



*Children's*  
RESEARCH UNIVERSITY

**Syllabus  
for  
Ph.D. Entrance Test**

# **Paper-1**

## **Research Methodology**

1. Pure & Applied Sciences (Physics, Botany, Environmental Sciences) (Annexure-1 Syllabus RM- Pure and Applied Sciences)
2. Social Sciences (Education, Psychology, Social Work, Home Sciences, Physical Education, Performing Arts, History, Management) (Annexure-2 Syllabus Social Sciences)
3. Language and Linguistics (Annexure-3 Syllabus of English, Gujarati, Sanskrit)

# **Paper-2**

## **Subject/ Domain Specific**

1. The syllabus of Paper-2 for each of the above subject is as per UGC NET syllabus for the concerned PG subject.

# **Paper-1**

## **Research Methodology**

### **Pure & Applied Sciences**

**(Annexure-1 : Syllabus of Physics,  
Botany, Environmental Sciences)**

# Pure & Applied Sciences

## **Chapter – 1 FUNDAMENTALS OF RESEARCH**

- Introduction to research methodology, Meaning of research, definition, characteristic features of good research, qualities of a good researcher, objectives, significance of research, types of research, interdisciplinary research, research ethics, scientific method and its basic postulates

## **Chapter – 2 RESEARCH FRAMEWORK**

- Introduction of Literature review, Identifying gap in Research, Research process, Defining and formulating research problem, extensive research survey, development of hypothesis, preparing research design, experimental work or data collection, data analysis, testing of hypothesis, interpretation, conclusions, report writing, Review article writing

## **Chapter –3 RESEARCH PROPOSAL DESIGN**

- Preparing a Research proposal, main ingredients and sequence, motivation, literature survey and background work, aim and objectives, research problem, national and international status of the research problem, methodology and time frame, possible outcome of the research project, justifications for financial assistance

## **Chapter – 4 ARTICLE WRITING**

- Writing research papers or report, defining aim, scope and expectations of the paper, using library and internet for literature survey, and data base resources by identifying reputable online sources, preparing draft, plagiarism testing, revision to avoid plagiarism, polishing language and preparing final draft, distinction between research paper, article, review, report and thesis, distinction between seminar, conference, symposium, workshop

# Pure & Applied Sciences

## Chapter – 5 EFFECTIVE RESEARCH PUBLICATION

- Preparation of the Manuscript and Writing style, Reference Style: APA, MLA, Chicago, referencing and references management tools, Using Reference Management Software: EndNote/ Zotero/ Mendeley, Distinction between research paper, article, review, report and thesis. Distinction between seminar, conference, symposium, workshop, tracking citation and impact using tools like Google Scholar, Scopus and Research Gate, General Finder, Selection and submission Process

# **Paper-1**

## **Research Methodology**

### **Social Sciences**

**(Annexure-2 : Syllabus of Education,  
Psychology, Social Work, Home  
Sciences, Physical Education,  
Performing Arts, History,  
Management)**

# Social Sciences

## 1. Research: Meaning, Types, and Characteristics

### **Meaning and Definition of Research**

- Nature, purpose, and objectives of research.
- Characteristics of research.

### **Types of Research**

- Basic, Applied, and Action Research.
- Fundamental vs. Applied Research.
- Interdisciplinary and Multidisciplinary research.
- Qualitative vs. Quantitative research.

### **Characteristics of Good Research**

- Objectivity, validity, reliability, and generalizability.

### **Philosophical Foundations**

- Positivism and Post-positivism

## 2. Methods of Research: Qualitative and Quantitative

### **Experimental Method**

- Variables: independent, dependent, control, intervening
- Experimental research designs
- Internal and external validity.

### **Descriptive Method**

- Survey studies, correlational studies.
- Tools: questionnaire, interview, observation.

### **Historical Method**

- Sources of historical data (primary, secondary).
- External and internal criticism of sources.

### **Qualitative Methods**

- Grounded theory, ethnography, phenomenology, narrative analysis, case study.

