

विश्वेश्वरय्या राष्ट्रीय प्रौद्योगिकी संस्थान, नागपूर— 440 010 VISVESVARAYA NATIONAL INSTITUTE OF TECHNOLOGY, NAGPUR – 440 010

Non-Teaching Staff Recruitment 2022 Syllabus for Written Test & Skill Test

SM-1(A) Superintendent (Pay level 06)

Written Test:

General Knowledge and Current Affairs – A standard pattern similar to one used by Staff Selection Commission for Combined higher secondary level examination or banking clerical examination can be conducted. Current Affairs questions can also be included in this. Knowledge level to test supervisory skills will also be included.

General English: Error recognition, Fill in the blanks with appropriate terms, Vocabulary, Grammar with special reference to Sentence Structure, Synonyms, Antonyms etc. Knowledge level to test supervisory skills will also be included.

General Aptitude & Reasoning: Questions on reasoning and problem solving, analysis, judgment, decision making, visual memory, relationship concepts, verbal and figure classification, arithmetical number series, non-verbal series etc. Knowledge level to test supervisory skills will also be included.

Mathematics: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT

Science, Computer application and Other Subjects: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT.

Skill Test:

Applications for everyday office work like Word Processing, MS Word, MS Excel, Spread Sheet etc. including usage of internet, drafting, etc. The skill test shall include a knowledge of basic government rules. Knowledge of procurement, Tally, financial rules, comparative statements, bids, accounting process, balance sheet etc. will be included.

CCS (CCA) Rules 1965, CCS Conduct Rules, Office procedure, Rules for TA/DA, LTC, RTI Act 2005 along with amendments, Manual of Office Procedure, Types of official correspondence, CCS Leave Rules 1972, CCS (Pension) Rule and NPS, NIT Acts and statutes, GFR-2017, Brief about Ministry of Education, Govt. of India, Education System in India, Types of Educational Institutions and Educational Institute Ranking System in India, NEP-2020, Computer Fundamentals.

Noting/ Drafting, Computer Proficiency Test for test of working knowledge of MS-Word, Excel, Power Point, Access & other office tools.

VNIT Recruitment 2022 Page 1 of 16

SM-1(B) Personal Assistant (Pay level 06)

Written Test:

General Knowledge and Current Affairs – A standard pattern similar to one used by SSC for Combined higher secondary level examination or banking clerical examination can be conducted. Current Affairs questions can also be included in this. Knowledge level to test supervisory skills will also be included.

General English: Error recognition, Fill in the blanks with appropriate terms, Vocabulary, Grammar with special reference to Sentence Structure, Synonyms, Antonyms etc. Knowledge level to test supervisory skills will also be included.

General Aptitude & Reasoning: questions on reasoning and problem solving, analysis, judgment, decision making, visual memory, relationship concepts, verbal and figure classification, arithmetical number series, non-verbal series etc. Knowledge level to test supervisory skills will also be included.

Mathematics: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT

Science, Computer application and Other Subjects: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT.

Skill Test:

Applications for everyday office work like Word Processing, MS Word, MS Excel, Spread Sheet, Power Point, etc. including usage of internet, drafting, etc. Basic government rules. Knowledge of procurement, tally, financial rules, comparative statements, bids, accounting process, balance sheet etc.

CCS (CCA) Rules 1965, CCS conduct rules, Office procedure, rules for TA/DA, LTC, RTI Act 2005 along with amendments, Manual of Office Procedure, Types of official correspondence, CCS Leave Rules 1972, CCS (Pension) Rule and NPS, NIT Acts and statutes, GFR-2017, Brief about Ministry of Education, Govt. of India, Education System in India, Types of Educational Institutions and Educational Institute Ranking System in India, NEP-2020, Computer Fundamentals.

Noting/ Drafting, Computer Proficiency Test for test of working knowledge of MS-Word, Excel, Power Point, Access & other office tools. Test of Stenography.

SM-2(A) Technical Assistant (Pay level 06)

Written Test:

General Knowledge and Current Affairs – A standard pattern similar to one used by SSC for Combined higher secondary level examination or banking clerical examination can be conducted. Current Affairs questions can also be included in this. Knowledge level to test supervisory skills will also be included.

