



RAYATSHIKSHANSANSTHA'S
RAJARSHICHHATRAPATISHAHU COLLEGE, KOLHAPUR

Skill Based Courses/ Short Term Courses

Syllabus

**TCS BPS ACADEMIC INTERFACE PROGRAMME CAMPUS TO CORPORATE
TRANSITION**

Syllabus:

Unit I: Overview of Corporate and BPS Industry

Unit II: Difference between Campus and Corporate

Unit III: Grooming for Corporate

Unit IV: Elementary Level English Communication

Unit V: Intermediate Level English Communication

BOSCH CARE GIVER PROGRAMME

Syllabus:

Paramedics Training - Caregiver Caregiving

1 Need for Caregiving

2 Role of Caregiver

3 Understanding the Patient

4 Methods of Caregiving

General Topics of Understanding

1 Human Physiology

2 Patient Vitals and Measurements

3 Tools and Equipment's

- 4 Special Procedures
- 5 Feeding and Nutrition
- 6 Emergency and First Aid
- 7 Infection & Control

CERTIFICATE COURSE IN VERMITECHNOLOGY

Sr No.	Particulars	Periods
1.	Unit. 1 : Introduction	07
	1.1 Vermicomposting: Introduction and Scope, History, their value in maintenance of soil structure, role as four r's of recycling: reduce, reuse, recycle, restore. 1.2 Types of Earthworm and Classification Epigeic, Endogeic, Diageic species. Useful species of earthworms. 1.3 Life history of Earthworms (Earthworm Species: Eiseniafoetida/Eudrilluseuginae) 1.4 Objectives of Vermicompost.	
2.	Unit 2 :	06
	2.2 Methods of Vermicomposting: Small and large scale Bed method, Pit 2.3 Vermicompost Production: Establishment of Vermicomposting and Vermiwash unit 2.4 Pests and diseases of Earthworms	
3.	Unit 3 :	06
	3.1 Management of vermicompost bed 3.2 Harvesting the Compost & Vermiwash 3.3 Storage and packaging of vermicompost 3.4 Physico-chemical analysis of vermicompost	
4.	Unit 4:	06
	4.1 Components of vermicompost and their role in agriculture 4.2 Importance and use of vermicompost 4.3 Importance & use of vermiwash 4.4 Marketing & awareness for farmers by organising farmers meet	

APPLICATION OF MS-EXCEL IN STATISTICS

Name of the Department : Department of Statistics
 Course name : Application of MS-Excel in Statistics
 Course Coordinator name & Contact number: Dr. Tejaswi S. Kurane

Duration : 30days
Course fee : 300/-
Eligibility : It's suitable for undergraduates, graduates and researchers from any field that uses statistical computing.

Minimum intake Capacity : 20

Objectives of the Course:

This course aims to provide knowledge about

- *Apply advanced formulas to lay data in readiness for analysis
- * Use advanced techniques for report visualizations
- * Understand various statistical methodologies of summarizing data

Learning Outcomes: At the end of the course, students should be able to:

- *Import and export data from other applications.
- *Share workbooks with others
- *Identify the different components of the Excel worksheet.
- * Open an existing workbook and create a new workbook
- *Save and print workbooks.
- *Enter text and formulas in to an Excel spreadsheet.
- * Work with cell references.
- * Create a spreadsheet to tabulate and record numeric values .
- *Learn to use functions and formulas.
- * Create and edit charts and graphics.
- *Create, sort, and filter table data *Differentiate between formulas and functions in Excel..
- *Save and print workbooks.
- *Construct formulas, including the use of built-in functions, and relative and absolute references.
- * Create charts and share information.

COMPUTATION OF STATISTICS USING R-SOFTWARE

Name of the Department	: Department of Statistics
Course name	: Computation of Statistics Using R-Software
Course Coordinator name & Contact number:	Mr. P. S. Chougule (9822680411, 7083633933)
Eligibility	: It's suitable for undergraduates, graduates and researchers from any field that uses statistical computing.
Minimum intake Capacity	: 20
Duration	: 30 days

Objectives of the Course:

This course aims to provide a practical introduction to the R programming language.

