

Course Contents for the Entrance Test for M.Phil/Ph.D

1. The Question paper will consist of sections A, B, C and D.
2. The Question paper will have 100 Multiple Choice Questions of 1 mark each.
3. There will be No Negative Marking.
4. Section A will be based on 'Research Methodology' will carry 30 marks. There will be 30 multiple choice questions carrying one mark each.
5. Section B will be based on 'Functional English Language' carrying 15 marks. There will be 15 multiple choice questions carrying one mark each.
6. Section C will be based on Functional Knowledge of Computer carrying 15 marks. There will be 15 multiple choice questions carrying one mark each.
7. Section D will be based on the syllabus of Master level course in the core subject and there will be 40 multiple choice questions in section D carrying one mark each.

(A) Research Methodology:

I. Research Aptitude

- (i) Research: Meaning, characteristics and types
- (ii) Step of research
- (iii) Method of research
- (iv) Research Ethics

II. Reading Comprehension: A passage to be set with questions to be answered

III. Library Resources and Communication

- i. Different types of data and their sources
- ii. Survey of literature
- iii. Sources of information
- iv. Bibliography
- v. Nature of research problem: theoretical research, experimental research, case study, survey.

IV. Reasoning (Including Mathematical)

- i. Number series; letter series; codes
- ii. Relationships; classification

V. Logical Reasoning

- i. Understanding the structure of arguments
- ii. Evaluating and distinguishing deductive and inductive reasoning
- iii. Verbal analogies: Word analogy - Applied analogy
- iv. Verbal classification
- v. Reasoning Logical Diagrams: Simple diagrammatic relationship, multi-diagrammatic Relationship

vi. Venn diagram; Analytical Reasoning

VI. Data Interpretation

- i. Sources, acquisition and interpretation of data
- ii. Quantitative and qualitative data
- iii. Graphical representation and mapping of data

VII. Information and Communication Technology (ICT)

- i. ICT: meaning, advantages, disadvantages and uses
- ii. General abbreviations and terminology
- iii. Basics of internet and e-mailing

VIII. Basic Statistical Techniques: Use of Statistics in Research.

IX. Higher Education System: Governance, Polity and Administration

- i. Structure of the institution of higher learning and research in India
- ii. Formal and distance education
- iii. State and Private domain of higher education
- iv. Professional/ technical and general education
- v. Governance, polity and administration
- vi. Educational commissions and higher education policy

X. Educational Methodology

- i. Teaching: Nature, objectives, characteristic and basic requirements
- ii. Learner's characteristics
- iii. Factors affecting teaching
- iv. Method of teaching
- v. Teaching aids
- vi. Evaluation systems

(B) FUNCTIONAL ENGLISH LANGUAGE (There shall be 5 MCQs to test Vocabulary (5 marks) and 10 MCQs to test Grammar Skills (10 marks))

• Parts of Speech and their Usages

- (i) Nouns (ii) Verbs (iii) Adjectives (iv) Adverbs (v) Prepositions (vi) Conjunctions
(vii) Interjections (viii) Pronouns (ix) Demonstratives

• Words and Word-formation Processes

- (i) Prefixes (ii) Suffixes (iii) Infixes (iv) Inflections (v) Derivation processes (from one category to another)

• Elements of Sentence (SVOCA)

- (i) Subject (ii) Verb (iii) Object (iv) Complement (v) Adverbial

• Types of Sentence and its Structure

- (i)Declarative Sentences (ii)Interrogative sentences(iii)Imperative sentences
iv) Exclamatory sentences; also, (v)Simple sentence (vi)Compound sentence
(vii)Complex sentence

• **Usages of Tenses in English**

- i. Present tense (Simple, Progressive and Perfective aspects)
ii. Past tense (Simple, Progressive and Perfective aspects)
iii. Expression of futurity

• **Active and Passive Voice**

• **Direct and Indirect Speech**

(C) FUNCTIONAL KNOWLEDGE OF COMPUTER

(All three components shall have equal weight)

I. Computer Fundamentals

- i. Basics of Computer: Block structure of a computer, characteristics of computers, classification of computers
ii. Computer Performance: Parameters that affect computer's performance – CPU execution speed, Clock speed, RAM size, Cache, Disc capacity etc.
iii. Basics of Internet: Internet, WWW, Web Browsers, Search Engines, Internet Service Provider, Social Networking Sites.

II. Elements of a Computer Processing System

- i. Processor: Understanding some of the functions of the CPU in terms of calculations, logical control and immediate access memory
ii. Storage Devices and Media: Compare the main types of storage devices in terms of speed, cost and capacity.
iii. Input- devices: Various input devices: Mouse, Keyboard, Trackball, Scanner, Touch Pad, Light Pen, Joy Stick, Digital Camera and Microphone, etc.
iv. Output - devices: Printers, Plotter and Speaker, VDU etc.

III. Software

- i. Types of Software: System software, Application software
ii. Operating System Software: Functions of OS and brief introduction of some OS. Latest Operating Systems in market.
iii. Application Software: Common Application software such as: Word processing, Spreadsheet, Database.
iv. Programming paradigms and Languages: classification, machine code, assembly language, programming paradigms and higher level languages.

(D) Core Subject: The syllabus of Paper II of core subject given for UGC –NET exam will be followed for the subjects for which UGC conducts the exam. And for the rest of the subjects the syllabi will be based on the papers studied at Master Level.