General English: Error recognition, Fill in the blanks with appropriate terms, Vocabulary, Grammar with special reference to Sentence Structure, Synonyms, Antonyms etc. Knowledge level to test supervisory skills will also be included.

General Aptitude & Reasoning: Questions on reasoning and problem solving, analysis, judgment, decision making, visual memory, relationship concepts, verbal and figure classification, arithmetical number series, non-verbal series etc. Knowledge level to test supervisory skills will also be included.

Mathematics: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT

Science, Computer application and Other Subjects: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT.

Skill Test:

Question based on topics including Science, Units, Measurements, Mass Weight and Density, Work Power and Energy, Speed and Velocity, Heat and Temperature, , Basic Electricity, Levers and Simple Machines, Occupational Safety and Health, Environment Education, IT Literacy.

Science (Class 10+2 Level): Permutation and combinations, probability and statistics, Mathematical Reasoning, Physical World and Measurement, Laws of Motion, Electrostatic, Current Electricity, Magnetic Effects of Current and Magnetism, Electronic Devices, Optics, Thermodynamics, Basic Concepts of Chemistry, Structure of Atom, Classification of Elements and Periodicity in Properties, Coordination chemistry, States of Matter: Gases and Liquids, Electrochemistry, chemical kinetics, Organic Chemistry - Some Basic Principles and Techniques, Functional group inter-conversion, Mechanism of organic reaction, Biomolecules, Environmental Chemistry.

Units and Measurement: Definition, Classifications: Fundamental and Derived units, Systems of units: FPS, CGS, MKS, Units of physical quantities, symbols, Conversion factors Measurement of mechanical quantities, electrical quantities, Related problems.

Mass Weight and Density: Definition, Comparison between mass and weight, Comparison between density and relative density/specific gravity, Volume of different geometries (Cube, Cylinder, Cone, Sphere etc.), related problems.

Work Power and Energy: Definition, Work and its Units, Measurement of work, Work done on bodies moving on horizontal arid inclined planes (consider frictional forces also) Concept of Power VNIT Recruitment 2022

Page 3 of 16

and its units, Calculations of power (simple cases), Concept of Kinetic energy and potential energy, Expressions for P.E and K.E, Principle of conservation of energy, Related problems. Speed and Velocity: Definition of speed, velocity and their comparison, Scalar and Vector quantity, Average Velocity, Acceleration & Retardation, Equations of motion, Circular Motion: Relation between circular motion and Linear motion, Related problems.

Heat and Temperature: Definition, Specific Heat and Thermal Capacity, Types of heat: Sensible Heat, Latent Heat, Difference between heat and temperature, Different temperature scales and conversions, Temperature measuring instruments. Basic Electricity: Source of electricity: Battery, Generator, Thermocouple, Types of electric current: Direct current, Alternate current, Difference between AC and DC, Electrical Terms and units, Ohm's Law, Kirchhoffs law Relationships between Current, Volt, Resistance and Power, Resistance connections, Simple Problems on series and parallel circuits,

Insulators: Properties and Classification, Conductors: Properties and Classification, Electric Power, Horse Power, Work and energy. Levers and Simple Machines: Definitions, Velocity ratio, Mechanical Advantages, Efficiency and relationships, Ideal Machines,

Lever: Principle, Types (First order lever, Second order lever, Third order lever), Relationship, law of machine, simple machines.

Occupational Safety, Health: Safety & Health: Introduction and Importance of Occupational Safety and Health Occupational Hazards: Basic Hazards, Chemical Hazards, Vibroacoustic Hazards, Mechanical Hazards, Electrical Hazards, Thermal Hazards. Occupational health, Occupational hygienic, Occupational Diseases/ Disorders & its prevention, Accident & safety: Basic principles for protective equipment, Accident Prevention techniques - control of accidents and safety measures, First Aid: Care of injured & Sick at the workplaces, First-Aid & Transportation of sick person, Basic Provisions: Idea of basic provision of safety, health, welfare under legislation of India.

Environment Education: Ecosystem: Introduction to Environment, Relationship between Society and Environment, Ecosystem and Factors causing imbalance, Pollution: Pollution and pollutants including liquid, gaseous, solid and hazardous waste, Energy Conservation: Conservation of Energy, re-use and recycle, Global warming: Global warming, climate change and Ozone layer depletion, Ground Water: Hydrological cycle, ground and surface water, Conservation and Harvesting of water, Environment: Right attitude towards environment, Maintenance of in-house environment.

