



झारखण्ड केन्द्रीय विश्वविद्यालय, राँची
Central University of Jharkhand, Ranchi
(भारतीय संसद के अधिनियम, 2009 द्वारा स्थापित)
(A Central University established by an Act of Parliament of India in 2009)

Date: 30th April, 2019

SYLLABUS
(NON-TEACHING POSITION)
ADVERTISEMENT NO.: CUJ/Advt./01/2018-19 Dated: 8th March, 2019

- 1.The University vide its **Advertisement No. CUJ/Advt./01/2018-19 Dated: 8th March, 2019** advertised various Non-Teaching Positions to be filled on direct/ deputation basis and lien vacancy.
- 2.With reference to above, the information related to Pattern of Written Examination, Syllabus, Total Marks, etc. for various Non-Teaching Positions is given below for information of all concerned.
- 3.Maximum qualifying marks shall be 33%.

THE SYLLABUS OF WRITTEN/SKILL TEST IS AS GIVEN BELOW:

Sl. No. 8. SECTION OFFICER

The written Examination will consist of an **Objective Type Paper** of 150 Multiple Choice Questions (MCQs) divided into the parts 'A' and B' of 75 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|---|---------------|----------|
| Part A | General English, Numerical Aptitude, Reasoning and General Knowledge | 75 | 3 hrs |
| Part B | Domain Knowledge and/or Knowledge of Rules of Government of India, Office Procedures & University Act | 75 | |
| Total | | 150 | |

SYLLABUS:

Part A

General English: Questions in this component will be designed to test the Candidate's understanding and knowledge of English Language like Error recognition, Fill in the blanks (using verbs, preposition, articles etc.), One word substitution, Improvement of Sentences, Vocabulary, Spellings, Grammar, Sentence Structure, Synonyms, Antonyms, Sentence Completion, Phrases and Idiomatic use of words, Comprehension of Passages, as may be expected of a well-educated person who has not made a special study of the subject.

Numerical Aptitude & Reasoning: The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be the computation of whole numbers, decimals and fractions and relationships between numbers. It will test sense of order among numbers, ability to translate form one name to another, sense or order of magnitude, estimation or prediction of the outcome of computation, selection of an appropriate operation for the solution of real life problems and knowledge of alternative computation procedures to find answers. The questions would also be based on arithmetical concepts and relationship between numbers and not on complicated arithmetical computation. On general reasoning, the candidates will be tested on reasoning and analytical abilities.

General Knowledge: Questions will be designed to General Knowledge viz., General Science, current events of national and international importance, History of India and Indian National Movement, India and World Geography, Indian Polity & Economy, General Mental Ability, Central University of Jharkhand, Indian States, India and other countries.

Part B

The questions will be from following areas:-

| | |
|------|--|
| i | Constitution of India |
| ii | Central Universities Act & Statutes, 2009 |
| iii | General Financial Rules and Purchase Procedure |
| iv | UGC Regulations governing the service conditions of the teachers |
| v | CCS (Conduct) Rules |
| vi | CCS (Leave) Rules |
| vii | CS (Medical Attendance) Rules |
| viii | CCS (LTC) Rules |
| ix | Reservation and Concessions to SCs/STs/OBCs/PWDs |
| x | CCS (Joining Time) Rules |
| xi | CCS (T.A.) Rules |
| xii | CCS (Pension) Rules/National Pension Scheme |
| xiii | General Rules on Pay and Allowances |

Sl. No. 9. SECURITY OFFICER

The written Examination will consist of an **Objective Type Paper** of 150 Multiple Choice Questions (MCQs) divided into the parts 'A' and B' of 75 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|---|---------------|----------|
| Part A | General English and General Knowledge, Numerical Aptitude & Reasoning | 75 | 3 hrs |
| Part B | Domain knowledge | 75 | |
| Total | | 150 | |

SYLLABUS:

Part A

General English: Questions in this component will be designed to test the Candidate's understanding and knowledge of English Language like Error recognition, Fill in the blanks (using verbs, preposition, articles etc.), One word substitution, Improvement of Sentences, Vocabulary, Spellings, Grammar, Sentence Structure, Synonyms, Antonyms, Sentence Completion, Phrases and Idiomatic use of words, Comprehension of Passages, as may be expected of a well-educated person who has not made a special study of the subject.

General Studies: Questions will be designed to General Studies viz., General Science, current events of national and international importance, History of India and Indian National Movement, India and World Geography, Indian Polity & Economy, General Mental Ability, Central University of Jharkhand, Indian States, India and other countries.

Numerical Aptitude & Reasoning: The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be the computation of whole numbers, decimals and fractions and relationships between numbers. It will test sense of order among numbers, ability to translate form one name to another, sense or order of magnitude, estimation or prediction of the outcome of computation, selection of an appropriate operation for the solution of real life problems and knowledge of alternative computation procedures to find answers. The questions would also be based on arithmetical concepts and relationship between numbers and not on complicated arithmetical computation.

On general reasoning, the candidates will be tested on reasoning and analytical abilities.

Part B

Knowledge of disaster management techniques - Handling of fire-fighting devices and installation of fire extinguishers - Proper handling of licensed weapons - Training and management of security personnel deployed for University security - Decorum and discipline of security staff - Protocol norms for Independence Day and Republic Day celebrations - Security check points and strategies for foolproof entry and exit system - Smooth transportation/movement within the campus. - Administering over all discipline in the campus - Other areas relevant to the post.

Sl. No. 10. PRIVATE SECRETARY

The written Examination will consist of an **Objective Type Paper** of 150 Multiple Choice Questions (MCQs) divided into the parts 'A' and 'B' of 75 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|---|---------------|----------|
| Part A | General English, Numerical Aptitude, Reasoning and General Knowledge | 75 | 3 hrs |
| Part B | Domain Knowledge and/or Knowledge of Rules of Government of India, Office Procedures & University Act | 75 | |
| Total | | 150 | |

In addition to the above written test, the candidates for the post of Private Secretary shall have to appear in the Skill Test (Shorthand and Typing Test) as detailed below:

| Name of the Skill Test | Speed | Duration | Maximum permissible error |
|------------------------|------------|-----------|---------------------------|
| Shorthand | 120 w.p.m. | 5 minutes | 10% |
| Typing | 40 w.p.m. | 5 minutes | -- |

SYLLABUS:

Part A

General English: Questions in this component will be designed to test the Candidate's understanding and knowledge of English Language like Error recognition, Fill in the blanks (using verbs, preposition, articles etc.), One word substitution, Improvement of Sentences, Vocabulary, Spellings, Grammar, Sentence Structure, Synonyms, Antonyms, Sentence Completion, Phrases and Idiomatic use of words, Comprehension of Passages, as may be expected of a well-educated person who has not made a special study of the subject.