# Social Sciences

- Data collection techniques: Interviews, focus groups, participant observation.
- Coding and thematic analysis, content analysis, triangulation

## **Population and Sample**

- Population and sample concept
- Sampling techniques: probability and non-probability sampling

## **Hypotheses testing**

- Hypotheses formulation, types and testing.
- Measurement scales (nominal, ordinal, interval, ratio).
- Statistical techniques: Descriptive statistics, inferential statistics.

## **3. Steps of Research**

- Identification and formulation of the research problem.
- Review of related literature.
- Formulation of objectives, research questions, and hypotheses.
- Research design.
- Sampling and selection of tools/instruments.
- Data collection procedures.
- Data analysis and interpretation.
- Report writing and presentation of findings.

## **4. Thesis and Article Writing: Format and Styles of Referencing**

### **Thesis Writing**

- Structure: Title page, Abstract, Introduction, Review of Literature, Methodology, Results, Discussion, Conclusion, References, Appendices.



# Social Sciences

- Formatting guidelines (margins, spacing, pagination, headings).

## Referencing Styles

- APA
- In-text citation and reference list.

## **5. Application of ICT in Research**

- Use of e-resources and online databases (Scopus, Web of Science, JSTOR, etc.).
- Reference management tools: Mendeley, Zotero, EndNote.
- Use of statistical software: Excel, SPSS, NVivo.
- Plagiarism detection tools (Turnitin, Drilbit).
- Use of ICT for Data collection:- Google forms, Survey Monkey etc.
- ICT in collaborative research: Google Scholar, ResearchGate, Academia.edu.

## **6. Research Ethics**

- Ethical principles in research: honesty, integrity, objectivity, confidentiality.
- Plagiarism and issues of academic misconduct.
- Ethical treatment of human participants.
- Informed consent, privacy, and data protection.
- Ethical publication practices: authorship, peer review, conflict of interest.

# **Paper-1**

## **Research Methodology**

# **Language and Linguistics**

**(Annexure-3: Syllabus of English,  
Gujarati, Sanskrit)**

# English Language

## Unit 1: Introduction to Research Methodology

### **Definition, Objectives, and Types of Research**

- What is research? The nature of inquiry in the humanities versus the sciences.
- Types: Basic, Applied, Qualitative, and Quantitative Research. The dominance of qualitative and interpretive methods in literary and cultural studies.
- Importance of Research: Its role in knowledge creation, critical analysis, and intellectual discourse within the discipline of English Studies.

### **Steps in Research**

- Identification of Research Problems: Moving from a broad area of interest to a specific, researchable question.
- Literature Review: The process of surveying existing scholarship and identifying gaps in knowledge.
- Formulation of Research Questions: Developing hypotheses and analytical questions that guide the research.

### **Significance of Research in language and literature**

- Interdisciplinary Research: The intersection of literary studies with fields like psychology, sociology, history, and education, particularly relevant to Children's, Teens', and Comics' Studies.
- Sub-fields as Academic Subjects: Acknowledging Children's Literature, Teens' Literature, and Comics' Studies as valid and vital areas of academic inquiry.

### **Role of ICT in Research**

- Use of e-resources and digital platforms: Using academic databases (JSTOR, MLA International Bibliography), institutional repositories (Shodhganga, CORE), and scholarly networks (Academia.edu, ResearchGate) for literature reviews.

# English Language

- Tools for Literature Review: Platforms for searching and managing scholarly articles (Google Scholar, Zotero, Mendeley).

## **Unit 2: Research Design and Methods for Literary and Cultural Studies**

### **Research Design**

- Exploratory, Descriptive, and Analytical Methods: Designing a study to explore a new topic, describe a phenomenon, or analyse a literary text.
- Case Study Method: In-depth analysis of a single author, text, or series

### **Sources of Information**

- Primary Sources: Manuscripts, Classical Texts, Commentaries, Literary texts (novels, graphic novels), author's manuscripts, letters, interviews, and visual & audio-visual media (illustrations in picture books, comic panels, films etc.)
- Secondary Sources: Scholarly books, peer-reviewed articles, literary criticism, scholarly interviews and academic journals.

