence Formation, Daily Life Conversation, Tense, Voice, Narration, Articles, Parts of Speech, Modals, Vocabulary, Phrases, Speaking & Pronunciation, Role Play, Listening & Writing, Show & Tell, Story Making, Short Talks.

**Module-2:** News Reading, Anchoring, Dealing with Imperfections, Advanced Vocabulary, Accent Building, Story Telling.

Module-3: Interview Session, Producer & Consumer Technique, Press Conference, Group Discussion, Tongue, Twisters, Debate / Impromptu, Dynamic Events, Extempore & Power play.

#### Assessment of the Course:

- A. Written Assessment
- B. Practical Assessment
- C. Viva-Voce Assessment

Course Coordinator

: Dr. Ram Prakash Gupt (Assistant Professor)

Kment of

Course Co-coordinator

: Dr. Khusboo Agrawal (Assistant Professor)

**Course Office** 

: Department of English, CMP College, MG Marg,

George Town, Prayagraj, UP 211002



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#### SHORT-TERM CERTIFICATE COURSE

Name of Course

Certificate Course in Vermiculture and Vermicomposting of

Biowaste

Course Code

: CVVB

**Course Category** 

: Skill Development

Department

: Zoology

#### Description of the Course: (150 words)

Vermiculture is the culture of earthworms. The goal is to continually increase the number of worms in order to obtain a sustainable harvest. Vermicomposting is the process by which worms are used to convert organic materials (usually wastes) into a humus-like material known as vermicompost. These two processes are similar but different.

Vermiculture is the process of breeding earthworms, whereas the liquid filtered from the watery wash of earthworms is called vermiwash, while, vermicomposting is the transformation process of organic waste to compost or vermicompost by the use of earthworms. The vermicomposting process is an eco-friendly method with the capacity to convert organic waste (cow dung, house wastes etc.). This technique uses the earthworms to transform the waste into natural and enriched manure: the vermicompost. In addition to the ability to reduce waste, the vermicompost is an effective bio-manure that permits, on the one hand, to improve plant growth and, on the other hand, brings them essential nutritive elements. The vermicomposting technique presents a double benefit: it guarantees a regular income for the family while preserving the environment.

#### The objective of the Course: (150 words)

- > To utilize waste of campus plants and garden by using earthworms and get vermicopost as a Black Gold!
- To aware the students and society about to use chemical free Vermicompost as an organic fertilizer for agriculture.
- > To provide own vermicompost to college horticulture and garden free of cost.
- > To provide skill development short-term course Vermicomposting Technology for students.
- To provide consultancy service to farmers is to compost organic wastes, not for the disposal of solid organic wastes but also to produce superior quality manure to feed our "nutrient/organic matter hungry" soils.
- They can help to maintain the environment pollution free and will get the knowledge other biodiversity of local earthworms.

Outcome of the Course (including potential for employment generation): (150 words)

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Course Coordinator M.P. Degree College

Allahabad

A. Hemlata Pant of Zoology (Course Co-rossell Hoogles College (M.P. Allahabad



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- In this course a student gains practical knowledge about making compost at home with kitchen waste. Vinegar & egg shell fertilizer practical preparation of compost.
- > By doing this course, students learn how to use organic waste to grown plants without chemical fertilizers.
- In addition students can save money not only for household gardens but it can also help to balance city's budget.
- > Students can generate income by making their own compost & selling it to farmers or organically grown fruits are high in demand.
- > Students get knowledge about different types of compost preparation to save soil, they can become entrepreneurs by setting up composting business and can literally "make out of trash".
- > Black gold is obtained from zero investment.

Duration of the Course: 3 Months (12 week/75 hours)

(in hours)

Frequency of Course : Once a Year (October to December)

Number of Seats : 40

Course Fee (INR) : 1500/-

Eligibility for the: The candidate seeking admission to the course either pursuing or

Course having a Graduate/Post-Graduate Degree from a recognized

University

#### **Important Points:**

Lecture/practical timing: 12.40 PM to 1.40 PM

Academic calendar for the course: four days in a week (3 days theory periods & 1day practical)

Examination structure & schedule:

At the end of course the examination will be conducted. Its notice & time table will be displayed for communication to the students at least before 15 days of the date of examination.

- 1. Course VT-01Theory paper (objective/short answer type) = 50 marks, Two hours duration.
- 2. Course VT-02 Practical paper =50 marks, two hours duration

Award of Certificate carrying grades: after successful completion of course colourful certificate indicating grade will be awarded to the candidate.

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C.M.P. Degree College
Allahabad

Dr. Hemlata Pant

Department of Zoolos
C.M.P. Degree College
Allahabad



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Course Content: Syllabus/Program

PAPER - I: Theory: Vermiculture

20 Hours

Habit and habitat.

Food and feeding habits of earthworm; worm castings.

Reproduction and lifecycle.

Economic importance of earthworms.

Role of earthworms in soil structure, fertility & productivity.

Meaning of vermiculture. General planning for vermiculture.

Ecological classification of earthworms.

Study of verms diseases & enemies

Advantages of Vermiculture.

PAPER - II: Theory: Vermicomposting

20 Hours

Introduction and Importance of Vermicompost.

Small – scale and Large – scale vermicomposting.

Indoor and outdoor vermicomposting.

Materials which can be used for vermicomposting.

Methods of vermicompost.

Harvest mature vermicompost and Earthworms, Post-harvest procedures

Vermiwash and its uses.

Precautions and Best Practices of Vermicomposting

PAPER - III: Practicals: Vemiculture

15 Hours

- Key to identify different types of earthworms
- Collection of local earthworms.
- Bed Preparation Steps for vermiculture.
- Vermiculturing using local species of earthworms.

