

# University of Rajasthan Jaipur

**Syllabus of Skill Enhancement Courses**

**As per UGC Curriculum and CBCS**

**Framework for Undergraduate Programmes**

**Under NEP- 2020**

**For**

**Three/Four Year Under Graduate Programme in**

**(Semester – I to VI)**

**In**

**Faculty of Arts/Science/Commerce/Social  
Science/ Fine Arts**

**w.e.f. Academic Session - 2023-24**

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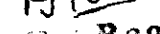
2024

## SKILL ENHANCEMENT COURSES


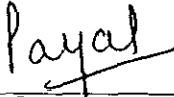

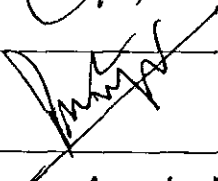
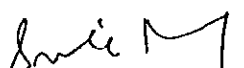
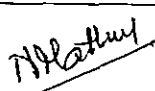


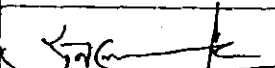



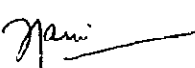


The introduction of Skill Enhancement courses into the Undergraduate Curriculum under the National Education Policy (NEP) 2020 signifies a significant leap forward in providing students with a holistic and practical education. These courses play a crucial role in equipping students with both technical and professional skills, empowering them to excel and adapt in the dynamic job market. The University of Rajasthan has taken proactive steps in offering a diverse range of Skill Enhancement courses, encompassing domains such as Computer Science, communication, digital literacy, entrepreneurship, and leadership, among others. This invaluable exposure not only aids students in making well-informed career decisions but also substantially enhances their employability prospects. Embracing these skill-oriented courses, the NEP-2020 envisions cultivating a generation of capable and job-ready professionals, fostering a brighter and more promising future for the young graduates.

Students enrolled in any undergraduate program at the University and/or its affiliated/constituent colleges are provided with a diverse selection of skill enhancement courses during the **First and Second Semesters**. This pool of courses offers students the opportunity to choose from a variety of options to enrich their skills and knowledge. Students can tailor their learning experiences by selecting courses that align with their interests and career aspirations, ensuring a well-rounded education and enhanced employability prospects. The list of such courses is as follows –

S. No.	Course Code-Course Title	Is offered to NC Students	Total Credit	Delivery Type of the Course
1.	SEC-001-Computer Fundamentals	Yes	2	T
2.	SEC-002-Introduction to Office Productivity Software	No	2	P
3.	SEC-003-Data Analysis Using Excel	No	2	P
4.	SEC-004-Business Communication Skills	Yes	2	T
5.	SEC-005-Effective Communication Skills	No	2	T+P
6.	SEC-006-Learning Life Skills	No	2	T+P
7.	SEC-007-Logical and Critical Thinking	Yes	2	T
8.	SEC-008-Quantitative Aptitude and Data Interpretation	Yes	2	T
9.	SEC-009-Finance for Everyone	Yes	2	T
10.	SEC-010- Basics of Tourism Concepts	Yes	2	T
11.	SEC-011-Data Literacy	Yes	2	T
12.	SEC-012-Bio-Fertilizer	No	2	T+P
13.	SEC-013-Nursery and Gardening Techniques	No	2	T+P
14.	SEC-014- अकृमद कौशल	Yes	2	T
15.	SEC-015-प्रमाचो हिन्दो लखन	Yes	2	T
16.	SEC-016-Pest Management and Control	No	2	T+P
17.	SEC-017-Vermicomposting	No	2	T+P
18.	SEC-018- Understanding Union Budget and Economic Survey	Yes	2	T
19.	SEC-019- Survey Methodology	Yes	2	T

  
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Adhoc Committee Member and Domain Expert for Skill Enhancement Courses

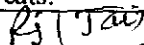

S. No.	Name		Signature
1.	Prof. Shailendra Kumar Gupta Department of Physics	Convenor	
2.	Prof. Payal Lodha Department of Botany	Member	
3.	Prof. Naresh Kumar Department of EAFM	Member	
4.	Prof. Paresh Vyas Department of Mathematics	Member	
5.	Prof. Sunita Agarwal Department of English	Member	
6.	Prof. Nupur Mathur Department of Zoology	Member	
7.	Prof. Sushila Pareek Department of Psychology	Member	
8.	Prof. Bhawani Shankar Sharma Department of Buss. Adm.	Member	
9.	Dr R. K. Gunsariya Department of Chemistry	Member	
10.	Dr Nikki Chaturvedi Department of History	Member	
11.	Dr Jitendra Singh Department of Hindi	Member	
12.	Prof. Pankaj Nagar Department of Statistics	Special Invitee	
13.	Prof. Rashmi Jain Department of Sociology	Special Invitee	
14.	Prof. Urvashi Sharma Department of Hindi	Special Invitee	
15.	Prof. Rameshwar Jat Department of Economics	Special Invitee	

Rj/Tan

## Syllabus

### SEC-001 – Computer Fundamentals

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-001	Computer Fundamentals		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	Yes	30 Hours Theory
Prerequisites	XII Pass				
<b>Objectives of the Course:</b>	<p><b>Objectives of the Course –</b></p> <ol style="list-style-type: none"> <li>1. To provide students with a comprehensive understanding of Information Technology and its evolution, including the different generations of computers and types of computer systems.</li> <li>2. To familiarize students with the architecture of a computer system, encompassing the CPU, ALU, memory, input/output devices, and hardware-software interactions.</li> <li>3. To introduce students to various operating systems, such as UNIX, Linux, Windows, and their types, enabling them to comprehend the significance of operating systems in computing.</li> <li>4. To acquaint students with different programming languages, including low-level and high-level languages, procedural programming, object-oriented programming, functional programming, scripting languages, and their respective applications.</li> <li>5. To enable students to utilize the Internet effectively, including web browsing, understanding domain names and URLs, utilizing email services, participating in online communication, and exploring e-commerce and m-commerce platforms.</li> <li>6. To educate students about social, legal, and ethical aspects of information technology, raising awareness about cyber threats, cybercrime prevention, and the importance of data security.</li> <li>7. To provide insights into various cyber threats and attacks, such as computer viruses, malware, identity theft, phishing, and SQL injection, and to equip students with preventive measures against such threats.</li> </ol>				

  
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## Examination Scheme-

### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-001 –Computer Fundamentals	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Question paper for Computer Fundamentals will be so set that it has 40 multiple choice questions (Bilingual) of one mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

### Non-Collegiate Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (EoSE)	Minimum Marks (EoSE)
Theory	SEC-001 –Computer Fundamentals	1 Hrs	50 Marks	20 Marks

Question paper for Computer Fundamentals will be so set that it has 50 multiple choice questions (Bilingual) of one mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

*P. J. Das*  
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*Das*

## Detailed Syllabus

### SEC-001- Computer Fundamentals

#### Unit – I

**Introduction to Information Technology:** Evolution and generation of computers, Type of computers. Micro, mini, mainframe and Super computer. Architecture of a computer system: CPU, ALU, Memory (RAM, ROM families, Cache Memory, Input/Output Devices, Pointing Devices, Hardware and Software

**Operating System and Programming Languages:** Concept of Operating System, Need, Types of Operating Systems, Batch, Single User, Multi-Processing, Distributed and Timeshared operating systems, Introduction to UNIX, Linux, Windows, Window NT, Virtual Machine, Programming Languages, Low Level and High Level, Generation of Languages, 3 GL and 4 GL languages, Procedural Programming Languages, Object Oriented Programming languages, Functional Programming Languages, Scripting Languages, Logic Programming Languages, Command Line Interface and Graphical User Interface

(8 Lectures)

#### Unit -II

**The Internet:** History and Functions of the Internet, Working with Internet, Web Browsers, World Wide Web, Uniform Resource Locator and Domain Names, Uses of Internet, Search for Information, Email, Chatting, Instant Messenger Services, News Group, Teleconferencing, Video Conferencing, E-Commerce and M-Commerce, E-services -Online Banking, Online Payment Modes, Mobile Wallets, Social Networking Sites, E-Learning/ Online Educations, Cloud-Based Storage, Digital Signature

Manage an E-Mail Account, E-Mail Address, Configure E-Mail Account, Login to an Email, Receive Email, Sending Email, Sending Files as Attachments, Adress Book, Downloading files

(8 Lectures)

#### Unit -III

**Social, Legal, Ethical Matters and Network Security:** Types of Cyber Threats, how to identify Safe Websites/ Portals, Secure Seals (Verisign/Trust pay etc.), Secure Browsing Habits and Mailing Etiquettes, Social, Legal and ethical aspect of IT, Effects on the way we work Socialise, Operational Areas, Cyber Crime, Prevention of Cyber Crime, Cyber Law, Indian IT Act, Intellectual Property Right, Software Piracy, Copy right and Patent, Software Licencing, Proprietary Software, Free and Open-Source Software, GPL Licence,

(7 Lectures)

#### Unit-IV

**Cyber Security Threats:** Security Threats and Attacks (Passive, Active). Types and Effects. Computer Virus, Malware, Adware, Ransomware, Spyware, Emotet , Identity Theft, Denial of Service, Man in Middle, Phishing, MySQL/SQL Injection, Password Attacks

**Network Security:** Risk Assessment and Security Measures, Assets and Type (Data, Applications System and Network). Security issues and Security Measure (Firewall, Encryption/Decryption), Prevention

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(7 Lectures)

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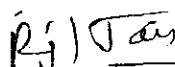
## Suggested Books and References –

1. Introduction to Computers by Peter Norton, McGraw-Hill Education
2. Computer Fundamentals by P.K. Sinha and Priti Sinha
3. Fundamental of Computers, Anita Goel
4. Fundamental of Computers, V. Rajaraman
5. Computer Fundamentals and Programming in C, Reema Thereja
6. Computers: Understanding Technology by Floyd Fuller and Brian Larson
7. Computer Science: An Overview by J. Glenn Brookshear
8. Discovering Computers by Misty E. Vermaat, Susan L. Sebok, Steven M. Freund, and Jennifer T. Campbell.
9. Computers Are Your Future by Catherine Laberta
10. The Elements of Computing Systems: Building a Modern Computer from First Principles by Noam Nisan and Shimon Schocken
11. How Computers Work by Ron White and Timothy Edward Downs
12. The Complete Idiot's Guide to the Internet by Peter Kent and Joe Kraynak
13. Cybersecurity for Beginners by Raef Meeuwisse.
14. Cybersecurity: The Beginner's Guide by Dr. Erdal Ozkaya and Hispasec Sistemas

## Course Learning Outcomes:

By the end of the course, students should be able to:

1. Students will gain a strong foundational knowledge of Information Technology and the historical progression of computers, leading to a broader perspective on technological advancements.
2. Students will be able to comprehend the architecture of a computer system, including the roles of CPU, ALU, memory, and input/output devices, fostering a deeper understanding of hardware-software interactions.
3. Students will acquire knowledge of different operating systems and programming languages, allowing them to make informed decisions while selecting appropriate tools for various applications.
4. Students will develop proficiency in using the Internet for research, communication, and e-commerce purposes, enhancing their digital literacy skills.
5. Students will understand the importance of social, legal, and ethical aspects of IT and be able to make responsible and secure choices while using technology.
6. Students will be able to identify potential cyber threats and adopt preventive measures to safeguard personal and organizational data from cyber-attacks.
7. By the end of the course, students will be equipped with essential skills and knowledge to navigate the digital world safely, making them more confident and informed users of technology.

