**Newman College** Thodupuzha
Affiliated to Mahatma Gandhi University
Reaccredited by NAAC with A grade (Cycle 3, CGPA 3.32)

Email: principal@newmancollege.ac.in
website:www.newmancollege.ac.in
Phone: 04862-222686


# Criterion I

# Curricular Aspects

**1.2** **Academic Flexibility**

1.2.1

## Curriculum of Certificate / Value added course with Assessment Procedure

## 2021-2022

Submitted to

National Assessment and Accreditation Council

## Curriculum for Certificate/Value added programs with Assessment procedure

### List of Courses for 2021-2022

| Sl. No | Name of the course | Number of students completed the course | Refer page no |
|---|---|---|---|
| 1 | Certificate Course in Social Work | 197 | 3 |
| 2 | Certificate Course on Research Methodology | 64 | 5 |
| 3 | Certificate Course on Functional English | 59 | 7 |
| 4 | Certificate Course on Business English | 59 | 10 |
| 5 | Certificate Course in Functional English | 58 | 12 |
| 6 | Certificate Course in Basic Informatics | 57 | 14 |
| 7 | Certificate course: DTP in Malayalam | 52 | 17 |
| 8 | Certificate Course on Ecologically Friendly Tourism and Eco system Conservation | 22 | 19 |
| 9 | UGC sponsored Career oriented Addon Course on Plant Tissue Culture | 24 | 22 |
| 10 | Certificate Course on Basic Scientific Tools for Chemistry | 38 | 24 |
| 11 | Certificate Course on Data Analytics Using R | 30 | 27 |
| 12 | Add on Course on Electronic Equipment Maintenance | 47 | 29 |
| 13 | Value added Course on Conservation of Natural Resources | 33 | 32 |
| 14 | Certificate Course: Python For Research Data Analysis | 13 | 34 |
| 15 | Certificate Course on Analysis Techniques | 18 | 36 |
| 16 | Certificate Course on Introduction to Excel | 17 | 38 |
| 17 | Certificate Course in Microbes as Bio fertilizers | 42 | 40 |
| 18 | Certificate Course - Research Methodology: A Practical approach | 92 | 43 |
| 19 | Certificate Course on Tourism Management | 140 | 47 |
| 20 | Certificate Course on Basics of Stock Market | 144 | 49 |
| 21 | Certificate Course on Business Environment | 146 | 51 |

# 1. Certificate Course in Social Work

## Curriculum with Assessment Procedure

**Syllabus**

**Certificate course in Social work**

**Course Code: ECOCCSW01**

### COURSE OUTCOME

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

1. get familiar with basic principles of social work and to enhance the understanding of social work profession.
2. understand the implications of social work services in the group works
3. apply the principles and techniques of social work gained through this course to the discussion of major social issues and the solution of typical case problems.

**Unit I:** Social Work- Meaning, Definition, Goals and Objectives, Scope and principles of social work. Relation and distinction between social services, social reform, social welfare & social work.

**Unit II**: Social Work Profession- Meaning and characteristics, beginning of social work education, Professional values and ethics. &Professional associations

**Unit III**: Social Work Services—Concept & Role in: Family service, Child welfare services, b Welfare services for the Challenged, Women welfare services, Labour welfare services, Medical social work and Correctional services.

**Unit IV** Social Institutions: Marriage: Meaning, Characteristics, Forms of Marriage, Mate Selection: Exogamy & Endogamy. Family: Meaning, Function of Family, Types of Family: Nuclear, Extended, Joint Family, Features of Modern Family and Trends.

**Unit V**: Social Group Work- Meaning, Definition, objectives, purpose and scope. Principles of social group work. Group and significance of different groups in the life of the individual and Society

**REFERENCES:**

1. Frink.A.B: The Field of Social Work, New York, Henry Holl and Co. 1945

2. Friedlander Walter A and Apte Robert Z: Introduction to Social Welfare, New Delhi, Prentice Hall.1982.

3. Friedlander Walter A: Concepts and Methods of Social Work, New Delhi, PrenticeHall.1964.

4. Ganguli.B.N: Gandhi's Social Philosophy, Delhi, Vikas Publishing House, 1973.

5. Gore.M.S: Social Work and Social Work Education, Bombay, Asia Publishing House, 1965.

6. Gupta, Manju: Child Abuse – A Social Work Perspective, Mangal Deep Publications, Jaipur, 2001.

7. Jainendra Kumar Jha: An Introduction to Social Work, Institute for Sustainable Development, Lucknow, and Anmol Publications Pvt., Ltd., New Delhi 2002.

8. Jacob.K.K. (Ed) Social Work Education in India – Retrospective and Prospect, Himansu Publications, Udaipur, 1991.

9. Lawani.B.T. Social Work Education and Field Instructions, Center for Social Research andDevelopment, Pune, 2002.

10. Marulasiddaiah.H.M. (Ed) Bharata Samajakarya Vishwakosha, Vol.I, Kannada Visvavidlaya, Hampi, 1994.

11. Moorthy, M.V: Social Work – Philosophy, Methods and Fields, Karnataka University, Dharwad, 1974. 12. Moorthy, M.V and Narayana Rao S: Field work in Social Work, Dept of Sociology and Social Work, Andra University, Waltair, 1970.

13. Publication Division, Ministry of Welfare, Govt of India: Encyclopaedia of Social Work in India (All Volumes) 1987.

14. Skidmore, Rex A and Thackeray, Milton G: Introduction to Social Work, Prentice Hall, Englewood Cliffs, New Jersey, 1982.

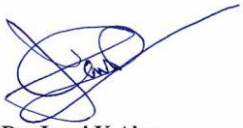
15. Stroup, H.H. Social Work – An Introduction to the Field, New Delhi, Eurasia Publishing House 1960. 16. University Grants Commission. Review of Social Work Education in India, Retrospect and Prospect, University Grants Commission, New Delhi, 1980.


**Assessment and evaluation:**

**Mode of assessment: Course end examination**

**Theory**

- Mode of assessment: Course end examination
- Marks: 40
- Minimum marks or pass: 15
- Assignment: 10



**Dr. Jenni K Alex**
Head of the Department

## 2. Certificate Course on Research Methodology (Started in 2018-19)

### Curriculum with Assessment Procedure

**Course Outcome:**

Better understanding of research methodology.

Effective use of methodologies in writing the dissertation.

**SYLLABUS**

**Module I**
**Definition and Scope of Research**

- Definition of "Research"
- Qualities of a good researcher
- Key terms in research: investigation, exploration, hypothesis, data, methods andtechniques, results and findings, Variables

**Module II**
**Materials and Tools of Research**

- Print: Books, Journals, International Abstract, International Conference Proceedings, etc.
- Audio-visual resources
- Interviewing
- Field Studies
- Web resources

**Module III**
**Selection of Topic**

- Area of Research: Genre, Period, Region, Author, Texts, Approach
- Intra-disciplinary/Interdisciplinary
- Background Study
- Studies of Literatures
- Framing of Topic-statement

**Module IV**
**Writing Research Paper**

- Sources
- Note-making
- Socio-Legal issues: Originality, Integrity, Plagiarism

**Module V**
**Documentation**

- Format: Citation format for print and non-print sources (MLA) in the text
- Preparing list of Works Cited
- Foot notes and End notes
- Quotations and Acknowledging the Sources
- Style Format: Spelling, punctuation, italics, abbreviations

**Assessment and Evaluation**

Mode of assessment: Course end examination

Marks: 40

Minimum marks for pass: 16

Number of students Passed: 64

## 3. Certificate Course on Functional English (Started in 2019-20)

### Curriculum with Assessment Procedure

**Learning Outcomes:**

After the completion of the course, the learner will be able to

a) develop both active and passive vocabulary

b) articulate words with correct pronunciation

c) get accuracy in grammar

d) achieve interpersonal communication skills

e) communicate with confidence and listen to others to build rapport

f) understand and practice proper use of body language

g) volunteer discussions and leave positive influence on others

enhance their professional skills

**Module 1**

Reading Skills: Vocabulary: Words used in daily conversation but often neglected or wrongly used, comprehension passages and answering, Reading and understanding articles from Literary, Journalistic, Scientific and Management field, Skimming, Scanning Techniques, Proof reading , Enhance speed reading The SQ3R Reading Strategy.