1. In this course you will learn how to program in R and how to use R for effective data analysis.
2. This course covers practical issues in statistical computing which includes programming in R, reading data into R, accessing R packages, writing R functions,
3. R code for in statistical data analysis will provide working examples and running summary statistics and visualizations and simulations form various distributions

Learning Outcomes: By the end of the course students you shall be confident and equipped with all the knowledge required to perform analytical activities in R. Specifically,

1. A new way of thinking
2. Download and Install R
3. A new language for speaking and reading (vectors, data frames, functions, objects, etc.
4. A new syntax for writing, e.g. `c()`, `print()`, `cat()`, `sort()`, `require()`, `subset()` for data analysis and presentation.
5. Understand the concepts of objects and assignment
6. Construct tables and figures
7. Load a script file, run lines from it, edit and save the script file.

Syllabus:

1. Fundamentals of R:

1.1 Introduction to R, features of R, Installation of R, starting and ending R session getting help in R, R commands and case sensitivity.

1.2 Data types: Logical, numeric and complex

1.3 Vectors and vector arithmetic a) Creation of vectors using function C, assign, seq, rep b) Arithmetic operation on vectors using operators+, c) Numerical log10,log,sort,max, min, unique,range,length,var, prod,sum,summary,fivenum functions: etc. d) Accessing vectors. e) Alternative ways to create vector by scan function.

1.4 Data frame: creation using data frame, subset and transform commands

1.5 Resident data sets: Accession and summary

1.6 Graphics using R: a) High level plotting functions b) Low level plotting functions c) Interactive graphic functions

1.7 Using R as calculator The following Statistical Methods using "R"

2. Sampling Methods:

Drawing sample from a population using SRSWR, SRSWOR Stratified random sampling, Systematic sampling.

3. Diagrams: Simple bar diagram, subdivided bar diagram, multiple bar diagram, Pie diagram, steam and leaf chart.

4. Graphs: Box plot, rod or spike plot, histogram (both equal and unequal class intervals), frequency polygon, ogive curves, empirical distribution function.

5. Measures of central Tendency: Computation of following measures for all types of data. Mean, mode, median, quartiles, Deciles, Percentiles, Geometric mean, Harmonic mean.

6. Measures of dispersion: computation of following measures for all types of data. Range, Quartile Deviation, Variance, Standard Deviation, Coefficient of Variation, Mean Deviation, Mean Squared Deviation.

7. Measures of Skewness and Kurtosis: Bowleys coefficient and Karl Pearson's coefficient of Skewness.

CERTIFICATE COURSE IN VERMITECHNOLOGY

Name of the Department	: Zoology
Course name	: "Certificate Course In Vermitechnology
Course Coordinator name & Contact number:	Smit.D.A.Malvekar (9067197523)
Duration	: 03 months
Course Fee	: 400-
Eligibility	: 12 Passed student
Minimum intake Capacity	: 20

Objectives of the Course:

1. To build an interest about Vermicompost, Vermiwash & Vermiculture among the students
2. To build entrepreneurship skills among the students
3. To encourage students about culture & management of Earthworms
4. To encourage the students for organic farming with the help of vermitechnology.
5. To aware the students about diseases and pests of Earthworm.

Learning Outcomes:

1. Students can construct their own compost in farm & can get monthly income.
2. Students/ farmers by using vermicompost can increase the
3. Students can produce vermicompost on small scale for garden/household plants.
4. The candidate can generate income by supplying vermiculture, vermiwash, & vermicompost.
5. He/she will directly or indirectly help to reduce environmental pollution.

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Practicals:

1. Classification of Earthworm
2. Study of external morphology of Earthworm- Eiseniafoetida
3. Study of habit and habitat of Earthworm- Eiseniafoetida
4. Study of Digestive system of earthworm 5. Study of Reproductive system of earthworm
6. Study of cocoon and juvenile stages of earthworm.
7. Study of Pests and diseases of Earthworm
8. Establishment of vermicomposting unit: Pit method
9. Establishment of vermicomposting unit: Bed method

Flower arrangement Ikebana

In ikebana, the Japanese art of flower arranging, blossoms, branches, leaves, and stems find new life as materials for art making. In contrast to the western habits of casually placing flowers in a vase, ikebana aims to bring out the inner qualities of flowers and other live materials and express emotion.