# Add-on Course Module on "Tech Essentials for Geographical Analysis: A Beginner's Approach"

For the 1st Semester Students of Geography, Onda Thana Mahavidyalaya

### **Course Co-coordinator**

Dr. Somenath Kar, Assistant Professor & Head, Department of Geography, Onda Thana Mahavidyalaya

(Resource Persons: Dr. Somenath Kar, Bulti Chakraborty, Arijit Mal)

Course Module	Module Details	No. of Class
FUNDAMENTAL	<ul> <li>Theory: <ul> <li>Description of Different parts of a Computer.</li> <li>System Software and Application Software.</li> </ul> </li> <li>Practical: <ul> <li>Identification of Different parts of a Computer System.</li> <li>Turning a computer system on and off</li> </ul> </li> </ul>	01 (DAY 1)
Details of Windows Operating System	<ul> <li>Practical:         <ul> <li>Identifying different Desktop Icons. My Computer, My Documents</li> <li>Changing Desktop Backgrounds, Mouse Pointer, Screen Saver</li> <li>Notepad, WordPad, MS Paint</li> </ul> </li> </ul>	01 (DAY 2)
MS Word	Theory:  Introduction to MS Office Practical:  Typing Font, Alignment, Paragraph formatting	01 (DAY 3)
MS Word (Revision class for detailed information)	Practical:	01 (DAY 4)
MS Word	Practical:	01 (DAY5)
MS Word (Revision class for detailed information)	<ul> <li>Practical:</li> <li>Tables, Bullets and Numbering</li> <li>Insert Picture, Clipart, Shapes</li> </ul>	01 (DAY 6)

MS Word  MS Word  (Revision class for detailed information)	Practical:  Word Art  Header & Footer, Text Box  Page Layout, Mail Merge  Spelling & Grammar  Practical:  Header & Footer, Text Box  Page Layout, Mail Merge  Spelling & Grammar  Word to Pdf/other formats	01 (DAY 7) 01 (DAY 8)
MS Word	Test on MS Word	01 (DAY 09)
MS Excel	Theory:  Introduction to MS Office  Practical:  Cell Formatting Options  Data Tabulation	01 (DAY 10)
MS Excel	• Formulas and Functions	01 (DAY 11)
MS Excel (Revision class for detailed information)	<ul><li>Practical:</li><li>Formulas and Functions</li></ul>	01 (DAY 12)
MS Excel	Practical:  • Charts	01 (DAY 13)
MS Excel (Revision class for detailed information)	Practical:  • Charts	01 (DAY 14)
MS Excel	<ul> <li>Practical:</li> <li>Sort, Filter, What if Analysis, Grouping Subtotal</li> <li>Paste options to Word</li> </ul>	01 (DAY 15)
MS Excel (Revision class for detailed information)	<ul> <li>Practical:</li> <li>Sort, Filter, What if Analysis, Grouping Subtotal</li> <li>Paste options to Word</li> </ul>	01 (DAY 16)
MS Excel	Test on MS Excel	01 (DAY 17)
MS PowerPoint	Theory:  • Introduction to MS PowerPoint  Practical:  • Creating Slides	01 (DAY 18)
MS PowerPoint	<ul> <li>Practical:</li> <li>Creating Slides</li> <li>Creating Slide Show by using Animation Technique</li> </ul>	01 (DAY 19)

MS PowerPoint (Revision class for detailed information)	<ul> <li>Practical:</li> <li>Creating Slides</li> <li>Creating Slide Show by using Animation Technique</li> </ul>	01 (DAY 20)
MS PowerPoint	Practical:	01 (DAY 21)
MS PowerPoint (Revision class for detailed information)	Practical:	01 (DAY 22)
MS PowerPoint	Test on MS PowerPoint	01 (DAY 23)
Internet	Theory:  Introduction to Web Practical:  Connecting to Internet Opening websites and browsing	01 (DAY 24)
Internet	<ul> <li>Practical:</li> <li>Browsing popular sites and using search engines</li> <li>Introduction to Google Forms</li> </ul>	01 (DAY 25)
Internet	Practical:  • Google Forms	01 (DAY 26)
Internet	<ul><li>Practical:</li><li>Google Forms</li></ul>	01 (DAY 27)
Email	<ul><li>Practical:</li><li>Writing, reading and sending emails.</li></ul>	01 (DAY 28)
Email (Revision class for detailed information)	<ul><li>Practical:</li><li>Writing, reading and sending emails.</li></ul>	01 (DAY 29)
Final Examination	Course-end Exam	01 (DAY 30)