**Module 2**

Writing Skills: Grammar: Tense: Formation and application; Affirmative /Negative/Interrogative formation, Modals and their usage, Parts of speech, Conditional sentences, Direct and indirect speech, Active and passive voice, Writing letters, emails for job placement, resume, letter to the editor, Writing enquiries, complaints and replies, representations, writing narrations

**Module 3**

Speaking Skills: Understanding and employing 7 Cs of communication in conversation, Narrating incidents, stories, situation, and appearance, Group Discussion, Mock Interview, Making Presentations, Telephonic Conversation, Extempore, Debate, Speech

**Module 4**

Listening Skills: Types of Listening, Qualities of a good Listener, Barriers of Listening, Listening to audio of news/ weather forecasts/ reports, Listening to announcements at air ports and railway stations, Listening and retaining dialogues from films, listening to a specific audio and answering the questions

**Reference Books**

M. Bhatnagar and N. Bhatnagar. *Communicative English for Engineers and Professionals*. New Delhi: Pearson Education, 2010.

M. Raman and S. Sharma. Technical Communication. 3rd Ed. New Delhi: OUP,2015.3.

P. Cullen. Cambridge English: Vocabulary for IELTS. Cambridge: Cambridge

University Press, 2015.4.

R. Brown and L. Richards. IELTS Advantage: Writing Skills. Surrey: Delta Publishing, 2011.5. R. Murphy. Intermediate English Grammar.2nd Ed.Cambridge:Cambridge University Press,1994

**Assessment and Evaluation**

Mode of assessment: Course end examination

Marks: 40

Minimum marks for pass: 16

Number of students Passed: 59

# 4. Certificate Course on Business English

## Curriculum with Assessment Procedure

**CERTIFICATE COURSE IN BUSINESS ENGLISH**

**SYLLABUS**

**COURSE CODE: ENCFE01**

**Module 1**

Oral Skills for Jobs and Careers: Preparing for interviews, Taking Interviews,Interview Etiquette, Post Interview follow-up, Telephone Interviews, Group Discussions

**Module 2**

Written Skills for Jobs and Careers: Applying for jobs, Preparing Resumes,Writing Cover Letters, Email and online etiquette, Making Presentations.

**Module 3**

Inter-Personal Skills: Communication in a management context, Horizontal andDemocratic Communication, Qualities of a good Listener.

**Module 4**

Soft Skills: Human relationships in academic and professional life, keeping PublicRelations, Professional Ethics, Managing multiple roles

**Reference Books**

1. Samson et. *English for Life* – 4, New Delhi, Cambridge U P.
2. *Oxford Guide to Effective Writing and Speaking*. OUP, 2007.
3. *English for Careers*, Pearson.
4. *English for Career Development*, Orient Longman, 2006.
5. Kaul, Asha. *The Effective Presentation*. New Delhi: Response

**Assessment and Evaluation**

Mode of assessment: Course end examination

Marks: 40

Minimum marks for pass: 16

Number of students Passed: 59

## 5. Certificate Course on Functional English (Started in 2019-20)

### Curriculum with Assessment Procedure

**Outcome of the course:**

1. Students acquire Speaking skills
2. The skills acquired will help them for academic and professional success

**Syllabus**

**Module 1 (10 hrs)**

Subject –Verb Agreement
Tense
Phrasal Verbs

**Module 2 (5 hrs)**
Letter Writing
**Module 3 (5 hrs)**

Business English
Communication Grammar

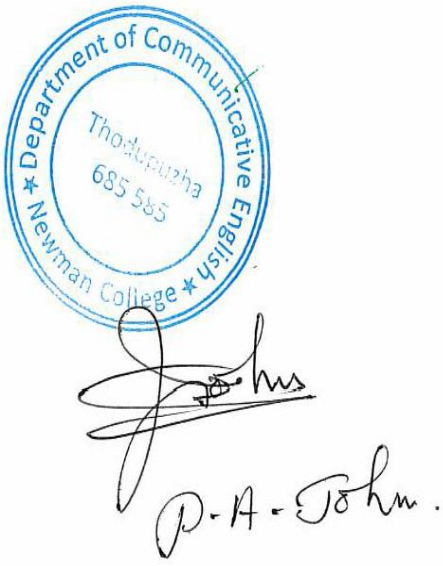
**Module 4 (10 hrs)**
Interaction with the peers through activities,
Oral Communication Practice

**Assignment:** A 15 minute Presentation on chosen topic

**Reference Texts:-**

Exploring English Grammar: From Formal to Functional

By Caroline Coffin, Jim Donohue, Sarah North



**Assessment and evaluation:**

Assignment (15%)

Attendance (5%)

Final Examination (80%)

Pass mark minimum - 40

# 6. Certificate Course in Basic Informatics

## Curriculum with Assessment Procedure

**NEWMAN COLLEGE, THODUPUZHA**

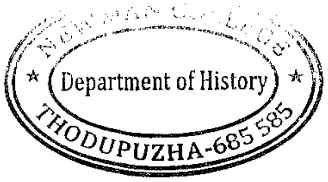
**CURRICULUM AND SYLLABUS FOR**

CERTIFICATE COURSE ON

**BASIC INFORMATICS**

**Course code: CCHYBI01**

**Coordinated by**
DEPARTMENT OF HISTORY
NEWMAN COLLEGE, THODUPUZHA



## GENERAL INFORMATICS

**Programme Description**

This Certificate course titled **Basic Informatics** is a skill-orientedprogramme of 30 hours duration. Candidates who have passed (Eligible for Higher Studies)the HSE of the Kerala State Board Higher Secondary Examination or any other examinationrecognized as equivalent with any of the social sciences as one of the subjects areeligible to apply for this course without any age restriction.

**Programme Objectives**

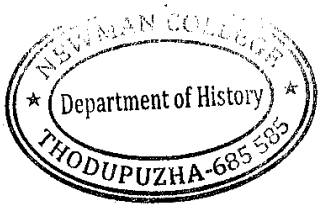
This course is designed to give the students a basic understanding on the fundamental aspectsInformation Technology. Primarily it will introduce the learners about the features of modern computer and internet services. The course alsoprovides a basic understanding about how to use IT effectively in higher studies and academic research. Along with that the programme gives the students an idea about how IT applications enhance the capability of various other sectors. There is also a module that covers the social impacts and implications of IT that helps the students to use the cyberspaces in an efficient and secured way.

**Programme Outcomes**

On completion of the course, the students are expected to have a clear understanding on thevarious aspects of Information Technology. The students can get more aware aboutthe ways IT can enhance their learning skills and research potential. The students are also expected to understand how IT can support numerous fields including health, communication, commerce etc. Introduced to social informatics, the students will be also capable of assessing the social impacts of IT and secure ways of using cyberspaces.

**Assessment of Students**

Assessment of students for the course will be done by internal continuous assessment. Marksystem is followed instead of direct grading for each question. Total marks for the course willbe 100 marks.



**Detailed Syllabus**

**Module 1**

**An Overview of Information Technology**

Features of modern computer and peripherals, Computer networks and internet, Overview of Operating systems and major applicationsoftware.

**Module 2**
**IT for Higher Education**

Internet as a knowledgerepository, Academic websites and open access initiatives, Basic concepts of IPR, copyrights and patents plagiarism, Educationalsoftware, INFLIBNET, NICNET, BRNET

**Module 3**
**Social Informatics**

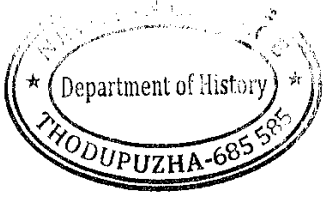
IT and society: issues concerning the digital divide, IT industry: new opportunities and new threats, Understanding cyber space: Ethics, law, crime and security, Unicode and the regional languages.