### **Research Methods**

- Close Reading and Formal Analysis: In-depth, word-for-word analysis of a text.
- Genre Studies and Comparative Studies: Comparing and contrasting literary forms and genres
- Theoretical Approaches: Applying critical theories to analyse texts.
- Audience Reception and Reader-Response Theory: Understanding how readers, particularly young readers, engage with and interpret texts.

### **Role of ICT in Research Design**

- ICT tools for data collection: Using tools for qualitative data collection and analysis (NVivo, Atlas.ti) for interview transcripts or content analysis of online fandom communities.

# English Language

- Use of digital archives: Utilizing online databases for primary sources, such as digital libraries of historical children's books or digital collections of comic book archives.

## **Unit 3: Textual Analysis and Digital Humanities**

### **Textual Analysis Methods:**

- Analysing Narrative Structure: Examining plot, character, and point of view in novels and sequential narratives.
- Image-Text Analysis: xMethods for interpreting the relationship between words and visuals, especially in picture books, illustrated novels, and graphic novels.
- Multimodal Analysis: Studying how meaning is created across multiple modes (linguistic, visual, spatial, audio).

### **Digital Humanities (DH) in Research:**

- Introduction to DH: Understanding the use of computational methods to analyze humanities data.
- Tools for Textual Analysis: Using software for text mining, sentiment analysis (e.g., to track themes of happiness or sadness in a novel series), and topic modeling to analyze large corpora of texts (e.g., all published YA novels from a specific decade).
- Data Visualization: Creating visualizations of literary data (e.g., network graphs of character relationships, maps of a fictional world).
- Digital Archives: Exploring the role of digital archives in preserving and accessing primary source materials related to literature and comics.

## **Unit 4: Ethics in Research**

### **Ethical Issues in English Studies Research**

- Plagiarism, Copyright, and Citation Practices: The importance of giving proper attribution to sources.

# English Language

- Intellectual Property Rights (IPR): Understanding copyright law and fair use, especially with contemporary works like graphic novels and comics.
- Ethical Guidelines for Research with Human Subjects: Special considerations when conducting research involving child or adolescent participants, such as interviews with young readers or observations of reading practices.

## **Role of ICT in Ethical Research**

- Use of plagiarism detection tools: Utilizing software like Turnitin and Grammarly.
- Online platforms for citation and referencing: Managing sources with tools like Zotero, Mendeley, and EndNote.
- Managing intellectual property: Understanding Creative Commons licenses and open-access publishing models for research dissemination.

## **Unit 5: Research Writing and Presentation**

### **Structure of a Research Thesis/Dissertation**

- Format: Title, Abstract, Introduction, Literature Review, Methodology, Analysis Chapters, Conclusion.
- Writing and Presenting: The process of crafting a research paper, proposal, and article.

### **Citation Styles in English Studies**

- MLA (Modern Language Association) Style: The primary citation style for literary studies.
- APA (American Psychological Association) Style: Used in fields that intersect with psychology and sociology.

### **Role of ICT in Research Writing**

- Digital tools for writing and collaboration: Using platforms like Google Docs, Overleaf, or collaborative software for team projects.

# English Language

- Reference management software: Using Zotero, Mendeley, and EndNote to build and manage bibliographies.
- Presentation software: Creating effective presentations for conferences using PowerPoint or Prezi.

## **Publishing and Presenting Research Findings**

- Dissemination: Submitting conference papers, journal articles, and book chapters.
- Online Platforms: Using professional networks like ResearchGate and Academia.edu to share research.

