



GANDHINAGAR

SYLLABUS FOR Ph.D. ENTRANCE TEST

Note: 1. Language of Ph.D. Entrance Test is English.

NAME OF THE SUBJECT: ENGLISH

Paper-1	Contents
Unit-1	Research – A form of Exploration
	Purpose of writing – Identification of a research problem
	and the choice of subject – Types of research-Selecting
	sources-Bibliography-Plagiarism.
Unit-2	The Mechanics of Writing
	Academic Writing
	Spelling, Punctuation, Italics, Numbers, Title of work,
	Quotations. Format and documentation of research
	paper.
Unit-3	Documentation
	Works cited – Citing works, Essays, Articles,
	Newspapers, Journals, Internet – sources
Unit-4	Analysis of research writings
	Analysis of specimen research writings. Motivate
	students for critical thinking.
Unit-5	Practicing writing research papers on various topics.
Unit-6	Research Methodology:
	1. Documentation: Various tools and techniques
	2. Presentation of Research: The format of a research paper, Works
	Cited and Bibliography
	3. Qualitative and quantitative research4. The issue of Plagiarism and AI generated writing in research
	T. The issue of Hugharishi and Al generated writing in research





5. Use of Internet ResourcesSuggested text1. Latest MLA Handbook (ninth edition)

PAPER-2 CONCERNED PG COURSE CONTENTS

Paper-2	Contents	
The syllabus of Paper-2	is as per UGC NET syl	labus for the concerned
PG subject. Further th	e syllabus on research	methodology shall be
taken in Paper-1.		





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SYLLABUS FOR Ph.D. ENTRANCE TEST

Note: Language of Ph.D. Entrance Test is English & Gujarati

NAME OF THE SUBJECT: EDUCATION

Paper-1	Contents
Unit -1	Research: Meaning, Types, and Characteristics, Positivism and Post positivistic approach to research, Methods of Research: Experimental, Descriptive, Historical, Qualitative and Quantitative methods, Steps of Research, Thesis and Article writing: Format and styles of referencing, Application of ICT in research, Research ethics.
Unit -2	Meaning and Scope of Educational Research, Meaning and steps of Scientific Method, Characteristics of Scientific Method (Replicability, Precision, Falsifiability and Parsimony), Types of Scientific Method (Exploratory, Explanatory and Descriptive), Aims of research as a scientific activity: Problem-solving, Theory Building and Prediction, Types of research (Fundamental, Applied and Action), Approaches to educational research (Quantitative and Qualitative), Designs in educational research (Descriptive, Experimental and Historical)
Unit -3	Variables: Meaning of Concepts, Constructs and Variables, Types of Variables (Independent, Dependent, Extraneous, Intervening and Moderator), Hypotheses - Concept, Sources, Types (Research, Page 5 of 8 Directional, Non-directional, Null), Formulating Hypothesis, Characteristics of a good hypothesis, Steps of Writing a Research Proposal, Concept of Universe and Sample, Characteristics of a good Sample, Techniques of Sampling (Probability and Non-probability Sampling), Tools of Research - Validity, Reliability and Standardization of a Tool, Types of Tools (Rating scale, Attitude scale, Questionnaire, Aptitude test and Achievement Test, Inventory), Techniques of Research (Observation, Interview and Projective Techniques)
Unit -4	Types of Measurement Scale (Nominal, Ordinal, Interval and Ratio), Quantitative Data Analysis - Descriptive data analysis (Measures of central tendency, variability, fiduciary limits and





	graphical presentation of data), Testing of Hypothesis (Type I and Type II Errors), Levels of Significance, Power of a statistical test and effect size, Parametric Techniques, Non-Parametric Techniques, Conditions to be satisfied for using parametric techniques, Inferential data analysis, Use and Interpretation of statistical techniques: Correlation, t-test, z-test, ANOVA, chi-square (Equal Probability and Normal Probability Hypothesis). Qualitative Data Analysis - Data Reduction and Classification, Analytical Induction and Constant Comparison, Concept of Triangulation
Unit -5	Qualitative Research Designs: Grounded Theory Designs (Types, characteristics, designs, Steps in conducting a GT research, Strengths and Weakness of GT) - Narrative Research Designs (Meaning and key Characteristics, Steps in conducting NR design), Case Study (Meaning, Characteristics, Components of a CS design, Types of CS design, Steps of conducting a CS research, Strengths and weaknesses), Ethnography (Meaning, Characteristics, Underlying assumptions, Steps of conducting ethnographic research, Writing ethnographic account, Strengths and weaknesses), Mixed Method Designs: Characteristics, Types of MM designs (Triangulation, explanatory and exploratory designs), Steps in conducting a MM designs, Strengths and weakness of MM research.

Paper-2	Contents	
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SYLLABUS FOR Ph.D. ENTRANCE TEST

Note: Language of Ph.D. Entrance Test is Sanskrit and Gujarati

NAME OF THE SUBJECT: SANSKRIT

Paper-1	Contents – ગુજરાતી	संस्कृत
Subject Sanskrit	 સંશોધન : અર્થ, પ્રકારો અને લાક્ષણિકતાઓ સાહિત્ય સંશોધનનું સ્વરૂપ , પ્રયોજન અને કાર્ચ જણાવો. સંશોધન માટે હકારાત્મક અભિગમ સંશોધનનાં સ્ટેપ્સ સંશોધનમાં આઈ.સી.ટીનો ઉપયોગ સંશોધનની પદ્ધતિઓઃ પ્રાયોગિક પદ્ધતિ, વર્ણનાત્મક પદ્ધતિ, ઐતિહાસિક પદ્ધતિ, ગુણાત્મક પદ્ધતિ અને 	 शोध: अर्थ: , प्रकारा: एवं लाक्षणिकता: साहित्यसंशोधनस्य स्वरूपं, उद्देश्यं, कार्यं च शोधकार्यस्य सकारात्मक दृष्टिकोणः संशोधनस्य चरणाः शोधकार्य्य सूचना प्रौद्योगिकीनां उपयोगः शोधस्य पद्धतयः १.प्रयोगविधिः, २. वर्णनात्मकविधिः ३. ऐतिहासिक विधि, ४. गुणात्मक विधि एवं ५. मात्रात्मक विधि शोधनिबन्धस्य लेखनकला सन्दर्भाणां प्रारूपं पद्धतयः च शोधनैतिकता समीक्षित संस्करण: रामायण, महाभारत आदि