**Module 4**
**IT Applications**

e-Governance applications, Overview of IT applications in social sector, health care, commerce, scientific research, mass media andcommunication, IT in service of disabled, Artificial Intelligence, Virtual reality, Bio-computing

**Readings**


- *Allan Evans, Kandal Martin et al.* Technology in Action, Pearson Prentice Hall (Third Edn.)
- V. Rajaraman, *Introduction to Information Technology*, Prentice Hall
- Alexis Leon & Mathews Leon, *Computers Today*, Leon Vikas.
- Peter Norton, *Introduction to Computers*, 6th ed., (Indian Adapted Edition)

## 7. Certificate Course on DTP- Malayalam (Started in 2019-20)

### Curriculum with Assessment Procedure

Course outcome :

To improve the computerized skills of DTP Malayalam & English of U G Malayalam students

Assessment and evaluation:

Theory

Mode of Assessment: Course end examination

Mark: 50

Minimum marks or pass: 20

Number of students passed: 52

Sample certificate:


NEWMAN COLLEGE THODUPUZHA

CERTIFICATE

Dr.Sr.Binsy C

Name and Signature of Course Coordinator

Dr.Thomson Joseph

Name and signature of Principal

DEPARTMENT OF MALAYALAM
THODUPUZHA
PIN - 685 585
NEWMAN COLLEGE

# Certificate Course – Syllabus (2021-2022)

## DTP – Malayalam

(For U G Malayalam Students)

Time Schedule: 30 hrs.

Objectives - To improve the computerized skills of DTP Malayalam & English of U G Malayalam students.

## Module I

Basics in DTP- Key words- Main Keys- Software's –ISM, Unicode Microsoft word, Excel, Power point Publisher.

## Module II

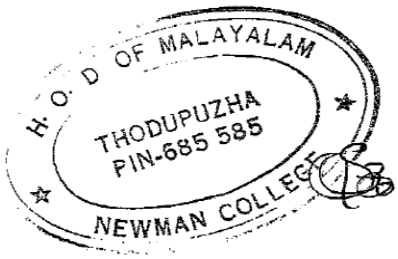
Typing in English, Malayalam, Keys of Malayalam Typing, Microsoft word, Page layout, size, orientation, Margining, Insert a Table, Pictures, Shapes, Smart Art, Chart, Header & Footer, Page Number, Word Art

## Module III

PageMaker, Microsoft Excel & PowerPoint, Design, Animation, Sound & Video Insert in, Excel- Formula, Excel- Spread sheet, PageMaker,

**References**

1. DTP Training Guide- Prof. Satish Jain, BPB Publications
2. Comdex -9- in 1DTP course Kit- Viks Gupta, Dream tech Press
3. Rapidex DTP Course – Shirish Chavan, Cloudtail India
4.Dynamic Memory Computer Course – Davinder Singh Minhas, Diamond Books.



# 8. Certificate Course on Ecologically Friendly Tourism and Ecosystem Conservation

## Curriculum with Assessment Procedure

**Course outcome:**

On completion of the course, the students will be able to

- Expected to have a clear understanding on ecosystem conservation, maintain crucial ecological processes as well as life support systems, conserve the variety of species and make sustainable exploitation of ecosystems.
- Actions for restoring degraded ecosystems and nature tourism need to be strengthened and scaled up.
- The Strategic Plan for Ecologically Friendly Tourism and Ecosystem conservation recognises that biodiversity underpins ecosystem functioning and the provision of ecosystem services that are essential for human well-being.

**4. SYLLABUS**

**ECOLOGICALLY FRIENDLY TOURISM AND ECOSYSTEM CONSERVATION**

**Course code: EFTC01**

**(Theory: 30 hrs; Practical: 5 hrs; Total 35hrs)**

**Module 1: Introduction to Tourism and Ecotourism (7)**

Tourism concepts and definitions , Ecotourism Definition, Evolution and characteristics of ecotourism Forms and types of tourism ,

**Module 2: The social and ecological impacts of tourism (7 hrs)**

Social impacts of tourism, environmental sustainability practice, benefiting local communities, Ecosystem management and protected areas, tourism industry, biodiversity, local people, cultural diversity, resources, environmental awareness, interpretation, stake holders, capacity building in ecotourism.

**Module 3: Tourism legislations and Ecotourism guidelines** (8)

Tourism legislations, National and State level ecotourism guidelines, Various acts and laws Tourism bill of rights and code for environment responsible tourism ,World Ecotourism Summit

**Module4: Methods of Environmental Conservation (7)**

The roots of conservationism, Afforestation and reforestation help in conserving the forests, Soil conservation, Managing waste, Control pollution, Create public awareness

**PRACTICAL (5hrs)**

1. Visit eco-friendly area and write a description about flora and funa
2. To make digital photo safari album
3. Observation of astronomical phenomena

## References

1. Fennell, David A. Ecotourism. Routledge, 2020.
2. Fennell, David A. *Ecotourism*. Routledge, 2014.
3. Wall, Geoffrey. "Is ecotourism sustainable?." Environmental management 21.4 (1997): 483-491.
4. Blamey, Russell K. "Principles of ecotourism." *The encyclopedia of ecotourism* 2001 (2001): 5-22.
5. Brandon, Katrina. *Ecotourism and conservation: A review of key issues*. The World Bank, 1996.
6. Honey, Martha. *Ecotourism and sustainable development. Who owns paradise?*. Island press, 1999.

THODUPUZHA

Head, Department of Botany
Newman College, Thodupuzha
Kerala, India-685585

**Assessment and evaluation:**

**Theory**

- Mode of assessment: Course end examination
- Weightage: 50%
- Marks: 50
- Minimum marks or pass: 20

**Practical**

- Mode of assessment: Continuous internal assessment based on lab involvement
- Weightage: 50%
- Marks: 50
- Minimum marks or pass: 20

**Dr. Mariat George**

Name and signature of

Course co-coordinator

**Dr. Saju Abraham**

Name and signature of

Head of Department

**Head, Department of Botany**
**Newman College, Thodupuzha**
**Kerala, India-685585**

# 9. UGC sponsored career oriented Add on Course on Plant Tissue Culture (Started in 2018-19)

## Curriculum with Assessment Procedure

**Course outcome:**

On completion of the course, the students will be able

- Identify the basics and application of Plant Tissue culture
- Isolate explants and inoculate it aseptically
- Perform Plant Tissue culture

### PLANT TISSUE CULTURE

**CERTIFICATE COURSE**

**Paper I.** Fundamentals of Plant Tissue Culture: 3 credits

**Paper II.** Applications of Plant Tissue Culture: 3 credits

**Paper III** – Practical: 6 credits

Paper IV - Field Work, Project, Training: 8 credits

**Paper I – Fundamentals of plant tissue culture 3 credits**

1. Introduction and historical background of Plant Tissue Culture.
2. General Laboratory Techniques.-Maintenance of Laboratory.-Laboratory Space.-Culture Room Culture vessels and washing
3. Equipment - Principle and working - pH meter, Hot air oven, Autoclave, LAF, Rotary Shaker.
4. Sterilization techniques- Dry heat sterilization, Wet Heat sterilization and Surface sterilization of explants-Surface sterilants -different Methods.
5. Media preparation, Composition of Nutrient Media, Role of components, Method of preparation of Stock solution, preparation of Growth regulators. Calculations
6. Inoculation -Laminar Air Flow, Procedure of inoculation
7. Incubation -Maintenance of inoculation record, subculture and temperature control, Humidity
8. Hardening Techniques.

**Paper II. Applications of Plant Tissue Culture - 3 credits**

1. Callus culture, suspension culture- choice of explants subculture Estimation of growth of cells in culture.
2. Regeneration -Shoot regeneration, Somatic embryogenesis.
3. Brief study of - Anther culture, Ovary culture, Meristem culture, Embryo culture, Protoplast culture, hybridization.
4. Somaclonal variation - genetic basis of somaclonal variation.
5. Synthetic seeds - Preparation and Importance.