I.T. Literacy: Computer: Introduction, Computer and its applications, Hardware and peripherals, switching on and shutting down of computer, WINDOWS: Basics of Operating System, WINDOWS, Create, Copy, Move and delete Files and Folders, Use of External memory like pen drive, CD, DVD etc. MS office: Basic operations of Word Processing, Excel worksheet, INTERNET: Computer Networks Applications of Internet, Web Browsing, Information Security and antivirus tools.

VNIT Recruitment 2022 Page 4 of 16

SM-2(B1) Jr. Engineer (Civil) (Pay level 06)

Written Test:

General Knowledge and Current Affairs – A standard pattern similar to one used by SSC for Combined higher secondary level examination or banking clerical examination can be conducted. Current Affairs questions can also be included in this. Knowledge level to test supervisory skills will also be included.

General English: Error recognition, Fill in the blanks with appropriate terms, Vocabulary, Grammar with special reference to Sentence Structure, Synonyms, Antonyms etc. Knowledge level to test supervisory skills will also be included.

General Aptitude & Reasoning: Questions on reasoning and problem solving, analysis, judgment, decision making, visual memory, relationship concepts, verbal and figure classification, arithmetical number series, non-verbal series etc. Knowledge level to test supervisory skills will also be included.

Fundamental of Civil Engineering

Mathematics: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT

Science, Computer application and Other Subjects: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT.

Skill Test:

Building materials, estimating, costing and valuation, surveying, soil mechanics, hydraulics, irrigation engineering, transportation engineering, environmental engineering.

Units, Measurements, Mass Weight and Density, Work Power and Energy, Speed and Velocity, Heat and Temperature, Basic Electricity, Levers and Simple Machines, Occupational Safety and Health, Environment Education, IT Literacy.

SM-2(B2) Jr. Engineer (Electrical) (Pay level 06)

Written Test:

General Knowledge and Current Affairs – A standard pattern similar to one used by SSC for Combined higher secondary level examination or banking clerical examination can be conducted. Current Affairs questions can also be included in this. Knowledge level to test supervisory skills will also be included.

General English: Error recognition, Fill in the blanks with appropriate terms, Vocabulary, Grammar with special reference to Sentence Structure, Synonyms, Antonyms etc. Knowledge level to test supervisory skills will also be included.

General Aptitude & Reasoning: Questions on reasoning and problem solving, analysis, judgment, decision making, visual memory, relationship concepts, verbal and figure classification, arithmetical number series, non-verbal series etc. Knowledge level to test supervisory skills will also be included. Basics of Electrical Engineering

Mathematics: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT

Science, Computer application and Other Subjects: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT.

Skill Test:

Basic concepts of electrical engineering, circuit law, magnetic circuit, AC fundamentals, measurements and measuring instruments, electrical machines, generation, transmission, and distribution, estimation and costing, utilization and electrical energy, wiring, cables, protection, illumination, basic electronics, power electronics.

Units, Measurements, Mass Weight and Density, Work Power and Energy, Speed and Velocity, Heat and Temperature, Levers and Simple Machines, Occupational Safety and Health, Environment Education, IT Literacy.

VNIT Recruitment 2022 Page 6 of 16

SM-2(B3) Library and Information Assistant (Pay level 06)

Written Test:

General Knowledge and Current Affairs – A standard pattern similar to one used by SSC for Combined higher secondary level examination or banking clerical examination can be conducted. Current Affairs questions can also be included in this. Knowledge level to test supervisory skills will also be included.

General English: Error recognition, Fill in the blanks with appropriate terms, Vocabulary, Grammar with special reference to Sentence Structure, Synonyms, Antonyms etc. Knowledge level to test supervisory skills will also be included.

General Aptitude & Reasoning: Questions on reasoning and problem solving, analysis, judgment, decision making, visual memory, relationship concepts, verbal and figure classification, 2 arithmetical number series, non-verbal series etc. Knowledge level to test supervisory skills will also be included.

Mathematics: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT.

Science, Computer application and Other Subjects: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT.