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ਮ	K	ત્મક	પહ	ાત

- શોધનિબંધ લેખન કળા
- સંદર્ભીનું ફોર્મેટ અને પદ્ધતિઓ
- સંશોધન નીતિશાસ્ત્ર
- પ્રાચીન ભારતીય લેખન સામગ્રી
 , લિપિના પ્રકાર, હસ્તપ્રત
 વિજ્ઞાન
- સમીક્ષિત આવૃત્તિ: રામાયણ,
 મહાભારત
- સંસ્કૃત પ્રાચ્ચિવદ્યા પરિચય અને તેની સંશોધન સંસ્થાઓ

• संस्कृत प्राच्यविद्याः परिचयः

शोधसंस्थायाः परिचयः

PAPER-2 CONCERNED PG COURSE CONTENTS

Paper-2	Contents	
The syllabus of Paper-2	is as per UGC NET syl	labus for the concerned
PG subject. Further th taken in Paper-1.	e syllabus on research	methodology shall be





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NAME OF THE SUBJECT: GUJARATI

Paper-1	Contents
	સંશોધનનું પદ્ધતિશાસ્ત્ર:
	સંશોધન: સંજ્ઞા, સ્વરૂપ અને વિભાવના
	સંશોધન: હેતુ, પ્રયોજન, પ્રસ્તુતતા, ઉપયોગિતા
	સંશોધનની વિવિધ પદ્ધતિઓ, અભિગમો, સંશોધકની
	સજ્જતા
	સંશોધન અને વિવેચન વચ્ચેનો સામ્યભેદ
	સંપાદન અને સંશોધન વચ્ચેનો સામ્યભેદ
	ગુજરાતી સાહિત્યમાં સંશોધન પરંપરા:
	કૃતિસંશોધન, સંપાદન અને તેના પ્રકાર અને તેની રીતો
	મધ્યકાલીન,અર્વાચીન સાહિત્યમાં સંશોધન પરંપરા (યુગ
	પ્રમાણે)
	મધ્યકાલીન કૃતિઓનું સંશોધન અને સંપાદન અને તેની
	સમસ્યાઓ,
	ગુજરાતી બાળસાહિત્ય સંશોધન પરંપરા:
	ગુજરાતી બાળસાહિત્ય સ્વરૂપ અને પ્રકારો
	ગુજરાતી બાળસાહિત્ય સંશોધન પરંપરા
	ગુજરાતી લોકસાહિત્ય સંશોધન પરંપરા:
	લોકસાહિત્ય સંશોધનનું પદ્ધતિશાસ્ત્ર





લોકકથાની સંશોધન પદ્ધતિ લોકગીતની સંશોધન પદ્ધતિ ગુજરાતી લોકસાહિત્ય સંશોધન પરંપરા (યુગ પ્રમાણે)

PAPER-2 CONCERNED PG COURSE CONTENTS

Paper-2	Contents	
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NAME OF THE SUBJECT: PSYCHOLOGY

Unit Name	Contents
Research Methodology	Research Methodology
and Statistics	Research: Meaning, Purpose, and Dimensions
	Research problems, Variables and Operational
	Definitions
	Hypothesis and Sampling
	Ethics in conducting and reporting research
	Paradigms of research: Quantitative, Qualitative,
	Mixed methods approach
	Methods of research: Observation, Survey
	Interview, Questionnaires], Experimental, Quasi-
	experimental, Field studies, Cross-Cultural
	Studies, Phenomenology, Grounded theory,
	Focus groups, Narratives, Case studies,
	Ethnography.
	Statistics in Psychology
	Measures of Central Tendency and Dispersion
	Normal Probability Curve
	Parametric test
	Non-parametric tests : Sign Test, Wilcoxon
	Signed rank test, Mann-Whitney test, Kruskal-
	Wallis test, Friedman test
	Power analysis and Effect size



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	Correlational Analysis: Product Moment, Rank
	Order, Partial correlation, Multiple correlation
	Special Correlation Methods: Biserial, Point
	biserial, tetrachoric, phi coefficient
	Regression: Simple linear regression, Multiple
	regression
	• Factor analysis: Assumptions, Methods,
	Rotation and Interpretation
	Experimental Designs: ANOVA [One-way,
	Factorial], Randomized Block Designs,
	Repeated Measures Design, Latin Square,
	Cohort studies, Time series, MANOVA,
	ANCOVA, Single-subject designs
Psychological testing	Psychological testing
	Types of tests
	1,7000 01 10010
	Test construction: Item writing, item analysis
	 Test construction: Item writing, item analysis Test standardization: Reliability, validity and Norms
	 Test construction: Item writing, item analysis Test standardization: Reliability, validity and Norms Areas of testing: Intelligence, creativity,
	 Test construction: Item writing, item analysis Test standardization: Reliability, validity and Norms
	 Test construction: Item writing, item analysis Test standardization: Reliability, validity and Norms Areas of testing: Intelligence, creativity, neuropsychological tests, aptitude, Personality
	 Test construction: Item writing, item analysis Test standardization: Reliability, validity and Norms Areas of testing: Intelligence, creativity, neuropsychological tests, aptitude, Personality assessment, interest inventories
	 Test construction: Item writing, item analysis Test standardization: Reliability, validity and Norms Areas of testing: Intelligence, creativity, neuropsychological tests, aptitude, Personality assessment, interest inventories Attitude scales – Semantic differential, Staples,
	 Test construction: Item writing, item analysis Test standardization: Reliability, validity and Norms Areas of testing: Intelligence, creativity, neuropsychological tests, aptitude, Personality assessment, interest inventories Attitude scales – Semantic differential, Staples, Likert scale.
	 Test construction: Item writing, item analysis Test standardization: Reliability, validity and Norms Areas of testing: Intelligence, creativity, neuropsychological tests, aptitude, Personality assessment, interest inventories Attitude scales – Semantic differential, Staples, Likert scale. Computer-based psychological testing
	 Test construction: Item writing, item analysis Test standardization: Reliability, validity and Norms Areas of testing: Intelligence, creativity, neuropsychological tests, aptitude, Personality assessment, interest inventories Attitude scales – Semantic differential, Staples, Likert scale. Computer-based psychological testing Applications of psychological testing in various
	 Test construction: Item writing, item analysis Test standardization: Reliability, validity and Norms Areas of testing: Intelligence, creativity, neuropsychological tests, aptitude, Personality assessment, interest inventories Attitude scales – Semantic differential, Staples, Likert scale. Computer-based psychological testing Applications of psychological testing in various settings: Clinical, Organizational and business,





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NAME OF THE SUBJECT: SOCIAL WORK