# Gujarati Language

## એકમ ૧: સાહિત્યિક સંશોધન વિભાવના

- સંશોધન સંજ્ઞા અને વિભાવના : વિવિધ વ્યાખ્યાઓ, અર્થઘટન અને ગુજરાતી અંગ્રેજી પર્યાયો
- સાહિત્યિક સંશોધનનું સ્વરૂપ
- સાહિત્યિક સંશોધનું કાર્યક્ષેત્ર
- સાહિત્યિક સંશોધનની પદ્ધતિઓ
- સાહિત્યિક સંશોધનની સમસ્યાઓ
- મધ્યકાલીન સાહિત્યની કૃતિઓના પાઠનિર્ણય અને સંપાદન માટેની પદ્ધતિઓ
- સાહિત્યિક સંશોધન અને આંતરવિદ્યાકીય સંશોધન

## એકમ ૨: સાહિત્યિક સંશોધનના અભિગમ

- કૃતિલક્ષી અભિગમ
- સર્જકલક્ષી અભિગમ
- સ્વરૂપલક્ષી અભિગમ
- વિભાવનાલક્ષી અભિગમ
- સમાજશાસ્ત્રીય અભિગમ
- મનોવિશ્લેષણાત્મક અભિગમ
- તુલનાત્મક અભિગમ
- ઐતિહાસિક અભિગમ
- ભાષાવિજ્ઞાનિક અભિગમ
- પર્યાવરણીય અભિગમ

## એકમ ૩: સાહિત્યિક સંશોધનનાં ક્ષેત્રો

- મધ્યકાલીન ગુજરાતી સાહિત્ય : વિભાવના અને કાર્યક્ષેત્ર

મધ્યકાલીન સાહિત્ય સંશોધનના પ્રશ્નો, કૃતિ વિષયક સમસ્યાઓ, સમય-નિર્માણની સમસ્યાઓ, સમીક્ષિત વાંચના તૈયાર કરવાની પદ્ધતિ, સંપાદકીય લેખ, નોંધ અને અભ્યાસલેખ

- અર્વાચીન ગુજરાતી સાહિત્ય : વિભાવના અને કાર્યક્ષેત્ર
- લોકસાહિત્ય

લોકસાહિત્યની વિભાવના સંજ્ઞા લક્ષણો સ્વરૂપ (કથા, લોકગીત, કથાગીતો અને અન્ય)

લોક સાહિત્યના સંશોધનની સમસ્યાઓ



# Gujarati Language

- આદિવાસી સાહિત્ય : વિભાવના, સંજ્ઞા, લક્ષણો, સ્વરૂપ

આદિવાસી સાહિત્યના સંશોધનની સમસ્યાઓ

- બાળસાહિત્ય વિભાવના, સંજ્ઞા, લક્ષણો, સ્વરૂપ
- ભાષાવિજ્ઞાન વિષયક સંશોધન : વિભાવના, સંજ્ઞા, લક્ષણો, સ્વરૂપ

## એકમ-૪ : સાહિત્યિક સંશોધનનું સ્વરૂપ અને સજ્જતા

સંશોધનનાં ક્રમિક સોપાન

સંશોધન સમસ્યાઓની ઓળખ

સાહિત્ય સમીક્ષા

સંશોધન પ્રશ્નોનું નિર્માણ

સંશોધન કાર્યક્ષેત્ર : સીમાંકન

પ્રકરણ વિભાજન

માહિતિસ્ત્રોત અને સૂચિ

- માહિતી-સ્ત્રોત

પ્રાથમિક સ્ત્રોત : હસ્તપ્રતો, શાસ્ત્રીય ગ્રંથો, ભાષ્યો, સાહિત્યિક ગ્રંથો, લેખકની હસ્તપ્રતો, પત્રો, ઇન્ટરવ્યુ અને દૃશ્ય-શ્રાવ્ય માધ્યમો

ગૌણ સ્ત્રોત: વિવેચન પુસ્તકો, સમીક્ષા કરાયેલા લેખો, સાહિત્યિક ટીકા, વિદ્વતાપૂર્ણ ઇન્ટરવ્યુ અને સામયિકો

સંશોધનમાં ICT ની ભૂમિકા :