PAPER – IV: Practicals: Vermicomposting

15 Hours

- Preparing vermicompost using paper waste and weeds.
- Preparation of vermiwash.
- Collection of vermicompost.
- Package and marketing of vermicompost.
- Vermicompost Cost Analysis
- Undertake basic entrepreneurial activities for small enterprise

Financing & Business Plan

by TYOTI VERMA

Course Compliant tof Zoology C.M.P. Degree College Allahabad De. Hemlata Pant

Department of Zoology C.M.P. Degree College Allahabad



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#### Reference:

Earthworm: Vermiculture & Vermicomposting – R. K. Bhatnagar & R.K.Palta; 1996;Kalyani publishers, New Delhi.

Vermicomposting - Dr. B. Ramesh Chandra Rao; 2006; KUIDFC- KUDCEM, Mangalore.

Vermiculture - Mary Cristy; MJP Publishers.

Vermicompost - Avinash K Panikkar- https://www.cleanindia.org/waste.htm#introwaste

Vermicomposting technology for solid waste management- Ashaa Aalok, A. K. Tripathi & P. Soni: https://www.indiaenvironmentportal.org.in/files/Vermicomposting.pdf

The Complete Technology Book on Vermiculture and Vermicompost. by NPCS board. Asis Specific Business Press

Textbook of Vermicompost: Vermiwash and Biopesticides. by Dr. Keshav Singh

#### Advantage of the Course & Future Prospects:

- I. Students can construct their own compost farm & thereby can get monthly income of Rs. 7000-8000.
- II. Students/ farmers by using vermicompost in their field can increase the crop yield.
- III. Students residing in cities can produce vermicompost in small scale for garden/household plants.
- IV. They can get the jobs in educational institutes as vermicompost/vermiculture technician.
- V. The candidate can generate income by supplying verms, vermiwash, & vermicompost.
- VI. By developing & propagating vermicompost technology he/she will directly or indirectly help to prevent environmental pollution, by using vermicompost in the field & thereby increasing crop yield he will help to solve food problems.

VII. It will lead towards organic farming & healthy food.

VIII. In today's world, recycling of garbage has become necessary in order to sustain our health and environment. So let's join for Four R's of Recycling Reduce, Reuse, Recycle, Restore

#### News link related to thuis course

https://www.facebook.com/cmpdcollege/posts/pfbid02YRvZyhJNjLCcccYgDagho7o5742PEAvdPcT2buwvQBAV3k8BHkL239doBy3VVrfSl

https://www.facebook.com/cmpdcollege/posts/pfbid02k7BBesQ4fv7aiUzoEkvckSCGqRW37fZX1n6yfqDPQeSepahU1ML7HVG4GCT3iazCl

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Allahabad

Course Co-condinates Department of Zoology
C.M.P. Degree College
Allahabad



## **Centre for Vocational Studies & Skill Development**

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Website: <a href="mailto:cmpcollege.ac.in">cmpcollege.ac.in</a>

### **GS FOUNDATION COURSE FOR CIVIL SERVICES**

| Name of Course             | : | GS Foundation Course for Civil Services  |
|----------------------------|---|--|
| Course Code                | : | GSF  |
| Department                 | : | Political Science  |
| Course Category            | : | Special Add-on Course  |
| Proposed Duration Course   | : | 150 hrs. (once in a year)  |
| Proposed Number of Seats   | : | 100  |
| Eligibility for the Course |   | The candidate seeking admission to the course either be pursuing Graduate/Post-Graduate Degree from the C.M.P. Degree College.   |
| Admission Process          | : | Admission shall be based on either first come first serve basis or by an Aptitude Test (in case of applications more than seats) |
| Proposed Fee/Students      | : | Rs. 3000/-   |
| Course Coordinator         | : | Dr. Govind Gaurav Assistant Professor, Department of Political Science, C.M.P. Degree College, Prayagraj                         |
| Course Office              |   | Department of Political Science, C.M.P. Degree College,<br>Prayagraj   |



## Centre for Vocational Studies & Skill Development

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Website: <a href="mailto:cmpcollege.ac.in">cmpcollege.ac.in</a>

#### **Course Overview and Structure**

#### **Description of Course:**

GS Foundation Course is aimed to provide a qualitative solution to the Civil Services aspirants in order to enhance their preparation and academic excellence for the examination. It focuses on grooming the young aspirants with the qualitative and right knowledge which helps them to shape their career in the civil services of India. The course offers the students a variety of foundational knowledge about the civil services that help them in gaining confidence to appear and crack the examination successfully.

The Foundation course is exclusively designed for comprehensive coverage of General Studies of preliminary Civil Services Examination. The course covers various aspects like basic concepts, their application in the examination, the ability to articulate through regular practices, and a dynamic approach with focus on current affairs.

The course is conducted by experienced and efficient faculties of the College having an experience of the preparation of Civil Services Examination.

#### **Objective of Course:**

GS Foundation Course will serve as a bridge between the preparation and the actual demand of the civil services examination. It will familiarize the students with the micro detailing of the syllabus thoroughly along with basic concept coverage of the various domains of study. It will lay a solid foundation of concepts and will help in developing the perspective & approach needed for the preparation and cracking the most difficult and prestigious examination of civil services.

#### **Course Outcome:**

The Course would provide guidance and assistance help to the students for preparation of civil services examinations. It would facilitate the study of competition and job-oriented study and lay a foundation of knowledge required to clear the competitive examination.