Paper-1	Contents		
Section A:	➤ Meaning of Social Science and Social Work		
Quantitative Research	Research, Nature and Scope.		
	 Steps in Social Science Research: Identifications 		
	and Formulations of Research Problem,		
	Literature Review, Objectives and Hypothesis		
	Formulation, Research Design, Sample Design,		
	Sources, Methods and Tools of Data Collection,		
	Processing and Analysis of Data and Writing		
	Research Reports including Presentations and		
	Styles of References, Citing and Paraphrasing.		
	 Basic Statistical concepts: Process of statistical 		
	Enquiry and dealing with Descriptive and Inferential Statistical Methods, Parametric and Nonparametric Tests.		
Section B: Qualitative	 Qualitative Research: Meaning, Basic tenets of 		
Research	Qualitative Research, • Difference between		
	Quantitative and Qualitative Approach to		
	Research in social Work.		
	Designing Qualitative Research: Steps, Methods		
	of Qualitative Research (Field study, Case Study,		
	Focus Group Discussions, Narratives,		
	Observation and Theoretic Research)		



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	➤ Managing Qualitative Data: Procedures and		
	Techniques of Analyzing, Qualitative Data and		
	Report Writing.		
Section: C	Mixed Method Research:		
	Components of Mixed Methods, Procedures of Combing		
	Quantitative and Qualitative research.		
વિભાગ: ૧	સામાજિક વિજ્ઞાન સંશોધનની મૂળભૂત બાબતો :		
માત્રાત્મક સંશોધન	સંશોધનનો અર્થ, સામાજિક વિજ્ઞાન અને સમાજ કાર્ય		
	સંશોધન: અર્થ લક્ષણો અને અવકાશ. સામાજિક વિજ્ઞાન		
	સંશોધન પગલો: સંશોધનની ઓળખાણો અને સમસ્યા.		
	સાહિત્ય સમીક્ષા. ઉદ્દેશો અને પૂર્વધારણા, સંશોધન		
	આલેખન સુત્રો. માહિતી સંગ્રહની પદ્ધતિઓ અને સ્ત્રોતો,		
	માહિતીનું વિશ્લેષણ, પ્રક્રિયા અને લેખન સંશોધન		
	અહેવાલો સહિત રજૂઆત, શૈલીઓ અને સંદર્ભો. મૂળ		
	આંકડાકીય વિભાવનાઓ: આંકડાકીય તપાસની પ્રક્રિયા		
	અને વર્ણનાત્મક અને અનુમાનિત આંકડાકીય પદ્ધતિઓ,		
	પરિણાત્મક અને બિન-પરિણાત્મક પરીક્ષણો સાથે		
	વ્યવહાર.		
વિભાગ :૨	ગુણાત્મક સંશોધન: અર્થ ગુણાત્મક સંશોધનનો મૂળ		
ગુણાત્મક સંશોધન:	સિદ્ધાંત, સમાજકાર્થ સંશોધન માટે પરિમાણાત્મક અને		
	ગુણાત્મક અભિગમ વચ્ચેનો મૂળભૂત તફાવત ગુણાત્મક		
	સંશોધન નો અહેવાલ: પગલાંઓ ગુણાત્મક સંશોધન		





	પદ્ધતિઓ (ક્ષેત્ર અભ્યાસ. પ્રસંગનો અભ્યાસ, કેન્દ્રિત જુથ-		
	યર્યા કથા, હકકીત, નિરીક્ષણ અને સૈદ્ધાંતિક સંશોધન)		
	ગુણાત્મક માહિતીનું સંચાલન: ગુણાત્મક માહિતી અને		
	અહેવાલ-લેખન વિશ્લેષણની કાર્યવાહી અને તકનીકો.		
વિભાગ : ૩	મિશ્ર પદ્ધતિ સંશોધન: મિશ્ર પદ્ધતિઓના ઘટકો, પીજણ		
મિશ્ર પદ્ધતિ સંશોધન	પરિમાણાત્મક, સંખ્યાત્મક અને ગુણાત્મક સંશોધનની		
	પ્રક્રિયા.		

Paper-2	Contents			
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NAME OF THE SUBJECT: PERFORMING ARTS

Paper-1	Contents
Unit 1	Research Methodology and Pedagogy, Avenues, Interdisciplinary aspects and Modern Technology: Research Pedagogy: Research areas, review of literature, selection of suitable research topics and research problems, Methodology of Music research, Preparing synopsis, Data collection and its sources, Analysis of data collection, Writing project report, Research project Indexing, references and bibliography etc. Research Avenues and its Interdisciplinary aspects: Music and Literature, Music Therapy, Philosophy, Psychology, Physics, Mathematics, Economics, Social Sciences, Religion and Culture. Modern Technology: Electronic equipments, computer, internet etc. New trends in Indian Music in post-independence era.





PAPER-2 CONCERNED PG COURSE CONTENTS PERFORMING ARTS

Paper-2	Contents
Unit 1	Technical Terms: Sangeet, Nada: ahata & anahata, Shruti & its five jaties, Seven Vedic Swaras, Seven Swaras used in Gandharva, Suddha & Vikrit Swara, Vadi- Samvadi, Anuvadi-Vivadi, Saptak, Aroha, Avaroha, Pakad / vishesa sanchara, Purvanga, Uttaranga, Audava, Shadava, Sampoorna, Varna, Alankara, Alapa, Tana, Gamaka, Alpatva-Bahutva, Graha, Ansha, Nyasa, Apanyas, Avirbhav, Tirobhava, Geeta; Gandharva, Gana, Marga Sangeeta, Deshi Sangeeta, Kutapa, Vrinda, Vaggeyakara Mela, Thata, Raga, Upanga, Bhashanga, Meend, Khatka, Murki, Soot, Gat, Jod, Jhala, Ghaseet, Baj, Harmony and Melody, Tala, laya and different layakari, common talas in Hindustani music, Sapta Talas and 35 Talas, Taladasa pranas, Yati, Theka, Matra, Vibhag, Tali, Khali, Quida, Peshkar, Uthaan, Gat, Paran, Rela, Tihai, Chakradar, Laggi, Ladi, Marga-Deshi Tala, Avartana, Sama, Vishama, Atita, Anagata, Twelve Swarasthanas, Niraval, Sangati, Mudra, Kaku
Unit 2	Folk Music Origin, evolution and classification of Indian folk song / music. Characteristics of folk music. Detailed study of folk music, folk instruments and performers of various regions in India. Ragas and Talas used in folk music Folk fairs & festivals in India.
Unit 3	Rasa and Aesthetics: Rasa, Principles of Rasa according to Bharata and others. Rasa nishpatti and its application to Indian Classical Music.