Numerical Aptitude & Reasoning: The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be the computation of whole numbers, decimals and fractions and relationships between numbers. It will test sense of order among numbers, ability to translate form one name to another, sense or order of magnitude, estimation or prediction of the outcome of computation, selection of an appropriate operation for the solution of real life problems and knowledge of alternative computation procedures to find answers. The questions would also be based on arithmetical concepts and relationship between numbers and not on complicated arithmetical computation. On general reasoning, the candidates will be tested on reasoning and analytical abilities.

General Knowledge: Questions will be designed to General Knowledge viz., General Science, current events of national and international importance, History of India and Indian National Movement, India and World Geography, Indian Polity & Economy, General Mental Ability, Central University of Jharkhand, Indian States, India and other countries.

Part B

The questions will be from following areas:-

| | |
|------|--|
| i | Constitution of India |
| ii | Central Universities Act & Statutes, 2009 |
| iii | General Financial Rules and Purchase Procedure |
| iv | UGC Regulations governing the service conditions of the teachers |
| v | CCS (Conduct) Rules |
| vi | CCS (Leave) Rules |
| vii | CS (Medical Attendance) Rules |
| viii | CCS (LTC) Rules |
| ix | Reservation and Concessions to SCs/STs/OBCs/PWDs |
| x | CCS (Joining Time) Rules |
| xi | CCS (T.A.) Rules |
| xii | CCS (Pension) Rules/National Pension Scheme |
| xiii | General Rules on Pay and Allowances |

Sl. No. 11. JUNIOR ENGINEER (CIVIL)

The written Examination will consist of an **Objective Type Paper** of 150 Multiple Choice Questions (MCQs) divided into the parts 'A' and 'B' of 75 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General English, Numerical Aptitude, Reasoning and General Knowledge | 75 | 3 hrs |
| Part B | Civil Engineering | 75 | |
| Total | | 150 | |

SYLLABUS:

Part A

General English: Questions in this component will be designed to test the Candidate's understanding and knowledge of English Language like Error recognition, Fill in the blanks (using verbs, preposition, articles etc.), One word substitution, Improvement of Sentences, Vocabulary, Spellings, Grammar, Sentence Structure, Synonyms, Antonyms, Sentence Completion, Phrases and Idiomatic use of words, Comprehension of Passages, as may be expected of a well-educated person who has not made a special study of the subject.

Numerical Aptitude & Reasoning: The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be the computation of whole numbers, decimals and fractions and relationships between numbers. It will test sense of order among numbers, ability to translate form one name to another, sense or order of magnitude, estimation or prediction of the outcome of computation, selection of an appropriate operation for the solution of real life problems and knowledge of alternative computation procedures to find answers. The questions would also be based on arithmetical concepts and relationship between numbers and not on complicated arithmetical computation. On general reasoning, the candidates will be tested on reasoning and analytical abilities.

General Knowledge: Questions will be designed to General Knowledge viz., General Science, current events of national and international importance, History of India and Indian National Movement, India and World Geography, Indian Polity & Economy, General Mental Ability, Central University of Jharkhand, Indian States, India and other countries.

Part B (CIVIL ENGINEERING)

- a) **Theory of Structures:** Energy methods; approximate and numerical methods. Moving loads, shearing force and Bending moment diagrams.
- b) **R.C. Design:** Design of slabs, simple and continuous beams, columns, footing-single and combined, raft foundations.
- c) **Steel Design:** Factors of safety and load factor.
- d) **Fluid Mechanics:** Dynamics of fluid flow-equations of continuity; energy and momentum.
- e) Bernoulli's theorem; free and forced vortices; flow net. Velocity distribution in laminar and turbulent flow, boundary layer, Incompressible flow through pipes, laminar and turbulent flow, critical velocity.
- f) **Hydraulic Engineering:** Open channel flow-Uniform and non-uniform flow, best hydraulic cross section. Hydraulic jump.
Diversion Head works- Principles of design of different part on impermeable and permeable foundations; Khosla's.
Dams- Design of rigid dams; earth dams; Forces acting on dams.
- g) **Soil Mechanics and Foundation Engineering:** Soil Mechanics- Origin and Classification of soils; Atterberg limits. Void ratio: moisture contents permeability, laboratory and field tests, stability of slopes; Theories of soil consolidation; rate of settlement. Foundation Engineering; Bearing capacity of footings; piles and walls; design of retaining walls.
- h) **Building construction:** Building materials and constructions- timber, stone, brick, sand, concrete, PERT and CPM methods.
- i) **Water Resources Engineering:** Hydrology- Hydrologic cycle; precipitation.
- j) Planning for water Resources- Ground and Surface water resources; surface flows.
- k) **Sanitation and Water Supply:** Sanitation-Site and orientation of buildings; ventilation and damp proof course; house drainage; conservancy and waterborne system of waste disposal, sanitary appliances, latrines and urinals.
- l) **Environment Engineering:** Environmental impact assessment and safety measures, Air Environment: Major pollutants and their adverse effects, types of air cleaning devices. Solid Wastes: Collection systems and disposal methods, their selection and operation.
- m) **Typical features of Sewerage systems:** sewerappurtenances, Dumping of sewage.

