#### **SECTION D**

#### **Scheme of Examination**

The tests as indicated in the Scheme of Examination detailed below may be computer based or otherwise. For Computer based tests, the candidates will be required to mark/type their responses including that for the descriptive papers on the computer.

## 1. Scheme of Examination for direct recruitment to the post of MEDICAL OFFICER (Post Code: P1001)

The following shall be the scheme of Examination, components of written test and its syllabus etc. for recruitment to the posts **Medical Officer**:

#### I. Scheme of Examination:

Part – I	Time: 2 hours each	Max. marks allowed:
Computer Based Examination in		500 marks (250 marks
two papers (Paper I and Paper II)		each)
Part-II		Max. marks allowed:
Personality Test		100 marks
Total Marks		600 marks

#### II. Syllabus:

#### (A) Part I

**Computer based Examination:** The components and syllabi of two Papers and the weightage to different components in the two papers are given below: -

Paper I Maximum Marks: 250 General Medicine and Paediatrics:

Total questions in Paper I = 125 (100 from General Medicine and 25 from Paediatrics);

#### **Syllabus of Paper-I**

- (a) General Medicine including the following:
  - (i) Cardiology
  - (ii) Respiratory diseases
  - (iii) Gastro-intestinal
  - (iv) Genito-Urinary
  - (v) Neurology
  - (vi) Hematology
  - (vii) Endocrinology
  - (viii) Metabolic disorders
  - (ix) Infections/Communicable Diseases
    - a) Virus
    - b) Rickets
    - c) Bacterial
    - d) Spirochetal
    - e) Protozoan
    - f) Metazoan
    - g) Fungus
  - (x) Nutrition/Growth

- (xi) Diseases of the skin (Dermatology)
- (xii) Musculoskelatal System
- (xiii) Psychiatry
- (xiv) General
- (xv) Emergency Medicine
- (xvi) Common Poisoning
- (xvii) Snake bite
- (xviii) Tropical Medicine
- (xix) Critical Care Medicine
- (xx) Emphasis on medical procedures 12
- (xxi) Patho physiological basis of diseases
- (xxii) Vaccines preventable diseases and Non vaccines preventable diseases
- (xxiii) Vitamin deficiency diseases
- (xxiv) In psychiatry include Depression, psychosis, anxiety, bipolar diseases and Schizoprenia.

#### (b) Paediatrics including the following:-

- (i) Common childhood emergencies,
- (ii) Basic new born care,
- (iii) Normal developmental milestones,
- (iv) Accidents and poisonings in children,
- (v) Birth defects and counseling including autism,
- (vi) Immunization in children,
- (vii) Recognizing children with special needs and management, and
- (viii) National programs related to child health.

#### Paper II Maximum Marks: 250

- (a) Surgery
- (b) Gynaecology& Obstetrics
- (c) Preventive & Social Medicine

Total questions in Paper II = 125 (40 questions each from the sections on Surgery and Gynaecology & Obstetrics and 45 questions form the section on Preventive & Social Medicine.)

#### **Syllabus of Paper - II**

- (a) Surgery (Surgery including ENT, Ophthalmology, Traumatology and Orthopaedics)
  - (I) General Surgery
    - i) Wounds
    - ii) Infections
    - iii) Tumours
    - iv) Lymphatic
    - v) Blood vessels
    - vi) Cysts/sinuses
    - vii) Head and neck
    - viii) Breast
    - ix) Alimentary tract
      - a) Oesophagus
      - b) Stomach
      - c) Intestines
      - d) Anus

- e) Developmental
- x) Liver, Bile, Pancreas
- xi) Spleen
- xii) Peritoneum
- xiii) Abdominal wall
- xiv) Abdominal injuries
- (II) Urological Surgery
- (III) Neuro Surgery
- (IV) Otorhinolaryngology E.N.T.
- (V) Thoracic surgery
- (VI) Orthopedic surgery
- (VII) Ophthalmology
- (VIII) Anesthesiology
- (IX) Traumatology
- (X) Diagnosis and management of common surgical ailments
- (XI) Pre-operative and post operative care of surgical patients
- (XII) Medicolegal and ethical issues of surgery
- (XIII) Wound healing
- (XIV) Fluid and electrolyte management in surgery
- (XV) Shock patho-physiology and management.

#### (b) GYNAECOLOGY & OBSTETRICS

#### (I) OBSTETRICS

- i) Ante-natal conditions
- ii) Intra-natal conditions
- iii) Post-natal conditions
- iv) Management of normal labours or complicated labour

#### (II) GYNAECOLOGY

- i) Questions on applied anatomy
- ii) Questions on applied physiology of menstruation and fertilization
- iii) Questions on infections in genital tract
- iv) Questions on neoplasma in the genital tract
- v) Questions on displacement of the uterus
- vi) Normal delivery and safe delivery practices
- vii) High risk pregnancy and management
- viii) Abortions
- ix) Intra Uterine growth retardation
- x) Medicolegal examination in obgy and Gynae including Rape.

#### (III) FAMILY PLANNING

- i) Conventional contraceptives
- ii) U.D. and oral pills
- iii) Operative procedure, sterilization and organization of programs in the urban and rural surroundings
- iv) Medical Termination of Pregnancy

#### (c) PREVENTIVE SOCIAL AND COMMUNITY MEDICINE

- I Social and Community Medicine
- II Concept of Health, Disease and Preventive Medicine
- III Health Administration and Planning

- IV General Epidemiology
- V Demography and Health Statistics
- VI Communicable Diseases
- VII Environmental Health
- VIII Nutrition and Health
- IX Non-communicable diseases
- X Occupational Health
- XI Genetics and Health
- XII International Health
- XIII Medical Sociology and Health Education
- XIV Maternal and Child Health
- XV National Programs
- XVI Management of common health problems
- XVII Ability to monitor national health programs
- XVIII Knowledge of maternal and child wellness
- XIX Ability to recognize, investigate, report, plan and manage community health problems including malnutrition and emergencies.