	Bhava and Rasa Rasa in relation to swara, laya, tala, chhanda and lyrics.
Unit 4	Applied Theory: Detail study of Sangeet Utpatti; Musical scales (Indian and western); Detail study of Gram, Murchchhana and Chatussarna; Jaati Lakshana, Jaati Bhed, concept of Raag, Raag-Lakshan. Classification of Raag: 1) Gram Raag and Deshi Raag Classification 2) Male Raag classification 3) Thaat Raag classification 4) Shuddha, Chhayalag and Sankeerna Raag classification 5) Raag-Raagini classification 6) Raagang classification; Time theory of Raagas; Placement of shuddha and vikrit swaras on shruties in Ancient, Medieval and Modern Period; Description of popular Raagas and Taalas; Notation systems of Hindustani, Karnataka and Western Music; Merits and demerits of a vocalist (Gayak); Remix, Fusion, Orchestra, Coir and Acoustic; Comparative studies of Hindustani and Karnatak Swaras and Taalas; Karnatak names of Popular Hindustani Ragas; Knowledge of different Layakaaries such as dugun, Tigun, Chaugun, Aad, Kuad and Viaad.
Unit 5	History of Indian Music, contribution of Musicologists and their textual tradition: Study of the Historical Development of Hindustani Music from Vedic to Modern period; Ancient Medieval and Modern Musicologist and Scholars:- Bharat, Naarad, Matang, Maharana Kumbha, Ramamatya, Damodar Pandit, Pt. Ahobal, Shriniwas, Hridyanarayana, Vyankatmakhi, Pt. Vishnu Digambar Palushkar, Pt. Vishnu Narayan Bhatkhande, Pt. Vinayak Rao Patwardhan, Pt. Omkarnanath Thakur, Acharya Birhaspati, Thakur Jaidev Singh, Sharachchandra Shridhar Paranjape, Dr. Prem Lata SharmaProf. R.C. Mehta, Study of ancient, Medieval and Modern Treatises in Indian Music like Natya Shastra, Nardiya Shiksha,



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Sangeet Brihaddeshi. Manasollaas. makarand. Sangeet Chudamani, Bharat Bhashya, Sangeet Ratnakar, Sangeet Samaysar, Swaramalekalanidhi, Sangeet Darpan, Sangeet Paarijaat. Raga Hridaya Kautuk, Hridaya Prakash. Tatvavibodh. Prakashika, Sangeet Chaturdandi Chintamani, Pranavbharati etc., Natya Shastra, Sangeet Ratnakar, Bruhad Deshi, Sangeet Samyasar Sangeet Raj, Ashtottar Shat Taal, Lakshanam, Bhartiya Sangeet Vadya, Table Ka Udagam Vikas avam Vadan Shailiyan, Bhartiya Talon Ka Shastriya Vivechan, Pakhawai avam Table ke Gharane Parmparayen, Taal Kosh, Tabla Vadan Kala avam Shastra, Tabla, Bhartiya Taal Men Anekata Mein Ekta, Aesthetics of Tabla, Tabla Puran, Taal Vadya Parichaya, Tabla Granth Manjusha, Laya Taal Vichar Manthan, Tabla Vadan Mein Nihit Saundaraya, Solo Tabla Drumming of North India, Tabla of Lucknow, Taal Vadya Shashtra, Bhartiya Sangeet Men Taal, Chand Avam Roop Vidhan.

Unit 6 Compositional forms and their evolution:

Prabandh, Dhrupad, Dhamaar, Saadra

Kheyaal, Tarana, Trivat, Chaturang, Sargam Geet, Lakshan Geet, Raagmaala etc.

Thumri, Dadra, Tappa, Hori, Kajri, and Chaiti etc.

Light Music: Geet, Gazal and Bhajan etc.

Firozkhani Gat, Maseetkhani Gat, Razakhani Gat and Zafarkhani Gat and its kind.

Jaati, Javali, Kriti, Tillana, Raagam, Taanam, Pallavi. Origin, development and presentation of above said vocal and instrumental compositions

Popular artists in the field of abovesaid forms.

Unit 7 Musical Instruments and its Classification

Classification of Indian Musical Instruments in Ancient, Medieval and Modern period

Different types of Veenas in ancient period

Tat - Sitar, Sarod, Violin, Dilruba, Israj, Santoor, Tanpura, Surbahhar, Guitar.

Ghan - Jaltarang, Ghatam, Morsing, Chipali, Manjeera, Jhanjh, Kartal



Sushir - Flute and its varieties, Shehnai, Nagaswaram, Harmonium

Avanaddha - Pakhawaj, Tabla, Mridangam, Kanjira, Khol, Chang, Nakkara, Duff, Hudaka, Dholak.

Origin, evolution, playing techniques and famous artist of these Instruments

Unit 8 Contribution of composers / performers to Indian Music:

Tansen, Haridas, Gopal Nayak, Sadarang, Pandit Balkrishna Bua Ichalkaranjikar, Pandit Digambar Palushkar. Pandit Vishnu Narayan Bhatkhand, Ustaad Faiyaz Khan, Ustad Bade Gulam Ali Khan, Ustad Nisaar Hussain Khan, Pandit Omkar Nath Thakur, Pandit Vinayak Rao Patwardhan, Pandit Naryan Rao Vyas, Pandit C.R. Vyas, Pandit Krishna Rao Shankar Pandit, Pandit Mallikarjun Mansoor, Smt Gangubai Hangal, Kesar Bai Kerkar, Abdul Kareem Khan, Heerabai Barodekar, Suhasini Koretkar, Bade Ramdas, Siddheswari Devi, Begham Akhtar, Shobha Gurtu, Girija Devi, Savita Devi, Moghubai Kurdikar, Kishori Amonkar, Pandit Kumar Gandharv, Pandit Jasrai, Pandit Balvant Rai Bhatt, Pt. Ramashrav Jha, Asad Ali Khan, Pt. Lal Mani Mishra, Abdul Halim Zafar Khan, Ali Akbar Khan, Sharan Rani, Amjad Ali Khan, Anath Lal, Panna Lal Ghosh, Vijay Raghav Rao, Ragunath Seth, Hari Prasad Chaurasia, Ahmad Jaan Thirakava, Pt. Samta Prasad, Kishan Maharaj, Kudau Singh, Paagal Das, Brij Bhooshan Kabra, Vishwa Mohan Bhatt, Shiv Kumar Sharma, Bhajan Sopori, M.S. Gopal Krishnan, V.G. Jog, N. Rajam, Jalgaonkar, Mehmood Dhaulpuri. Appa Natthu Khan, Modu Khan, Bakshu Khan, Abid Hussian Khan, Haji Vilayat Ali, Salari Khan, Chudiya Imam Baksh, Ram Sahay, Munir Khan, Habibuddin Ahmemadjan Thirukuwa, Amir Hussain. Jahangir Khan, Shekh Daud, Bade Munne Khan, Karamtullah Khan, Allarakha Khan, Gyan Prakash Nikhil Ghosh, Gama Maharaj, Ghosh, Kishan Maharaj, Kanthe Maharaj, Samta Prasad (Gudai Maharaj), Anokhe Lal Mishra, Bhai Gaitonde,