Sl. No. 12. HINDI TRANSLATOR

The written Examination will consist of an **Objective and Descriptive Type Paper** of 150 marks divided into the parts 'A' and 'B' of 75 MCQs and Descriptive Questions.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | 1. General Hindi , 2. General English | 75 | 3 hrs |
| Part B | Translation & Essay – Translation of 2 passages (1 each from Hindi to English & vice versa) & and Two Essays - 1 each in Hindi & English | 75 | |
| Total | | 150 | |

SYLLABUS:

Part A:

General Hindi and General English: (Objective Type)

Questions in this component will be designed to test the Candidate's understanding and knowledge of Hindi & English Languages and will be based on error recognition, fill in the blanks (using verbs,

preposition, articles etc.), vocabulary, spellings, grammar, sentence structure, synonyms, antonyms, sentence completion, correct use of words, phrases and idioms, ability to write language correctly, precisely and effectively.

Part B:

Translation and Essay (Descriptive and Objective type)

This Paper will contain two passages for translation- one passage for translation from Hindi to English and one passage for translation from English to Hindi, and an Essay each in Hindi & English which will test the candidates' translation skills and their ability to write the two languages correctly, precisely and effectively.

Sl. No. 13. PROFESSIONAL ASSISTANT

The written Examination will consist of an **Objective Type Paper** of 150 Multiple Choice Questions (MCQs) divided into the parts 'A' and B' of 75 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|---------------------------------|---------------|----------|
| Part A | General English | 75 | 3 hrs |
| Part B | Library and Information Science | 75 | |
| Total | | 150 | |

SYLLABUS:

Part A: General English: Questions in this component will be designed to test the Candidate's understanding and knowledge of English Language like Error recognition, Fill in the blanks (using verbs, preposition, articles etc.), One word substitution, Improvement of Sentences, Vocabulary, Spellings, Grammar, Sentence Structure, Synonyms, Antonyms, Sentence Completion, Phrases and Idiomatic use of words, Comprehension of Passages, as may be expected of a well-educated person who has not made a special study of the subject.

PART B: Unit 1: Acquisition of Library Resources Collection Development; Principles and procedure; Selection of printed and electronic resources; Ordering; Management and Maintenance Unit 2: Serial Management Selection; Ordering; Receiving; Display Unit 3: Database Management Machine Readable Formats; Basic Knowledge of common software Koha, SOUL, SLIM, Metadata Unit 4: Information Technology Data Harvesting; Institutional Repositories; Digital Library; and Automated Library Services

Sl. No. 14: SENIOR TECHNICAL ASSISTANT (Science Stream)

The written Examination will consist of an **Objective Type Paper** of 150 Multiple Choice Questions (MCQs) divided into the parts 'A' and B' of 75 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General English, General Knowledge, Numerical Aptitude & Reasoning | 75 | 3 hrs |
| Part B | Subject of Science Stream | 75 | |
| Total | | 150 | |

SYLLABUS:

Part A,

General English: Questions in this component will be designed to test the Candidate's understanding and knowledge of English Language like Error recognition, Fill in the blanks (using verbs, preposition, articles etc.), One word substitution, Improvement of Sentences, Vocabulary, Spellings, Grammar, Sentence Structure, Synonyms, Antonyms, Sentence Completion, Phrases and Idiomatic

use of words, Comprehension of Passages, as may be expected of a well-educated person who has not made a special study of the subject.

General Studies: Questions will be designed to General Studies viz., General Science, current events of national and international importance, History of India and Indian National Movement, India and World Geography, Indian Polity & Economy, General Mental Ability, Central University of Jharkhand, Indian States, India and other countries.

Numerical Aptitude & Reasoning: The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be the computation of whole numbers, decimals and fractions and relationships between numbers. It will test sense of order among numbers, ability to translate form one name to another, sense or order of magnitude, estimation or prediction of the outcome of computation, selection of an appropriate operation for the solution of real life problems and knowledge of alternative computation procedures to find answers. The questions would also be based on arithmetical concepts and relationship between numbers and not on complicated arithmetical computation. On general reasoning, the candidates will be tested on reasoning and analytical abilities.

Part B,

Science Stream: Question will be based on the Lab. Instruments, Lab. Safety, Lab. Operation, Basic of Environmental studies and Chemical reaction, functioning and operations of important instruments: pH Meter, Turbidity Meter, Conductivity Meter, Thermo-Hygro Meter, Luxmeter, High Volume Sampler, Distillation plant, Hot air oven, Centrifuge, Spectrophotometer, Laminar flow, Autoclave, Incubator, Furnace, Water Bath, Kjeldahl nitrogen apparatus, Flame photometer, Sound level meter, microscope, Lysimeter Knowledge of laboratory safety practices, Preparation of normal and molar solutions, sample preparation: wet digestion & dry ashing Analytical analysis of important parameters: pH, Turbidity, Electrical Conductivity, Alkalinity. Acidity, Total Solid, Total Dissolved Solid, Total Suspended Solid, Hardness, Free CO₂, Dissolved Oxygen, Biochemical Oxygen Demand, Chemical Oxygen Demand, Phosphate, Nitrate, Ammonia, Sulphate, Iron Microbial media: bacterial & fungal, pure culture technique, sterilization, staining Sampling techniques for vegetation, soil, water, & air Measurement techniques for weather parameters, radiation, aerosols, Black Carbon, Soil moisture, upper air profiling, lab. Safety, Preparation of Lab. Manuals, Anatomy.

Sl. No. 14: SENIOR TECHNICAL ASSISTANT (Engineering & Technology Stream)

The written Examination will consist of an **Objective Type Paper** of 150 Multiple Choice Questions (MCQs) divided into the parts 'A' and B' of 75 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|---|---------------|----------|
| Part A | General English, GK, Numerical Aptitude & Reasoning | 75 | 3 hrs |
| Part B | Engineering & Technology Stream | 75 | |
| Total | | 150 | |

SYLLABUS:

Part A:

General English: Questions in this component will be designed to test the Candidate's understanding and knowledge of English Language like Error recognition, Fill in the blanks (using verbs, preposition, articles etc.), One word substitution, Improvement of Sentences, Vocabulary, Spellings, Grammar, Sentence Structure, Synonyms, Antonyms, Sentence Completion, Phrases and Idiomatic use of words, Comprehension of Passages, as may be expected of a well-educated person who has not made a special study of the subject.