- ઈ-સંસાધનો અને ડિજિટલ પ્લેટફોર્મનો ઉપયોગ: સાહિત્ય સમીક્ષાઓ માટે શૈક્ષણિક ડેટાબેઝ (JSTOR, MLA ઇન્ટરનેશનલ ગ્રંથસૂચિ), સંસ્થાકીય ભંડાર (શોધગંગા, CORE), અને વિદ્વતાપૂર્ણ નેટવર્ક્સ (Academia.edu, Research Gate) નો ઉપયોગ.
- સાહિત્ય સમીક્ષા માટેના સાધનો: વિદ્વતાપૂર્ણ લેખો શોધવા અને તેનું સંચાલન કરવા માટેના પ્લેટફોર્મ (Google Scholar, Zotero, Mendeley).
- લેખન અને સહયોગ માટે ડિજિટલ સાધનો: Google Docs, Overleaf, અથવા ટીમ પ્રોજેક્ટ્સ માટે સહયોગી સોફ્ટવેર જેવા પ્લેટફોર્મનો ઉપયોગ.
- સંદર્ભ વ્યવસ્થાપન સોફ્ટવેર: ગ્રંથસૂચિ બનાવવા અને સંચાલિત કરવા માટે Zotero, Mendeley અને EndNoteનો ઉપયોગ.

# Gujarati Language

## એકમ પ: સંશોધન લેખન અને નીતિશાસ્ત્ર

- સંશોધન થીસિસ/મહાશોધ નિબંધનું માળખું :
- સાહિત્ય સંશોધનમાં સંદર્ભ શૈલીઓ:

MLA (આધુનિક ભાષા સંગઠન) શૈલી: સાહિત્યિક અભ્યાસ માટે પ્રાથમિક સંદર્ભ શૈલી.

APA (અમેરિકન સાયકોલોજિકલ એસોસિએશન) શૈલી: મનોવિજ્ઞાન અને સમાજશાસ્ત્ર

- સંશોધન તારણો પ્રકાશિત અને પ્રસ્તુત કરવા:
- કોન્ફરન્સ પેપર્સ, જર્નલ-સામયિક લેખો અને પુસ્તક પ્રકરણો
- સાહિત્યચોરી, કૉપિરાઈટ અને સંદર્ભ પ્રથાઓ: માહિતી-સ્ત્રોતને યોગ્ય શ્રેય પ્રદાન
- બૌદ્ધિક સંપદા અધિકારો (IPR): કૉપિરાઈટ કાયદા અને વાજબી ઉપયોગની સમજણ
- નૈતિક સંશોધનમાં ICT ની ભૂમિકા:
- સાહિત્યચોરી શોધ સાધનોનો ઉપયોગ : ટર્નિટિન અને ગ્રામરલી જેવા સોફ્ટવેરનો ઉપયોગ.
- સંદર્ભ માટે ઑનલાઈન પ્લેટફોર્મ: (ઝોટેરો, મેન્ડેલી અને એન્ડનોટ...)
- ઓપન-એક્સેસ પ્રકાશન મોડેલ

# Sanskrit Language

## इकाई १: शोध पद्धति का परिचय

### परिभाषा, उद्देश्य और शोध के प्रकार

- शोध क्या है? मानविकी और विज्ञान में अन्वेषण/अनुसंधान की प्रकृति।
- शोध के प्रकार: मौलिक, अनुप्रयुक्त, गुणात्मक और मात्रात्मक शोध।
- साहित्य और सांस्कृतिक अध्ययन में गुणात्मक एवं व्याख्यात्मक विधियों का प्रभुत्व।
- शोध का महत्व: ज्ञान-सृजन, आलोचनात्मक विश्लेषण और बौद्धिक विमर्श में भूमिका।

### शोध के चरण

- शोध समस्या की पहचान।
- साहित्य समीक्षा: पूर्ववर्ती शोधों का अवलोकन और रिक्तताओं की पहचान।
- शोध प्रश्नों/परिकल्पना का निर्माण।

### भाषा और साहित्य में शोध का महत्व

- अंतर्विषयक शोध: साहित्य का मनोविज्ञान, समाजशास्त्र, इतिहास और शिक्षा से संबंध; विशेष रूप से बाल साहित्य, किशोर साहित्य और कॉमिक अध्ययन।
- उपविषयों की स्वीकृति: बाल साहित्य, किशोर साहित्य और कॉमिक अध्ययन को मान्य व महत्वपूर्ण शैक्षणिक क्षेत्र मानना।