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#### **Course Design:**

| Sr. | Course Module | Title   | <b>Duration</b> (in |
|-----|---------------|---|---------------------|
| No. |               |   | hrs.)               |
| 1   | GSF-1         | History of India & Indian National Movement   | 35 hrs.             |
| 2   | GSF-2         | Indian & World Geography– Physical, Social,<br>Economic Geography of India & the World                                      | 30 hrs.             |
| 3   | GSF-3         | Indian Polity & Governance— Constitution, Political System, Panchayati Raj, Public Policy, Rights Issues, etc.              | 40 hrs.             |
| 4   | GSF-4         | Economic & Social Development– Sustainable Development, Poverty, Inclusion, Demographics, Social Sector Initiatives, etc.   | 20 hrs.             |
| 5   | GSF-5         | General issues on Environmental ecology, Bio-<br>diversity & climate change – that do not require<br>subject specialization | 10 hrs              |
| 6   | GSF-6         | English Comprehension   | 10 hrs              |
| 7   | GSF-7         | Data interpretation (charts, graphs, tables, data sufficiency etc.  | 5 hrs               |
|     |               | Total   | 150 hrs             |

(Dr. Govind Gaurav)

**Course Coordinator** 

### **Android App Development**

#### **Outline of the Course**

| S.No. | <b>Course Modules</b> | Title                   | Hours |
|-------|-----------------------|-------------------------|-------|
| 1.    | APPS-1.1              | Java Concepts           | 20    |
| 2.    | APPS -1.2             | Android Basics          | 20    |
| 3.    | APPS -2.1             | Android App Development | 50    |
| 4.    | APPS -2.2             | Android - Advanced      | 30    |
|       |                       | Total Hours:            | 120   |

#### **Details of Course Modules:**

#### **Module I: Java Concepts**

- Introduction to Java
- OOPS refreshing concept

#### **Module II: Android - Basics**

- Introduction to Android
- What is Android?
- History of Android
- Android versions History
- [CODING, UI, STORAGE]
- Introduction to Android Apps Development TOOL
- What is Activity?
- Developing a Simple Android Log In screen UI design
- Types of Layouts in Android
- Introduction to Android Java class file & its structure.

## Module III: Android App Development

- Creating a simple Toast Message Application on click of a button
- What is Android Virtual device (AVD)?
- How to create Android Virtual Device (AVD)?
- How to run our App on our own Android device?
- Android Menus
- Creating Alert dialog box in Android
- Basic widgets in android, Creating a Simple user registration page UI

- Intents
- Creating a new Activity
- Passing Data between Activities
- WebView
- What is Android Manifest file?
- What is build Gradle file?
- Date and Time picker
- Playing Audio and Video in android Listview, gridview, Recycleview
- StartActivity for result, Types of Intents
- Creating Notifications in Android
- Animation in android
- Basic Components of Android
- Activity

#### Module IV: Android - Advanced

- Effective usage of Android Templates
- Shared Preferences
- Internal and External storage
- Android Fragments, Creating Navigation drawer and loading different fragments on clicking different menu item.
- SQLite Database.
- Creating a Login and Sign-Up Application using Firebase database
- Firebase- Realtime, Cloud, Storage, Auth
- How to import and Export codes, how to use Third party library projects and integrating it to our App
- Working with GitHub codes
- Procedures to launch your App on Play store.

## Additional things to learn:

- Adobe XD
- Adobe photoshop
- Figma
- Github
- Git
- Basic of Html & CSS

#### **Outcome of the Course:**

- Understand how an android works and how it is different from other.
- Know how to design an app.
- What are the basic parts of an android application.
- Create an android application.
- Start their own work and business.

## **Assessment of the Course:**

- A. Written Assessment N/A
- B. Practical Assessment 2 Practical assessments each of 50 Marks
- **C.** Viva-Voce Assessment 2 Viva-Voce Assessments during presentations.

**Course Coordinator** 

Asing ny

Dr. Ashutosh Mishra

#### **DIPLOMA IN COMPUTERISED ACCOUNTING (DCAC)**

#### **RELEVANT DOCUMENTS-**

#### 1. NAME OF THE PROGRAMME (YEAR WISE)

Diploma in Computerised Accounting (DCAC)

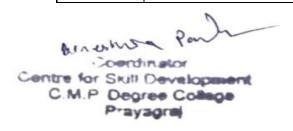
#### 2. DURATION OF THE COURSE (NOT LESS THAN 30 HRS):

Six Months

#### 3. LIST OF STUDENTS WITH SIGNATURE

#### 3. LIST OF STUDENTS WITH SIGNATURE

| S. No. | Name                   | Fee receipt<br>Number |
|--------|------------------------|-----------------------|
| 001    | ABEER DWIVEDI          | 201                   |
| 002    | VIRENDRA YADAV         | 204                   |
| 003    | SUNIL KUMAR            | 202                   |
| 004    | ASHISH KUMAR JAISWAL   | 205                   |
| 005    | SHUBHAM MODANVAL       | 203                   |
| 006    | ANCHAL SINGH           | 207                   |
| 007    | PRAVEEN KR. SRIVASTAVA | 208                   |
| 008    | SWETANK CHAUBEY        | 209                   |
| 009    | RAVI KUSHWAHA          | 210                   |
| 010    | VISHAL SINGH           | 211                   |
| 011    | SURAJ YADAV            | 212                   |
| 012    | SAUMYA PANDEY          | 213                   |
| 013    | ARYAN GUPTA            | 215                   |
| 014    | AVANISH KUMAR VERMA    | 214                   |
| 015    | BASANT KUMAR           | 216                   |
| 016    | ANIL TIWARI            | 217                   |



| 017 | SHIV NARAYAN MISHRA | 219 |
|-----|---------------------|-----|
| 018 | AMIT SHARMA         | 218 |
| 019 | HARSHWARDHAN SINGH  | 220 |
| 020 | VIPIN KUMAR         | 221 |
| 021 | MANISH YADAV        | 222 |
| 022 | PRAVEEN KUMAR       | 223 |
| 023 | SOUMYA GUPTA        | 224 |
| 024 | RAHUL MAURYA        | 225 |
| 025 | VISHV VIJAY KUMAR   | 226 |
| 026 | MOHD NAJMUS SAQUIB  | 227 |
| 027 | SHREYA YADAV        | 228 |
| 028 | SWATI JHA           | 229 |
| 029 | AVIRAL AGARWAL      | 230 |
| 030 | ADARSH DHAR DWIVEDI | 231 |