  
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## Syllabus

### SEC-002 – Introduction to Office Productivity Software

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-002	Introduction to Office Productivity Software		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	-	2	NO	60 Hours Practical
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – The objective of this course is to provide participants with a comprehensive understanding of the fundamental features and functionalities of word processing tools, electronic spreadsheets, and presentation software. Through hands-on practice and theoretical knowledge, participants will develop the skills necessary to efficiently create, format, and manage documents, spreadsheets, and presentations. By the end of the course, participants will be able to use these tools effectively to enhance their productivity in various professional and personal scenarios.				

### Examination Scheme-

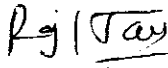
#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Practical	SEC-002- Introduction to Office Productivity Software	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

The Practical examination Scheme for Introduction to Office Productivity Software should be as follows –

- Three Practical Exercise of 10 Marks each from each Unit – 30 Marks
- Viva-Voce – 10 Marks
- Record – 10 Marks

Duration of Practical Examination will be of 1 Hours.

  
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## Detailed Syllabus

### SEC-002 – Introduction to Office Productivity Software

#### Unit – I

##### Word Processing Tools:

**Text Basics:** Typing the text, Alignment of text, Editing Text: Cut, Copy, Paste, Select All, Clear, Find & Replace. **Text Formatting and saving file:** New, Open, Close, Save, Save As, Formatting Text: Font Size, Font Style, Font Colour, Use the Bold, Italic, and Underline, Change the Text Case, Line spacing, Paragraph spacing, Shading text and paragraph. Working with Tabs and Indents, **Objects:** Shapes, Clipart and Picture, Word Art, Smart Art, Columns and Orderings - To Add Columns to a Document, Change the Order of Objects, Page Number, Date & Time, Inserting Text boxes, Inserting Word art, inserting symbols, Inserting Chart, **Header & Footers:** Inserting custom Header and Footer, inserting objects in the header and footer, add section break to a document **Bullets and numbered lists:** Multilevel numbering and Bulleting, Creating List, Customizing List style, Page bordering, Page background, **Tables:** Working with Tables, Table Formatting, Table Styles, Alignment option, Merge and split option, **Styles and Content:** Using Build- in Styles, Modifying Styles, Creating Styles, Creating a list style, Table of contents and references, Adding internal references, Adding a Footnote, Adding Endnote **Merging Documents:** Typing new address list, Importing address list from Excel file, Write and insert field, Merging with outlook contact, Preview Result, Merging to envelopes, Merging to label, Setting rules for merges, Finish & Merge options **Sharing and Maintaining Document:** Changing Word Options, Changing the Proofing Tools, Managing Templates, Restricting Document Access, Using Protected View, Working with Templates, Managing Templates, Understanding building blocks **Proofing the document:** Check Spelling As You Type, Mark Grammar Errors As You Type, Setting AutoCorrect Options **Printing:** Page Setup, setting margins, Print Preview, Print

(20 Hours Practical)

#### Unit -II

##### Electronic Spreadsheet:

**Introduction to spreadsheet:** Introduction, Understanding rows and columns, Naming Cells, Working with excel workbook and sheets, **Formatting excel work book::** New, Open, Close, Save, Save As, Formatting Text: Font Size, Font Style, Font Color, Use the Bold, Italic, and Underline, Wrap text, Merge and Centre, Currency, Accounting and other formats, Modifying Columns, Rows & Cells, **Perform Calculations with Functions:** Creating Simple Formulas, Setting up your own formula, Date and Time Functions, Financial Functions, Logical Functions, Lookup and Reference, Functions Mathematical Functions, Statistical Functions, Text Functions, **Sort and Filter Data:** Sort and filtering data, Using number filter, Text filter, Custom filtering, Removing filters from columns, Conditional formatting, **Create Charts:** Create an effective chart with Chart Tool, Design, Format, and Layout options, Adding chart title, Changing layouts, Chart styles, Editing chart data range, Editing data series, Changing chart, **PivotTables and Pivot Charts:** Understand PivotTables, Create a PivotTable, Framework Using the PivotTable and PivotChart, Create Pivot Chart from pivot Table, Inserting slicer, Creating Calculated fields **Protecting and Sharing the work book:** Protecting a workbook with a password, Allow user to edit ranges, Track changes, Working with Comments, Insert Excel Objects and Charts in Word Document and Power point Presentation. **Use Macros to Automate Tasks:** Creating and Recording Macros, Assigning Macros to the work sheets, Saving Macro enabled workbook **Proofing and Printing:** Page setup, setting print area, print titles, inserting custom Header and Footer, inserting objects in the header and footer, Page Setup, setting margins, Print Preview, Print, enable back ground error checking, Setting Auto Correct Options

(20 Hours Practical)

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## Unit -III

### POWERPOINT:

**Setting Up PowerPoint Environment:** New, Open, Close, Save, Save As, Typing the text, Alignment of text, Formatting Text: Font Size, Font Style, Font Color, Use the Bold, Italic, and Underline, Cut, Copy, Paste, Select All, Clear text, Find & Replace, Working with Tabs and Indents, **Creating slides and applying themes:** Inserting new slide, Changing layout of slides, Duplicating slides, Copying and pasting slide, Applying themes to the slide layout, Changing theme color, Slide background, Formatting slide background, Using slide views, **Working with bullets and numbering:** Multilevel numbering and Bulleting, Creating List, Page bordering, Page background, Aligning text, Text directions, Columns option **Working with Objects:** Shapes, Clipart and Picture, Word Art, Smart Art, Change the Order of Objects, Inserting slide header and footer, Inserting Text boxes, Inserting shapes, using quick styles, Inserting Word art, Inserting symbols, Inserting Chart, **Hyperlinks and Action Buttons:** Inserting Hyperlinks and Action Buttons, Edit Hyperlinks and Action Button, Word Art and Shapes **Working With Movies and Sounds:** Inserting Movie From a Computer File, Inserting Audio file, Audio Video playback and format options, Video options, Adjust options, Reshaping and bordering Video, **Using SmartArt and Tables:** Working with Tables, Table Formatting, Table Styles, Alignment option, Merge and split option, Converting text to smart art, **Animation and Slide Transition:** Default Animation, Custom Animation, Modify a Default or Custom Animation, Reorder Animation Using Transitions, Apply a Slide Transition, Modifying, Transition, Advancing to the Next Slide, **Using slide Master:** Using slide master, Inserting layout option, Creating custom layout, Inserting place holders, Formatting place holders, **Slide show option:** Start slide show, Start show from the current slide, Rehearse timing, creating custom slide show, **Proofing and Printing:** Check Spelling As You Type, Setting AutoCorrect Options, Save as video, Save as JPEG files, Save as PowerPoint Show file, Print Preview, Print

(20 Hours Practical)

### Suggested Books and References –

1. Microsoft Office for Beginners by M.L. Humphrey
2. Microsoft Word 2016 Step by Step by Joan Lambert and Curtis Frye
3. Excel 2016 Bible by John Walkenbach
4. PowerPoint 2016 For Dummies by Doug Lowe
5. Microsoft Office 2016 In Practice by Randy Nordell

### Course Learning Outcomes:

By the end of the course, students should be able to:

1. **Word Processing:**
  - Format documents using advanced text styling and alignment.
  - Manipulate text with cut, copy, paste, and find & replace functions.
  - Enhance document layout with headers, footers, and page numbering.
  - Create visually appealing content using tables, objects, and styles.
  - Efficiently merge documents and manage templates for streamlined work.
2. **Electronic Spreadsheet:**
  - Apply formatting and calculations using a variety of functions.
  - Organize and analyze data through sorting, filtering, and charts.
  - Automate tasks with macros and protect workbooks with passwords.
  - Create dynamic pivot tables for data visualization and analysis.
3. **PowerPoint:**
  - Design captivating presentations with themes, formatting, and multimedia.
  - Incorporate interactive elements like hyperlinks and action buttons.
  - Apply animations and transitions for engaging slide shows.
  - Customize master slides for consistent and polished presentations.

## Syllabus

### SEC-003 – Data Analysis Using Excel

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-003	Data Analysis Using Excel		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	-	2	No	60 Hours Practical
Prerequisites	XII Pass				
Objectives of the Course:	<b>Objectives of the Course –</b> <ol style="list-style-type: none"> <li>1. To Understand Data Analysis Fundamentals and Excel Basics:</li> <li>2. Understanding the process of cleaning and transforming data.</li> <li>3. Understanding Visualization of data.</li> <li>4. Understanding Inbuilt functions of MS-Excel and User defined functions</li> <li>5. To understand Statistical Tools for Data analysis.</li> <li>6. Apply Data Analysis to Real-world Scenarios.</li> </ol>				

### Examination Scheme-

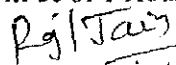
#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Practical	Data Analysis Using Excel	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

The Practical examination Scheme for Introduction to Office Productivity Software should be as follows –

- Three Practical Exercise of 10 Marks each from each Unit – 30 Marks
- Viva-Voce – 10 Marks
- Record – 10 Marks

Duration of Practical Examination will be of 1 Hours.