Skill Test:

Library and Society: Laws of Library Science; Types of Libraries; Library Associations, Systems and Programs; Library Movement and Library Legislation in India; Organizations and Institutions involved in the development of Library and Information Services - UNESCO, IFLA, FID, INIS, NISSAT, etc.;

Library Management: Collection development - Types of Documents and Selection Principles, Acquisition Procedure, Acquisition of Journals and Periodicals, Preparation of Documents for use; Library Personnel and Library Committee, Library Rules and Regulations; Library Finance and Budget; Principles of Library Management, Library Organization and Structure; Use and Maintenance of the Library - Circulation, Maintenance, Shelving, Stock Verification, Binding and Preservation, Weeding out, etc.;

Library Classification Theory and Practice: Canons and Principles, Library Classification Schemes DDC, CC, UDC;

Library Cataloguing Theory and Practice: Canons and Principles; Library Cataloguing Codes - CCC and AACR;

Reference and Information Sources: Bibliography and Reference Sources - Types of Bibliography; Reference Sources - Dictionaries, Encyclopedias, Ready Reference Sources, etc.; Sources of Information Primary, Secondary, Tertiary, Documentary, Non-Documentary; E- Documents, EBooks, E-Journals, etc.;

Information Services: Concept and need for Information; Types of Documents; Nature and organization of Information Services, Abstracting and Indexing Services; Computer based Information Services - CAS, SDI;

Information Technology: Basics Introduction to Computers; Use of computers in Library housekeeping, Library Automation; Software and software packages; Networks - DELNET, NICNET, etc.; National and International Information Systems - NISSAT, NASSDOC, INSDOC, DESIDOC, etc.

VNIT Recruitment 2022 Page 7 of 16

SM-2(B4) SAS Assistant (Pay level 06)

Written Test:

General Knowledge and Current Affairs – A standard pattern similar to one used by SSC for Combined higher secondary level examination or banking clerical examination can be conducted. Current Affairs questions can also be included in this. Knowledge level to test supervisory skills will also be included.

General English: Error recognition, Fill in the blanks with appropriate terms, Vocabulary, Grammar with special reference to Sentence Structure, Synonyms, Antonyms etc. Knowledge level to test supervisory skills will also be included.

General Aptitude & Reasoning: Questions on reasoning and problem solving, analysis, judgment, decision making, visual memory, relationship concepts, verbal and figure classification, arithmetical number series, non-verbal series etc. Knowledge level to test supervisory skills will also be included.

Mathematics: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT

Science, Computer application and Other Subjects: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT.

Skill Test:

Physical Education - Meaning, Definition, Aims, Objectives and Scope. History of Physical Education in Ancient Greece: in Reference to Sparta and Athens. Philosophy: Meaning, functions of Philosophy, Idealism, Realism, Naturalism, Pragmatism, Arjuna Award, Dronacharya Award /MAKA Trophy. Ancient and Modern Olympic Game, Commonwealth Games.

Meaning of kinesiology, aims and objectives of kinesiology. Importance of kinesiology in physical education. Meaning structure and chemical composition of bones. Functions and types of bones. Common postural deformities i.e. flat foot, bow legs, knock knees, lordosis, scoliosis, kyphosis, and round shoulders, their causes and remedial 'measures. Motion and types of motion & Newton's law of motion.

Meaning and Definition of Test, Measurement, & Evaluation. Philip's J.C.R Test, AAHPER Youth, Fitness Test, Tuttle Pulse Ratio Test, Harvard Step Test) Johnson Basketball Test, Knox Basketball Test, Modified Brady Volleyball Test, Russell-Lange Volleyball Test. Somatotyping. Meaning of Somatotyping Brief Account of Kretchmer's Body Type, Brief Account of Sheldon Body Classification.

Meaning and Definition of Sports Training, Aims and Objectives of Sports Training. Meaning and Types, Talent Identification and its Importance. Meaning of Training Load, Principle of Training

VNIT Recruitment 2022 Page 8 of 16

Load, Overload Causes and Symptoms of Overload. Definition and Meaning of Endurance, Types of Endurance, Factor Affecting Endurance, Methods of Developing Endurance Definition Meaning of Flexibility, Types of Flexibility, Factor Affecting Flexibility, Methods of Developing Flexibility. Muscular System: Classification of Muscles, Functions and Types of Muscles, Concept of Homeostasis and its Relevance to Physical Education and Sports, Brief Introduction of the Cardiovascular System: The Heart & its Structure and Function, Cardiac Cycle, Mechanism of Blood Circulation, Composition and Function of Blood, Brief Introduction of the Respiratory System, Structure and Functions, Mechanism of Respiration, Types of Respiration.