#### 4. **CURRICULUM**

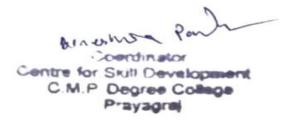
#### ABOUT THE DIPLOMA IN COMPUTERISED ACCOUNTING (DCAC)

CMP Degree College has setup a Computer Value Hub in collaboration with UPTEC (A Government joint venture) at College campus. The tie-up provides quality IT Courses like CCC and Tally ERP 9 to students through well trained professionals in their free time with a nominal fee to become a Complete Accounting Professional.

#### Programme, Course, Duration, Eligibility and Fee Structure Details

Eligibility and Fee and Fee

| S.No. | Programme | Course                  | Duration | Eligibility | Fee Structure   |
|-------|-----------|-------------------------|----------|-------------|---|
| 1     | Diploma   | Computerized Accounting | 6 Months | 10+2        | Rs.6000  (For full course) + Rs. 200 (Admission fees) + Rs. 600 |



|  |  |  | (Courseware fees) |
|--|--|--|-------------------|
|  |  |  |                   |

#### **Syllabus**

#### **NIELIT 'CCC'**

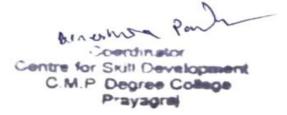
- Computer Fundamentals
- Introduction to GHI based operating system
- Office Productivity Enhancements Tool
  - Word Processing
  - o Spreadsheet
  - Making small presentation
  - o Computer communication and Internet
  - o WWW and web browser
- Communication and Collaboration

#### **Financial Accounting and Tally.ERP9**

- Business Accounting
- Basic Accounting using Tally.ERP 9
- Financial Management & Banking
- Payroll
- Audit of Accounts
- GST (Goods and Service Tax)
  - o TDS (Tax Deducted at Source)
  - o TDS (Tax Collected at Source)
  - o e-filing of Tax Returns
- Advance Accounting using Tally.ERP9
- Personality Development

#### **5. ASSESSMENT PROCESS**

All assessment process will be taken by UPTEC.



# 6. A summary report on Certificate Programme in Banking, Finance and Insurance (CPBFI)

C.M.P. Degree College organized a course on Diploma in Computerised Accounting (DCAC) in collaboration with UPTEC. This CPBFI course started from 14<sup>th</sup> September 2022. The course covered all aspects of advance accounting using Tally.ERP9. The course covered 6 months of learning through corporate trainers with 4 hours of training per day. 4 modules covered during the training:

- a. 3 months of Computer Fundamentals.
- b. 3 months of Advance Accounting using Tally. ERP9.

The course ended on 27<sup>th</sup> October, 2022. Thirty (30) students completed the course and certificate are distributed to them.

#### **Outcome**

The course was mainly intended to improve the overall knowledge of financial accounting. The programme was successful in achieving following outcomes-

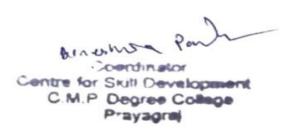
- 1. Improving general concept of accounting.
- 2. Improving basic computer knowledge.
- 3. Improving overall financial accounting operations through TALLY software.

#### 7. MODEL CERTIFICATE ISSUED

Attached.

#### 8. ATTENDANCE SHEET

Attached



#### 1. NAME OF THE PROGRAMME (YEAR WISE)

- 1. Diploma in Banking and Financial Service
- 2. Diploma in Management and Entrepreneurship
- 3. Diploma in Computer Hardware and Networking

# 2. DURATION OF THE COURSE (NOT LESS THAN 30 HRS):

One Year

## 3. LIST OF STUDENTS WITH SIGNATURE

## DIPLOMA IN BANKING & FINANCIAL SERVICE (DBFS) - 2020-21

| S.No          | Name                 | Fee Receipt No. |
|---------------|----------------------|-----------------|
| 1             | ABHISHEK MISHRA      | 7813            |
| 2 ADITI YADAV |                      | 7799            |
| 3             | AHMAD ABBAS          | 10315           |
| 4             | ARPITA SRIVASTAVA    | 7803            |
| 5             | ASHOK KUMAR GUPTA    | 7793            |
| 6             | GARGI SHUKLA         | 7878            |
| 7             | HIMANSHU PATEL       | 7833            |
| 8             | JAI ASHISH TOPPO     | 7790            |
| 9             | JYOTI ARYA           | 7819            |
| 10            | JYOTI SHUKLA         | 7811            |
| 11            | KM NIKITA SRIVASTAVA | 7972            |
| 12            | KM. HINA HASHAIvii   | 7821            |
| 13            | KOMAL VERMA          | 10321           |
| 14            | MANJARI SRIVASTAVA   | 7810            |
| 15            | PIYUSH AGRAWAL       | 7829            |
| 16            | POOJA                | 7836            |
| 17            | PRASHASTI GUPTA      | 7792            |
| 18            | PRAYANK KUMAR        | 10311           |
| 19            | PREETI KUMARI        | 7834            |
| 20            | SAKSHI YADAV         | 7835            |
| 21            | SHIKHA PANDEY        | 7806            |
| 22            | SUDHANSHU MISHKA     | 7814            |
| 23            | SUDIPTI SINGH        | 7825            |
| 24            | SUHANI GUPTA         | 10310           |
| 25            | SWATI SINGH          | 7827            |
| 26            | VISHAL SRIVASTAVA    | 7841            |