# **Course Outcomes**

The course outcome of basic computer learning typically includes the following:

- **1. Understanding Computer Fundamentals:** Grasp basic concepts such as what a computer is, how it works, and its essential components (hardware and software). Learn to create graphs, charts, and visual representations of geographical data for better understanding and communication.
- **2. Proficiency in Operating Systems:** Learn how to navigate and use different operating systems like Windows, Mac OS, or Linux.
- **3. Familiarity with Office Applications:** Gain hands-on experience in using applications like Microsoft Word, Excel, and PowerPoint for document creation, data management, and presentations and ability to collect, organize, and analyze geographical data using spreadsheets, databases, and other digital tools.
- **4. Internet and Email Usage:** Learn how to browse the internet safely, search for information, and effectively use email for communication.
- <u>5. Basic Troubleshooting:</u> Develop problem-solving skills to troubleshoot common computer issues like connectivity problems, software errors, and device malfunctions.
- **<u>6. File Management Skills:</u>** Learn how to create, save, and organize files and folders on a computer or in the cloud.
- **7. Introduction to Online Safety:** Understand the importance of cyber security, protecting personal information, and using antivirus software.
- **8.** Typing and Keyboard Skills: Improve typing speed and accuracy, understanding the layout and functions of a keyboard.

# Add-on Course Module on <u>"Introduction to Research Methodology in Geography"</u> For the 3<sup>rd</sup> and 5<sup>th</sup> Semester Students of Geography

#### **Course Co-coordinator**

Dr. Somenath Kar, Assistant Professor & Head, Department of Geography, Onda Thana Mahavidyalaya

[Resource Persons: Internal Experts (Dr. Somenath Kar, Bulti Chakraborty, Arijit Mal) and External Experts]

#### **Unit 1: Introduction to Research in Geography**

- 1.1: Definition of Research and Its Importance in Geography
- 1.2: Types of Research: Qualitative vs. Quantitative

#### **Unit 2: Research Design and Formulation**

- 2.1: Identifying Research Problems
- 2.2: Formulating Research Questions, Objectives and Hypotheses

### **Unit 3: Data Collection Methods**

- 3.1: Primary Data: Fieldwork and Surveys
- 3.2: Secondary Data: Maps, Satellite Imagery, and Reports

# **Unit 4: Data Analysis and Presentation**

- 4.1: Basic Data Analysis Techniques: Descriptive Statistics and Mapping
- 4.2: Interpreting Results in Geographic Research

## **Unit 5: Case Study and Conclusion**

- 5.1: Case Study in Physical/Social Geography
- 5.2: Writing a Research Report: Key Sections (Introduction, Methods, Findings)

# **Course Outcomes**

### 1. Understanding Research Fundamentals:

- Students will gain a foundational understanding of research methodology and its significance in the field of geography.

#### 2. Formulating Research Questions:

- Students will be able to identify geographic research problems and develop clear, focused research questions and hypotheses.

#### 3. Knowledge of Data Collection Methods:

- Students will understand primary and secondary data collection methods, including field surveys, satellite imagery, and the use of Geographic Information Systems (GIS).

#### 4. Basic Data Analysis Skills:

- Students will learn simple data analysis techniques, including descriptive statistics and spatial data analysis using maps.

# 5. Report Writing and Presentation Skills:

- Students will acquire the ability to organize and present research findings effectively through structured research reports and visual aids.

# **6. Application of Research to Real-World Problems:**

- Through case studies, students will apply research methods to real-world issues in physical and human geography, such as environmental assessment and urbanization.

# 7. Critical Thinking and Problem Solving:

- The course will enhance students' ability to critically analyze geographic data and develop solutions to geographical problems.

These outcomes aim to equip students with the essential skills needed to conduct and present research in geography