**Paper III practical - 6 credits**

1. Preparation of Standard tissue culture media -MS and White's. Preparation of Stock solution, Preparation of hormones, cotton plugs.
2. Method of preparation of Media, Sterilization of media.
3. Collection of explants Sterilization, inoculation of explants-leaf; root, shoot, anther, ovary and embryo.

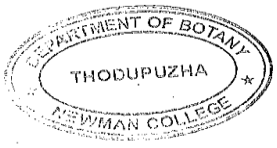
4. Preparation of synthetic seeds
5. Maintenance of cultures, Sub culturing at periodical intervals.
6. Hardening of rooted plantlets.

**Paper IV field work, project, and training - 8 credits**

Collection of plant Material with medicinal and economic importance. Establishment in field, Selection of explants, contamination free cultures.

**Reference**

1. Kalyan Kumar De., (1992) An introduction to plant tissue culture. New Central Agency Calcutta.
2. Razdan M K 1993 an Introduction to plant Tissue culture. Oxford IBH Publi. Co. Ltd.
   ReinertJand Baja YPS. 1989 applied and fundamental aspects of Plant cell tissue and organ culture NarosePubli. House, New Delhi.




**Assessment and evaluation:**

**Theory and Practical (Paper I, II, III)**

- Mode of assessment:

  Continual assessment: Test papers (I and II); Seminar/ viva; Assignments; Attendance

  Written assessment: Written examination at the end of course

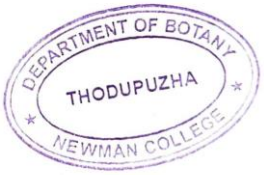
- Weightage:
  - ✓ Continual assessment – 50%

    Test paper I – 10 marks

    Test paper II – 10 marks

    Seminar/ viva – 10 marks

    Assignments- 10 marks



# 10. Certificate Course on Basic Scientific Tools for Chemistry

## Curriculum with Assessment Procedure



### Course Content

**Module 1: ChemDraw software** **(10 hours)**

**ChemDraw software** – Introduction, download and installation process of ChemDraw, ChemDraw menus, Tool palette overview, Basic drawing techniques, drawing tips, working in docs, Structures and Chemical Reactions, Calculation of Properties, NMR prediction, name-structure interconversion, captions and atom labels, orbitals, symbols and other shapes, writing chemical equation schemes, transporting pictures into word document, use of analytical tools and TLC plate tool, introduction to Chem 3D

- **Learning outcomes: -** After successful completion of this module, candidate will be able to use ChemDraw for drawing molecules and reaction schemes as well as calculation of physical/chemical properties of simple to complex molecules.

**Module 2: Origin software** **(10 hours)**

**Origin software** - Introduction to the Origin Workspace, download and installation process, Menus, Tool palette overview, Multi-sheet Workbooks, Managing Data and Metadata, Importing Data from different sources, Working with Excel and Origin, Basic Data Manipulation, Creating and Customizing Graphs, Customizing Data Import, Post Processing of Imported Data, Creating and Customizing Multi-layer Graphs, Data Exploration, Custom Fitting Functions, Analysis Themes, Customizing Reports and Creating Custom Tables in Graphs

- **Learning outcomes: -** After successful completion of this module, candidate will be able to use Origin Software efficiently to create, customize and analyze single and multi-layered graphs

**Module 3: Zotero and Mendeley Softwares** **(10 Hours)**

**Reference/Bibliography Management Softwares- Zotero and Mendeley-** Introduction to Zotero and Mendeley, downloading and installation, Menus, Tool

palette overview, importing and exporting files, web connectors, add-ons, MS Word plugins, add/edit citation, add/edit bibliography, preference of styles.

- **Learning outcomes: -** After successful completion of this module, candidate will be able to understand the importance of citing scientific literature while reporting research works and to use reference management software tools to create and manage bibliographies appropriately and accurately.

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Sri. Biju Peter
HoD, Chemistry

DEPARTMENT OF CHEMISTRY
THODUPUZHA
NEWMAN COLLEGE

Sona John
Course Coordinator

**Assessment and evaluation:**

**Theory**

| | | |
|---|---|---|
| Marks of external examination | : | 40 |
| Marks of internal examination | : | 10 |

**Practical**

| | | |
|---|---|---|
| Marks of external examination | : | 40 |
| Marks of internal examination | : | 10 |

Sona John

Name and Signature of Course Coordinator

Biju Peter Boni

Name and Signature of HoD

DEPARTMENT OF CHEMISTRY
THODUPUZHA
NEWMAN COLLEGE

Name and signature of Principal

DR THOMSON JOSEPH
PRINCIPAL-IN-CHARGE
NEWMAN COLLEGE
THODUPUZHA

# 10. Certificate Course on Data Analytics Using R

## Curriculum with Assessment Procedure

**Course Outcomes**

- ☐ The students will be enabled to undertake data analysis tasks required in preparing project reports and dissertations using statistical techniques.
- ☐ The students can undertake research projects, field surveys, data compilation, graphical displays etc.
- ☐ The participants will be empowered to undertake data analysis, which is in great demand today.

**Syllabus**

**Module 1: Basics Statistics**
Introduction to Statistics, Statistical Investigation, Data Collection, Presentation - Charts & Diagrams, Basics of Descriptive Statistics- Central Tendency, Dispersion, Skewness and Kurtosis, Correlation and Regression. (5 hours)

**Module 2: Statistical Analysis Using Excel**
Working knowledge in Excel, Entering Data in Excel, Importing data from Excel worksheet to R (8 hours)

**Module 3: Statistical Analysis Using R**
Handling statistical data in R, Analysis using R - Assessing relationships between continuous variables through plots -

Measuring Central Tendency, Dispersion, Skewness and Kurtosis - Assessing relationships between continuous variables through correlation and Regression (7 Hours)

**Module 4: Project Work**
Exercising the Knowledge through a Project study with primary data collected through questionnaire method (10 hours)

**Mode of Evaluation**
Attendance, Assignments, Viva Voce, and Final Examination.

**References:**

1. Excel Formulas And Functions Step-By-Step Guide With Examples by Ramirez Adam ,Caprioru
2. Advanced MS excel by Kavita Navlani
3. Ms-Office 2007: Gini Courter & Annette Marquis BPB Publications
4. Beginning Data Science in R: Data Analysis, Visualisation, and Modelling for the data Scientist: Thomas Mailund

Dr. Jaan A Lukose
Head, Statistics

Nancy Jacob
H.O.D, Mathematics

DEPARTMENT OF MATHEMATICS THODUPUZHA NEWMAN COLLEGE

**Assessment and evaluation:**

Mode of assessment: End examination (Online)

Weightage: 50%

Marks: 50

Minimum marks required for passing: 20

**Name and Signature of Course Coordinator**

Dr. Jane A Luke

**Name and Signature of HoD**

Mrs. Nancy Jacob

**Name and Signature of Principal**

Dr. Thomson Joseph

DEPARTMENT OF MATHEMATICS
THODUPUZHA
NEWMAN COLLEGE

# 12. Value Added Course on Electronic Equipment Maintenance

## (Started in 2018-19)

## Curriculum with Assessment Procedure

**Paper I: Basic Principles of Electronics – 15 hr**

1. Resistors : General information: Symbol, colour code. Types, Variable resistors and measurement of resistance using multimeter.