General Studies: Questions will be designed to General Studies viz., General Science, current events of national and international importance, History of India and Indian National Movement, India and World Geography, Indian Polity & Economy, General Mental Ability, Central University of Jharkhand, Indian States, India and other countries.

Numerical Aptitude & Reasoning: The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be the computation of whole numbers, decimals and fractions and relationships between numbers. It will test sense of order among numbers, ability to translate form one name to another, sense or order of magnitude, estimation or prediction of the outcome of computation, selection of an appropriate operation for the solution of real life problems and knowledge of alternative computation procedures to find answers. The questions would also be based on arithmetical concepts and relationship between numbers and not on complicated arithmetical computation.

On general reasoning, the candidates will be tested on reasoning and analytical abilities.

Part B:

Engineering & Technology Stream: The questions will be based on Basics of Energy and Renewable Energy, Solar Energy, Wind Energy, Fuel Cell and Hydrogen Energy, Fuel, Measurement and Instrumentations, Control Systems, Energy Materials, Characterization of instruments such as M-TEM, SEM, XPS, UV-VIS SPECTROPHOTOMETER, TGA; Electrical Machines; IC Engines; Furnace, preparation of Engineering Lab. Manuals.

Sl. No. 14: SENIOR TECHNICAL ASSISTANT (Data Centre)

The written Examination will consist of an **Objective Type Paper** of 150 Multiple Choice Questions (MCQs) divided into the parts ‘A’ and B’ of 75 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General English, Numerical Aptitude, Reasoning and General Knowledge | 75 | 3 hrs |
| Part B | Computer/IT Proficiency | 75 | |
| Total | | 150 | |

SYLLABUS:

Part A:

General English: Questions in this component will be designed to test the Candidate's understanding and knowledge of English Language like Error recognition, Fill in the blanks (using verbs, preposition, articles etc.), One word substitution, Improvement of Sentences, Vocabulary, Spellings, Grammar, Sentence Structure, Synonyms, Antonyms, Sentence Completion, Phrases and Idiomatic use of words, Comprehension of Passages, as may be expected of a well-educated person who has not made a special study of the subject.

Numerical Aptitude & Reasoning: The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be the computation of whole numbers, decimals and fractions and relationships between numbers. It will test sense of order among numbers, ability to translate form one name to another, sense or order of magnitude, estimation or prediction of the outcome of computation, selection of an appropriate operation for the solution of real life problems and knowledge of alternative computation procedures to find answers. The questions would also be based on arithmetical concepts and relationship between numbers and not on complicated arithmetical computation. On general reasoning, the candidates will be tested on reasoning and analytical abilities.

General Knowledge: Questions will be designed to General Knowledge viz., General Science, current events of national and international importance, History of India and Indian National Movement, India and World Geography, Indian Polity & Economy, General Mental Ability, Central University of Jharkhand, Indian States, India and other countries.

Part B: Computer/IT Proficiency

Computer Fundamentals: Generations, H/W, S/W, Number Systems and their base conversions, sign-magnitude, 1's complement and floating point representation of numbers. ASCII, EBCDIC and Unicode, BCD Codes.

Digital Logic: Boolean algebra, simplification of Boolean functions, logic gates, combinational and sequential circuits, memory system, I/O devices.

Data Base Systems: Concepts of databases, DBMS, normalization, MS-SQL,

Operating System: Concepts, different types, functions, Windows OS, MS-Office, Word, Excel, PowerPoint, Outlook Software Engg. (SDLC) with thorough knowledge of s/w testing.

Computer Network: Basic concepts topology types, Data Communications, N/W Security, Online Transaction Security, OSI Model devices and Protocols, Transmission.

Programming: Problem solving on a computer, algorithm, flowchart, decision tables, programming in C Language and C++ Language. Encoding signals.

Basics of ERP solutions, Online e-content, e-solution in office management.

Sl. No. 15: SENIOR TECHNICAL ASSISTANT (Computer)

The written Examination will consist of an **Objective Type Paper** of 150 Multiple Choice Questions (MCQs) divided into the parts 'A' and 'B' of 75 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General English, Numerical Aptitude, Reasoning and General Knowledge | 75 | 3 hrs |
| Part B | Computer/IT Proficiency | 75 | |
| Total | | 150 | |

SYLLABUS:

Part A

General English: Questions in this component will be designed to test the Candidate's understanding and knowledge of English Language like Error recognition, Fill in the blanks (using verbs, preposition, articles etc.), One word substitution, Improvement of Sentences, Vocabulary, Spellings, Grammar, Sentence Structure, Synonyms, Antonyms, Sentence Completion, Phrases and Idiomatic use of words, Comprehension of Passages, as may be expected of a well-educated person who has not made a special study of the subject.

Numerical Aptitude & Reasoning: The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be the computation of whole numbers, decimals and fractions and relationships between numbers. It will test sense of order among numbers, ability to translate form one name to another, sense or order of magnitude, estimation or prediction of the outcome of computation, selection of an appropriate operation for the solution of real life problems and knowledge of alternative computation procedures to find answers. The questions would also be based on arithmetical concepts and relationship between numbers and not on complicated arithmetical computation. On general reasoning, the candidates will be tested on reasoning and analytical abilities.

General Knowledge: Questions will be designed to General Knowledge viz., General Science, current events of national and international importance, History of India and Indian National Movement, India and World Geography, Indian Polity & Economy, General Mental Ability, Central University of Jharkhand, Indian States, India and other countries.

Part B:

Computer/IT Proficiency

Computer Fundamentals: Generations, H/W, S/W, Number Systems and their base conversions, sign-magnitude, 1's complement and floating point representation of numbers. ASCII, EBCDIC and Unicode, BCD Codes.

Digital Logic: Boolean algebra, simplification of Boolean functions, logic gates, combinational and sequential circuits, memory system, I/O devices.

Data Base Systems: Concepts of databases, DBMS, normalization, MS-SQL,

Operating System: Concepts, different types, functions, Windows OS, MS-Office, Word, Excel, PowerPoint, Outlook Software Engg. (SDLC) with thorough knowledge of s/w testing.