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## DIPLOMA IN MANAGEMENT AND FN [REPRENEURSHIP (DME)-2021

| S. No | Name                   | Fee Receipt No. |
|-------|------------------------|-----------------|
| 1     | AKSHIT VERMA           | 7816            |
| 2     | AMIT JAISAWAL          | 10320           |
| 3     | AMIT KUMAR VERMA       | 7837            |
| 4     | ARVIND VERMA           | 7939            |
| 5     | ATUL KUMAR             | 7826            |
| 6     | HARSH KUMAR MAURYA     | 7824            |
| 7     | MOHAMMAD DANISH ABBASI | 7789            |
| 8     | PRIYANSHU RAI          | 7791            |
| 9     | RAVI KANT TIWARI       | 7802            |
| 10    | Shikhar Shrivastav     | 9845            |
| 11    | SHRUTI SRIVASTAVA      | 7800            |

#### DIPLOMA IN COMPUTER HARDWARE AND NETWORKING (DCHN) -2020-21

| S.NO. | Name            | Fee Receipt No. |
|-------|-----------------|-----------------|
| 1     | ANKIT TRIPATHI  | 7809            |
| 2     | GAURAV PANDEY   | 7831            |
| 3     | SHRUTI NIGAM    | 7808            |
| 4     | SHUBHAM KASHYAP | 7822            |

#### 4. CURRICULUM

Programme, Course, Duration, Eligibility, No. of Seats and Fee Structure Details

| S.No. | Programme | Course                                 | Duration | Eligibility | Seats | Fee<br>Structure   |
|-------|-----------|--|----------|-------------|-------|--|
| 1     | Diploma   | Banking &<br>Financial Service         | One Year | 10+2        | 40    | Rs.5000<br>(For full<br>course) +<br>Rs.200<br>(Admission<br>fees)   |
| 2     | Diploma   | Management and<br>Entrepreneurship     | One Year | 10+2        | 40    | Rs. 5000<br>(For full<br>Course) +<br>Rs.200<br>(Admission<br>fees)  |
| 3     | Diploma   | Computer<br>Hardware and<br>Networking | One Year | 10+2        | 40    | Rs. 12000<br>(For full<br>Course) +<br>Rs.200<br>(Admission<br>fees) |

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Centre for Skill Development C.M.P. Degree College (Skilvagra)

#### Syllabus

# Diploma in Banking and Financial Service (DBFS)

#### Sem-I

- 1. Business Communication and Personality Development
- 2. IT for Bankers
- 3. Banking Law & Practice-1
- 4. Management of Financial

#### Sem-II

- 1. Economics for Bankers
- 2. Financial Markets and Institutions
- Banking Law & Practice 2
- 4. Project Work/ Internship/Apprenticeship

# Diploma in Management & Entrepreneurship (DME)

#### Sem-1

- 1. Business Communication and Personality Development
- 2. IT for Business
- 3. Principles and Practice of Management
- 4. Introduction to Entrepreneurship

#### Sem-II

- 1. Financial Management
- 2. Marketing Management
- 3. Human Resource Management
- 4. Project Work/ Internship/Apprenticeship

#### Diploma in Computer Hardware and Networking Sem-1

- COMPUTER FUNDAMENTAL-1 (DCHN-01)
- 2. ELECTRONICS (DCHN-02)
- Module-2: Hardware Concepts (DCHN-03)
- 4. Module-3 Computer Fundamental-2 (DCHN-04)
- 5. Module-4: Software Installation and Troubleshooting (DCHN-05)

#### Sem-II

- 1. Module5: Network Concepts (DCHN-06)
- 2. Module 6: Structure cabling, Fiber Splicing and Routing (DCHN-07)
- Module 7: LINUX (DCHN-08)
- 4. Module 8: Project Work/ Internship/Apprenticeship (DHCN-09)
- 5. Module 9: Business Communication and Personality Development (DHCN-10)

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#### 5. ASSESSMENT PROCESS

Written examination has been conducted at the end of semester and evaluation of Project Work/ Internship/Apprenticeship.

# 6. A summary report on Certificate Programme in Banking, Finance and Insurance (CPBFI)

C.M.P. Degree College organized a course under UGC-NSQF programme. This CPBFI course started from 05<sup>th</sup> January, 2020. The course covered all aspects of banking, finance, management and computer hardware and networking. The course ended on 27<sup>th</sup> December, 2020. Forty one (41) students completed the course and certificate are distributed to them.

#### Outcome

The course was mainly intended to improve the overall knowledge of banking, finance, accounting and management. The programme was successful in achieving following outcomes-

- 1. Improving general concept of banking, finance, accounting and management.
- Improving basic computer knowledge.
- 3. Improving overall knowledge of computer hardware and networking.

## 7. MODEL CERTIFICATE ISSUED

Attached.

