Syllabus: PhD Entrance Test (Written) Linguistics Science and Technology

A. Research Methodology

Qualitative method: Discourse analytic approaches to text and talk, Linguistic Ethnography, Contemplating Interviews and Focus groups, Multimodal analysis, Narrative analysis; Quantitative methods: Concepts, Frameworks and Issues, Corpus methods in Linguistics, Mixed method; Data Collection and Interpretation; Population samples, Surveys and interviews; Types of research: Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical, longitudinal research, simulation research, clinical research etc.; Research design in case of exploratory studies, descriptive and diagnostic studies, hypothesis testing research studies; Sampling Design, Statistical Design, Observational Design, Operational Design; Methods of data collection: observation method, interview method, questionnaire method; Statistics in Research: Measures of central tendency, measures of dispersion, measures of dispersion, skewness, measures of relationship, simple regression analysis, multiple correlation and regression, partial correlation, hypothesis and hypothesis testing etc.

B. Linguistics

1. Fundamentals of Language and Linguistics

Notions of Language: Language as written text—Philological and literary notions i.e., norm, purity and their preservation, language as a cultural heritage—Codification and transmission of cultural knowledge and behaviour, language as a marker of social identity—Language boundary, Dialect and language—Codes of special groups—Use of language(s) to express multiple identities; Language as an object i.e., notion of autonomy, structure and its units and components; Language in spoken and written modes and relation between them; Writing system—Units of writing—Sound (alphabetic), or Syllable (syllabic) and Morpheme/Word (logographic).

Approaches to the Study of Language: Semiotic approach—Interpretation of sign; language as a system of social behaviour—Use of language in family, community and country; Language as a system of communication—Communicative functions—Emotive, Conative, Referential, Poetic, Metalinguistic and Phatic; Sign language; Animal communication system and formal language; Design features of language—Arbitrariness, Double articulation, Displacement, interchangeability and specialisation; Language as a congnitive system—Knowledge representation; Relation with culture and thought, i.e., concept formation; existence of language faculty; linguistic competence, ideal speaker-hearer.

Structure of Language : Levels and their hierarchy—Phonological. Morphological, Syntactic and semantic, their interrelations; Universal and specific properties of language—Formal and substantive universals. Synchronic and diachronic view of language; Language relation—Genetic, areal and typological; Concepts of language and parole, idiolect and language.

Grammatical Analysis : Linguistic units and their distribution at different levels; Notions of contrast and complementation; -etic and -emic categorisation; Paradigmatic and syntagmatic relations; Notions of word classes (parts of speech) and grammatical categories; Grammatical relations and case relations; notion of rule at different levels; description vs explanation of grammatical facts.

Linguistics and Others Fields : Relevance of linguistics to other fields of enquiry—Philosophy, Anthropology, Sociology, Political Science, Psychology, Education, Computer Science and Literature.

2. Core Linguistics

Phonetics: Definition; Mechanisms of speech production—Airstream mechanism, oro-nasal process, Phonation process and articulation (place and manner); cardinal vowels (primary and secondary); vowels and consonants (liquids, glides); secondary articulation; coarticulation; syllable; phonetic transcription (IPA); suprasegmentals—Length, stress, tone, intonation and juncture.

Phonology: Phonetics vs phonology; concept of phoneme, phone and allophone; Principles of phonemic analysis—Phonetic similarity, contrast, complementary distribution, free variation, economy, pattern congruity; alternation and neutralization; distinctive features; syllable in phonology.

Morphology: Scope and nature: concept of morpheme, morph, allomorph, portmanteau morph, lexeme and word; identification of morphemes; morphological alternation; morphophonemic process; internal and external sandhi; derivation vs inflection; root and stem; grammatical categories—tense, aspect, mood, person, gender, number, case; case marker and case relation; pre- and post-positions; affixes vsclitics; stem vs word-based morphology; paradigmatic and syntagmatic relations.

Traditional and Structuralist Syntax: Parts of speech; Indian classification of grammatical categories (naama, aakhyaata, upasarga, nipaata); structural syntactic categories (word, phrase, clause etc.); functional syntactic categories (subject, object, etc.); construction types (exocentric, indocentric, etc.), Immediate Constituent Analysis.

Semantics and Pragmatics: Types of meaning; descriptive, emotive and phatic; sense and reference, connotation and denotation, sense relations (homonymy, synonymy, etc.); types of opposition (taxonomic, polar, etc.); ambiguity, sentence meaning and truth conditions, presupposition, entailment and implicature. speech acts, deixis, definiteness, mood and modality, componential analysis.

3. Historical Linguistics and South Asian Language Families

Introduction: Synchronic and diachronic approaches to language; interrelationship between diachronic and synchronic data; use of written records for historical studies; language classification; notion of language family, criteria for identifying family relationships among languages; definition of the word 'cognate'; language isolates; criteria for typological classification—agglutinative, inflectional, analytic, synthetic and polysynthetic; basic word order typology—SVO, SOV, etc.

Linguistic Change and Reconstruction: Sound change; Neogrammarian theory of gradualness and regularity of sound change; genesis and spread of sound change; phonetic and phonemic change; split and merger; conditioned vs unconditioned change; types of change—assimilation and dissimilation, coalescence, metathesis^ deletion, epenthesis; Transformational-generative approach to sound change—rule addition, rule deletion, rule generalisation, rule ordering; social motivation for change; lexical diffusion of sound change; analogy and its relationship to sound change; reconstructing the proto-stages of languages, internal reconstruction and comparative method—their scopes and limitations; innovation and retention; sub grouping within a family; family tree and wave models; relative chronology of different changes.