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	Pandharinath Nageshkar, Suresh Talwalkar,		
	Hashamat Ali Khan, Zakir Hussain and contemporary		
	tabla and pakhawaj vizards & scholars.		
	Pakhawaj:- Kudau Singh Jodhsingh, Nana Panse,		
	Ayodhya Prasad, Pagal Das, Chatrapati Singh, Arjun		
	Sejwal, Madhav Rao Alkutkar, Sakhara Ram.		
	Nakkara Vadak:- Dilawar Khan, Aggan Khan.		
	Dholak Vadak:- Bafati Khan, Gulam Jafer, Dholki:-		
	Vijay Chauhan.		
	Recipient of Bharat Ratna:-		
	M.S. Subbhalakshmi, Pt. Ravi Shankar, Utsad		
	Bismillah Khan, Lata Mangeshkar and Pt. Bhim Sen		
	Joshi.		
	Purandar Das, Shyam Shastri, Mutthuswami Dixitar,		
	Tyagraja, Swathi Tirunal		
	Bach, Beethoven, Mozart, Yahudi Menuhin,		
Unit 9	Gharna and Institutional System and		
	conferences of Hindustani Music:		
	General study of origin and development of Gharana.		
	Institutionalised system and their contribution to		
	Hindustani Music.		
	Four baanies of Dhrupad and its importance to		
	Hindustani Music.		
	General study of various Gharanas of Dhrupad		
	Kheyal and Instrumental Music.		
	Special features of Gharanas in vocal and		
	Instrumental Music and its famous artists.		
	Purab and Punjab Angas of Tumari.		
	Important music conferences in India.		
	National and International awards in the field of		
	music.		
	Contribution of Music educational institutes		
	Akademies, Prasar Bharati, Song and Drama Division		
	and Film in Indian Music.		
Unit 10	Applied Theory – Taal & Avanadhavadhya:		
	Description and playing techniques of Varna's and		
	their combinations in Tabla and Pakhwaj instruments.		
	Ten Pranas of Taal (detailed study). Detailed study of		
	Margi and Deshi Taal system (Paddhati), knowledge		
	of Karnataka Taal system: Detailed knowledge of		
	of Ramataka radi system. Detailed knowledge of		



Uttar Bhartiya Taal Padhati and Taalas used in Uttar Bhartiya Sangeet. A brief knowledge of Taalas used with Rabindra Sangeet.

Laya and Layakari. Detailed knowledge of Hindustani and Karnatak taal notation system.

Brief knowledge of staff notation system.

Tabla accompaniment with vocal, (classical, semiclassical music) instrumental music and Kathak Dance.

Relationship between Taal and Chhand, Knowledge of composing Tihaies of different matras.

Detailed knowledge of Tihai--Damdar, Bedam, Nauhakka and chakradar Tihaies.

Mathematical calculation of chakradar- (Sadharan, Firmaishi and Kamali chakradar).

Difference between Chakradar Gat, Chakradar Tukada and Chakradar Paran.

The Chakra of Thirty two tihaies describe by Acharya Brihaspati

Unit 11

Detailed study of Compositional Forms of avanaddha vadyas

Definition of Bandish - expandable and nonexpendable compositions.

The aesthetics of bandishen. Importance of presentation of Bandishen

Detailed study of Theka, Peshkar, Quaida and its prastar (Paltas), Bant, Rela, Rau, Tukda, Mukhada, Gat and its various kinds, Rang-Rela, Fird, Paran,

Tihaies of various kinds. Gats and Quaidas of different Gharanas, Laggi-Ladi.

Study of different compositions popular in classical vocal, Semi-Classical and instrumental music:-Khayal, Masitkhani Gat, Raza Khani Gat, Thumari, Dadra, Tappa, Kajari, Chaiti, Dhrupad, Dhamar, Sadra, Jhoola, Bhajan, Gazal, Geet.

General Knowledge of compositions used in Kathak dance:- Aamad, Paran, Tatkar, Toda, Stuti Paran.





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SYLLABUS FOR Ph.D. ENTRANCE TEST

Note: Language of Ph.D. Entrance Test is English & Gujarati

NAME OF THE SUBJECT: PHYSICAL EDUCATION

Paper-1	Contents	Paper-1	Contents
એકમ- ૧ સંશોધન પરિચય	 સંશોધનનો અર્થ, પ્રકારો, લાક્ષણિકતાઓ શારીરિક શિક્ષણમાં સંશોધન ક્ષેત્રો સંશોધનના સોપાનો શોધ નિબંધ લેખન સંશોધકના લક્ષણો શારીરિક શિક્ષણમાં સંશોધન 	Unit-1 Introductio n to Research	 Meaning, types, characteristics of research Research Areas in Physical Education Research Methods Research Essay Writing Characteristics of researcher Research in Physical Education
એકમ – ર સંશોધન માં પ્રક્રિયામાં સમસ્યા પસંદગી	 સંશોધનમાં સમસ્યાનો અર્થ સમસ્યાની પસંદગી ઉદ્ભવ અને સ્ત્રોત સમસ્યાના પ્રકારો શારીરિક શિક્ષણ સમસ્યા ક્ષેત્રો અને સમસ્યા પસંદગીના સોપાનો 	Unit – 2 Process in Research problem selection	 Meaning of problem in research Choice of problem Origin and source Types of problem Physical education problem areas and problem selection criteria
એકમ ૩ સંશોધન પ્રક્રિયાના	સમસ્યાની ઓળખ અને પસંદગીઉપકરણની પસંદગી અથવા રચના	Unit 3 Research Process the stairs	 Problem identification and selection Device selection or design Information gathering Data analysis and