#### 8. ATTENDANCE SHEET

Attached

Goordinator
Centre for Skill Development
C.M.P. Degree College
Prayagraj



# C. M. P. Degree College

(A Constituent PG College, University of Allahabad) M.G. Marg, Prayagraj-211002

Website: cmpcollege.ac.in

#### CERTIFICATE COURSE

| Name of Course             | Plant Tissue Culture and Micro propagation   |
|----------------------------|--|
|                            | (Exposure of lab to land techniques)   |
| Course Code                | PTC  |
| Department                 | BOTANY   |
| Course Category            | Special Add-on Course  |
| Proposed Duration Course   | 30 hrs. (once in a year)   |
| Proposed Number of Seats   | 15   |
| Eligibility for the Course | The candidate seeking admission to the course either be pursuing Graduate/Post-Graduate Degree in Science (Bio) from the C.M.P.Degree College. |
| Admission Process          | Admission shall be based on either first come first serve basis or by an Aptitude Test (in case of applications more than seats)               |
| Proposed Fee/Students      | Rs. 15000/-  |
| Course Coordinator         | Dr. Neha Pandey<br>Assistant Professor, Department of Botany,<br>C.M.P. Degree College, Prayagraj  |
| Course Co-coordinator      | Dr. Sarita Srivastava Associate Professor, Department of Botany, C.M.P. Degree College, Prayagraj  |
| Course Office              | DBT Central Facility center, Department of Botany,<br>C.M.P. Degree College, Prayagraj   |



# C. M. P. Degree College

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M.G. Marg, Prayagraj-211002

Website: cmpcollege.ac.in

#### BUDGET PROPOSAL FOR THE COURSE DURATION OF 3 MONTHS

| S. No   | Items                          | Budget                          | Total (Rs) |
|---------|--------------------------------|---------------------------------|------------|
| 1       | Resource person honorarium     | 1000/- per lecture              | 20000.00   |
|         | (including Course coordinator) |                                 |            |
| 2       | Lab technician                 | 5000/-per month                 | 15000.00   |
| 3       | Consumables                    | 1,50000/-once during the course | 150000.00  |
| 4       | Instrumentation                | 50,000/- once during the course | 50000.00   |
| 5       | Tours and travel               | 25000/- once during the course  | 25000.00   |
| 6       | Miscellaneous                  |                                 | 10000.00   |
| Total 7 | 2250000                        |                                 |            |

#### **Basic Requirements for Implementation:**

- 1. A laboratory cum culture room of 20x 20 feet
- 2. One Air-conditioners for tissue culture chamber
- 3. Instrumentations:
  - a. pH meter
  - b. Refrigerator
- 4. Consumables Chemicals and glass wares
- 5. Man power:
  - a. Course coordinator (specialized in Tissue culture and micro-propagation)
  - b. Resource persons (lectures on specialized area)
  - c. One technical assistant.
  - d. One daily wager for washing and autoclaving

#### Course Overview and Structure

#### **Description of Course**

Plant Tissue culture is an important tool for both basic and applied aspects of plant biotechnology as well as its commercial applications. As a technique widely known for the production of large numbers of genetically identical plantlets, this technology exhibits several advantages over conventional propagation techniques. All techniques are skill based and upon systematic learning, can equip a person to effectively utilize the techniques in various areas like basic research, environmental issues and commercial applications. It is a valuable tool for research on morphogenesis, cell signaling, physiology, and molecular biology, as well as crop improvement by biotechnology. This course offers a comprehensive hands-on training for learning the basics with an insight to laboratory practices along with exposure to "lab-to-land" transfers.



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#### 1. Objective:

- 1. Dissemination of knowledge for Lab to Land
- Basic and applied training in the subject for development of skills for a successful career in entrepreneurship,
- Generate technically trained human resource for tissue culture industries and as instructors in schools and junior colleges.

#### 2. Benefits of Course:

- The course will be a value-added course for High School and Jr. College Science teachers.
- 2. To start as Entrepreneurs in Plant tissue culture and can establish their own labs
- Researchers in plant tissue culture who have a focus on commercial applications such as crop improvement, secondary metabolite production, and various strategies for inducing genetic interference;
- Beneficial for researchers and students who want to understand basic laboratory setup, handling of explant tissue, nutrient medium and establishing the culture, and incubation of cultures.

#### 3. Course Structure:

| S.No. | Course Modules | Title                                | Total number of hours |
|-------|----------------|--------------------------------------|-----------------------|
| 1.    | PTC-1.1        | Plant Tissue Culture: Techniques (T) | 08 hrs                |
| 2.    | PTC-1.2        | Micro-propagation (T)                | 08 hrs                |
| 3.    | PTC-2.1        | Practical course based on PTC-1.1    | 08 hrs                |
| 4.    | PTC-2.2        | Practical course based on PTC-1.2    | 06 hrs                |
| 5     | PTC            | Laboratory/Industrial visit          | -                     |

#### 4. Course Assessment:

At the end of the course, an MCQ examination shall be conducted on the basis of curriculum/module to assess the progress of students and certificates shall be provided only to those students who scored at least 50 percent marks in the examination.

#### 5. Course Outcome:

The Course would provide guidance and assistance that helps the students to understand the importance of antioxidant agents and their derivatives. It would facilitate the job-oriented study and lay a foundation of knowledge required to combat with ageing process.



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#### 6. Course contents and Modules

#### Module I: Basic theory of Plant tissue culture and applications

#### PTC-1.1: Plant Tissue Culture

- Introduction. History. Scope. Advantages. Applications. Limitations.
- · Guidelines for establishing academic and commercial laboratory.
- Steps involved in Plant Tissue Culture.
- Various nutrient medium composition
- Plant growth regulators and their role in nutrient media.
- Types of organ cultures and their applications.
- Pathways of regeneration.
- Micrografting of commercially important plants. In vitro approaches for crop improvement.
- Plant cell reactors.
- Micro techniques

#### PTC-1.2: Micropropagation (22L)

- Meristem culture for the production of virus free plants.
- Nucellus culture for clonal propagation and large scale multiplication.
- Stratagies of Micropropagation.
- Stages of micropropagation via axillary shoot proliferation in Monocots and Dicots.
- Stages in micropropagation via direct and indirect organogenesis.
- Stages in micropropagation via direct and indirect somatic embryogenesis.
- Low cost methods for micropropagation.