Language Contact and Dialect Geography: Linguistic borrowing—lexical and structural; motivations—Prestige and need-filling (including culture-based); Classification of loan words—Loan translation, loan blend, calque, assimilated and unassimilated loans (tadbhava and tatsama); Bilingualism as the source for borrowing; dialect, idiolect; isogloss; methods of preparing dialect atlas, focal area, transition area and relic area.

Language Families of South Asia : Indo-Aryan, Dravidian-, Austro-Asiatic, Tibeto-Burman; language isolates—Burmshaski, Nahali—their. geographical distribution, enumeration; characteristics.

Areal Features of South Asia : South Asia as a linguistic area—phonological—length contrast in vowels and consonants, retroflexion, open syllable structure; morphemic structure rules; morphological and syntactical—agglutination, ergativity, agreement; productive use of conjunctive participles; passives; causatives; echowords; phenomenon of reduplication; copulative compounds; compound verbs, relative clause construction; dative /genitive subject construction.

4. Sociolinguistics

Language and Society: Speech community; verbal repertoire; linguistic and communicative competence; linguistic variability and ethnography of speaking; socio-linguistic variables; patterns of variation; regional, social and stylistic; restricted and elaborated codes; diglossia.

Languages in Contact : Types of bilingualism and bilinguals; borrowing; convergence; pidgins and creoles; language maintenance and shift.

Sociology of Language : Language planning; language standardization and modernization; language and power; literacy—autonomous us ideological.

5. Applied Linguistics

Scope of Applied Linguistics : Language teaching; translation studies; lexicography; stylistics; speech pathology; mass media and communication; language and computers.

Language Learning and Language Teaching: First and second language learning; language acquisition in multilingual settings; behaviouristic and cognitive theories of language learning; social and psychological aspects of second language acquisition; methods, materials and teaching-aids in language teaching; Computer Assisted Language Teaching (CALT); types of tests and their standardization.

Brain-language Relationship : Issues in neurolinguistics and linguistics aphasiology, cerebral dominance, lateralization and handedness; models of brain-language relationship—Classical connectionist, hierarchical, global and process models.

Brain Pathology and Language Breakdown: Aphasia and its classification; classical categories, linguistic account, overview of linguistic aphasiology, anomia and agrammatism; dyslexia and its classification.

Linguistics and Language Pathology: Use of linguistics in diagnosis and prognosis of language disorders; language pathology and normal language,

Language Pathology and Language Disorders; Stuttering; nature and analysis of language in psychopathological conditions; schizophrenic language: language in mental retardation.

Language Disorders and Intervention: Variation in language disorders; need and scope of intervention: therapeutic use of language.

Logic and mathematics in linguistics : Propositional logic, Predicate logic, Set theory.

Communication Networks: Networks and speech and verbal repertoire, 'Types of network, Redefining 'speech community' in terms of networks, Speech and multiple identities.

Computational Lexicography: The craft of dictionary making; the digital computer as a lexicographic tool; lexical databases and on-line dictionary— corpus-based dictionaries; lexical acquisition from Machine Readable Dictionaries (MRDs); major lexicographical projects—the Longman Dictionary of Contemporary English (LDOCE) and the Collins Cobuild Project.

Parsing, Syntax and Semantics : Parsing and generation, top-down and bottom up parsing; types of parsers; unification and unification-based grammars— Definite Clause Grammar (DCG), Generalised Phrase Structure Grammar (GPSG); Lexical Functional Grammar (LFG), Head-driven Phrase Structure Grammar (HPSG) and Tree Adjoining Grammar (TAG).

Reference and compositionality, Functions and arguments, Meanings of referring expressions and predicates; Meanings of determiners, quantifiers, adverbs, adjectives and prepositions; Putting meanings.

Corpus Linguistics: Corpus-building and corpus-processing, SGML and Text Encoding Initiative, Corpus tagging and Tree banks, Corpus projects—the Brown Corpus and Lancaster-Oslo Bergen (LOB) Corpus, the Survey of English Usage (SEU), Corpus and London-Lund Corpus of Spoken English (LLC), The Kolhapur Corpus of Indian English; the TDIL Corpus Project of the Deptt. of Electronics.

Language Technology: Natural language interface to databases, Cooperative response systems, Speech .technology—text-to-speech and speech-to-text systems, Machine (aided) translation; computer aided language teaching; text processing; Major European and American Projects; the Japanese Fifth Generation Initiative, Natural language processing in India.

Types of Dictionaries: Comprehensive and concise, monolingual and bilingual, general and learner's, historical and etymological, dictionary of idioms and phrases, encyclopaedic dictionary, electronic dictionary, reverse dictionary, thesaurus and other distinguishing purposes and features of various types; difference between glossing, dictionary and lexicon.

Nature of Translation : Paraphrase, translation and transcreation; translation of literary text and technical text; theories of translation; use of linguistics in translation; linguistic affinity and translatability.

Methods of Translation : Unit of translation; equivalence of meaning and style; translation loss; problems of cultural terms; scientific terms; idioms, metaphors and proverbs; evaluation of translation; fidelity and readability; types of translation—simultaneous interpretation, machine aided translation, media translation (dubbing, copy-editing, advertisement, slogans, jingles, etc.)

Nature and Methods of Stylistic Analysis: Style—stylistic individual, style, period, style as choice, style as deviation, style as riiti, style as alankaara; style as vyanjana (vakrokti) foregrounding; parallelism levels of stylistic analysis—phonological, lexical, syntactic and semantic.