Sports Psychology, Nature, Scope and Importance III Physical Education Methods of Sports Psychology. Concept of Learning, Theories and Laws of Learning and principles of learning. Meaning and Types Dynamics of Motivation in Sports. Techniques of Motivation. Intelligence, Definition and Meaning of Intelligence, Theories of Intelligence, Role of Intelligence in Sports. Definition, Meaning and Importance of Officiating, Principles of Officiating, Qualities of good Officials. Duties of Officials:- Pre-game, During Game, Post Game, Measures for Improving the Standard of Officials. Rules of Different games and Dimensions of Play fields:-Basketball, Handball, Kabaddi, Volleyball. Methods of Conditioning and Training, Continuous Training Method, Interval Training Method, Repetition Training Method.

VNIT Recruitment 2022 Page 9 of 16

SA-1 Office Attendant (Pay level 01)/ Lab Attendant (Pay level 01)

Written Test

(Questions Upto 10th Class syllabus or banking clerical examination)

Aptitude - Averages, Number System, Profit and Loss, Time and Work, Problems on Trains, Calendar, Area, Problems on Numbers, Square Root and Cube Root, Interest, Percentage, Ratio, Time and Distance, Problems on Ages, Clock, Simplifications, Odd Man Out Series.

Reasoning - Number Series Compilation, Missing Number Finding, Continuous Pattern Series, Direction Sense Test, Series Compilations, Classification, Missing Character Finding, Odd Man Out, Blood Relations, Analogy, Coding and Decoding, Syllogisms, Letter and Symbol Series, Verbal Reasoning, Statement and Conclusions, Letter and Symbol Series, Logical Problems, Arithmetic Reasoning, Logical Sequence of Words, Analogies.

General - English- Antonyms, Synonyms, Spelling Check, Active/Passive Voice, Spotting Errors, Sentence Improvement, One Word Substitutes, Selecting Words, Sentence Corrections, Idioms and Phrases, Common Error Detection, Ordering of Words, Verbal Analogies, Sentence Formation, Completing Statements, Change of Speech.

Skill Test

Computer Fundamentals: Operating System, MS Word, MS Excel & Spreadsheet, Power Point. **GK** - Indian History, Indian Economy, Indian Culture, Sports, Books and Authors, Famous Personalities, Constitution of India, Geography, Days and Years, Environmental Science, General Science, Inventions, Basic General Knowledge, Awards and Honors, Famous Places in India, World Organization, Current Affairs.

Reading Comprehension.

Test of computer knowledge.

Knowledge about basic lab equipment, safety and precautions, identification of lab instruments, basic computer knowledge etc.

SA-2 Junior Assistant (Pay level 03)

Written Test:

General Knowledge and Current Affairs – A standard pattern similar to one used by the Staff Selection Commission for Combined higher secondary level examination or banking clerical examination can be conducted. Current Affairs questions are also to be included in this.

General English: Error recognition, Fill in blanks with appropriate terms, Vocabulary, Grammar with special reference to Sentence Structure, Synonyms, Antonyms etc.

General Aptitude & Reasoning: Questions on reasoning and problem solving, analysis, judgment, decision making, visual memory, relationship concepts, verbal and figure classification, 2 arithmetical number series, non-verbal series etc.

Mathematics: Time and Work, Ratio and Proportion, Simple and Compound Interest, Area, Volume, Percentage, Mensuration, Time and Distance, Profit-Loss, LCM and HCF, Permutation and Combination, Probability, Average, Simple and Quadratic Equations, Number Classification, Venn diagrams, Visual Memory, Shapes, Odd man out, Discrimination, Figural Classification, Similarities, Letter series, Arithmetical Number Series, Semantic Analogy, Number series Relationship Concepts. **Science, computer application and Other Subjects:** Class 10th Syllabus of NCERT.

Skill Test:

Data Interpretation and Computer Proficiency: Questions to test candidate's knowledge of Computer Applications like Word Processing, MS Word, MS Excel, Spread Sheet etc. including Data tabulation/plotting, Pie Chart, Bar Chart for everyday office work. Usage of internet, Email, drafting, typing, tally, financial rules, comparative statements, bids, accounting process, etc. will be included.