Computer Network: Basic concepts topology types, Data Communications, N/W Security, Online Transaction Security, OSI Model devices and Protocols, Transmission.

Programming: Problem solving on a computer, algorithm, flowchart, decision tables, programming in C Language and C++ Language. Encoding signals.

Sl. No. 16. TECHNICAL ASSISTANT (Mass Communication Stream)

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs) divided into the parts 'A' and 'B' of 50 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General Knowledge, General English, Numerical Aptitude, General Intelligence & Reasoning | 50 | 2 hrs |
| Part B | Mass Communication | 50 | |
| Total | | 100 | |

SYLLABUS:

A. General Knowledge

Questions in this component will be aimed at testing the candidate's general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. General English

Candidates' ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

C. Numerical Aptitude

This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

D. General Intelligence & Reasoning

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding-decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series.

Question related to Mass Communication:

Basic understanding of the concepts, technologies, techniques, equipment and skills related to Print Media, Graphics and Animation, Multimedia and Digital Media

Sl. No. 16. TECHNICAL ASSISTANT (Computer Stream)

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs) divided into the parts 'A' and B' of 50 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General Knowledge, General English, Numerical Aptitude, General Intelligence & Reasoning | 50 | 2 hrs |
| Part B | Computer Stream | 50 | |
| Total | | 100 | |

SYLLABUS:**A. General Knowledge**

Questions in this component will be aimed at testing the candidate's general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. General English

Candidates' ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

C. Numerical Aptitude

This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

D. General Intelligence & Reasoning

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding-decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series.

Question related to Computer Stream:

Computer/IT Proficiency: Computer Fundamentals: Generations, H/W, S/W, Number Systems and their base conversions, sign-magnitude, 1's complement and floating point representation of numbers. ASCII, EBCDIC and Unicode, BCD Codes.

Digital Logic: Boolean algebra, simplification of Boolean functions, logic gates, combinational and sequential circuits, memory system, I/O devices.

Data Base Systems: Concepts of databases, DBMS, normalization, MS-SQL,

Operating System: Concepts, different types, functions, Windows OS, MS-Office, Word, Excel, PowerPoint, Outlook Software Engg. (SDLC) with thorough knowledge of s/w testing.

Computer Network: Basic concepts topology types, Data Communications, N/W Security, Online Transaction Security, OSI Model devices and Protocols, Transmission.

Sl. No. 17. STATISTICAL ASSISTANT

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs) divided into the parts 'A' and B' of 50 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General Knowledge, General English, Numerical Aptitude, General Intelligence & Reasoning | 50 | 2 hrs |
| Part B | Domain knowledge | 50 | |
| Total | | 100 | |

SYLLABUS:

A. General Knowledge

Questions in this component will be aimed at testing the candidate's general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. General English

Candidates' ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

C. General Intelligence & Reasoning

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding–decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series.

Domain Knowledge:

Whole numbers, decimals fractions and relationships between numbers, Percentage, Ratio & Proportion, Square roots, Averages, Interest, Profit and Loss, Discount, Partnership, Business, Mixture and Alligation, Time and distance, Time & Work, Basic algebraic, Algebra & Elementary surds, Graphs of Linear Equations, Triangle and its various kinds of centers, Congruence and similarity of triangles, Circle and its chords, Tangents, Angles subtended by chords of a circle, common tangents to two or more circles, Quadrilaterals, Regular Polygons, Circle.

Sl. No. 18. LABORATORY ASSISTANT (Science Stream)

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs) divided into the parts 'A' and 'B' of 50 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General Knowledge, General English, Numerical Aptitude, General Intelligence & Reasoning | 50 | 2 hrs |
| Part B | Subject of Science Stream | 50 | |
| Total | | 100 | |

SYLLABUS:

A. General Knowledge

Questions in this component will be aimed at testing the candidate's general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and

Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. General English

Candidates’ ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

C. Numerical Aptitude

This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

D. General Intelligence & Reasoning

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding–decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series.

Subject of Science Stream:

Knowledge of laboratory safety practices, Preparation of normal and molar solutions, sample preparation: wet digestion & dry ashing

Analytical analysis of important parameters: pH, Turbidity, Electrical Conductivity, Alkalinity. Acidity, Total Solid, Total Dissolved Solid, Total Suspended Solid, Hardness, Free CO₂, Dissolved Oxygen, Biochemical Oxygen Demand, Chemical Oxygen Demand, Phosphate, Nitrate, Ammonia, Sulphate, Iron

Sl. No. 18. LABORATORY ASSISTANT (Engineering & Technology Stream)

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs) divided into the parts ‘A’ and B’ of 50 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General Knowledge, General English, Numerical Aptitude, General Intelligence & Reasoning | 50 | 2 hrs |
| Part B | Subject of Engineering & Technology Stream | 50 | |
| Total | | 100 | |

SYLLABUS:

A. General Knowledge

Questions in this component will be aimed at testing the candidate’s general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. General English

Candidates’ ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

C. Numerical Aptitude

This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical

operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

D. General Intelligence & Reasoning

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding–decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series.

Part B:

Engineering & Technology Stream: The questions will be based on Basics of Energy and Renewable Energy, Solar Energy, Wind Energy, Fuel Cell and Hydrogen Energy, Fuel, Measurement and Instrumentations, Control Systems, Energy Materials, Characterization of instruments such as M-TEM, SEM, XPS, UV-VIS SPECTROPHOTOMETER, TGA; Electrical Machines; IC Engines; Furnace.

Sl. No. 18. LABORATORY ASSISTANT (Computer Stream)

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs) divided into the parts ‘A’ and B’ of 50 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General Knowledge, General English, Numerical Aptitude, General Intelligence & Reasoning | 50 | 2 hrs |
| Part B | Subject of Computer Stream | 50 | |
| Total | | 100 | |

SYLLABUS:

A. General Knowledge

Questions in this component will be aimed at testing the candidate’s general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. General English

Candidates’ ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

C. Numerical Aptitude

This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

D. General Intelligence & Reasoning

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding–decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series.