  
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## Detailed Syllabus

### SEC-003 – Data Analysis Using Excel

Unit	Course Contents	No. of Lectures
Unit-I	<b>Introduction:</b> Introduction to data analysis concepts. Excel's interface and its features. Data entry, formatting, and basic calculations on work sheet. Introduction to Simple Excel functions (SUM, AVERAGE, COUNT, date formats etc.). Various form of storing an excel file. Managing worksheets and workbooks. Storing Workbooks.	16
Unit-II	<b>Data Cleaning and Transformation</b> Importing data from various sources (CSV, text, databases). Data cleaning techniques (removing duplicates, handling missing values). Text-to-columns and data splitting. Data validation and conditional formatting.	12
Unit-III	<b>Visualization:</b> Creating basic charts (bar, line, pie). Customizing charts (titles, labels, legends). Using advanced chart types (scatter plots, histograms). Adding trend lines and data labels. Creating dynamic charts with slicers. Probability Distributions and their graphical representation. Pivot Tables: Creating, modifying, and summarizing data. Pivot Charts: Visualizing Pivot Table data. Introduction to What-If Analysis	16
Unit-IV	<b>Data Analysis Tools:</b> Introduction to basic statistical functions (STDEV, MIN, MAX). Using Excel's built-in analysis tools (Correlation, Regression). Introduction to Power Query for data transformation. User Defined Formulae, Data Analysis Tool-Pack, Preparation of Correlation Matrix, Fitting multiple Regression equation. Generating Random Numbers, Statistical Inference tools : Application of Z-Test, t-test, F-tests, ANOVA- One way and Two-way.	16

#### Suggested Books and References –

1. Paul McFedries (2022): Excel Data Analysis For Dummies, 5th Edition, John Wiley & Sons, ISBN: 978-1-119-84442-6
2. K. Berk (Author), Partrick Carey (2003), Data Analysis with Microsoft Excel, Duxbury Press; New edition (25 March 2003), ISBN-13 : 978-0534407148
3. Robert de Levie(2003), Advanced Excel for Scientific Data Analysis, OUP USA (9 October 2003), ISBN-13 : 978-0195170894
4. Manisha Nigam(2019): Data Analysis with Excel, BPB Publications; First Edition (5 September 2019), ISBN-13 : 978-9388176675
5. L. Winston Wayne (2019): MICROSOFT EXCEL 2019: DATA ANALYSIS & BUSINESS MODEL, 6<sup>th</sup> Edn., PHI Learning Pvt. Ltd. (11 October 2019), ISBN-13 : 978-9389347180
6. Wayne Winston(2017), Microsoft Excel Data Analysis and Business Modeling, Microsoft Press; 5th edition, ISBN-13 : 978-1509304219

  
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**Suggested E-resources:**

**Online Lecture Notes and Course Materials:**

1. E-PG Pathshala:  
<https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=fBYckQKJvP3a/8Vd3L08tQ==>
2. **Lecture Notes:**
  1. <https://www.gacbe.ac.in/pdf/ematerial/18BCS5EL-U5.pdf>
  2. <https://drive.google.com/file/d/11yrw1jBol2RRaBlj4Vy3XpZQhaM8D1dz/view?pli=1>
  3. <https://www.guru99.com/excel-tutorials.html>
  4. <https://gacbe.ac.in/pdf/ematerial/18MEC24C-U4.pdf>

**Course Learning Outcomes:**

**After completing this short-term course students will gain with**

1. Proficiency in Excel.
2. Data Analytical tools with Excel.
3. Data Visualization tools with MS-Excel:
4. Creating Pivot-Table Mastery.
5. Participants will have a solid foundation for further studies in data analysis, statistics, or related fields.
6. Successful completion of the course can enhance participants' career prospects by equipping them with sought-after data analysis skills.
7. Participants will be better equipped to solve real-world problems using data-driven insights and informed decision-making.
8. Students will realize confident navigating and utilizing Excel for various data analysis tasks.

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## Syllabus

### SEC-004 – Business Communication Skills

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-004	Business Communication Skills		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	Yes	30 Hours Lectures
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – <ul style="list-style-type: none"> <li>• Acquire the essentials of business communication skills.</li> <li>• Acquire career skills and truly pursue to partake in a successful career path.</li> <li>• Teach them all types of business correspondences including electronic.</li> <li>• Prepare good resume, prepare for interviews and group discussions.</li> <li>• Explore desired career opportunities in the employment market in consideration of an individual SWOT.</li> </ul>				

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-004-Business Communication Skills	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Question paper for Business Communication Skill will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

#### Non-Collegiate Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (EoSE)	Minimum Marks (EoSE)
Theory	SEC-004-Business Communication Skills	1 Hrs	50 Marks	20 Marks

Question paper for Business Communication Skill will be so set that it has 50 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

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## Detailed Syllabus

### SEC-004 – Business Communication Skills

#### Unit 1. Introduction to the essentials of Business Communication

Meaning, Process and Functions  
Channels and Types of Communication  
Effective Communication and its Barriers  
Importance of Business Communication

(7 Lecture)

#### Unit 2: Business Correspondence

Advertisement  
Inviting Tender and Placing Order  
Notice, Circular, Memo, Minutes of Meeting  
Appreciation and Complaint Letters

(8 Lecture)

#### Unit 3. Oral Business Communication

Greeting and Telephonic Conversation  
PPT Making and Presentation Skills  
Interview  
Group Discussion

(8 Lecture)

#### Unit 4: Electronic Communication

Email Writing  
Virtual Business Meetings  
Use of Social-Media for Business Communication  
Internet Etiquettes and Correct use of Emoticons

(7 Lecture)

#### Suggested Books and References –

1. English Communication – A Textbook for AECC-2 (Cambridge), Somak Mandal/ Sharmishtha Chatterjee Sriwastav (Cambridge)
2. Interact – A Course in Communicative English, Malathy Krishnam/ Zinia Mitra/ Binayak Ray (Cambridge)
3. English Fluency – I, Pooja Khanna/ Neerja Deswal
4. Sen Madhucchanda (2010), An Introduction to Critical Thinking, Pearson, Delhi
5. Silvia P.J. (2007), How to Read a Lot, American Psychological Association, Washington DC

#### Suggested E-resources:

1. Online Lecture Notes and Course Materials:  
Online platform SWAYAM

#### Course Learning Outcomes:

By the end of the course, students should be able to:

1. By the end of this program participants should have a clear understanding of what good communication skills are and what they can do to improve their abilities.
2. Participate in a digital lifestyle conversant with computers, applications, Internet and nuances of cyber security.
3. Engage in effective communication by respecting diversity and embracing good listening skills.
4. Distinguish the guiding principles for communication in a diverse, smaller internal world.

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## Syllabus

### SEC-005 – Effective Communication Skills


Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-005	Effective Communication Skills		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	No	20 Lectures and 20 Hour Activity Based
Prerequisites	XII Pass				
Objectives of the Course:	<ul style="list-style-type: none"> <li>• Develop a deep understanding of key concepts</li> <li>• To acquire good LSRW</li> <li>• To Prepare them for course and employment</li> <li>• Understand the importance of empathetic listening</li> <li>• Master a subject or tool with hands-on projects</li> </ul>				

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
	SEC-004-Effective Communication Skills	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Question paper for Effective Communication Skills will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

  
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## Detailed Syllabus

### SEC-005 – Effective Communication Skills

#### Unit 1:

##### Communication Process

Meaning of Communication and its Components  
Types of Communication  
Barriers of Communication  
Activity based Learning

(8 Lectures)

#### Unit 2:

##### Non-Verbal Communication

Meaning of non-verbal communication  
Introduction to modes of non-verbal communication  
Do's and Don'ts  
Activity based Learning

(7 Lectures)

#### Unit 3:

##### Listening and Speaking Skills

Techniques of Effective Listening  
Listening and Comprehension  
Understanding English Sounds, Tone and Intonation  
Activity based Learning

(8 Lectures)

#### Unit 4:

##### Reading and Writing Skills

Techniques of Effective Reading  
Reading and Comprehension  
Common Errors  
Activity based Learning

(7 Lectures)

#### Suggested Books and References --

1. English Communication – A Textbook for AECC-2 (Cambridge), Somak Mandal/ Sharmishtha Chatterjee Sriwastav (Cambridge)
5. Interact – A Course in Communicative English, Malathy Krishnam/ Zinia Mitra/ Binayak Ray (Cambridge)
6. English Fluency – I, Pooja Khanna/ Neerja Deswal
7. Sen Madhucchanda (2010). An Introduction to Critical Thinking. Pearson, Delhi
8. Silvia P.J. (2007). How to Read a Lot, American Psychological Association, Washington DC

*P. J. Deswal*  
Dy. Registrar

(Academic)

University of

**Suggested E-resources:**

1. **Online Lecture Notes and Course Materials:**  
Online platform SWAYAM

**Course Learning Outcomes:**

By the end of the course, students should be able to:

1. By the end of this program participants should have a clear understanding of what good communication skills are and what they can do to improve their abilities.
2. Participate in a digital lifestyle conversant with computers, applications, Internet and nuances of cyber security.
3. Engage in effective communication by respecting diversity and embracing good listening skills.
4. Distinguish the guiding principles for communication in a diverse, smaller internal world.