સોપાનો	 માહિતી એકત્રીકરણ માહિતીનું વિશ્લેષણ અને વિશ્લેષણ પદ્ધતિઓ અર્થઘટન 		analysis methods interpretationResearch reportwriting
એકમ – ૪ ઉત્કલ્પના	 સંશોધન અહેવાલ લેખન ઉત્કલ્પના અર્થ,પ્રકાર ઉત્કલ્પના લક્ષણો શારીરિક શિક્ષણ અને રમત ગમત ક્ષેત્રે ઉત્કલ્પના 	Unit – 4 Concepts	 Meaning, Types of imagination Features of imagination Innovation in the field of physical education and sports
એકમ – પ સંશોધન માં નમુનાની પસંદગી	 નમુના અર્થ, પ્રકાર પસંદગી પ્રક્રિયા નમુના પસંદગીમાં ભૂલ સંભાવના અને બિનસંભાવના 	Unit – 5 Selection of sample in research	 Sample meaning, type Selection process Error in sample selection Probability and Improbability
એકમ – પ આંકડાકી ય પૃથકરણ	 સંધોધનમાં આંકડાશાસ્ત્રનું મહત્વ અને ઉપયોગીતા T-ટેસ્ટ, F-ટેસ્ટ, કાઈ સ્કેવિ, Z-ટેસ્ટ, આલેખ આંકડાશાસ્ત્ર માહિતીનું અર્થઘટન અને પૃથકરણ પેરમેત્રિક અને નોન પેરમેત્રિક આંકડાકીય ટેકનીક 	Unit – 6 Statistical Analysis	 ❖ Importance and usefulness of statistics in research ❖ T-Test, F-Test, Chi Scale, Z-Test, Graph ❖ Interpretation and analysis of statistics data ❖ Parametric and non-parametric statistical techniques
એકમ – ૬ સ્ત્રોત અને સાહિત્ય	પુસ્તકાલય,શોધયંત્ર, મેગેઝીન, પુકાશિત અને અપુકાશિત સાહિત્ય,	Unit – 7 Sources and Literature Steps of discovery	Libraries, inventions, magazines, published and unpublished





શોધના પગલા	નોંધ		literature, notes
એકમ – ૭ કોમ્પ્યૂટર	 કોમ્પ્યુટર એપ્લીકેશન ડાટા વિશ્લેષણ માટે આંકડાકીય પદ્ધતિ એસ્પીએસેસ ઇમેલ, સર્ચ એન્જીન નો ઉપયોગ માઈક્રોસોફ્ટનો ઉપયોગ 	Unit – 8 Computers	 Computer applications Statistical method for data analysis Spaces Use of email, search engines Using Microsoft
એકમ – ૮ દરખાસ્ત	સંશોધન દરખાસ્તઅહેવાલ અને સારપ્રકાશન	Unit – 9 Proposal	 Research proposal Report and Summary Publishing

Paper-2	Contents			
The syllabus of Paper-2 is as per UGC NET syllabus for the concerned				
PG subject. Further the syllabus on research methodology shall be				
taken in Paper-1.				





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SYLLABUS FOR Ph.D. ENTRANCE TEST

Note: Language of Ph.D. Entrance Test is English

NAME OF THE SUBJECT: PHYSICS

Paper-1	Contents
1	Numerical Ability: Number and Simplification, LCM and
	HCF Average, Quadratic Equations, Sequence and
	Series, Surds and Indices, Logarithms, Percentage, Profit
	and Loss, Simple Interest, Compound Interest, Ratio,
	Proportion and Variation, Partnership, Alligation, and
	Mixture. Time Speed and Distance, Time and Work,
	Permutations and Combinations, Probability, Geometry,
	Mensuration, Trigonometry, etc.
2	Reasoning: Series Formation, Coding-Decoding, Distance
	and Directions, Calendar and Clock, Ranking and
	Arrangement, Puzzles, etc.
3	Data Interpretation and Graphical Analysis: Mean, Median,
	Mode, Measures of Dispersion, Graphical Analysis: Bar
	Graph, Line Graph, Pie-Chart, Tabulation.





Paper-2	Contents	Remarks
The syllabus of Paper-2 is as per UGC NET syllabus for the concerned		
PG subject. Further the syllabus on research methodology shall be		
taken in Paper-1.		





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SYLLABUS FOR Ph.D. ENTRANCE TEST

Note: Language of Ph.D. Entrance Test is English

NAME OF THE SUBJECT:BOTANY

Paper-1	Contents
An overview of research	Introduction and definition of research, Selecting research
methodology	problem, Steps of research, Hypothesis, Sampling,
	Experimental Research Methods, Errors in sampling,
	Variables in research, Different research designs, Review
	literature, literature collection- textual and digital resources
	(internet)
Biostatistics & Computer	Significance tests: Student's 't' test: Hypotheses, acceptance
Applications	and rejections, significance levels. Analysis of Variance:
	General principles, completely randomized and random-block
	design ANOVA. Regression and correlation – biveriate
	analysis. Chi-Square and its applications. Statistical Methods:
	Measures of central tendency and dispersal; probability
	distributions Binomial Poisson and normal Sampling
	distribution; Difference between parametric and non -
	parametric statistics; Confidence Interval; Errors; Levels of
	significance; Regression and Correlation; t-test; Analysis of
	variance; X ² test; Basic introduction to Multivariate statistics,
	etc. Use of different software packages. Data Analysis,
	Graphics, PowerPoint Presentations. MS office, excel,
	Grapical presentation of data.
Qualitative and Quantitative	Qualitative - Quantitative Research - Concept of measurement,
Research	causality, generalization, replication. Merging the two
	approaches. Biological data: Types of data - Qualitative data,





	Quantitative data
Scientific writing and	Forms of scientific writing- Article, notes, reports, review
Formulation of Scientific	article, monographs, dissertations, popular science articles,
Writing	bibliographies, Outline preparation, drafting title, subtitles,
	tables, illustrations; Formatting tables- title, body footnotes;
	figures & graphs-structure, title and legends, Impact factor,
	citation indices, plagiarism, Layout of a Research Paper,
	Journals, Ethical issues related to publishing, Plagiarism and
	SelfPlagiarism.
Application of results and	Environmental impacts - Ethical issues - ethical committees -
ethics	Commercialization - Copy right - royalty - Intellectual
	property rights and patent law - Falsification and verification.

Paper-2	Contents
Systematics an Taxonomy	Aims, objectives and scope of taxonomy, Nomenclature and
	different classification system. Qualitative and quantitative
	methods in plant taxonomy, Taxonomic literature,
	Evolutionary trends and variations, ICN, phylogenetic
	classifications, APG system of classification, species concepts,
	speciation, Biosystematics, biosystematic categories,
	Paleobotany
Diversity of plants	Rare and endangered species, conservation strategies,
	Cryptogams plants and their life cycles- Algae, fungi,
	Bryophytes, Pteridophytes, Angiosperm diversity,
	Gymnosperms diversity
Anatomy & Morphogenesis	Meristematic and permanent tissues of plants, Shoot and root
	apex organization Special and secretory tissues of plants,
	Types of tissue systems, Anatomical features of
	dicotyledonous and monocotyledonous plants, Secondary and