Subject of Computer Stream:

Computer Fundamentals: Generations, H/W, S/W, Number Systems and their base conversions, sign-magnitude, 1's complement and floating point representation of numbers. ASCII, EBCDIC and Unicode, BCD Codes, I/O Devices.

Data Base Systems: Concepts of databases, DBMS, normalization, MS-SQL,

Operating System: Concepts, different types, functions, Windows OS, MS-Office, Word, Excel, PowerPoint, Outlook Software Engg. (SDLC) with thorough knowledge of s/w testing.

Computer Network: Basic concepts topology types, Data Communications, N/W Security, Online Transaction Security, OSI Model devices and Protocols, Transmission.

Sl. No. 18. LABORATORY ASSISTANT (Accompanist 'Tabla and Harmonium')

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs) divided into the parts 'A' and 'B' of 50 MCQs each.

| Part | Subject | Maximum Marks | | Duration |
|--------------|--|---------------|------------|----------|
| Part A | General Knowledge, General English, Numerical Aptitude, General Intelligence & Reasoning | 50 | | 2 hrs |
| Part B | Accompanist 'Tabla' | 50 | - | |
| | Accompanist 'Harmonium' | - | 50 | |
| Total | | 100 | 100 | |

Skill Test on the Musical Instruments of the candidates qualifying the written test will be conducted. The qualified candidates are required to carry the musical instruments with them during the skill test.

SYLLABUS:**A. General Knowledge**

Questions in this component will be aimed at testing the candidate's general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. General English

Candidates' ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

C. Numerical Aptitude

This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

D. General Intelligence & Reasoning

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding-decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series.

Subject of Accompanist 'Tabla':

- Basic knowledge of vocal music and instruments used for basic.
- Writing/ basic knowledge of Taal, Laya etc.

- Accompaniment general idea and simple rules.
- Knowledge regarding different Gharanas of Tabla Pakhawaj
- Knowledge of eminent Table players in India, like Ustad, Firakwakhan, Hibibudin, Pandit Samta Prasad, Ustad Allahrakha, etc.

Subject of Accompanist ‘Harmonium’:

- Theoretical knowledge of prescribed Raagas- Yaman, Bhoopali, Bhairav, Khamaaj, Kaafi, bhairavi, Maalkaunsh, Bheempalasi, Durga, Darbari, Vrindavani sarang, Hameer, Kedar, Tilang, Peelu, Kalingada, Bageshri, Kamod, Desh, Asavari, jaunpuri, Adana, Bilawal, Jaijawanti, Bahar, Patdeep, Marwa etc.
- Detail study of prescribed Taalas with Layakari-Dadra, Keharws, Teentaal, Ektaal, Choutaal, Dhamar Tall, Jhap taal, Rupak Tall, Teevra Tall, Sul Tall etc.
- Description of Naad, Shruti, Swar, Saptak, Varna, Raag Jaati, Thaata, Raag, Taal Vaadi-Samvadi-Anuvadi-Vivadi Swar, Parmel Praveshak Raag, Raag ka Samay Sidhant (time theory of Raagas) Gamak, Meend, Kaku, Alpatva-Bahutwa, Avirbhao-Teerobhav, Graam, Murchhana, Jaati, Prabandh, Poorvang-Uttrang etc.
- Study of Harmonium and its playing method.
- Biography and its playing method.
- Biography and contribution of following-
- Pt.V.D. Paluskar, Pt. V.N. Bhatkhande, Tansen, Pt. Omkarnath Thaku, Ustad Abdul Karim Khan, Ustad Bade Ghulam Ali Khan, Pt. Bhimsen Joshi, Pt. Kishan Maharaj, Pt. Ravishankar, Pt. Hari Prasad Chourasis, Pt. Shiv Kumar Sharma etc.
- Comparison of Hindustani and Carnatic Music.
- Study of Musical Styles-Dhrupad, Dhamar, khayal, Thumri, Bhajan etc.
- Study of folk music of different parts of India.

Sl. No. 19: UPPER DIVISION CLERK

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs) divided into the parts ‘A’ and B’ of 50 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General Knowledge, General Hindi, General English, Numerical Ability, General Intelligence & Reasoning | 50 | 2 hrs |
| Part B | Knowledge of Rules of Government of India & University Administration | 50 | |
| Total | | 100 | |

In addition to the above written test, the candidates for the post of Upper Division Clerk shall have to appear in the Computer Skill Test (Qualifying Speed 30 w.p.m. in English or 25 w.p.m. in Hindi on computer). This test will be of qualifying nature and no weightage of marks scored in the Computer Skill Test shall be given in the merit.

SYLLABUS:

A. General Knowledge

Questions in this component will be aimed at testing the candidate’s general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and

Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. GENERAL HINDI

हिन्दी के प्रश्न निम्नलिखित क्षेत्रों से होंगे:

- पर्यायवाची / विलोम शब्द पर आधारित प्रश्न
- वाक्यांश के लिए एक शब्द पर आधारित प्रश्न
- वाक्य-अशुद्धि संशोधन पर आधारित प्रश्न
- मुहावरे / लोकोक्तियों पर आधारित प्रश्न
- अनेकार्थी शब्द पर आधारित प्रश्न
- वर्तनी की त्रुटि
- परिभाषि शब्दावली – प्रशासन से संबंधित अंग्रेजी शब्दों के समानार्थक हिन्दी शब्द

C. General English (10th Level)

Candidates' ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

D. Numerical Ability

This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

E. General Intelligence & Reasoning

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding–decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series.

F. Knowledge of Rules of Government of India & University Administration

Questions in this component will be aimed at testing the candidate's knowledge and awareness of central civil services (CCS) rules and University Act. etc. The test will include questions relating to Personnel Administration including recruitment, training, promotion, pay scale and service matters; including seniority and leave rules etc.; Reservation and Concessions for SC, ST, OBC, PWD etc.; Right to Information Act 2005; General Financial Rules; Fundamental and Supplementary Rules & University Act, Deemed Universities etc.