2. Inductor : General information: Symbol, Types, Chokes Inductance measurement

3. Transformers : General information Principle. Types, and Design of main transformer

4. Capacitors : General information: Symbols, Colour codes, Types - Fixed and variable capacitors, measurement of capacitance

5. Diodes, Transistors and IC : General information: Symbols, Types and applications

6. Measuring Devices : Thermometer, Barometer, Multimeter, LCR meter, Voltmeter, Ammeter, Galvanometer, Signal generator CRO

7. Microphones and Loudspeakers : Principles, Types and Application areas

8. Swatches. Cables and Electrical fittings : Bulbs, Tubes, Plugs - Testing of connections, Bread Board, Soldering

**Paper II : Principles of Electronic and Electrical Devices - 5 hr**

1. Computers - Familiarization of input and output devices and connections

4. Telephones - Receiver, Pulse dialling, Tone dating, Troubleshooting, Modem, STD, ISD, EPABX Intercom, Fax, EMail

5. Power consumption - General information. Methods to reduce power consumption - Bulbs and Tubes.

**Paper 111: Maintenance of Electrical and Electronic Household Devices –12 hr**

1. Troubleshooting and maintenance of Mixer Grinder, Fan, Iron box safety precautions
2. Wiring – General information about house wiring, Phases, Two way switch, Master switch
3. . Sodium Lamp, Mercury Lamp, UV and IR Lamps, Halogen Lamps, CFL Lamps -Their domestic and industrial applications. Basic Principle and working of lux meters Modern Methods of lighting-Stages, rooms and auditorium. Light Sensors.
4. Various Types of Stabilizers, inverters, UPS and its working

## Paper IV- Project Training – 13 hr

1 Component identification, Checking and measurement of different parameters using multimeter (Resistors, Capacitors, Diodes, Transistors, Inductors)

2. Soldering Practice

3. Electrical fittings - Bulbs, Tubes, Plugs Testing of connections

4. Computers-Familiarization of input and output devices and connections

5. Wiring-General information about house wiring, Phases, Two way switch, Master switch

5. Microprocessor 8085-Addition, Subtraction, Multiplication, Division, Data Transfer, Illumination Techniques-Domestic Applications

**Reference**

1. "Electronic Devices and Circuits" by Salivahanan, N. Suresh Kumar, and A. Vallavaraj
2. Integrated Electronics: Analog and Digital Circuits and Systems" by Jacob Millman and Christos C. Halkias:
3. "Principles of Electronics" by V.K. Mehta and Rohit Mehta:
4. Basic Electrical and Electronics Engineering" by R.K. Rajput:
5. A Course in Electrical and Electronic Measurements and Instrumentation" by A.K. Sawhney:

**Assessment & Evaluation:**

**Written Exam-**

Mode of Assessment: Course end Examination

Weightage-33.33%

Max. Marks- (20+30=50)

**Paper1**-(multiple choice)

weightage – 13.33%

Max. Marks: 20

**Paper II-** (Descriptive)

Weightage: 20 %

Max. Marks: 30

**Practical-**

**Paper III-weightage 66.66%**

Mode of Assessment: Course end Examination

Max. Marks: 100

**Total Mark:** 150

**Minimum pass mark:** 40% (60 marks)


Dr.Beena Mary John

Name and Signature of

Head of the Department

# 13. Value Added Course on Conservation of Natural Resources

## Curriculum with Assessment Procedure

### Course Outcome

- Understand the need of conservation of natural resource
- Aware the problems due to the manmade environmental issues
- Understand the toxic effects of various chemicals
- Know the natural pest control methods
- Know the management of nuclear and e waste
- Global conservation efforts

### Syllabus

Duration : 30 hr

Natural resources: Renewable and non-renewable resources, forest resources - use and over-exploitation, deforestation. environmental effects of extracting and using mineral resources (3 hr)

land degradation, man induced landslides, soil erosion and desertification Resettlement and rehabilitation of people: its problems and concerns, changes caused by agriculture and overgrazing (3 hr)

Food resources - World food problems, Modern agricultural practices and pest problem - high yielding varieties, monoculture, fertilizers, pesticides, irrigation, Pest control-biological control, chemical control, integrated pest management, miscellaneous control. Mechanical (hand picking, exclusion by screens and barriers, trapping, clipping, pruning etc), physical (hot and cold treatment, moisture, light traps etc), sterility principle (6 hr)

Toxic chemicals in the environment, impact of toxic chemicals on enzymes, biochemical effects of As, Cd, Pb, Hg, CO, Oxides of Nitrogen and Sulphur. (6 hr)

Global conservation efforts - Rio Earth summit - Agenda 21, Kyoto protocol, COP15 (15th Conference of the parties under the UN framework convention on climate change) and Paris protocol - major contributions. Conservation strategies and efforts in India and Kerala.

Organizations, movements and contributors of environmental studies and conservation: organizations - WWF, Chipko, NEERI: (8 hr)

Nuclear waste and its impact on environment – nuclear waste management -Protocols Electronic waste management, Environmental impacts of e-waste during treatment processes (4 hr)

Reference:

1. Environmental Science: Principles and Practice- R.C. Das and D.K. Behera (PHI Pvt. Ltd)
2. Environmental chemistry and pollution control S.S Dara (S. Chand)
3. Biotechnology for waste and wastewater treatment- N.P. Cheremisinoff (PHI Pvt. Ltd)

**Assessment & Evaluation:**

**Attendance :**

Maximum Marks: 5 Marks

Weightage: 10 %

**Assignment:**

Maximum Marks: 15 Marks

Weightage: 30 %

**Written Exam**

Mode of Assessment: Course end Examination

Weightage: : 60 %

Max. Marks: 30

**Total Mark:** 50

**Minimum pass mark:** 40% (20 marks)

Dr.Beena Mary John

**Name and Signature of**

**Course Coordinator**

Dr.Thomson Joseph

**Name and Signature of Principal**

# 14. Course Certificate on Python for Research Data Analysis

## Curriculum with Assessment Procedure

### Python for Research Data Analysis (30 Hrs)

***Introduction to various Python IDEs (3 hours)***

Why Python? The Scientific Python ecosystem — Core numeric libraries, Advanced interactive environments (IPython, Jupyter notebooks), Navigating Files and Directories, Domain-specific packages; Installing a working environment: Anaconda; The workflow: interactive environments and text editors; IPython and Jupyter Tips and Tricks.

***Fundamentals of Python Programming (10 hours)***

Python as a Calculator; Basic types: Numerical types, Containers (Lists, Strings, Dictionaries, Tuples), Methods on Containers (eg. Indexing, Slicing, etc. ), Assignment operator; Control Flow: if/elif/else, for/range, while/break/continue, Conditional Expressions, Advanced iteration (Iterate over any sequence, Keeping track of enumeration number, Looping over a dictionary), List Comprehensions; Defining functions: Function definition, Return statement, Parameters, Passing by value, Global variables, Variable number of parameters, Docstrings; Input and Output: write or read strings to/from files; Standard Library: os module: operating system functionality, sys module: system-specific information.

***NumPy: Generating and manipulating numerical data (8 hours)***

The NumPy array object: Creating arrays - Manual construction of arrays, Functions for creating arrays, Indexing and slicing, Copies and views, Fancy indexing (boolean masks, Indexing with an array of integers); Numerical operations on arrays: Elementwise operations, Basic reductions, Broadcasting, Array shape manipulation (Flattening, Reshaping, Adding a dimension, Dimension shuffling, Resizing), Sorting data; Loading data files (loadtxt, savetxt, imread).

***Python Data Visualization (2 hours)***

Matplotlib: pyplot, Changing colors and line widths, Setting limits, Setting ticks, Setting tick labels, Moving spines, Adding a legend, Annotate some points; Figures, Subplots, Axes and Ticks; Other Types of Plots: Scatter Plots, Bar Plots, Contour Plots, Imshow, Pie Charts.

***Scipy and High Level Scientific Computing Methods (7 hours)***

Linear algebra operations; Interpolation; Optimization and fit: Curve fitting, general linear least squares, Finding the minimum of a scalar function, Finding the roots of a scalar function; Statistics and random numbers: histogram and probability density function, Mean, median and percentiles, Statistical tests.