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patterm, Organogenesis of root, stem and leaf, Organogenesis of bud, flower and inflorescence, Morphogenesis: light, temperature and precipitation affecting on morphogenesis Embryology and Plant Growth and Development Micro and Mega sporangium, Female and Male gametophyte, Fertilization, Endosperm Types Embryogenesis and types of embryo, Apomix, Polyembryony, Embryology in relation to taxonomy, Experimental Embryology. Vegetative and reproductive development in plants, organization of plant structures, Regulation of plant development by intrinsic and extrinsic factors (light, Hormones). Molecular aspects of development. Plant growth processes, Physiology of flowering: vernalization and photoperiodism, Seed viability and germination, Seed and bud dormancy, Senescence and Abscission Cytogenetics and Mendelian genetics, concept of gene, Linkage and recombination, genetic mapping, extra chromosomal inheritance, chromosome banding, FISH and GISH, Microbial genetics, phage genetics, linkage and crossing over, recombination, homologous and non-homologous linkage maps, 3 point test cross Molecular Biology and Chromosome organization, DNA replication and repair, Chromatin organization, protein targeting, Organization of plant cell and chloroplast, mitochondria, Golgi complex, Nucleus, Ribosomes, ER,Cell wall, Cell membrane, vacuoles, cytoskeleton, Totipotency differentiation and cell death,cell cycle, apoptosis, signal transduction in cells. Plant Ecology and Ecosystem- structure, types and functions, Ecological succession, habitat, biomes, Biomes, population ecology, plant interactions, phytogeography, endemism, RET species, IUCN categories, Ecological modelling Niche, evolution and coevolution, Diversity types. Pollution ecology, Pollution in cilistens careactives proteins that processes and contents of the formation and coevolution, Diversity types.		anomalous growth in plants, Evolution of morphogenetic
Embryology and Plant Growth and Development Micro and Mega sporangium, Female and Male gametophyte, Fertilization, Endosperm Types Embryogenesis and types of embryo, Apomix, Polyembryony, Embryology in relation to taxonomy, Experimental Embryology. Vegetative and reproductive development in plants, organization of plant structures, Regulation of plant development by intrinsic and extrinsic factors (light, Hormones). Molecular aspects of development. Plant growth processes, Physiology of flowering: vernalization and photoperiodism, Seed viability and germination, Seed and bud dormancy, Senescence and Abscission Cytogenetics and Genetics Mendelian genetics, concept of gene, Linkage and recombination, genetic mapping, extra chromosomal inheritance, chromosome banding, FISH and GISH, Microbial genetics, phage genetics, linkage and crossing over, recombination, homologous and non-homologous linkage maps, 3 point test cross Molecular Biology and Chromosome organization, DNA replication and repair, Chromatin organization, protein synthesis, transcriptional and translational regulation, Protein targeting. Organization of plant cell and chloroplast, mitochondria, Golgi complex, Nucleus, Ribosomes, ER,Cell wall, Cell membrane, vacuoles, cytoskeleton, Totipotency differentiation and cell death,cell cycle, apoptosis, , signal transduction in cells. Plant Ecology and Ecosystem- structure, types and functions, Ecological succession, habitat, biomes, Biomes, population ecology, plant interactions, phytogeography, endemism, RET species, IUCN categories, Ecological modelling Niche, evolution and co- evolution, Diversity types. Pollution		pattern, Organogenesis of root, stem and leaf, Organogenesis
Embryology and Plant Growth and Development Micro and Mega sporangium, Female and Male gametophyte, Fertilization, Endosperm Types Embryology in relation to taxonomy, Experimental Embryology. Vegetative and reproductive development in plants, organization of plant structures, Regulation of plant development by intrinsic and extrinsic factors (light, Hormones). Molecular aspects of development. Plant growth processes, Physiology of flowering: vernalization and photoperiodism, Seed viability and germination, Seed and bud dormancy, Senescence and Abscission Cytogenetics and Genetics Mendelian genetics, concept of gene, Linkage and recombination, genetic mapping, extra chromosomal inheritance, chromosome banding, FISH and GISH, Microbial genetics, phage genetics, linkage and crossing over, recombination, homologous and non-homologous linkage maps, 3 point test cross Molecular Biology and Chromosome organization, DNA replication and repair, Chromatin organization, protein synthesis, transcriptional and translational regulation, Protein targeting. Organization of plant cell and chloroplast, mitochondria, Golgi complex, Nucleus, Ribosomes, ER,Cell wall, Cell membrane, vacuoles, cytoskeleton, Totipotency differentiation and cell death,cell cycle, apoptosis, , signal transduction in cells. Plant Ecology and Ecosystem- structure, types and functions, Ecological succession, habitat, biomes, Biomes, population ecology, plant interactions, phytogeography, endemism, RET species, IUCN categories, Ecological modelling Niche, evolution and co- evolution, Diversity types. Pollution ecology, Pollution		of bud, flower and inflorescence, Morphogenesis: light,
Growth and Development Fertilization, Endosperm Types Embryogenesis and types of embryo, Apomix, Polyembryony, Embryology in relation to taxonomy, Experimental Embryology. Vegetative and reproductive development in plants, organization of plant structures, Regulation of plant development by intrinsic and extrinsic factors (light, Hormones). Molecular aspects of development. Plant growth processes, Physiology of flowering: vernalization and photoperiodism, Seed viability and germination, Seed and bud dormancy, Senescence and Abscission Cytogenetics and Mendelian genetics, concept of gene, Linkage and recombination, genetic mapping, extra chromosomal inheritance, chromosome banding, FISH and GISH, Microbial genetics, phage genetics, linkage and crossing over, recombination, homologous and non-homologous linkage maps, 3 point test cross Molecular Biology and Cell biology Chromosome organization, DNA replication and repair, Chromatin organization, protein synthesis, transcriptional and translational regulation, Protein targeting. Organization of plant cell and chloroplast, mitochondria, Golgi complex, Nucleus, Ribosomes, ER,Cell wall, Cell membrane, vacuoles, cytoskeleton, Totipotency differentiation and cell death,cell cycle, apoptosis, , signal transduction in cells. Plant Ecology and Ecosystem- structure, types and functions, Ecological succession, habitat, biomes, Biomes, population ecology, plant interactions, phytogeography, endemism, RET species, IUCN categories, Ecological modelling Niche, evolution and coevolution, Diversity types. Pollution ecology, Pollution		temperature and precipitation affecting on morphogenesis
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indicator organisms, restoration ecology with reference to		indicator organisms, restoration ecology with reference to



Children's RESEARCH UNIVERSITY

	plants and microbes, Environmental Impact Assessment,
	Ecotoxicology, sewage treatment, carbon sequestration.
	National and International conventions and laws for protection
	and conservation of biological resources.
Plant Physiology	Photosynthesis: Photosynthetic pigments and light harvest
	complexes, Photo oxidation of water, Mechanisms of electron
	and proton transport, Carbon assimilation the Calvin cycle.
	The C4 cycle, the CAM pathway.
	Respiration and Photorespiration: Its significance, Citric
	acid cycle; plant mitochondrial electron transport and ATP
	synthesis; alternate oxidase; photo-respiratory pathway.
	Plant Growth Regulators: Physiological effects and
	mechanism of action of auxins, gibberellins and cytokines,
	Physiological role of abscisic acid and ethylene, Minor group
	of phytohormones: brassinosteroids, polyamines, jasmonic
	acid, salicylic acid and their role in plant growth and
	development.
	Mineral Nutrition: Essential elements and their role in plant
	growth and development, Translocation phenomena in plants,
	Assimilation of inorganic nutrients, Plant - Water relations,
	Transpiration and stomatal movement
Plant Biotechnology	Plant tissue culture techniques, Micropropagation, cell, tissue
	and organ culture, Elicitation and secondary metabolites
	production. Enzymes in genetic engineering, cloning vectors,
	Agrobacterium mediated gene transfer, characterization of
	transformants, Gene libraries, DNA sequencing.