*Raj Tay*  
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## Syllabus

### SEC-006 – Learning Life Skills


Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-006	Learning Life Skills		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	No	20 Lectures and 20 Hour Activity Based
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – <ul style="list-style-type: none"> <li>• To help young students to better understand themselves</li> <li>• To get along well with others</li> <li>• To take responsible and mature decisions</li> <li>• To cope with life's inevitable challenges realistically and effectively</li> </ul>				

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-006-Learning Life Skills	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Question paper for Learning Life Skills will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

  
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## Detailed Syllabus

### SEC-006 – Learning Life Skills

#### Unit – I

Life Skills- Introduction, Need and Significance,  
Benefits and Methods of Life Skills Education

(8 Lectures)

#### Unit –II

Social Skills-Self Awareness, Empathy, Effective Communication,  
Interpersonal Relationship

(7 Lectures)

#### Unit –III

Thinking Skills- Creative Thinking, Critical Thinking,  
Decision Making, Problem Solving

(8 Lectures)

#### Unit-IV

Emotional Skills- Coping with Stress, Coping with Emotions

(7 Lectures)

#### Suggested Books and References –

1. Saravanakumar, A. R. (2020) Life Skill Education through Lifelong Learning. Maharashtra, India, Laxmi Book Publication.
2. Verma, S. (2014) Development of Life Skills and Professional Practice. Noida, India, Vikas Publishing House Pvt. Ltd.
3. UNICEF Comprehensive Life Skills Framework.
4. AIF Handbook of Activities on Life Skills (2018)

#### Suggested E-resources:

1. [www.AIF.org](http://www.AIF.org)
2. [www.unicef.org](http://www.unicef.org)
3. [www.who.org](http://www.who.org)

#### Course Learning Outcomes:

By the end of the course, students will be able to:

1. identify and share the interests, aspirations, strengths and weaknesses by enhancing self-awareness.
2. develop social and communication skills and learn to maintain healthy relationships.
3. analyse and evaluate situations, actions and thoughts rationally and creatively.
4. identify and manage and cope with stress and deal effectively with positive and negative emotions

## Syllabus

### SEC-007 – Logical and Critical Thinking

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-007	Logical and Critical Thinking		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	Yes	30 Hours Lecture
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – This course aims to equip students with a comprehensive understanding of various logical reasoning concepts and critical thinking techniques. Through a diverse range of topics and exercises, the course seeks to enhance students' ability to analyze information, evaluate arguments, solve complex problems, and make informed decisions. By the end of the course, students should have a solid foundation in logical reasoning and critical thinking, empowering them to excel in various academic, professional, and everyday scenarios.				

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-007- Logical and Critical Thinking	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Question paper for Logical and Critical Thinking will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

#### Non-Collegiate Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (EoSE)	Minimum Marks (EoSE)
Theory	SEC-007- Logical and Critical Thinking	1 Hrs	50 Marks	20 Marks

Question paper for Logical and Critical Thinking will be so set that it has 50 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

## Detailed Syllabus

### SEC-007- Logical and Critical Thinking

#### Unit – I

Alphabet test, Alphanumeric series, Analogy, Analytical and Decision Making, Arithmetic Reasoning, Artificial Language,

(7 Lectures)

#### Unit – II

Blood Relations, Calendars, Cause and Effect, Classification, Clocks, Code Inequalities, Coded equations, Coding and Decoding, Course of Action, Critical path, Critical Reasoning, Cubes and cuboids,

(8 Lectures)

#### Unit – III

Data Sufficiency, Decision Making, Deductive Reasoning/Statement Analysis, Dices, Direction questions, Embedded Images, Figure Matrix, Input-Output, Mirror and Water Images, Odd One Out, Ordering and Ranking, Paper folding; unfolding questions

(8 Lectures)

#### Unit – IV

Picture Series and Sequences, Puzzles, Reasoning Analogies, Seating Arrangements, Shape Construction, Statement and Assumptions, Statement and Conclusions, Syllogism, Venn Diagram. Verbal Reasoning, Visual Reasoning

(7 Lectures)

#### Suggested Books and References –

1. A Modern Approach to Logical Reasoning by R.S. Aggarwal
2. Logical and Analytical Reasoning by A.K. Gupta
3. How to Prepare for Logical Reasoning for CAT by Arun Sharma
4. Verbal and Non-Verbal Reasoning by R.S. Aggarwal
5. Analytical Reasoning by M.K. Pandey
6. Logical Reasoning and Data Interpretation for CAT by Nishit K. Sinha
7. The PowerScore LSAT Logical Reasoning Bible by David M. Killoran
8. Critical Thinking: A Student's Introduction by Gregory Bassham, William Irwin, and Henry Nardone
9. Thinking, Fast and Slow by Daniel Kahneman
10. The Art of Thinking Clearly by Rolf Dobell

#### Course Learning Outcomes:

By the end of the course, students should be able to:

1. Demonstrate Proficiency in Various Logical Reasoning Techniques: Students will grasp the fundamental principles of logical reasoning and apply techniques such as analogy, classification, coding-decoding, statement analysis, syllogism, and more.
2. Enhance Critical Thinking Skills: Students will develop the ability to critically evaluate information, identify assumptions, and analyze argument to make well-reasoned decisions.

3. **Solve Complex Problems:** Students will be adept at solving intricate problems involving arithmetic reasoning, puzzles, sequencing, and other logical challenges.
4. **Interpret Visual and Verbal Data:** Students will effectively interpret visual information, such as figure matrices, and comprehend verbal reasoning exercises to arrive at accurate conclusions.
5. **Navigate Various Question Types:** Students will become proficient in handling a wide range of logical reasoning question formats, including seating arrangements, blood relations, calendars, and more.
6. **Strengthen Decision-Making Abilities:** Students will sharpen their decision-making skills by considering cause and effect relationships, identifying critical paths, and applying course of action principles.
7. **Enhance Test-Taking Abilities:** Students will be well-prepared for competitive exams and assessments that include logical reasoning sections, as they will have practiced a diverse set of reasoning challenges.
8. **Apply Logical Thinking in Real-Life Contexts:** Students will be able to apply logical and critical thinking techniques to real-life situations, improving their problem-solving abilities in various domains.

*Rg/Tav*  
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## Syllabus

### SEC-008 – Quantitative Aptitude and Data Interpretation

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-008	Quantitative Aptitude and Data Interpretation		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	Yes	30 Hours Lecture
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – <ul style="list-style-type: none"> <li>• To provide a strong foundation in the number system and basic arithmetic concepts.</li> <li>• To understand divisibility rules, decimal fractions, greatest common divisor (GCD), least common multiple (LCM), surds, indices, and simplifying square and cube roots.</li> <li>• To solve problems related to averages, ages, allegations, and percentages.</li> </ul>				

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-008- Quantitative Aptitude and Data Interpretation	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Question paper for Quantitative Aptitude and Data Interpretation will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

#### Non-Collegiate Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (EoSE)	Minimum Marks (EoSE)
Theory	SEC-008- Quantitative Aptitude and Data Interpretation	1 Hrs	50 Marks	20 Marks

Question paper for Quantitative Aptitude and Data Interpretation will be so set that it has 50 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.



## Detailed Syllabus

### SEC-008 – Quantitative Aptitude and Data Interpretation

#### Unit – I

Number system, divisibility, decimal fractions, GCD & LCM, surds and indices, Squares and Cubes, square roots and cube roots, problems on averages and ages, allegations, percentage.

(08 Lectures)

#### Unit -II

Profit & loss, partnership, discount, simple & compound interest, ratio & proportion and variation.

(06 Lectures)

#### Unit -III

Time and work, time, speed and distance, geometry and mensuration, coordinate geometry, functions, inequalities, quadratic and other equations, logarithms, permutations and combinations, probability, set theory

(08 Lectures)

#### Unit-IV

Basic modes of data Interpretation, Data. Nature of Data, Data represents variable, types of variable need for capturing data. Data interpretation -definition, organization and presentation, Tabular presentation. Tables, bar Charts- Simple, Stacked, Composite, representation of percentage, show deviation, XY Charts, Pie Charts, Cases, Challenges of data interpretation, Data Sufficiency

(08 Lectures)

#### Suggested Books and References –

1. R.S. Aggarwal, Quantitative Aptitude for Competitive Examinations, S. Chand, 2018.
2. Arun Sharma, Teach Yourself Quantitative Aptitude, McGraw Hill, 2019.
3. P.A. Anand, Wiley Quantitative Aptitude For Competitive Exams, Wiley India Pvt.Ltd, 2015.
4. Rajesh Verma, Fast Track Objective Arithmetic, Arihant Publications, 2018.
5. Nishit K. Sinha - The Pearson Guide to Quantitative Aptitude and Data Interpretation for the CAT-Pearson Education (2012)

#### Course Learning Outcomes:

By the end of the course, students will be proficient in solving a range of mathematical problems, interpreting data, and making informed decisions in various contexts. They will have developed quantitative reasoning skills that can be applied both academically and in practical situations.

*P. J. Jay*  
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## Syllabus

### SEC-009 – Finance for Everyone

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-009	Finance for Everyone		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	Yes	30 Hours Lecture
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – The course "Finance for Everyone" aims to provide participants with a solid foundation in financial literacy and personal finance management. Through comprehensive lessons, it seeks to familiarize students with essential financial concepts, various financial institutions, investment strategies, taxation principles, and insurance planning. The course is designed to empower individuals with the knowledge and skills necessary to make informed financial decisions and effectively manage their personal finances.				

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-009- Finance for Everyone	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Question paper for Finance for Everyone will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

#### Non-Collegiate Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (EoSE)	Minimum Marks (EoSE)
Theory	SEC-009- Finance for Everyone	1 Hrs	50 Marks	20 Marks

Question paper for Finance for Everyone will be so set that it has 50 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

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## Detailed Syllabus

### SEC-009 – Finance for Everyone

#### Unit – I

- Lesson :1 – Introduction to Financial Literacy and Personal Finance
  - Lesson :2 – Brief about Financial Institution (Banks, NBFC's and Insurance Companies)
  - Lesson :3 – Financial Planning and Decisions
  - Lesson :4 – Introduction to Financial Forecasting and Budgeting
- (08 Lectures)

#### Unit -II

- Lesson :1 – Introduction to Banking and Electronic Banking (Including Digital Payments)
  - Lesson :2 – Basic Concepts of Investment
  - Lesson :3 – Basics of Money Market
  - Lesson :4 – Brief about Capital Market and its types
- (08 Lectures)

#### Unit -III

- Lesson :1 – Introduction to Insurance Planning
  - Lesson :2 – Various types of Insurance
  - Lesson :3 – Introduction to Indirect Tax (GST)
- (06 Lectures)

#### Unit-IV

- Lesson :1 – Income Tax: An Introduction
  - Lesson :2 – Basic Concepts of Taxation (Including Residential Status and Heads of Income)
  - Lesson :3 – Personal Tax Planning and Reduction of Tax Liability
- (08 Lectures)

#### Suggested Books and References –

1. Finance for everyone: Devinder Kumar Anand, Vikas Publishing House Pvt Ltd.
2. Basics of Finance and Banking: Bhattacharya & Agarwal. Himalya Publishing House.