General Awareness: Indian History, Indian Economy, Indian Culture, Sports, Books and Authors, Famous Personalities, Geography, Days and Years, Environmental Science, General Science, Inventions, Basic General Knowledge, Awards and Honors, Famous Places in India, World Organization, Current Affairs. Functioning and structure of Government, Government Policy.

Miscellaneous: Basic Knowledge of NITs and its Act and statutes, GFR-20 17, Brief about Ministry of Education, Govt. of India, Education System in India, Types of Educational Institutions and Educational Institute Ranking System in India, Manual of Office Procedure, Types of official correspondence, basic knowledge of official matters, service matter and leave rules, NPS, NEP-2020, GeM etc.

SA-3(A) Senior Assistant (Pay level 4)

Written Test:

General Intelligence & Reasoning: Questions on analogies, similarities and differences, space visualization, problem solving, analysis, judgement, decision making, visual memory, discriminating observation, relationship concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series, non-verbal series etc. The test will also include questions designed to test the candidate's abilities to deal with abstract ideas and symbols and their relationship, arithmetical computation and other analytical functions.

General Awareness: Questions related to general awareness of the environment around and its application to society. Questions will also be designed to test knowledge of current events and of such matters of everyday observation and experience in their scientific aspects as may be expected of an educated person. The test will also include questions relating to India and its neighbouring countries especially pertaining to Sports, History, Culture, Geography, Economic scene, General Polity including Indian Constitution, and Scientific Research etc.

English Language & Comprehension: Understanding of the English Language, its vocabulary, grammar, sentence structure, synonyms, antonyms and its correct usage, etc.

Mathematics: Time and work, Ratio and Proportion, Simple and compound interest, Area, Volume, Percentage, Mensuration, Time and distance, Profit-loss, L.C.M. and H.C.F, Permutations and combinations, Probability, Average, Simple and quadratic equations, Number classification, Venn diagrams, Visual memory, shapes, odd man out, discrimination, Figural classification, Similarities, Letter series, Arithmetical number series, Semantic analogy, Number series relationship concepts. **Science, computer application and Other Subjects:** Class 10th Syllabus of NCERT.

Skill Test:

General Awareness: Indian History, Indian Economy, Indian Culture, Sports, Books and Authors, Famous Personalities, Geography, Days and Years, Environmental Science, General Science, Inventions, Basic General Knowledge, Awards and Honors, Famous Places in India, World Organization, Current Affairs. Functioning and structure of Government, Government Policy.

Miscellaneous: Questions related to procedures of Government Offices and Rules, Institute working system, basic Knowledge of NITs and its Act and statutes, GFR-20 17, Brief about Ministry of Education, Govt. of India, Education System in India, Types of Educational Institutions and Educational Institute Ranking System in India, Manual of Office Procedure, Types of official correspondence, basic knowledge of official matters, service matter and leave rules, NPS, NEP-2020, GeM etc.

Data Interpretation and Computer proficiency-Questions to test the candidate's knowledge of Computer applications for everyday office work like Word Processing, MS Word, MS Excel, Spread Sheet etc. including data tabulation/plotting, interpretation of Pie Chart, Bar Chart. Familiarity with the Operating System and usage of internet, E-mail, Antivirus, drafting, typing etc.

SA-3(B) Stenographer (Pay level 4)

Written Test:

General Intelligence & Reasoning: Questions on analogies, similarities and differences, space visualization, problem solving, analysis, judgement, decision making, visual memory, discriminating observation, relationship concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series, non-verbal series etc. The test will also include questions designed to test the candidate's abilities to deal with abstract ideas and symbols and their relationship, arithmetical computation and other analytical functions.

General Awareness: Questions related to general awareness of the environment around and its application to society. Questions will also be designed to test knowledge of current events and of such matters of everyday observation and experience in their scientific aspects as may be expected of an educated person. The test will also include questions relating to India and its neighbouring countries especially pertaining to Sports, History, Culture, Geography, Economic scene, General Polity including Indian Constitution, and Scientific Research etc.

English Language & Comprehension: In addition to the testing of candidates understanding of the English Language, its vocabulary, grammar, sentence structure, synonyms, antonyms and its correct usage, etc. his/her writing ability, would also be tested.