Sl. No. 20: LOWER DIVISION CLERK (INCLUDING THE LDC FOR TAKING CARE OF GUEST HOUSE AND HOSTEL)

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs).

| Subject | Maximum Marks | Duration |
|--|----------------------|-----------------|
| General Knowledge, General Hindi, General English, Numerical Ability, General Intelligence & Reasoning | 100 | 2 hrs |

Skill Test:

A skill test of typing (Qualifying Speed 35 w.p.m. in English or 30 w.p.m. in Hindi on computer) will be held after the written examination. The skill test will be of qualifying nature and assessment will not be done on the basis of marks for such tests.

SYLLABUS:

A. General Knowledge

Questions in this component will be aimed at testing the candidate's general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. GENERAL HINDI

हिन्दी के प्रश्न निम्नलिखित क्षेत्रों से होंगे:

- पर्यायवाची / विलोम शब्द पर आधारित प्रश्न
- वाक्यांश के लिए एक शब्द पर आधारित प्रश्न
- वाक्य-अशुद्धि संशोधन पर आधारित प्रश्न
- मुहावरे / लोकोक्तियों पर आधारित प्रश्न
- अनेकार्थी शब्द पर आधारित प्रश्न
- वर्तनी की त्रुटि

C. General English (10th Level)

Candidates' ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

D. Numerical Ability

This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

E. General Intelligence & Reasoning

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding-decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series.

Sl. No. 21: ATTENDANT (Kitchen)

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs).

| Subject | Maximum Marks | Duration |
|--|----------------------|-----------------|
| General Knowledge, General Hindi, General English, Numerical Ability, General Intelligence & Reasoning | 100 | 2 hrs |

Skill Test: Knowledge of Room Service/Housekeeping etc.

SYLLABUS:

A. General Knowledge

Questions in this component will be aimed at testing the candidate's general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. GENERAL HINDI

हिन्दी के प्रश्न निम्नलिखित क्षेत्रों से होंगे:

- पर्यायवाची / विलोम शब्द पर आधारित प्रश्न
- वाक्यांश के लिए एक शब्द पर आधारित प्रश्न
- मुहावरे / लोकोक्तियों पर आधारित प्रश्न
- अनेकार्थी शब्द पर आधारित प्रश्न
- वर्तनी की त्रुटि

C. General English (10th Level)

Candidates' ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

D. Numerical Ability:

This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

E. General Intelligence & Reasoning:

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding–decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series

Sl. No. 21: LABORATORY ATTENDANT (Science Stream)

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs) divided into the parts 'A' and B' of 50 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|--|---------------|----------|
| Part A | General Knowledge, General Hindi, General English, Numerical Ability, General Intelligence & Reasoning | 50 | 2 hrs |
| Part B | Physics, Chemistry, Biology | 50 | |
| Total | | 100 | |

SYLLABUS: Laboratory Attendant (Science Stream)

A. General Knowledge

Questions in this component will be aimed at testing the candidate's general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. GENERAL HINDI

हिन्दी के प्रश्न निम्नलिखित क्षेत्रों से होंगे:

- पर्यायवाची / विलोम शब्द पर आधारित प्रश्न
- वाक्यांश के लिए एक शब्द पर आधारित प्रश्न
- मुहावरे / लोकोक्तियों पर आधारित प्रश्न
- अनेकार्थी शब्द पर आधारित प्रश्न
- वर्तनी की त्रुटि

C. General English (10th Level)

Candidates' ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

D. Numerical Ability:

This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

E. General Intelligence & Reasoning:

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding–decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series

The questions in this section will be from following areas:

| Sl. No | Section | Areas |
|--------|-----------|---|
| 1 | Physics | Heat, Electricity and Magnetism, Light, Sound, Atomic Physics |
| 2 | Chemistry | Matter & Its Nature, Acid, Base & Salt, Chemical Reactions & Equations, Properties of Gases, Atomic Structure, Periodic Classification of Elements, Chemical Bonding, Organic Chemistry, Some Common Elements and Compounds |
| 3 | Biology | Cell - The Basic Unit of Life, Tissues, Microorganism, The Plant Kingdom, Nutrition, Respiratory System, Circulatory System, Excretory System, Endocrine System, Nervous System, Reproductive System, Genetics |

Sl. No. 21: LABORATORY ATTENDANT (Arts/Commerce Stream)

The written Examination will consist of an **Objective Type Paper** of 100 Multiple Choice Questions (MCQs) divided into the parts 'A' and 'B' of 50 MCQs each.

| Part | Subject | Maximum Marks | Duration |
|--------------|---|---------------|----------|
| Part A | General Knowledge, General Hindi, General English, Numerical Ability | 50 | 2 hrs |
| Part B | General Subjects comprising: History, Geography, Civics, Accounting, Banking, Economics, etc. | 50 | |
| Total | | 100 | |

SYLLABUS: Laboratory Attendant (Arts/Commerce Stream)

A. General Knowledge

Questions in this component will be aimed at testing the candidate's general awareness of the environment around him. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India especially pertaining to Sports, History, Culture, Geography, Economic Scene, General Polity, Indian Constitution and Scientific Research etc. These Questions will be such that they do not require a special study of any discipline.

B. GENERAL HINDI

हिन्दी के प्रश्न निम्नलिखित क्षेत्रों से होंगे:

- पर्यायवाची / विलोम शब्द पर आधारित प्रश्न
- वाक्यांश के लिए एक शब्द पर आधारित प्रश्न

- मुहावरे/लोकोक्तियों पर आधारित प्रश्न
- अनेकार्थी शब्द पर आधारित प्रश्न
- वर्तनी की त्रुटि

C. General English (10th Level)

Candidates' ability to understand English language, its vocabulary, sentence structure, synonyms, antonyms and its correct usage etc. Basic comprehension and writing ability, etc. will be tested.