#### Course Learning Outcomes:

By the end of the course, students should be able to:

1. Recognize the significance of financial literacy and its role in making informed financial decisions.
2. Understand the functions and roles of different financial institutions, including banks, NBFCs, and insurance companies.

3. Develop effective financial planning skills, set financial goals, and make prudent financial decisions.
4. Apply financial forecasting and budgeting techniques to manage expenses and achieve financial objectives.
5. Navigate electronic banking, including digital payments, and utilize online banking services effectively.
6. Grasp fundamental investment concepts, assess risk and return relationships, and explore different investment options.
7. Comprehend the basics of the money market and its importance in short-term financing.
8. Gain insight into the capital market and its primary and secondary segments, along with various traded securities.
9. Understand the significance of insurance planning, choose appropriate insurance products, and manage financial risks.
10. Identify different types of insurance, such as life, health, property, and liability insurance, and their respective benefits.
11. Gain a basic understanding of the Goods and Services Tax (GST) and its implications.
12. Familiarize themselves with income tax, its fundamental concepts, residential status determination, and various sources of income.
13. Employ personal tax planning strategies, optimize tax liabilities, and explore tax-saving investment options

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## Syllabus

### SEC-010 – Basics of Tourism Concepts

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-010	Basics of Tourism Concepts		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	Yes	30 Hours Lecture
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – <ol style="list-style-type: none"> <li>1. Introduce students to the core concepts of tourism, including its historical development, types, forms, and components.</li> <li>2. Provide insights into the characteristics and patterns of growth in domestic and international tourism.</li> <li>3. Develop an understanding of the motivations driving tourism demand and the factors influencing individuals' choices to travel.</li> <li>4. Explore the wide-ranging impacts of tourism, including economic, socio-cultural, and environmental effects, both positive and negative.</li> </ol>				

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-010- Basics of Tourism Concepts	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Question paper for Basics of Tourism Concepts will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

#### Non-Collegiate Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (EoSE)	Minimum Marks (EoSE)
Theory	SEC-010- Basics of Tourism Concepts	1 Hrs	50 Marks	20 Marks

Question paper for Basics of Tourism Concepts will be so set that it has 50 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

## Detailed Syllabus

### SEC-010 – Basics of Tourism Concepts

#### Unit I

**Tourism Concepts:** Definitions and historical development of tourism, Types of tourist-Visitor-Excursionists, Types and Forms of Tourism, Tourism system: Nature, characteristic, Tourism: Components and Characteristics

(08 Lectures)

#### Unit II

**Domestic Tourism:** features, pattern of growth and profile  
**International Tourism:** Tourist generating and destination regions Tourism motivation and tourism demand

(08 Lectures)

#### Unit III

**Tourism Impacts:** Positive and Negative Impacts of Tourism; Economic, Socio-Cultural, and Environmental Impact

(07 Lectures)

#### Unit IV

**Tourism Organizations:** Objectives and Role of ITDC, TFCI, IRCTC

(07 Lectures)

#### Suggested Books and References –

1. Burkart & Medlik : Tourism: Past, Present and Future
2. Chunky Gee et-al: Travel Industry
3. Cooper C., Fletcher J., Gilbert D and Wanhil. S: Tourism: Principles and Practices
4. J.K. Sharma: Tourism Planning and Development -
5. McIntosh, R. W.: Tourism: Principles and Practices
6. Mill and Morrison: Tourism systems
7. P.C. Sinha: Tourism Management Vol. - 4
8. Prannath Seth: Successful Tourism Management
9. R. Gartner: Tourism Development
10. Sagar Singh: Studies in Tourism

#### Course Learning Outcomes:

By the end of the course, students should be able to:

1. Identify and assess the positive and negative impacts of tourism on different sectors.
2. Understand the economic effects of tourism, including income generation and employment opportunities.
3. Analyze the socio-cultural impacts of tourism on local communities and cultural heritage.
4. Recognize the environmental impacts of tourism and its effects on ecosystems and natural resources.

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## Syllabus

### SEC-011 – Data Literacy

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-011	Data Literacy		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	Yes	30 Hours Lecture
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – The objective of this course is to develop students' data literacy skills. This course will give students skills in understanding and interpreting data from simple descriptive representation of data, to the use of graphs.				

### Examination Scheme-

#### Regular Students –

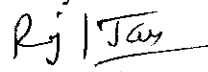
Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-011- Data Literacy	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Question paper for Data Literacy will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

#### Non-Collegiate Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (EoSE)	Minimum Marks (EoSE)
Theory	SEC-011- Data Literacy	1 Hrs	50 Marks	20 Marks

Question paper for Data Literacy will be so set that it has 50 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

  
**Dy. Registrar**  
 Academic

## Detailed Syllabus

### SEC-011 – Data Literacy

#### Unit – I

Data- Meaning and Types, Nature and Properties of Data, Uses of Data  
(07 Lectures)

#### Unit -II

Sources of Data, Types of Government Data, Types of Measurement, Reliability and Validity  
(07 Lectures)

#### Unit -III

Techniques of data Collection, Text as Data, Different Data sets and how to read them  
(08 Lectures)

#### Unit-IV

Data visualization, Graphical and Tabular representation of data, Types of Data Analysis  
(08 Lectures)

#### Suggested Books and References –

1. Walliman Nicholas, Research Methods- The Basics, Routledge, 2011
2. Pandey P. and Pandey M.M, Research Methodology: Tools and Techniques, Bridge Center, 2015
3. Kothari C. R. Research Methodology: Tools and Techniques, (Chapter 6), New Age International Publishers, 1990
4. Research Methods, Alagappa University, Unit 8-11, Vikas Publishing House, 2020

#### Suggested E-resources:

##### Online Lecture Notes and Course Materials:

1. <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=sP9KhysDemvbqPHPOAmaYw==>
2. <https://egyankosh.ac.in/biustream/unit2>
3. <https://www.toppr.com/guides/maths/statistics/data/>
4. <https://www.simplilearn.com/what-is-data-article>

#### Course Learning Outcomes:

By the end of the course, students should be able to:

1. Identify different types of data and data sources
2. Evaluate how quantitative data is used within everyday life and academics:
3. Recognise the limitations of quantitative data;
4. Apply basic data literacy skills to practical analysis of datasets.

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## Syllabus

### SEC-012 – Biofertilizers


Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-012	Biofertilizers		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	No	15 Hours Lecture +30 Hours Lab Activity / Fieldwork
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – The concept of biofertilizers and develop the skills for handling microbial inoculants. The growth and multiplication conditions of useful microbes and their role in mineral cycling and nutrition to plants. Various methods of decomposition of biodegradable waste and their conversion to compost				

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-012-Biofertilizers	1 Hrs-MT 1 Hrs-EoSE	5 Marks-MT 20 Marks-EoSE	2 Marks-MT 8 Marks-EoSE

Theory question paper for biofertilizers will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

  
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## Detailed Syllabus

### SEC-012 – Biofertilizers

#### Unit –I

Biofertilizers - Introduction, status and scope; Rhizobia: isolation, purification, morphology, identification, and mass cultivation. Actinorrhizal symbiosis.

(04 Lectures)

#### Unit -II

*Azospirillum*: isolation and mass multiplication – carrier-based inoculant, associative effect of different microorganisms. *Azotobacter*: classification, characteristics – crop response to *Azotobacter* inoculum, maintenance and mass multiplication

(04 Lectures)

#### Unit –III

Cyanobacteria (blue green algae), *Azolla* and *Anabaena azollae* association, nitrogen fixation, factors affecting growth, blue green algae and *Azolla* in rice cultivation. FCO specifications and quality control of biofertilizers

(04 Lectures)

#### Unit-IV

Mycorrhizal association, types of mycorrhizal association, taxonomy, occurrence and distribution, phosphorus nutrition, growth and yield – colonization of VAM – isolation and inoculum production of VAM, and its influence on growth and yield of crop Plants

(03 Lectures)

#### Practical:

1. Sterilization of glassware, culture media, other substances, materials and equipment
2. Study of heterocyst in cyanobacteria.
3. Isolation and culturing of Rhizobium from root nodules of leguminous crops.
4. Preparation of media for microbial biofertilizers.
5. Preparation of media for microbes.
6. Isolation of Azotobacter from root nodules of leguminous crops.
7. Cultivation of blue green algae.
8. Study of different types of Cyanobacteria used for nitrogen fixation.
9. Study various biocontrol methods and their application Pheromone trap, Trichoderma, Pseudomonas, Neem etc.
10. Preparation of Vermicompost.

(30 Hours Lab Activity)

#### Suggested Books and References –

1. Dubey, R.C. (2005). A Text Book of Biotechnology. S. Chand and Co. New Delhi.
2. John Jothi Prakash, E. (2004). Outlines of Plant Biotechnology. Emkay Publication. New Delhi.

3. Kumaresan. V. (2005). Biotechnology. Saras Publications, New Delhi.
4. Sathe, T.V. (2004). Vermiculture and Organic Farming. Daya Publishers.
5. Subha Rao, N.S. (2000). Soil Microbiology. Oxford and IBH Publishers. New Delhi.
6. Vayas, S.C, Vayas, S. and Modi, H.A. (1998). Bio-fertilizers and organic Farming. Akta Prakashan, Nadiad
7. Somani, L.L. (2004). Handbook of Biofertilizers. Agrotech Publishing Academy, Udaipur-313002
8. Khosla, R. (2017). Biofertilizers and Biocontrol Agents for Organic Farming Kojo Press
9. Trueman's Biofertilizers. (2018). Trueman Book Company, Jalandhar.

### Suggested E-resources:

1. Azotobacter - Isolation and characterization -- <https://youtu.be/1Z1VhgJ2h6U>
2. Rhizobium -- Identification and characterization - <https://youtu.be/jELlo-pMvc4>

### Course Learning Outcomes:

By the end of the course, students should be able to:

1. Develop conceptual skill about identifying microbes, and bio-fertilizers
2. Gain knowledge about developing commercial enterprise of bio-fertilizers.