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SYLLABUS FOR Ph.D. ENTRANCE TEST

Note: Language of Ph.D. Entrance Test is English

NAME OF THE SUBJECT: MANAGEMENT

Paper-1	Contents
Unit - 1:	Introduction to Business Research: The Nature of Research; identifying the underlying conceptual elements of the research issue; Theoretical Approaches to Research. Planning And Designing A Research Study: Choosing A Research Topic, Review of Literature, Types of Reviews, Sources of Research Literature, Writing of Review.
Unit - 2	Research Formulation – Defining and formulating the research problem - Selecting the problem - Necessity of defining the problem - Importance of literature review in defining a problem – technique involve defining problem
Unit - 3	Research Design: Different types of Research design; Rationale behind choosing an appropriate Research Design for different types of Research Study. Sampling design, Probability and Non Probability sampling, Sampling and Non- Sampling errors.
Unit - 4:	Data Collection: Types and methods of data collection. Questionnaire: Nature, Importance and Uses; Issues Involved In Designing of Questionnaire, Testing Validity and





Unit - 5 Data Analysis and Interpretation: Parametric Test: z test, T test and F test and ANOVA, Non-Parametric Tests: Chi-Square Test, Mann Whitney Test. Multimedia Analysis: Discriminant Analysis, Factor Analysis and Cluster Analysis, Application of Computer Software/Ms. Excel in data analysis. Report Writing: Bibliography & Citation, Structure and		Reliability of Questionnaires. Attitude Measurement Scales,
Data Analysis and Interpretation: Parametric Test: z test, T test and F test and ANOVA, Non-Parametric Tests: Chi-Square Test, Mann Whitney Test. Multimedia Analysis: Discriminant Analysis, Factor Analysis and Cluster Analysis, Application of Computer Software/Ms. Excel in data analysis. Report Writing: Bibliography & Citation, Structure and		Data Preparation: Preliminary Analysis & Secondary Analysis
Components of Research Report.	Unit - 5	test and F test and ANOVA, Non-Parametric Tests: Chi- Square Test, Mann Whitney Test. Multimedia Analysis: Discriminant Analysis, Factor Analysis and Cluster Analysis, Application of Computer Software/Ms. Excel in data analysis.

PAPER-2 CONCERNED PG COURSE CONTENTS NOTE: EXCEPT RESEARCH METHODOLOGY

Paper-2	Contents	
The syllabus of Paper-2	is as per UGC NET syl	labus for the concerned
PG subject. Further the syllabus on research methodology shall be		
taken in Paper-1.		





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SYLLABUS FOR Ph.D. ENTRANCE TEST

Note: Language of Ph.D. Entrance Test is English & Gujarati

NAME OF THE SUBJECT: HOMESCIENCE

Paper-1	Contents
Unit I	Basics of research
	 Research – definition, types, and research design
	Role of research and statistics in Home Science
	Objectives of research
	Ethics and plagiarism in research
Unit II	Research Design
	How to select a research topic
	 Hypothesis – definition and types, hypothesis testing
	Review of literature
	Planning of research
	Methodology and tools
Unit III	Measurements- scaling and sampling
	 Population and Variables – definition and types
	 Sampling – definition and types, Sampling methods
	 Data gathering tools – Interview, questionnaire, observation
Unit IV	Data Analysis and Tools
	Basics of statistics – use of appropriate measurement tools in research
	 Frequency distribution – continuous and discrete series
	 Measurement of central tendency – mean, median, mode
	 Measurement of dispersion – range, mean deviation, quartile deviation, standard deviation
	Student "t" test, chi square test, ANOVA, regression
	Representation of data – editing, classification, tabulation





	and coding
	 Graphical representation – Bar, Column, Histogram, Pie,
	Frequency polygon, Ogive
Unit V	Research Report and proposal Writing
	Research report – Different types
	Contents of report- Chapterization – contents of chapter
	Report writing
	 Need of research proposal for dissertation, Ph.D., to get
	funds from various sources

Paper-2	Contents			
The syllabus of Paper-2 is as per UGC NET syllabus for the concerned				
PG subject. Further the syllabus on research methodology shall be				
taken in Paper-1.				





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SYLLABUS FOR Ph.D. ENTRANCE TEST

Note: Language of Ph.D. Entrance Test is English & Gujarati

NAME OF THE SUBJECT: HISTORY

Paper-1	Contents		
RESEARCH	Scope and Importance of History		
METHODOLOGY	Objectivity and Bias in History		
	Heuristics Operation, Criticism in History, Synthesis and Presentation		
	History and its Auxiliary Sciences		
	History a Science, Arts or a Social Science		
	Causation and Imagination in History		
	Significance of Regional History		
	Recent Trends of Indian History		
	Research Methodology		
	Area of Proposed Research		
	Sources - Data Collection, Primary / Secondary, Original and Transit		
	Sources, Trends in Historical Research		
	Recent Indian Historiography, Selection of Topic in History		
	Notes Taking, References, Footnotes and Bibliography		
	Thesis and Assignment Writing, Plagiarism, Intellectual Dishonesty and		
	History Writing		
	Beginnings of Historical Writings - Greek, Roman and Church,		
	Historiography		
	Renaissance and its Impact on History Writing		
	Negative and Positive Schools of Historical Writing		
	Berlin Revolution in History Writing – Von Ranke		
	Marxist Philosophy of History – Scientific Materialism		
	Cyclical Theory of History – Oswald Spengler		
	Challenge and Response Theory - Arnold Joseph Toynbee, Post -		
	Modernism in History		





Paper-2	Contents			
The syllabus of Paper-2 is as per UGC NET syllabus for the concerned				
PG subject. Further the syllabus on research methodology shall be				
taken in Paper-1.				