D. Numerical Ability:

This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

E. General Intelligence & Reasoning:

Questions of verbal, non-verbal and analytical types, analogies, syllogism, similarities, differences, missing numbers, characters and sequences, space visualization, problem solving, analysis, decision making, visual memory, discrimination, observation, relationship concepts, direction sense, coding–decoding, arithmetical reasoning, verbal and figure classification, data representation and analysis, arithmetical number series

GENERAL TERMS AND CONDITIONS:

1. The University shall prescribe the minimum qualifying marks to be considered for selection for a particular post.
2. At any stage of the selection process, the University may specify cut-off qualifying marks higher than the minimum qualifying marks based on the number of vacant posts and the number of candidates qualified as per the minimum standard.
3. If circumstances so warrant, the University reserves the right to modify or remove the condition of Minimum Qualifying Marks prescribed for one or more Non-Teaching posts at any stage and/or for any component and/or for any Section. **The decision of the University shall be final and binding on each candidate.**
4. The **Skill Test**, wherever prescribed above shall be essential. However, these tests will only be of qualifying nature. **Assessment will NOT be done on the basis of marks of such tests.**

IMPORTANT NOTE: If required, the University shall hold Skill Test for any Non-Teaching Positions even for such Non-Teaching posts for which the University has not mentioned about Skill Test while advertising the various Non-Teaching Positions vide *Advertisement No. CUJ/Advt./01/2018-19 dated 8th March, 2019*. The decision of the University shall be final and binding on each candidate.

5. The appointment of the candidate on the basis of marks in Written Examinations shall be provisional and subject to qualifying in skill test, if any; verification of her/his Character & Antecedents; and if applicable her/his Caste/Tribe/Community Certificate from the respective authorities through proper channel. If the verification reveals anything adverse about her/his character and antecedents and/or that the claim to belong to the Scheduled Caste/Scheduled Tribe/Other Backward Class (Non-Creamy Layer), as the case may be, is false, her/his services will be terminated forthwith without assigning any reasons thereof and without prejudice to such further action as may be taken under the provisions of the Indian Penal Code for production of false certificates.

6. **The list of candidates to be called for Written Examination and details regarding Date, Time, Venue of Written Examination and Hall Ticket/Admit Card shall be notified on the University Website (www.cuj.ac.in).** Therefore, the candidates are advised to check the University Website regularly.
7. **NEGATIVE MARKING: There will be negative marks for wrong answers in the objective tests. One-Fourth of the Correct Answer (i.e., 0.25 marks) will be deducted for each wrong answer.**
8. **USE OF UNFAIR MEANS:** Candidates are not permitted to use Mobile Phone, Calculators or any other electronic / electrical device. Candidates, therefore, **MUST NOT** bring Mobile Phone, Calculators or any other electronic / electrical device inside the Examination premises. Possession of these items, whether in use or not, will be considered as **“use of unfair means”** in the Examination and appropriate action will be taken by the University against such candidates.
9. Success in the examination confers no right for selection unless the University is satisfied after such verification, as may be considered necessary about the candidate, having regard to her/his conduct in service, that she/he is eligible and suitable in all respects for appointment to the post for which the examination is conducted.
10. The Compensatory time for PWD candidates shall be given as per rules, if any.
11. Candidates are warned that they should not furnish any particulars that are false or suppress any material information in filling up the application form. Candidates are also warned that they should in no case correct or alter or otherwise tamper with any entry in a document or its attested/certified copy submitted by them nor should they submit a tampered/fabricated document. If there is any inaccuracy or any discrepancy between two or more such documents or their attested/certified copies, an explanation regarding this discrepancy should be submitted.
12. **Action against Candidates found Guilty of Misconduct**

A candidate will be disqualified, if she/he has been declared by the University to be guilty of:

- i Obtaining support of his/her candidature by any means; or
- ii Impersonating; or
- iii Procuring impersonation by any person;
- iv Submitting fabricated documents or documents which have been tampered with; or
- v Making statements which are incorrect or false or suppressing material information; or
- vi Resorting to any other irregular or improper means in connection with his/her candidature for the selection; or
- vii Using unfair means during the test; or
- viii Writing irrelevant matter including obscene language or pornographic matter, in the script(s);
or
- ix Misbehaving in any other manner in the examination hall; or
- x Harassing or doing bodily harm to the staff employed by the University for the conduct of their test; or
- xi Bringing mobile Phone/communication device in the Examination Hall/Interview Room; or
- xii Attempting to commit or, as the case may be, abetting the University of all or any of the acts specified in the foregoing clauses may, in addition to rendering himself/herself liable to criminal prosecution, be liable to be disqualified by the University from selection for which he/she is a candidate; and/or to be debarred either permanently or for a specified period by the:
 - a University from any Examination or Selection held by them.
 - b University from taking admission under the courses offered by them.

xiii if he/she is already in service under Government to disciplinary action under the appropriate rules.

13. Resolution of Tie Cases

- a. In case of a tie, the tie will be resolved by the University by referring to the marks scored by the candidates in Part B (wherever Part B exists) i.e., a candidate having more marks in the Part B will be given preference.
- b. If the tie still persists, the candidate older in age gets preference.
- c. If the tie still persists, it is finally resolved by referring to the alphabetical order of names i.e. a candidate whose name begins with the alphabet which comes first in the alphabetical order gets preference.

14. Universities Decision Final:

The decision of the University in all matters relating to eligibility, acceptance or rejection of the applications, penalty for false information, mode of selection, conduct of examination(s), allotment of examination centres and preparation of merit list will be final and binding on the candidates and no enquiry/correspondence will be entertained in this regard.

15. Court's Jurisdiction:

In case of any dispute, any suite or legal proceeding against the University in regard to this recruitment, the territorial jurisdiction shall be Hon'ble Jharkhand High Court at Ranchi.

IMPORTANT NOTE:

1. The candidates applied for any Non-Teaching Positions should ensure that they fulfill all the eligibility conditions for admission to the Written Examination. Their admission at all the stages of Written Examination will be purely provisional, subject to their satisfying the prescribed eligibility conditions. If, on verification, at any time before or after the Written Examination and Skill Test (wherever applicable), it is found that they do not fulfill any of the eligibility conditions, their candidature for the examination will be cancelled by the University.
2. The candidates must carry at least one latest photo bearing identification proof such as Driving License / Voter Card / Aadhaar Card / Identity Card issued by University / College, Income Tax Pan Card in original to the Examination Centre, failing which they will not be allowed to appear for the same.
3. Any attempt to influence the authorities by way of recommendations will ab-initio disqualify the candidate.

Sd/-
REGISTRAR
Central University of Jharkhand