*P. J. Talwar*  
Dy. Registrar  
(Academic)  
University of Rajasthan  
JAIPUR

## Syllabus

### SEC-013 – Nursery & Gardening Techniques



Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-013	Nursery & Gardening Techniques		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	No	15 Hours Lecture +30 Hours Lab Activity / Fieldwork
Prerequisites	Biology courses of Central Board of Secondary Education or equivalent.				
Objectives of the Course:	Objectives of the Course – The program is aimed to teach students the basic knowledge required to develop entrepreneurship skills in the development of Nursery, Gardening and Landscaping. This course would train students to initiate a remunerative enterprise owing to a high demand of skilled professionals in this field				

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-013- Nursery & Gardening Techniques	1 Hrs-MT 1 Hrs-EoSE	5 Marks-MT 20 Marks-EoSE	2 Marks-MT 8 Marks-EoSE

Theory question paper for Nursery & Gardening Technique will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hour. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

  
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## Detailed Syllabus

### SEC-013 – Nursery & Gardening Techniques

#### Unit -I

Nursery: definition, objectives and scope and building up of infrastructure for nursery, planning and seasonal activities - Planting - direct seeding and transplants.

(03 Lectures)

#### Unit -II

Seed: Structure and types - Seed dormancy; causes and methods of breaking dormancy-Seed storage: Seed banks, factors affecting seed viability, genetic erosion – Seed production technology - seed testing and certification

(04 Lectures)

#### Unit -III

Vegetative propagation: air-layering, cutting, selection of cutting, collecting season, treatment of cutting, rooting medium and planting of cuttings - Hardening of plants – green house - mist chamber, shed root, shade house and glass house

(04 Lectures)

#### Unit-IV

Gardening: definition, objectives and scope - different types of gardening-landscape and home gardening, parks and its components - plant materials and design-computer applications in landscaping, Gardening operations: soil laying, manuring, watering, management of pests and diseases and harvesting.

(04 Lectures)

#### Practical: -

1. Study of germination of dormant & non-dormant seeds (Pea, tomato, maize, bean).
2. Seed viability test.
3. To estimate bulk density and porosity of Garden soils.
4. To determine moisture content & water holding capacity of Garden Soils.
5. Study of different types of tools & accessories for Nursery
6. Methods of preparation of nursery beds and sowing of seeds.
7. Media for propagation of plants in Nursery Beds, Pots and Mist chamber.
8. Study and practice of different propagation methods viz., cutting, layering, division, grafting and budding.
9. Introduction and practicing Bonsai training, pruning and wiring.
10. Study of different types of gardens (indoor and outdoor) and key features of gardens (Paths & Avenues, Hedges & Edges, Lawn, Flowerbeds, Arches & Pergolas, Fencing, Water bodies, Rock Garden).
11. Visit to a horticulture/forest nursery
12. Hands on training on sowing methods of seed and vegetative propagation techniques

(30 Hours Lab Activity)

### Suggested Books and References –

1. Agrawal, P.K. (1993). Hand Book of Seed Technology. Dept. of Agriculture and Cooperation, National Seed Corporation Ltd., New Delhi.
2. Bose T.K. and Mukherjee, D. (1972). Gardening in India, Oxford and IBH Publishing Co., New Delhi.
3. Jules J. (1979). Horticultural Science. (3rd Ed.), W.H. Freeman and Co., San Francisco, USA.
4. Kumar, N. (1997). Introduction to Horticulture, Rajalakshmi Publications, Nagercoil.
5. Sandhu, M.K. (1989). Plant Propagation, Wile Eastern Ltd., Bangalore, Madras
6. Ratha Krishnan, M. *et al.*, (2014). Plant Nursery management: Principles and Practices, Central Arid Zone Research Insititute (ICAR) Jodhpur, Rajasthan.
7. Roy, R. K., Roy, R. K. (2013). Fundamentals of Garden Designing: A Colour Encyclopaedia. India: New India Publishing Agency.
8. Littlepage, R., Littlepage, R. (2017), Fundamentals of Garden Design: An Introduction to Landscape Design. (n.p.): Create Space Independent Publishing Platform

### Course Learning Outcomes:

By the end of the course, students should be able to:

1. Describe and differentiate between the types of gardens.
2. Develop conceptual of nursery and gardening.
3. Gain knowledge about developing commercial enterprise of nursery

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## Syllabus

### SEC-014 –अनुवाद कौशल

Semester	Code of the Course	Title of the Course/Paper			NHEQF Level	Credits
I/II	SEC-014	अनुवाद कौशल			5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course	
		Theory	Practical			
Introductory	Skill Enhancement	2	-	Yes	30 Hours Lecture	
Prerequisites	XII Pass					
Objectives of the Course:	Objectives of the Course – 1. अन्य भाषा के साहित्य को लक्ष्यभाषा में उपलब्ध करवाना 2. वैश्विक ज्ञान को लक्ष्यभाषा में उपलब्ध करवाना 3. ज्ञान का विस्तार					

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-014- अनुवाद कौशल	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Question paper for अनुवाद कौशल will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

#### Non-Collegiate Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-014- अनुवाद कौशल	1 Hrs	50 Marks	20 Marks

Question paper for अनुवाद कौशल will be so set that it has 50 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

## Detailed Syllabus

### SEC-014 – अनुवाद कौशल

#### Unit –I

- अनुवाद, आवश्यकता और महत्त्व
- अनुवाद के प्रकार
- अनुवाद की प्रक्रिया

#### Unit –II

- अनुवाद कार्य की प्रकृति
- अनुवाद और समतुल्यता
- अनुवाद की समस्याएँ

#### Unit –III

- अँग्रेजी से हिन्दी में अनुवाद
- अन्य भारतीय भाषाओं से हिन्दी में अनुवाद
- प्रशासनिक-पारिभाषिक शब्दावली

#### Unit-IV

- पाठ : मालगुडी डेज़ – मालगुडी की कहानियाँ आर. के. नारायण (02 कहानियाँ)

### Suggested Books and References –

1. मालगुडी की कहानियाँ, आर.के. नारायण, राजपाल एंड संस, नई दिल्ली, 2017
2. अनुवाद : सिद्धांत एवं व्यवहार, डॉ. जयन्ती प्रसाद नौटियाल, राजकमल प्रकाशन, नई दिल्ली
3. अनुवाद सिद्धांत और प्रयोग, जी. गोपीनाथन, अभिजीत पब्लिकेशन्स, 2008
4. अनुवाद : सिद्धांत और समस्याएँ, डॉ. रवीन्द्रनाथ श्रीवास्तव- डॉ. कृष्णकुमार गोस्वामी, आलेख प्रकाशन, 2008

### Suggested E-resources:

1. Online Lecture Notes and Course Materials:

### Course Learning Outcomes:

अनुवाद कौशल के अध्ययन को पूरा करने पर, छात्र निम्नलिखित क्षमताओं को प्राप्त करेंगे-

1. अनुवाद शब्द की परिभाषा और इसे सभी भाषाओं के बीच संवाद में महत्वपूर्णता की व्याख्या करना।
2. भाषाई और सांस्कृतिक अंतरों को पार करने में अनुवाद के भूमिका को पहचानना।
3. साहित्यिक, तकनीकी, कानूनी और वैज्ञानिक अनुवाद सहित विभिन्न अनुवाद प्रकार के बीच अंतर करना।
4. प्रत्येक प्रकार के अनुवाद के साथ जुड़े विशेष चुनौतियों का विश्लेषण करना।
5. स्रोत पाठ विश्लेषण से लेकर लक्ष्य पाठ उत्पादन तक की विभिन्न चरणों की जाँच करना।
6. सटीक और सांस्कृतिक रूप से सही अनुवाद उत्पन्न करने में शामिल कदमों का वर्णन करना।
7. लाक्षणिक अनुवाद पैराफ्रेजिंग, अनुकूलन और स्थानीयकरण जैसे विभिन्न अनुवाद विधियों के साथ अलग-अलग होना।
8. पाठ की प्रकृति और लक्ष्य दर्शक के आधार पर उपयुक्त विधियों का प्रयोग करना।

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of Rajasthau



9. अनुवाद समता की अवधारणा समझें और स्रोत पाठ के अर्थ और शैली को बनाए रखने में इसकी भूमिका समझना।
10. अर्थ की प्राप्ति में सामान्य चुनौतियों का विश्लेषण करना, जैसे कि मुहावरे और सांस्कृतिक सूक्ष्मताएँ।
11. रूपांतरण, सुचनांक, और सांस्कृतिक प्रतिस्थानन जैसी तकनीकों का अन्वेषण करें ताकि इच्छित अर्थ को प्रभावी रूप से प्रस्तुत करना।
12. इन तकनीकों को विभिन्न अनुवाद परिदृश्यों में लागू करना।
13. लक्ष्य भाषा में पठनीयता को बनाए रखते हुए स्रोत पाठ के प्रति वफादारी के लिए अनुवादक की जिम्मेदारी को मान्यता देना।
14. अनुवाद प्रक्रिया के दौरान अनुवादकों के द्वारा नैतिक विचारणाएँ और चुनौतियों का मूल्यांकन करना।
15. अंग्रेजी से हिंदी में चयनित अंशों का अनुवाद करना, जिससे कि पाठ्यक्रम में सीखे गए अनुवाद सिद्धांतों की समझ प्रदर्शित हो सके।
16. सटीक और प्रभावी अनुवाद के लिए उपयुक्त विधियों, तकनीकों, और रणनीतियों का प्रयोग करना।

*Rg' (Jaw)*  
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*RW*

## Syllabus

### SEC-015 – प्रभावी हिन्दी लेखन

Semester	Code of the Course	Title of the Course/Paper			NHEQF Level	Credits
I/II	SEC-015	प्रभावी हिन्दी लेखन			5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course	
		Theory	Practical			
Introductory	Skill Enhancement	2	-	Yes	30 Hours	
Prerequisites	XII Pass					
Objectives of the Course:	Objectives of the Course – 1. विद्यार्थी को लेखन स्तर पर कुशल बनाना 2. विविध लेखन शैलियों व शब्द भण्डार का ज्ञान 3. अभिव्यक्ति की सशक्तता और सटीकता प्राप्त करना					