**Reference:**

1. Python 3 for absolute beginners, Tim Hall and J P Stacey, Apress-2009

2. Python programming for beginners, Adam Stewart-2016

3. Introduction to Programming in Python, Durham university -2009

4. Learning scientific programming with python, Christian Hill, Cambridge University Press, 2015

5. Python for scientists, John M Stewart, Cambridge University Press, 2017

**Assessment & Evaluation:**

**Attendance :**

Maximum Marks: 5 Marks

Weightage: 10 %

**Assignment:**

Maximum Marks: 15 Marks

Weightage: 30 %

**Written Exam**

Mode of Assessment: Course end Examination

Weightage: : 60 %

Max. Marks: 30

**Total Mark:** 50

**Minimum pass mark:** 40% (20 marks)

Dr.Subin Jose

Name and Signature of

Course Coordinator

Dr.Aloysius Sabu N

Name and Signature of

Head of the Department

DEPARTMENT OF PHYSICS NEWMAN COLLEGE, THODUPUZHA

Dr.Thomson Joseph

Name and Signature of Principal

# 15. Certificate Course on Analysis Techniques

## Curriculum with Assessment Procedure

### Syllabus

**Unit 1-Spectroscopic Tool (10 hr)**

UV-Visible spectroscopic analysis - Tauc plot- determination of band gap, Infrared spectroscopic analysis - identification of chemical substances or functional groups, Raman Spectroscopy- *identification of molecules and study chemical bonding and intramolecular bonds,* X-ray Photoelectron Spectroscopy,NMR, Atomic Mass Spectroscopy

**Structural Analysis (5hrs)**

Structural analysis using X-ray Diffraction , X-ray sources and detectors, Scherrer equation- determination of lattice parameter- particle size, Practical training on XRD data collection and analysis, FTIR

**Surface Analysis:, (5hrs)**

SEM, Atomic force microscopy, TEM, FE SEM

**Nonlinear optical study (3hr)**

Z scan technique, Faradays effect, Pockels effect, Kerr effect

**Thickness measurements( 4 hr)**

Stylus profile, Fizeau fringes

**Electrical & Magnetic studies (3 hr)**

VSM, susceptibility measurements, Ac and Dc electrical conductivity, dielectric studies

### Course Outcome

- Understand principles and applications of spectroscopic techniques for band gap determination , Identify chemical substances and functional groups and study chemical bonding
- Apply XRD technique for structural analysis and determine lattice parameters and particle size
- Develop proficiency in surface analysis techniques
- Understand principles and applications of nonlinear optical studies
- Gain knowledge in electrical and magnetic studies

### Reference

1. Spectroscopy of Organic Compounds" by P.S. Kalsi:
2. UV-Visible Spectroscopy: Principles and Applications" by Harold A. Willis
3. Raman Spectroscopy: Principles and Applications" by John R. Ferraro
4. Molecular Spectroscopy: Aruldas
5. Molecular Spectroscopy: Banwel

**Assessment & Evaluation:**

**Attendance :**

Maximum Marks: 5 Marks

Weightage: 8.33 %

**Assignment:**

Maximum Marks: 5 Marks

Weightage: 8.33 %

**Written Exam**

Mode of Assessment: Course end Examination

Weightage: : 66.67 %

Max. Marks: 40

**Practical**

Mode of Assessment: Continual evaluation

Weightage: : 16.67 %

Max. Marks: 10

**Total Mark:** 60

**Minimum pass mark:** 40% (24 marks)

Dr. Indu Sebastian

Name and Signature of

Course Coordinator

Dr.Aloysius Sabu N

Name and Signature of

Head of the Department

Dr.Thomson Joseph

Name and Signature of Principal

# 16. Certificate Course on Introduction to MS Excel

## Curriculum with Assessment Procedure

**Course outcome:**

On completion of the course, the students will be able to

(i) Illustrate basic concepts of MS EXCEL.
(ii) Prepare to print a worksheet
(iii) Test data using various functions

### INTRODUCTION TO MS EXCEL

**TOTAL HOUR: 30** **SEMESTERS: 3 & 4**

**OBJECTIVES:**

**(i) Illustrate basic concepts of MS EXCEL.**

**(ii) Prepare to print a worksheet**

**(iii) Test data using various functions**

**Module I: Introduction to MS EXCEL**

Introduction-Excel User Interface- Working with Cell and Cell Addresses- Selecting a Range, Moving, Cutting, Copying With Paste-Inserting and Deleting Cells Freezing Cells-Adding, Deleting and Copying Worksheet within a Workbook- Renaming a Worksheet Cell Formatting Options- Formatting Fonts- Aligning-Wrapping and Rotating Text Using Borders Boxes and Colors- Centering a Heading, Changing Row/Column Height / Width-Formatting a Worksheet Automatically- Insert Comments- Clear Contents in a Cell.

**Module II: Print a worksheet**

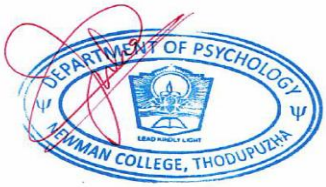
Using Print Preview- Preparing Worksheet for the Printer- Selecting Print Area-Margin and Orientation- Centering a Worksheet- Using Header and Footer- Inserting Page Breaks- Sorting Data.

**Module III: Advanced Features of Excel**

All Functions in Excel- Using Logical Functions-Statistical Functions, Mathematical Functions - Linking Data between Worksheet- Elements of Excel Charts-Categories Create a Chart-Choosing Chart Type- Edit Chart Axis - Titles, Labels, Data Series and Legend.

**REFERENCE:**

1. Patrick Blattner, Louie Utrich. Ken Cook & Timothy Dyck, Special Edition MS Excel 2013, Prentice Hall India Pvt. Ltd.
2. Gini, Courter & Annette Marquis, MS-Office 2013, BPB Publications



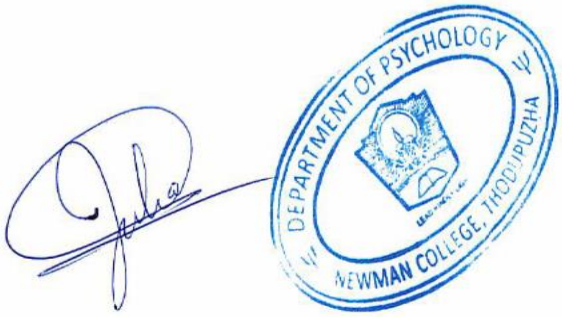
**Assessment and evaluation:**

Theory

- Mode of assessment: Course end examination
- Weightage: 50%
- Marks: 50
- Minimum marks or pass: 20

Practical

- Mode of assessment: Continuous internal assessment based on lab involvement
- Weightage: 50%
- Marks: 50
- Minimum marks or pass: 20



# 17. Certificate Course on Microbes as Biofertilizers

## Curriculum with Assessment Procedure

### Syllabus

**Module 01: Microbes as Biofertilizer – Introduction(2 hrs)**

Overview : General account on microbes –brief account on organic farming -Introduction to biofertilizers – microbes used.

**Module 02: Biofertilizers– Definition,types (4 hrs)**

Important groups of microbial biofertilizers- Types of biofertilizers- Brief account on method of production– biofertilizer technology

**Module 03: Application** **(3 hrs)**

Use of biofertilizers - Importance of biofertilizers and its benefits.

list of available microbial fertilizers available in market and their application

**Module 04: Constrains in microbial Biofertlizers(2hrs)**

Biofertilizer technology constraints - Limitations

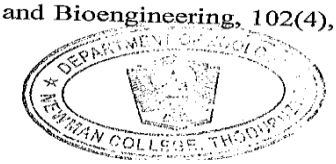
References

1. Barea, J. M., Pozo, M. J., Azcón, R., & Azcón-Aguilar, C. (2005). Microbial co-operation in the rhizosphere. Journal of Experimental Botany, 56(417), 1761-1778.

2. Bashan, Y., & de-Bashan, L. E. (2010). How the plant growth-promoting bacterium Azospirillum promotes plant growth—A critical assessment. Advances in Agronomy, 108, 77-136.