#### Module II: Hands on training in basic tissue culture techniques

#### PTC-2.1: Practicals in Pant Tissue Culture:

- 1. Handling and Instrumentation of Plant Tissue Culture.
- 2. Glassware Washing & Sterilization Techniques.
- 3. Preparation of stock solutions and nutrient media.
- 4. Surface sterilization of Explants.
- 5. Seed cultures for the establishment of organ cultures.
- 6. Establishment of organ cultures for the induction of callus
- 7. Establishment of organ cultures for the induction of multiple shoots
- 8. Sub-culturing of nucellar seedlings for clonal propagation.

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## Centre for Vocational Studies & Skill Development

# C. M. P. Degree College

(A Constituent PG College, University of Allahabad) M.G. Marg, Prayagraj-211002

Website: cmpcollege.ac.in

- 9. Primary hardening of tissue culture plants for their acclimatization
- 10. Cytological study of calli cells and their subculturing
- 11. Establishment of embryogenic/ non embryogenic cell suspension cultures.
- 12. Embryo / Endosperm/ Ovules and anther Cultures.

#### PTC-2.2: Practicals in Micropropagation

- 1. Demonstration of meristematic explants in different plants
- 2. Preparation of mother plants for collection of explants
- 3. Monocot shoot bud culture for axillary shoot proliferation
- 4. Dicot Shoot tip / nodal segment culture for axillary shoot proliferation.
- 5. Establishment of multicultures
- 6. In vitro and ex vitro rooting of microshoots.
- 7. Primary and secondary hardening of tissue cultured plants.
- 8. Artificial seed production from microshoots and their in- vitro germination.
- 9. Establishment of cultures for the induction of embryogenic callus.
- 10. Maturation and conversion of somatic embryos into plantlets.

Module III: Exposure to the industrial and lab setup

PTC 3: Visit to a tissue culture Laboratory or Industrial visit of one day

Neha Pander

(Dr. Neha Pandey)

Course Coordinator

Assistant Professor

Department of Botany

(Dr Sarita Srivastava)

Sanh muistane

Course Co-coordinator

Associate Professor

Department of Botany



# C. M. P. Degree College

(A Constituent PG College, University of Allahabad) M.G. Marg, Prayagraj-211002

Website: cmpcollege.ac.in

# Antioxidant Testing in Medicinal and Aromatic Plants

| Name of Course             | : | Antioxidant Testing in Medicinal and Aromatic Plants   |  |
|----------------------------|---|--|--|
| Course Code                | : | ATM  |  |
| Department                 | : | Chemistry  |  |
| Course Category            | : | Special Add-on Course  |  |
| Proposed Duration Course   | : | 30 hrs. (once in a year)   |  |
| Proposed Number of Seats   | : | 10   |  |
| Eligibility for the Course |   | The candidate seeking admission to the course either be pursuing Graduate/Post-Graduate Degree in Science (Bio) from the C.M.P.Degree College. |  |
| Admission Process          | : | Admission shall be based on either first come first serve basis<br>or by an Aptitude Test (in case of applications more than seats)            |  |
| Proposed Fee/Students      | : | Rs. 500/-  |  |
| Course Coordinator         | : | Dr. Santosh Kumar Srivastava Associate Professor, Department of Chemistry, C.M.P. Degree College, Prayagraj                                    |  |
| Course Co-coordinator      | : | Dr. Himani Chaurasia Assistant Professor, Department of Chemistry, C.M.P. Degree College, Prayagraj  |  |
| Course Office              | 1 | Photophysical & Therapeutic Laboratory, Department of<br>Chemistry, C.M.P. Degree College, Prayagraj   |  |



# C. M. P. Degree College

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M.G. Marg, Prayagraj-211002

Website: <u>cmpcollege.ac.in</u>

#### Course Overview and Structure

#### **Description of Course:**

Antioxidant Testing Short-Term Course is aimed to provide a qualitative solution to the Biochemistry, Chemistry and Biology Students norder to enhance their preparation and academic excellence for their future endeavors. Antioxidants have become scientifically interesting compounds due to their many benefits such as anti-aging, anti-inflammatory, in food technology, in pharmacology, cosmetics and medicine.

This course focuses on grooming the Science Students with the qualitative and right knowledge which helps them to shape their career in the field of Medicinal Chemistry. It offers the students in-hand-training about the extraction and antioxidant potential analysis of natural products, that help them in gaining confidence to appear and crack the interviews successfully.

This course is exclusively designed for the introduction of drug discovery, chemistry and biological importance of natural products, and extraction & haras-in-training for antioxidant evaluation. The course is conducted by experienced and efficient faculties of the College having an expertise in antioxidant evaluation in natural and synthetic products.

#### Objective of Course:

The course will serve as a bridge between the training and the actual demand of the pharmaceutical industries. It will familiarize the students with the micro detailing of the drug discovery and analysis of biological activities of antioxidants. It will lay a solid foundation of concepts and will help in developing the perspective & approach needed to achieve jobs in pharmaceutical industries.

#### Course Assessment:

At the end of the course, an MCQ examination shall be conducted on the basis of curriculum/module to assess the progress of students and certificates shall be provided only to those students who scored at least 50 percent marks in the examination.

#### **Course Outcome:**

The Course would provide guidance and assistance that helps the students to understand the importance of antioxidant agents and their derivatives. It would facilitate the job-oriented study and lay a foundation of knowledge required to combat with ageing process.