Mathematics: Time and work, Ratio and Proportion, Simple and compound interest, Area, Volume, Percentage, Mensuration, Time and distance, Profit-loss, L.C.M. and H.C.F, Permutations and combinations, Probability, Average, Simple and quadratic equations, Number classification, Venn diagrams, Visual memory, shapes, odd man out, discrimination, Figural classification, Similarities, Letter series, Arithmetical number series, Semantic analogy, Number series relationship concepts. **Science, computer application and Other Subjects:** Class 10th Syllabus of NCERT.

Skill Test:

General Awareness: Indian History, Indian Economy, Indian Culture, Sports, Books and Authors, Famous Personalities, Geography, Days and Years, Environmental Science, General Science, Inventions, Basic General Knowledge, Awards and Honors, Famous Places in India, World Organization, Current Affairs. Functioning and structure of Government, Government Policy.

Miscellaneous: Questions related to procedures of Government Offices and Rules, Institute working system, basic Knowledge of NITs and its Act and statutes, GFR-20 17, Brief about Ministry of Education, Govt. of India, Education System in India, Types of Educational Institutions and Educational Institute Ranking System in India, Manual of Office Procedure, Types of official correspondence, basic knowledge of official matters, service matter and leave rules, NPS, NEP-2020, GeM etc.

Data Interpretation and Computer proficiency- Questions to test the candidate's knowledge of Computer applications for everyday office work like Word Processing, MS Word, MS Excel, Spread Sheet etc. including data tabulation/plotting, interpretation of Pie Chart, Bar Chart. Familiarity with the Operating System and usage of internet, E-mail, Antivirus, drafting, typing etc. Test of Stenography, level wise.

SA-4 Senior Stenographer (Pay level 5)

Written Test:

General Intelligence & Reasoning: It would include questions of both verbal and nonverbal type. The test will include questions on analogies, similarities and differences, space visualization, problem solving, analysis, judgement, decision making, visual memory, discriminating observation, relationship concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series, non-verbal series etc. The test will also include questions designed to test the candidate's abilities to deal with abstract ideas and symbols and their relationship, arithmetical computation and other analytical functions.

General Awareness: Questions will be designed to test the ability of the candidate's general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current events and of such matters of everyday observation and experience in their scientific aspects as may be expected of an educated person. The test will also include questions relating to India and its neighbouring countries especially pertaining to Sports, History, Culture, Geography, Economic scene, General Polity including Indian Constitution, and Scientific Research etc. These questions will be such that they do not require a special study of any discipline.

English Language & Comprehension: In addition to the testing of candidates' understanding of the English Language, its vocabulary, grammar, sentence structure, synonyms, antonyms and its correct usage, etc. his/her writing ability, would also be tested.

Mathematics: Time and work, Ratio and Proportion, Simple and compound interest, Area, Volume, Percentage, Mensuration, Time and distance, Profit-loss, L.C.M. and H.C.F, Permutations and combinations, Probability, Average, Simple and quadratic equations, Number classification, Venn diagrams, Visual memory, shapes, odd man out, discrimination, Figural classification, Similarities, Letter series, Arithmetical number series, Semantic analogy, Number series relationship concepts.

Science, computer application and Other Subjects: Class 10th Syllabus of NCERT.

Skill Test:

Test can be computer based. Questions to test the candidate's knowledge of Computer Applications for everyday office work like Word Processing, MS Word, MS Excel, Spread Sheet etc. including usage of internet, drafting, typing speed etc. The skill test shall include a knowledge of basic government rules. Knowledge of procurement, tally, financial rules, comparative statements, bids, accounting process, balance sheet etc. will be included.

General Awareness: Indian History, Indian Economy, Indian Culture, Sports, Books and Authors, Famous Personalities, Geography, Days and Years, Environmental Science, General Science, Inventions, Basic General Knowledge, Awards and Honors, Famous Places in India, World Organization, Current Affairs. Functioning and structure of Government, Government Policy.

Miscellaneous: Basic Knowledge of NITs and its Act and statutes, GFR-20 17, Brief about Ministry of Education, Govt. of India, Education System in India, Types of Educational Institutions and Educational Institute Ranking System in India, Manual of Office Procedure, Types of official correspondence, basic knowledge of official matters, service matter and leave rules, NPS, NEP-2020, GeM etc.