3. Subramanian, P., Kim, K., Krishnamoorthy, R., & Mageswari, A. (2015). Role of plant growth promoting rhizobacteria in agriculture and their potential for bioformulations. Journal of Pure and Applied Microbiology, 9(Spl. Edn. 1), 225-239.

4. Gupta, R., & Pandey, A. (2009). Potential of plant growth promoting Pseudomonas in enhancing oil productivity in Jatropha curcas L. Biotechnology and Bioengineering, 102(4), 1131-1140.



5. Vessey, J. K. (2003). Plant growth promoting rhizobacteria as biofertilizers. Plant and Soil, 255(2), 571-586.

6. Glick, B. R. (2012). Plant growth-promoting bacteria: mechanisms and applications. Scientifica, 2012, 963401.

7. Adesemoye, A. O., Torbert, H. A., & Kloepper, J. W. (2010). Plant growth-promoting rhizobacteria allow reduced application rates of chemical fertilizers. Microbial Ecology, 58(4), 921-929.

8. Saravanakumar, D., Vijayakumar, C., Kumar, N., & Samiyappan, R. (2007). PGPR-induced defense responses in the tea plant against blister blight disease. Crop Protection, 26(4), 556-565.

9. Figueiredo, M. V. B., Burity, H. A., Martínez, C. R., & Chanway, C. P. (2008). Alleviation of drought stress in the common bean (Phaseolus vulgaris L.) by co-inoculation with Paenibacillus polymyxa and Rhizobium tropici. Applied Soil Ecology, 40(1), 182-188.

10. Jha, Y., Subramanian, R. B., Patel, S., & Mandal, S. M. (2011). Sustainable agriculture through enhanced utilization of plant growth-promoting rhizobacteria: A review. Bulletin of Environment, Pharmacology, and Life Sciences, 1(5), 35-40.

Head of the department
Department of Zoology
Newman College
Thodupuzha

**3. Course outcome**

This course content should be taught and implemented with the aim to develop an interest in agricultural practices.To impart knowledge on biofertilizers and to promote organic farming. To select a low cost, suitable and efficient bio-fertilizer for organic farming.This paper deals with various types of microbes used as biofertilizers. After the completion of the course the learners will be able to describe biofertilizers and apply the knowledge gained for commercial purposes.

**Assessment and Evaluation:**

**Theory**

Mode of assessment: Course End examination
Weightage: 80%
Marks: 80
Minimum marks or pass: 40

**Practical**

Mode of assessment: Continuous internal assessment based on lab/Field involvement
Weightage: 20%
Marks: 20
Minimum marks or pass: 10

Signature of the Course Coordinator

Name and signature of the HoD

Name and Signature of the principal

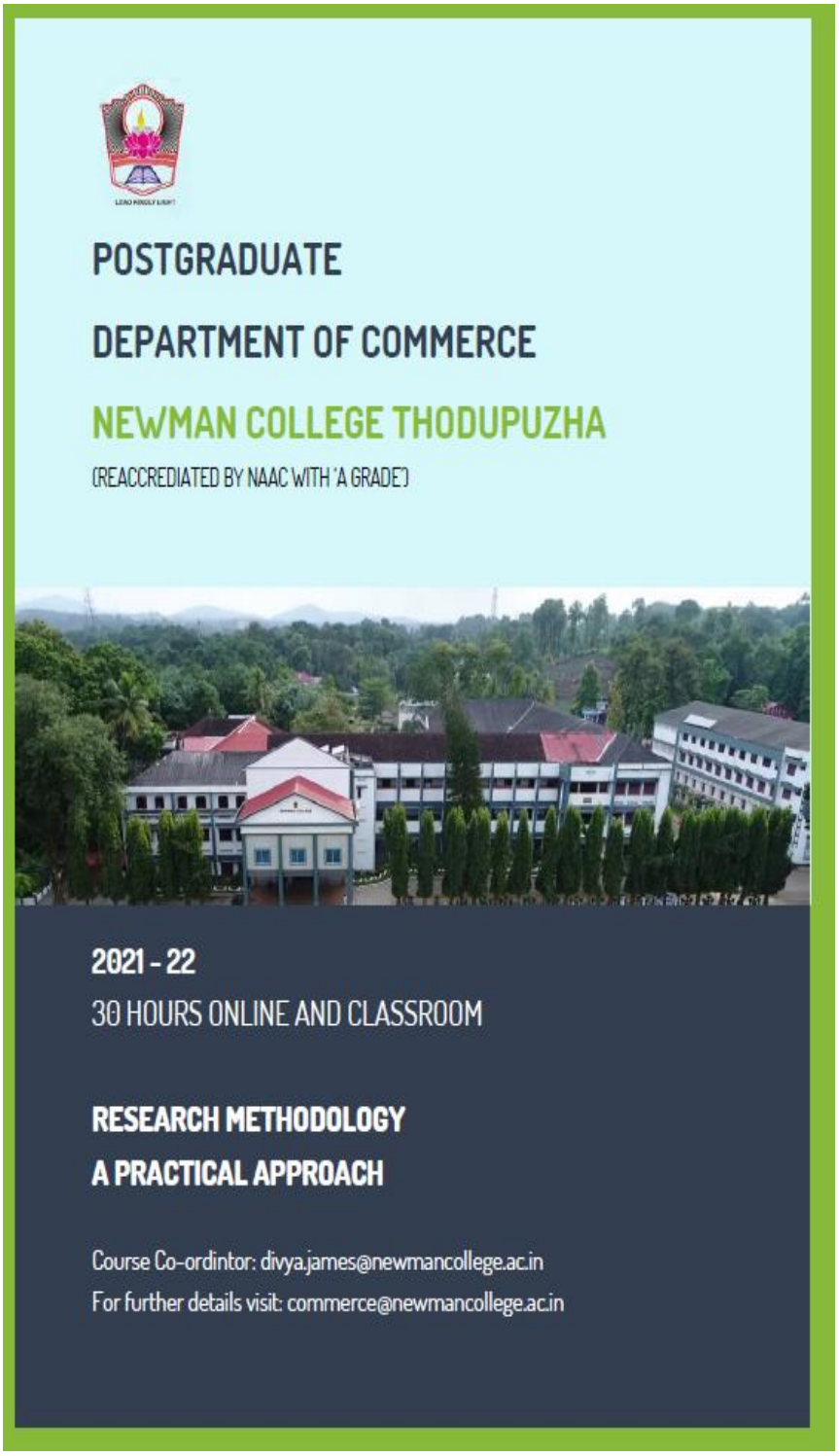
Dr. THOMSON JOSEPH
PRINCIPAL
NEWMAN COLLEGE
THODUPUZHA

Head of the department
Department of Zoology
Newman College
Thodupuzha

DEPARTMENT OF ZOOLOGY

## 18. Certificate Course on Research Methodology – A Practical Approach

### Curriculum with Assessment Procedure



**Features of the course:**

- Practical orientation to Research methodology
- Course Duration : 30 hours
- Eligibility : Final year B.com students
- Number of Seats : 92
- Attendance : Minimum 75% attendance to appear for final exam

**Course outcome:**

Students who successfully complete this course will be able to:

- Explain key research concepts and issues
- Read, comprehend, and explain research articles in their academic discipline
- Perform literature reviews using print and online databases
- Identify, explain, compare, and prepare the key elements of a research proposal
- Describe sampling methods, measurement scales and instruments, and appropriate uses of each

**Assessment Procedure:**

Assessment will be done after completion of each module through assignments and projects.