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-015- प्रभावी हिन्दी लेखन	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Question paper for प्रभावी हिन्दी लेखन will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

#### Non-Collegiate Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (EoSE)	Minimum Marks (EoSE)
Theory	SEC-015- प्रभावी हिन्दी लेखन	1 Hrs-EoSE	50 Marks-EoSE	20 Marks-EoSE

Question paper for प्रभावी हिन्दी लेखन will be so set that it has 50 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

  
 Registrar

## Detailed Syllabus

### SEC-015 - प्रभावी हिन्दी लेखन

#### Unit -I

- लेखन -कौशल की आवश्यकता
- लेखन कौशल के उद्देश्य
- लेखन कौशल का विकास

#### Unit -II

- रचनात्मक आयाम
- पत्र लेखन
- रिपोर्ट लेखन
- कहानी लेखन
- फीचर लेखन

#### Unit -III

- प्रायोगिक आयाम
- कार्यशाला
- उच्चारण अभ्यास (जैसा बोलेंगे वैसा लिखेंगे)

#### Unit-IV

- शब्दकोश का उपयोग
- वर्तनी अशुद्धि परिमार्जन
- वक्तृता कौशल

### Suggested Books and References -

1. रचनात्मक लेखन, संपा रमेश गौतम, भारतीय ज्ञानपीठ-वाणी प्रकाशन 2022 नई दिल्ली
2. मीडिया लेखन, वाणी प्रकाशन 2018, तीसरा संस्करण, नई दिल्ली
3. रेडियो लेखन, राजेन्द्र मिश्र, तक्षशिला प्रकाशन, 2009
4. पटकथा : एक परिचय, मनोहर श्याम जोशी, राजकमल प्रकाशन, 2000, नई दिल्ली

### Course Learning Outcomes:

प्रभावी लेखन कौशल" को पूरा करने पर, छात्र निम्नलिखित क्षमताओं को प्राप्त करेंगे:

1. विभिन्न व्यक्तिगत और पेशेवर प्रसंगों में मजबूत लेखन कौशल के महत्व को मान्यता देना।
2. स्पष्ट संवाद में सहायक होने और विचारों को प्रस्तुत करने में प्रभावी लेखन का योगदान समझना।
3. लेखन कौशल का विकसन करने के लक्ष्यों को पहचानना, जिसमें स्पष्टता, प्रसंज्ञानशीलता, और लिखित संवाद में रुचिकरता को बढ़ावा देना शामिल है।
4. विचारों को स्पष्ट और सुसंगत तरीके से लिखकर व्यक्त करने की क्षमता को बढ़ावा देना।
5. सुधारित लेखन प्रवीणता के लिए व्याकरण नियम, विराम चिह्न, और वाक्यबद्धता का उपयोग करना।
6. रचनात्मक आयामों में गहराई में जाएं, जिसमें कल्पनाशील और कलात्मक अभिव्यक्तियाँ शामिल होंगी।
7. ऐतिहासिक भाषाका प्रयोग करके पाठकों को रोचक तरीके से आकर्षित करने वाले लेखित कार्य बनाना।
8. विभिन्न उद्देश्यों के लिए दैनिक पत्र, ईमेल, और संवादों को तैयार करने में परिपूर्णता विकसित करना।
9. दैनिक संवाद में प्रभावी तर्क से संवाद करने के लिए उपयोग, भाषा और भाषा का प्रयोग करना।

R. J. Das  
Registrar

10. ऐसे निबंध, रिपोर्ट, और संक्षेप तैयार करने की प्रवीणता हासिल करना जो जानकारी और विचारों को प्रभावी रूप से प्रस्तुत करता हो।
11. विभिन्न लेखन प्रारूपों के विशिष्ट घटकों और संरचनाओं को समझना।
12. आकर्षक और संवादात्मक कथानकों को तैयार करने के कौशल हासिल करना।
13. अच्छी तरह से प्लॉट और पात्र विकास के साथ कहानियों को बनाने की क्षमता विकसित करना।
14. फीचर लेखन की कला और उसकी तकनीकों को समझना, जिनसे जानकारी को रचनात्मक तरीके से प्रस्तुत किया जा सकता हो।
15. पाठकों को सूचित करने और मनोरंजन करने वाले लेखों को तैयार करने के लिए उपयुक्त तकनीकों का प्रयोग करना।
16. रिज्यूम, कवर पत्र, और प्रस्तावों जैसे दस्तावेजों के लिए आवश्यक प्रैक्टिकल लेखन कौशल की ज्ञान प्राप्त करना।
17. योग्यता और संवाद को प्रभावी बनाने के लिए तकनीकों का प्रयोग करना।
18. सहयोग और सहकारीता को प्रोत्साहित करने वाली लेखन कार्यशालाओं में भाग लेना।
19. संवाद कौशल को और भी बेहतर बनाने के लिए सुरक्षित प्रतिक्रिया प्राप्त करना।
20. वाक्यांशों को सही ढंग से उच्चारित करने के लिए उच्चारण कौशल विकसित करना।
21. सही उच्चारण का अभ्यास करके लिखित सामग्री को मौखिक रूप से प्रभावी ढंग से संवादित करना।
22. शब्दकोषों और शब्दसंग्रहों का उपयोग शब्दावली को समृद्ध करने और शब्द चयन को बेहतर बनाने के लिए करना।
23. उच्च शब्दावली का प्रयोग करके विचारों को और अधिक स्पष्ट और जीवंत ढंग से प्रस्तुत करने का प्रयास करना।
24. सुधारने और संपादन की कला को सीखकर व्याकरण, विराम चिह्न, और शैली में सुधार करना।
25. स्पष्टता और प्रभाव के लिए लिखित काम को पूर्णता और प्रभाव के लिए पुनः संवाद करना।

*RJ*

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*RJ*

## Syllabus

### SEC-016 – Household Pests and their Management


Semester	Code of the Course	Title of the Course/Paper			NHEQF Level	Credits
I/II	SEC-016	Household Pests and their Management			5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course	
		Theory	Practical			
Introductory	Skill Enhancement	2	0	No	15 Hours Lecture +30 Hours Lab Activity / Fieldwork	
Prerequisites	XII Pass					
Objectives of the Course:	Objectives of the Course – The aim of the study is to know the basics of common household pest like cockroaches, mosquito, housefly, termite, etc. and their medical importance in human life.					

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-016- Household Pests and their Management	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Theory question paper for **Household Pests and their Management** will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

  
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## Detailed Syllabus

### SEC-016- Household Pests and their Management

#### Unit - I

##### Introduction to household pests and mode of disease transmission

**Housefly:** Systematic position, Morphology and identification characters, life cycle, mode of disease transmission, control measures

**Silver fish:** Systematic position, Morphology and identification characters, life cycle, their damage and control

(4 Lectures)

#### Unit -II

**Mosquito:** Systematic position, Morphology and identification characters, life cycle, role of mosquito in virus/ protozoan borne diseases, control measures-preventive and curative, WHO initiated programmes

**Ants:** Systematic position, Morphology and identification characters, castes and social life, ant mounds, their mode of damage and control

(4 Lectures)

#### Unit -III

**Termite:** Systematic position, Morphology and identification characters, castes and social life, termitarium, their mode of damage and control

**Crickets:** Systematic position, Morphology and identification characters, life cycle, control measures

(3 Lectures)

#### Unit-IV

**Cockroach:** Systematic position, Morphology and identification characters, life cycle, spread of diseases carrying pathogens, control measures

**Bedbug:** Systematic position, Morphology and identification characters, life cycle, inflammation and their control measures

**Pediculus:** Systematic position, Morphology and identification characters, life cycle, *Pediculus* borne disease and their control measures

(4 Lectures)

#### Practicums:

##### I. Permanent slides

**Mosquito:** W.M. of adults of *Anopheles*, *Aedes*, or *Culex* (male and female), larvae of mosquito; *Anopheles*, *Aedes*, or *Culex*

**Cockroach:** nymph stage

**Silver fish:** W.M. ; **Bedbug:** W.M.

**Termite:** W.M. of termite castes: queen, soldier: nasute & mandibulate, worker

**Ants:** W. M ; **Pediculus:** W.M

2. **Specimens:** *Periplaneta americana*, *Musca domestica*, crickets

3. **Laboratory rearing and study of life cycle of mosquitoes (any one genera: *Anopheles*, *Aedes*, or *Culex* spp.)**

4. **Laboratory rearing and study of life cycle of cockroaches**

5. **Field visits to study termitarium, ant mounds and mosquito breeding sites**

(30 Hours Lab Activity)

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### Suggested Books and References –

1. Medical and Veterinary Entomology by Gary R. Mullen and Lance A. Durden, 3rd Edition 2009, ISBN 978-0-12-814043-7.
2. Insect-Borne Diseases in the 21st Century by Marcello Nicoletti, 2020, ISBN 978-0-12-818706-7
3. Pests and vector-borne diseases in the livestock industry by Garros, Claire, editor.; Bouyer, Jérémy, editor.; Takken, Willem, editor.; Smallegange, Renate C., 2018, ISBN: 9789086868636
4. Biological and environmental control of disease vectors by Cameron, M. M. (Mary M.), editor.; Lorenz, L. M. (Lena M.), 2013, ISBN: 9781845939861

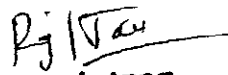

### Suggested E-resources:

1. Medically important vectors:  
<https://vidyamitra.inflibnet.ac.in/index.php/content/index/5fd9f1678007bef4453de567>

### Course Learning Outcomes:

By the end of the course, students should be able to:

1. To understand the common household pest
2. Able to differentiate between various household pest on the basis of their basic morphological characters and life cycle.
3. Student will be able to answer which life stage is damaging to the human dwellings
4. Student will be aware of common disease-causing vectors inhabiting our houses like mosquito, housefly, bedbug, termites, etc.
5. Gain awareness about the diseases they spread like malaria, dengue, chikungunya, local inflammation, diarrhoea, etc.
6. Able to manage and control these pests with basic knowledge given

  
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## Syllabus

### SEC-017 – VERMICOMPOSTING

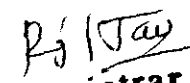

Semester	Code of the Course	Title of the Course/Paper			NHEQF Level	Credits
I/II	SEC-017	Vermicomposting			5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course	
		Theory	Practical			
Introductory	Skill Enhancement	2	-	No	15 Hours Lecture +30 Hours Lab Activity / Fieldwork	
Prerequisites	XII Pass					
Objectives of the Course:	Objectives of the Course – This is a skill-oriented course aimed to understand the concept of vermicomposting, get hands-on experience while learning and to practice it techniques in appropriate site/location.					