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# Centre for Vocational Studies & Skill Development

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#### Course Design:

| Sr. No. | Course Module | Title   | Duration (in |
|---------|---------------|---|--------------|
|         | 5             |   | hrs.)        |
| 1       | ATM-1         | Introduction of ageing process and oxidative release of free radicals | 02 hrs.      |
| 2       | ATM-2         | Plants of Biological Importance                                       | 02 hrs.      |
| 3       | ATM-3         | Essential and Non-Essential Antioxidants                              | 02 hrs.      |
| 4       | ATM-4         | Synthetic and Natural Antioxidants                                    | 02 hrs.      |
| 5       | ATM-5         | Methodology of Antioxidant Evaluation (insilico and in-vitro)         | 10 hrs       |
| 6 '     | ATM-6         | Mechanism of Antioxidant Action in vitro                              | 02 hrs       |
| 7       | ATM-7         | Data interpretation (charts, graphs, tables, data sufficiency etc.    |              |
| 8       | ATM-8         | Hands-in-Training   | 08 hrs       |
| • •     |               | Total   | 30 hrs       |

(Dr. Santosh Kumar Srivastava)
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University of Allahabad

# CERTIFICATE COURSE IN ADULTERATION OF **MILK AND MILK PRODUCTS** (THIRTY HOURS CERTIFICATE PROGRAM)

**SYLLABUS** 

**COURSE STRUCTURE AND SCHEME** 



# **Department of Chemistry**

C.M.P. Degree Collage Prayagraj

2022-2023

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# CERTIFICATE COURSE IN ADULTERATION OF MILK AND MILK PRODUCTS: (THIRTY HOURS CERTIFICATE PROGRAM)

| 1  | Course Code                         |   | AMP  |
|----|-------------------------------------|---|--|
| 2  | Duration of Course                  | * *   | 30 hours   |
| 3  | No. of Seats                        | :   | 10   |
| 4  | Fees                                | :   | Rs. 2000.00  |
| 5  | Course offered by the<br>Department | Concentration of Anima and Confession and Anima and | Department of Chemistry C.M.P. Degree Collage Prayagraj  |
| 6  | Name of Course Coordinator          |   | Dr. Pravin Kumar Singh Assistant Professor Department of Chemistry C.M.P. Degree Collage Prayagraj   |
| .6 | Name of Course Co-coordinator       |   | Dr. Vishal Srivastava  Assistant Professor  Department of Chemistry  C.M.P. Degree Collage Prayagraj |

Dr. Pravin Kumar Singh

Course Coordinator

Dr. Vishal Srivastava

Co-coordinator

Collage Prayagraj

C.M.P. DEGREE COLLEGE PRAYAGRAJ

Dr. Babita Agraw

Convener

Department of Chemic

C.M.P. Degree Collage Prayagraje

# CERTIFICATE COURSE IN ADULTERATION OF MILK AND MILK PRODUCTS: (THIRTY HOURS CERTIFICATE PROGRAM)

#### **Course Objective:**

- 1. To understand the fundamentals of food quality and control procedures.
- 2. To provide hands on training about adulteration and detection methods.

#### **Course Learning Outcomes:**

After successful completion of the course, students will be able to:

- 1. This course provides knowledge of Dairy Chemistry, Milk Composition Physico Chemical properties of milk.
- 2. This course provides knowledge on various adulterants that added in milk and milk products.
- 3. It provides knowledge to students on various tests to detect adulterants.

#### Syllabus:

#### Unit I.

**Dairy Chemistry:** Milk Composition — Physico Chemical properties of milk, Milk lipids, Proteins, Sugar and significance - Minerals and Vitamins in Milk — Thermal stability of Milk — Freezing Point depression of Milk.

#### Unit II.

Adulteration and contaminants in milk and milk products: Definition, classification of adulterants, List of commonly adulterant in milk and milk products, harmful effects of adulterants and contaminants. Food laws - adulteration acts.

#### Unit III.

Qualitative testing methods of market milk and milk products: Quality testing of market milk: use of bio protective factors for preservation of raw milk: effects on physiochemical, microbial and nutritional properties of organic milk. Status of preservation of raw milk.

**Adulteration of carbohydrates in milk:** starch, sugar, glucose and Dextrin/Maltodextrin – detecting methods - health effects.

**Adulteration of Fertilizers and salts in milk**: urea, pond water, ammonium compound and common salt — detecting methods - health effects. Detergents in milk

#### Unit IV.

**Adulteration of neutralizer and preservative in milk:** sodium hydroxide, sodium carbonate - sodium bicarbonate - formaldehyde - hydrogen peroxide — MRL- Detecting methods – health effects. Permitted preservatives and its limits

#### Unit V.

**Adulteration of milk Products: Vanaspati** — **animal body fats** — vegetable oils in fat rich products—detecting methods - health effects, Effects and health

**Colour and flavours** - Impacts of artificial/synthetic colour and flavours in milk and milk products

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#### Reference Text Books:

- Early, R. (1995), Guide to Quality Management Systems for the Food Industry, Blackie, Academic and Professional, London.
- 2. Farrington and Woll. 2010. Testing milk and its products, Axis Books Publ, Jodhpur.
- 3. Gould, W.A. and Gould, R.W. 1988. Total Quality Assurance for the Food Industries, CTI Publications Inc, Baltimore.
- 4. Ramakant Sharma 2006, Production, processing and quality of milk products International book distributing Co, Lucknow.
- SandeepTomar. 2013, Dairy products research and analysis, Oxford book company, Jaipur.
- Srilakshmi, B. 2005. Food Science, New Age International (P) Ltd., Publishers, New Delhi.