### आईसीटी (ICT) की भूमिका

- ई-संसाधन व डिजिटल प्लेटफॉर्म: JSTOR, MLA International Bibliography, Shodhganga, CORE, Academia.edu, ResearchGate
- साहित्य समीक्षा उपकरण: Google Scholar, Zotero, Mendeley

## इकाई २: साहित्यिक एवं सांस्कृतिक अध्ययन के लिए शोध-डिज़ाइन एवं विधियाँ

### शोध-डिज़ाइन

- अन्वेषणात्मक, वर्णनात्मक और विश्लेषणात्मक विधियाँ।
- केस स्टडी: किसी एक लेखक, ग्रंथ या शृंखला का गहन अध्ययन।

### सूत्र/स्रोत

- प्राथमिक स्रोत: पांडुलिपियाँ, शास्त्रीय ग्रंथ, टीकाएँ, उपन्यास, ग्राफिक नॉवेल, लेखक के पत्र, साक्षात्कार, चित्र एवं श्रव्य-दृश्य माध्यम।
- द्वितीयक स्रोत: शोधग्रंथ, समीक्षित शोधपत्र, साहित्यालोचना, अकादमिक पत्रिकाएँ।

# Sanskrit Language

## शोध विधियाँ

- समीप-पठन व औपचारिक विश्लेषण।
- विधा अध्ययन एवं तुलनात्मक अध्ययन।
- सैद्धांतिक दृष्टिकोण।
- पाठक-अभिग्रहण व प्रतिक्रिया सिद्धांत।

## आईसीटी की भूमिका

- डेटा संग्रहण हेतु उपकरण: NVivo, Atlas.ti
- डिजिटल अभिलेखागार का उपयोग।

## इकाई ३: पाठ-विश्लेषण एवं डिजिटल मानविकी

### पाठ-विश्लेषण की विधियाँ

- कथानक, पात्र एवं दृष्टिकोण का विश्लेषण।
- चित्र-पाठ विश्लेषण।
- बहुआयामी (Multimodal) विश्लेषण।

### डिजिटल मानविकी

- परिचय एवं प्रयोजन।
- उपकरण: टेक्स्ट माइनिंग, सेंटिमेंट एनालिसिस, टॉपिक मॉडलिंग।
- डेटा दृश्यांकन (ग्राफ, नक्शे)।
- डिजिटल अभिलेखागार की भूमिका।

## इकाई ४: शोध में नैतिकता

### नैतिक मुद्दे

- साहित्यिक चोरी (Plagiarism), कॉपीराइट, संदर्भ-प्रथाएँ।
- बौद्धिक संपदा अधिकार (IPR) और फेयर यूज़।
- मानव प्रतिभागियों पर शोध: बच्चों/किशोरों पर विशेष सावधानियाँ।

### आईसीटी की भूमिका

- प्लेज़रिज़्म जाँच: Turnitin, Grammarly।
- संदर्भ प्रबंधन उपकरण: Zotero, Mendeley, EndNote।
- Creative Commons एवं ओपन-एक्सेस मॉडल।

# Sanskrit Language

## इकाई ५: शोधलेखन एवं प्रस्तुतीकरण

### थीसिस/प्रबंध संरचना

- शीर्षक, सारांश, प्रस्तावना, साहित्य समीक्षा, पद्धति, विश्लेषण, निष्कर्ष।
- शोध-पत्र, प्रस्ताव व लेख लेखन।

### संदर्भ शैलियाँ

- MLA शैली (साहित्य अध्ययन हेतु)।
- APA शैली (मनोविज्ञान, समाजशास्त्र हेतु)।

### आईसीटी की भूमिका

- लेखन एवं सहयोग: Google Docs, Overleaf।
- संदर्भ प्रबंधन: Zotero, Mendeley, EndNote।
- प्रस्तुतीकरण: PowerPoint, Prezi।

### प्रकाशन एवं प्रस्तुतीकरण

- सम्मेलन-पत्र, शोधलेख, पुस्तक अध्याय।
- ResearchGate, Academia.edu पर साझा करना।



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