### Examination Scheme-

#### Regular Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-017- Vermicomposting	1 Hrs-MT	10 Marks-MT	4 Marks-MT
		1 Hrs-EoSE	40 Marks-EoSE	16 Marks-EoSE

Theory question paper for Vermicomposting will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

  
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## Detailed Syllabus

### SEC-017- Vermicomposting

#### Unit - I

**Earthworms** – Taxonomic position, external features- shape, size, colour, segmentation, setae & clitellum. Reproductive system-Male & Female, copulation, cocoon formation & fertilization; ecological grouping – Epigeic species, Endogeic species and Anecics.

(4 Lectures)

#### Unit -II

**Vermiculture** – definition, scope and importance; common species for culture; Environmental parameters; culture methods – wormery – breeding techniques; indoor and outdoor cultures – monoculture and polyculture – merits and demerits; Limiting factors-climatic factors, pH, humidity, Temperature, gases, xenobiotics

(4 Lectures)

#### Unit -III

**Vermicomposting** of wastes in field pits, ground heaps, tank method, roof shed method, wedges & bin method; harvesting the compost, storage, Vermiwash-Preparation and application vermicomposting harvest and processing. Nutritional composition of vermicompost; Comparison with other fertilizers.

(4 Lectures)

#### Unit-IV

**Applications** of vermiculture –use of vermicastings in organic farming/horticulture, earthworms for management of municipal/selected biomedical solid wastes: as feed/bait for capture/culture fisheries; forest regeneration.

(3 Lectures)

#### Practicals:

1. Collection of earthworms from soil and identification
2. Study of life stages and development of Earthworms
3. Study of vermiculture, Vermiwash and vermiculture equipment and devices
4. Analysis of vermicompost nutritional status
5. Visit to a vermicompost manufacturing unit

(30 Hours Lab Activity)

#### Suggested Books and References –



1. Sultan Ahmed Ismail, 2005. The Earthworm Book, Second Revised Edition. Goa, India Press, Goa, India.
2. Bhatnagar & Patla, 2007. Earthworm vermiculture and vermin-composting. Kalyani Publishers, New Delhi.
3. Mary Violet Christy, 2008. Vermitechnology, MJP Publishers, Chennai.
4. Aravind Kumar, 2005. Verms & Vermitechnology, A.P.H. Publishing Corporation, New Delhi.
5. Jordan & Verma, 2009. Invertebrate Zoology, Chand & Company Ltd
6. Edwards, C.A & J.R. Lofty Vermicology – The Biology of earthworm, 1997 Chapman & Hall Publications N.Y.U.S.A.

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### Course Learning Outcomes:

By the end of the course, students should be able to:

- (i) To develop basic theoretical knowledge about morphology, ecology and role of earthworms in enhancing soil fertility.
- (ii) To perform vermicomposting using the locally available organic waste items.
- (iii) To adopt vermicomposting as a tool of organic farming on a smaller scale.

  
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## Syllabus

### SEC-018 – Understanding Union Budget and Economic Survey

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-018	Understanding Union Budget and Economic Survey		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	Yes	30 Hours Lecture
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – The course seeks to familiarize students with basic concepts related to the Union Budget and Economic Survey. It aims to equip students with sufficient knowledge and skills to analyze budget and economic survey.				

### Examination Scheme-

#### Regular Students –

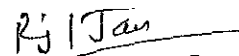
Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-018-Understanding Union Budget and Economic Survey	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Theory question paper for Understanding Union Budget and Economic Survey will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

#### Non-Collegiate Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (EoSE)	Minimum Marks (EoSE)
Theory	SEC-018-Understanding Union Budget and Economic Survey	1 Hrs	50 Marks	20 Marks

Question paper for Understanding Union Budget and Economic Survey will be so set that it has 50 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

  
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## Detailed Syllabus

### SEC-018- Understanding Union Budget and Economic Survey

#### Unit -I

Types of Expenditures, Revenue/Receipts, Taxes and Deficits; Introduction to budget; Types of Budgets- Traditional, Zero Based, Gender and Incremental Budgeting; Need for the budget.

(07 Hours Lecture)

#### Unit -II

Process of Union budget making in India; Components of Union Budget; Structure of Union Budget; Budget Estimates- Actual, Revised and Budget Estimates; Important Features of Union Budget and State Budget.

(08 Hours Lecture)

#### Unit- III

Importance of the Economic Survey, Main Ingredients of Economic Survey; The Current State of the Economy. Recent Fiscal Developments.

(07 Hours Lecture)

#### Unit- IV

Main Features of Physical, Digital and Social Infrastructures; Current Policy Emphasis; Challenges for the Economy.

(08 Hours Lecture)

#### Suggested Books and References –

Given the nature of the course, readings will be updated every year

1. Centre for Budget and Governance Accountability. Recent reports.
2. Ministry of Finance, Economic and social classification of the budget.
3. Ministry of Finance, Union budget (lates).
4. Ministry of Finance, Economic Survey (latest).
5. State Budget, Government of Rajasthan (latest).

#### Course Learning Outcomes:

By the end of the course, students should be able to –

1. Understand the concepts of government expenditures, revenue, taxes, and deficits, and their roles in public finance.
2. Differentiate between various types of expenditures and taxes, and explain their significance.
3. Comprehend the purpose and importance of creating budgets and the different budgeting approaches.
4. Explain the process of formulating the Union Budget in India and its key components.
5. Analyze budget estimates, actual figures, and revised estimates in the context of government

6. Recognize the role and significance of the Economic Survey in assessing the nation's economic health.
7. Identify the main sections and elements of the Economic Survey and interpret its findings.
8. Describe the current economic state of the country based on data from the Economic Survey.
9. Evaluate recent fiscal developments and their implications.
10. Differentiate between physical, digital, and social infrastructures, and understand their importance.
11. Assess current policy priorities and challenges in the economic landscape.
12. Analyze policy measures aimed at addressing economic challenges and promoting growth.

*Pj / Jaw*  
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## Syllabus

### SEC-019 – Survey Methodology

Semester	Code of the Course	Title of the Course/Paper		NHEQF Level	Credits
I/II	SEC-019	Survey Methodology		5	2
Level of Course	Type of the Course	Credit Distribution		Offered to NC Student	Delivery Type of the Course
		Theory	Practical		
Introductory	Skill Enhancement	2	-	Yes	30 Hours Lecture
Prerequisites	XII Pass				
Objectives of the Course:	Objectives of the Course – Survey methodology as a scientific field seeks to identify principles about the sample design, data collection instruments, statistical adjustment of data and data processing that can create systematic and random survey errors.				

### Examination Scheme-

#### Regular Students –

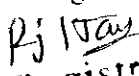
Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (Midterm + EoSE)	Minimum Marks (Midterm + EoSE)
Theory	SEC-019-Survey Methodology	1 Hrs-MT 1 Hrs-EoSE	10 Marks-MT 40 Marks-EoSE	4 Marks-MT 16 Marks-EoSE

Theory question paper for Survey Methodology will be so set that it has 40 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

#### Non-Collegiate Students –

Type	Paper code and Nomenclature	Duration of Examination	Maximum Marks (EoSE)	Minimum Marks (EoSE)
Theory	SEC-019-Survey Methodology	1 Hrs	50 Marks	20 Marks

Question paper for Survey Methodology will be so set that it has 50 multiple choice questions (Bilingual) of One mark each. The Question paper will be of duration of 1 hours. The examinees will have to give their answers on OMR sheet only to be provided by the University whose evaluation will be done based on OMR Scanning Technology.

  
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## Detailed Syllabus

### SEC-019 – Survey Methodology

#### Unit-I

Introduction; types of data; Sources of data; methods of data collection; Survey Design- Coverage and sampling, Choosing the method collecting data, writing effective questions, the logic of constructing questionnaires, testing survey questions.

(07 Hours Lecture)

#### Unit-II

Face-to-face interviews, Telephone surveys, Self-administered questionnaires: mail surveys and other applications, Internet surveys, Interactive Voice Response, Mixed mode surveys: When and why.

(08 Hours Lecture)

#### Unit-III

Processing of survey data- Data cleaning, Weighting survey data and checking for consistency; Incomplete data: Diagnosis, Imputation and accommodating measurement errors; The basic of data Management; Representation of sample data.

(07 Hours Lecture)

#### Unit-IV

Descriptive Statistics Analysis (Applications) – Mean, Median, Mode, Dispersion, Skewness and Kurtosis.

(08 Hours Lecture)

#### Suggested Books and References –

1. Andres, Lesley (2012). *Designing and Doing Survey Research*, London: Sage.
2. Dillman, D.A. (1978) *Mail and telephone surveys: The total design method*, New York: Wiley.
3. Edith D. de Leeuw, Joop Hox, Don Dillman (2008). *International Handbook of Survey Methodology*, Routledge.
4. Engel, U., Jann, B., Lynn, P., Scherpenzeel, A. and Sturgis, P. (2014). *Improving Survey Methods: Lessons from Recent Research*, New York: Routledge.
5. Groves, R.M.; Fowler, F. J.; Couper, M.P.; Lepkowski, J.M.; Singer, E.; Tourangeau, R. (2009). *Survey Methodology*. New Jersey: John Wiley & Sons.
6. Kumar, R. (2014). *Research methodology: A step by step guide for beginners*. 4th ed. Sage Publications.

#### Course Learning Outcomes:

By the end of the course, students should be able to develop an understanding of how commonly available data is collected and processed.

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