- Final exam will conducted at the end of the program
- Exam shall contain objective and descriptive questions
- Maximum marks for the final exam shall be 100
- Grade shall be allotted based on the following scale
  - ✓ 85% and above : A+
  - ✓ 80% – 84% : A
  - ✓ 75% -- 79% : B+
  - ✓ 70% -- 74% : B
  - ✓ 65% --69% : C+
  - ✓ 60% --64% : C
  - ✓ Less than 60% : D

Course outcome : Students who successfully completed the course were able to

- explain key research concepts ad issues
- read, comprehend and explain research articles in their academic discipline
- perform literature reviews using print and online databases.
- identify, explain,compare and prepare the key elements of a research proposal
- Describe sampling methods, measurement scales and instruments with and appropriate uses of each

***Syllabus***

**Module I – Introduction to research**

Meaning and definition of research – objectives – Importance –Qualities of a good research Research problem – Introduction to research problem – Sources

**Module II –Literature review**

Review of literature – Methods of literature survey – Sources of literature survey – Purpose or need for literature survey- How to organize the literature – Gap analysis (6 hours)

**Module III – Formulation of Objective**

Setting of objectives -

**Module IV – Questionnaire preparation**

Instruments of data collection – qualities of a good questionnaire – stages in the preparation of questionnaire – types of questions

**Module V – Methodology and Data Collection**

Research methodology

Sample design – Essential qualities of a good sample design –Census methods V/S sample survey – Sampling techniques (8 hours)

**Module VI – Data Analysis & Interpretation**

Data Collection – Sources of data – Methods of data collection – Primary data and secondary data

Processing of data –Editing – Coding –Classification – Methods of classification – Analysis of data – Tools and statistical method used in analysis of data – interpretation – Need – Steps – Errors in interpretation (9 hours)

**Module VII- Report writing & Documentation**

Report writing – Need – Essentials of a good report – Steps – Layout of a report – Rules in report writing – Types of report

Documentation – plagiarism – Citing references – Methods for citing references (4 hours)

DEPARTMENT OF COMMERCE
NEWMAN COLLEGE, THODUPUZHA

HEAD,
P.G. Department of Commerce
Newman College
Thodupuzha - 685 585

# 19. Certificate Course on Tourism Management

## Curriculum with Assessment Procedure

### TOURISM MANAGEMENT

**CourseTitle:Tourism Management**

**Course Code : CC1HCM06**

**Instructional Hours : 35 hours**

**Course Description:**

Tourism management provides a fundamental knowledge about the tourism industry among students. This course is intended study therecent trends and tourism industry and also to deliver managerialknowledgeinvolvedintourismsectorandtherebyequipthestudentswithmanagerial skills in tourism industry.

**Course objective:**

The aim of this course is to provide a fundamental knowledge on the principles of tourism management

**Course outcomes:**

- To get a conceptual base on tourism
- To understand the need for developing tourism
- To identify the recent trends in tourism
- To evolve plans for new and existing tourism destinations

### SYLLABUS

**ModuleI**

Meaning of Tourism, Excursion, Leisure, Recreation, Tourist, Visitor and Traveller - Types of Tourism : Domestic and international Tourism, Holidaying and sight - seeing Tourism, Business Tourism,PilgrimTourism,RuralTourism,CulturalTourism,AdventureTourism,FarmTourism, Dark Tourism, Eco Tourism, Responsible Tourism - Modern Trends in Tourism

**(10 hours)**

**ModuleII**

Impact of Tourism: Economic, Psychological, political,Cultural-Social significance of Tourism -Economic significance:Foreign Exchange Benefits, Employment Generation, Tax Revenue,

Multiplier effects - Adverse Effects of Tourism - Components of Tourism : Tourist attractions Natural, cultural, Religious, Adventurous, etc. -Supplementary Attractions: Amusement parks, Film cities, fairs and festival etc. - Tourist facilities and services: Hotels, Travel Agencies, Tour Operators,Homestays,Retailers,Transportation:Airways,Roadways,Railways,andwaterways

**(15hours)**

**ModuleIII**

Planning and Development of Tourism:Development of Tourism Potential-Scope for Development-Planning Process-Environmental Planning-Tourism and environmental Linkage -Threats in planning:War,Natural Calamities Epidemic etc.

**(10 hours)**

**Assessment and Evaluation:**

Final exam was conducted at the end of the program

Exam contained objective and descriptive questions

Maximum marks for the final exam - 100.

Grads were allotted based on the following scale

- 85% and above : A+
- 80% – 84% : A
- 75% -- 79% : B+
- 70% -- 74% : B
- 65% --69% : C+
- 60% --64% : C
- Less than 60% : D

**Reference:**

1. Successful Tourism Management: Pran Nath Seth
2. Introduction to Tourism :A.K.Bhatia
3. Tourism System: MillR. C& Morrison
4. Tourism Development :R.Garther

Signature of course co-ordinator

DEPARTMENT OF COMMERCE (SF) NEWMAN COLLEGE THODUPUZHA

Signature of HOD

# 20. Certificate Course on Basics of Stock Market

## Curriculum with Assessment Procedure

**Syllabus**

**Module I: Introduction to Investment Avenues in the Stock Market**

Financial System-Structure of the Indian Financial System- Money market & capital market instruments.

**Module II:Capital Market - an Overview**

Capital market: Primary market and Secondary market (Stock market)-New Issue- IPO processing stages.

**Module III: Stock markets**

Introduction to stock market-History of Stock Exchange-NSE & BSE-Function of Stock exchange-Stock Brokers-How to Start Stock trading account-Type of orders- SL, MKT, SLM -Online trading.

**Module IV: Security Analysis**

Fundamental Analysis- EIC analysis- Technical Analysis - Charts, Oscillators & Moving averages.

**Learning Outcomes:**

- Knowledge about the functioning of the Stock market.
- Better understanding about stock market investment avenues.
- Basic knowledge on rules in stock trading.
- Able to make investment decisions.

**References:**

- Web Technologies by Uttam k Roy
- Learning Web Design: A Beginner's Guide by Jennifer Robbins

Head of the Department

Course Co-ordinator

**Assessment and evaluation:**

**Theory**

- Mode of assessment: Course end examination
- Weightage: 50%
- Marks: 50
- Minimum marks or pass: 20

**Practical**

- Mode of assessment: Continuous internal assessment based on lab involvement
- Weightage: 50%
- Marks: 50
- Minimum marks or pass: 20

NameandSignatureofCourseCoordinator
JISNA JOSEPH

NameandSignatureofHoD
Sachin Jacob

NameandsignatureofPrincipal

# 21. Certificate Course on Business Environment

## Curriculum with Assessment Procedure

**Course Outcomes**

On completion of this course, learners will be able to:

- Familiarize with the nature of business environment and its components.
- The students will be able to demonstrate and develop conceptual framework of business environment and generate interest in international business

**Syllabus**

Unit I

Meaning-Types-Components of internal environment- Macro environment-Micro environment - Factors Influencing the Environment-Environmental Scanning-Liberalisation-Privatisation-Globalisation.

Unit II

Nature of economy- Structure of economy – Economic System- Market Economy – Planned Economy –Mixed Economy – Economic policies – Industrial policies- Trade Policy –Monetary Policy –Inflation- Balance of Payment- Fiscal Policy- Union Budget- Taxation – Economic Conditions- Business Cycle – Make in India

Unit III

Elements of culture – Language – Religion – National Income – Education – Population – Family System – Natural Environment – Land Resource – Irrigation – power – Minerals – Forest Resource – Sea Wealth – Human Development Index

Unit IV

Classification of Political System- Political Risk – Causes- Types – Relationship between business and Government – Responsibilities of business Towards Government – Responsibilities of Government Towards Business-

UNIT V

Technology Acquisition and Protection – Features of Technology – Technological Obsolescence- Technology Absorption- Technology Transfer – Forms of Technological transfer – intellectual Property rights

**References :**

1. Francis Cherunilam, *Business Environment*-Himalaya Publishing House, New Delhi
2. Aswathappa, Essentials of Business Environment, Himalaya Publishing House, New Delhi

Head of the Department

Course Coordinator

**Assessment and evaluation:**

Theory

- Mode of Assesment : Course end examination
- Mark : 50
- Minimum marks or pass : 20

Head of the Department

Course Coordinator

Digitally signed by
BIJIMOL THOMAS