Computer proficiency test-for the test of working knowledge of MS-Word, Spreadsheets and Excel, Power Point, Access & other office tools. Test of Stenography, level wise.

SA-5 Technician (Pay Level 3)

Written Test:

General Knowledge and Current Affairs – A standard pattern similar to one used by SSC for Combined higher secondary level examination or banking clerical examination can be conducted. Current Affairs questions can also be included in this. Knowledge level to test supervisory skills will also be included.

General English: Error recognition, Fill in the blanks with appropriate terms, Vocabulary, Grammar with special reference to Sentence Structure, Synonyms, Antonyms etc. Knowledge level to test supervisory skills will also be included.

General Aptitude & Reasoning: Questions on reasoning and problem solving, analysis, judgment, decision making, visual memory, relationship concepts, verbal and figure classification, 2 arithmetical number series, non-verbal series etc. Knowledge level to test supervisory skills will also be included.

Mathematics: Knowledge level to test supervisory skills will also be included. As per Minimum qualification for the post. Class 10th Syllabus of NCERT.

Science, Computer application and Other Subjects: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT

Skill Test:

Applications for everyday office work like Word Processing, MS Word, MS Excel, Spread Sheet etc. including usage of internet, drafting, etc. The skill test shall include a knowledge of basic government rules. Knowledge of procurement, tally, financial rules, comparative statements, bids, accounting process, balance sheet etc. will be included.

General Awareness: Indian History, Indian Economy, Indian Culture, Sports, Books and Authors, Famous Personalities, Geography, Days and Years, Environmental Science, General Science, Inventions, Basic General Knowledge, Awards and Honors, Famous Places in India, World Organization, Current Affairs. Functioning and structure of Government, Government Policy.

Miscellaneous: Basic Knowledge of NITs and its Act and statutes, GFR-20 17, Brief about Ministry of Education, Govt. of India, Education System in India, Types of Educational Institutions and Educational Institute Ranking System in India, Manual of Office Procedure, Types of official correspondence, basic knowledge of official matters, service matter and leave rules, NPS, NEP-2020, GeM etc.

Tool recognition, knowledge of trade passed, reading of working drawings, knowledge of computer skills etc.

SA-6 Senior Technician (Pay Level 4):

Written Test:

General Knowledge and Current Affairs – A standard pattern similar to one used by SSC for Combined higher secondary level examination or banking clerical examination can be conducted. Current affairs questions can also be included in this. Knowledge level to test supervisory skills will also be included.

General English: Error recognition, Fill in the blanks with appropriate terms, Vocabulary, Grammar with special reference to Sentence Structure, Synonyms, Antonyms etc. Knowledge level to test supervisory skills will also be included.

General Aptitude & Reasoning: Questions on reasoning and problem solving, analysis, judgment, decision making, visual memory, relationship concepts, verbal and figure classification, arithmetical number series, non-verbal series etc. Knowledge level to test supervisory skills will also be included.

Mathematics: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT

Science, Computer application and Other Subjects: Knowledge level to test supervisory skills will also be included. Class 10th Syllabus of NCERT.

Skill Test:

Applications for everyday office work like Word Processing, MS Word, MS Excel, Spread Sheet etc. including usage of internet, drafting, etc. The skill test shall include a knowledge of basic government rules. Knowledge of procurement, tally, financial rules, comparative statements, bids, accounting process, balance sheet etc. will be included.

General Awareness: Indian History, Indian Economy, Indian Culture, Sports, Books and Authors, Famous Personalities, Geography, Days and Years, Environmental Science, General Science, Inventions, Basic General Knowledge, Awards and Honors, Famous Places in India, World Organization, Current Affairs. Functioning and structure of Government, Government Policy.

Miscellaneous: Basic Knowledge of NITs and its Act and statutes, GFR-20 17, Brief about Ministry of Education, Govt. of India, Education System in India, Types of Educational Institutions and Educational Institute Ranking System in India, Manual of Office Procedure, Types of official correspondence, basic knowledge of official matters, service matter and leave rules, NPS, NEP-2020, GeM etc.

Tool recognition, knowledge of trade passed, reading of working drawings, knowledge of computer skills etc.