#### (B) Part II

#### **PERSONALITY TEST – (100 marks):**

Candidates who qualify in the written examination will be called for Interview/ Personality Test. The Interview/ Personality Test will carry 100 marks. The Interview for Personality Test will be intended to serve as a supplement to the examination for testing the General Knowledge and ability of the candidates in the fields of their academic study and also in the nature of a personality test to assess the candidate's intellectual curiosity, critical powers of assimilation, balance of judgement and alertness of mind, ability for social cohesion, integrity of character, initiative and capability for leadership.

#### Manner and mode for drawing final merit list:

- 1. The minimum qualifying marks for Part I, i.e., Paper I and Paper II taken separately shall be 45% for the unreserved postsand 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for interview.
- 2. There shall be negative marking for wrong answers in Part I, i.e., Paper I and Paper II, to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 3. The question paper shall be in English language only.
- 4. Final Merit list shall be drawn only for candidates who qualify both the Papers I and II and Personality Test/Interview separately. The Merit list shall be drawn on the basis of combined scores of both the papers and interview. However, the candidate must score at least 50% in Personality Test/Interview.
- 5. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

## 2. Scheme of Examination for direct recruitment to the post of ASSISTANT REGISTRAR (Post Code: P1002)

The following shall be the scheme of examination, components of written test, personality test and its syllabus for recruitment to the post of **Assistant Registrar** by direct recruitment:

#### I. Scheme of the Examination:

Written Test			Interview/
			Personality Test
MCQ Type	Time:2 hours*	Max. marks allowed:	Max. marks
(150 questions)		150 marks	allowed:150 marks
Paper I			
Descriptive	Time: 2 hours*	Max. marks	
Type		Allowed: 150 marks	
Paper II			
Total Marks (150	+ 150 + 150)		450 marks

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### **II.** Components of Written Test:

			Duration: 2 h	ours each
	COMPONENTS		NO. OF QUESTIONS	MARKS
Paper I	Test of General Studies		150	150
Paper II	Educational Admin Management	istration and	_	150
		TOTAL		300

#### III. Syllabus:

#### Paper I: Test of General Studies (MCQ Type)

Questions will be designed to test the ability of the candidate's <u>General Studies</u> viz., General Science, current events of national and international importance, History of India and Indian National Movement, Indian and World Geography, Indian Polity & Economy, General Mental Ability.

Questions on <u>General Science</u> will cover general appreciation and understanding of science including matters of everyday observation and experience, as may be expected of a well-educated person who has not made a special study of any particular scientific discipline.

In <u>Current Events</u>, knowledge of significant national and international events will be tested.

In <u>History of India</u>, emphasis will be on broad general understanding of the subject in its social, economic and political aspects.

Questions on the <u>Indian National Movement</u> will relate to the nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence.

In <u>Geography</u>, emphasis will be on Geography of India. Questions on the Geography of India will relate to physical, social and economic Geography of the country, including the main features of Indian agricultural and natural resources.

Questions on <u>Indian Polity and Economy</u> will test knowledge of the country's political system and Constitution of India, Panchayati Raj, Social systems and economic developments in India.

On **General Mental Ability**, the candidates will be tested on reasoning and analytical abilities.

#### Paper II: Educational Administration and Management (Descriptive Type)

The questions will be designed to test the ability of the candidate's knowledge and awareness on higher education system in India, its regulatory bodies and recent developments in the field, basic concepts and principles of Public Administration including Organization, Hierarchy, Unity of command, Span of control, Authority and Responsibility, Co-ordination, Centralization and Decentralization, Delegation, Supervision, Line and Staff.

Personnel Administration including recruitment, training, promotion, pay scale and service conditions, Union-Management Relationship.

Financial Administration including budget, formulation and execution of budget.

Application of Information Communication Technology (ICT) and other modern technologies in the University system.

#### **IV.** Personality Test/Interview:

The interview/personality test shall be conducted in such a manner that the candidates' suitability for the post is probed among other things, through academic qualifications, relevant experience, extra-curricular activities, general awareness/knowledge, communication and problem solving skills and overall personality etc.

#### Manner and mode for drawing final merit list:

- 1. The question paper would be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination, which is defined as the minimum eligibility for the respective post.
- 3. The minimum qualifying marks for Paper I and Paper II separately shall be 45% for the unreserved postsand 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list

- would be restricted to 30 times the advertised posts for shortlisting the candidates for Interview.
- 4. Answer script of Paper-II of a candidate would be evaluated, only if the candidate qualifies in Paper-I.
- 5. There shall be negative marking for wrong answers in Paper I to the tune of  $1/4^{th}$  of marks allocated per question.
- 6. Final Merit list shall be drawn only for candidates who qualify both the Papers I and II and Personality Test/Interview separately. The Merit list shall be drawn on the basis of combined scores of both the papers and interview. However, the candidate must score at least 50% in Personality Test/Interview.
- 7. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
- a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
- b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
- c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.
- 3. Scheme of Examination for direct recruitment to the post of PRIVATE SECRETARY (Post Code: P0701), SECURITY OFFICER (Post Code: P0702), YOGA ORGANIZER (Post Code: P0703), SENIOR PERSONAL ASSISTANT (Post Code: P0704), NURSE (Post Code: P0600), ASSISTANT MANAGER (GUEST HOUSE) (Post Code: P0601), ASSISTANT SECURITY OFFICER (Post Code: P0604), HINDI TRANSLATOR (Post Code: P0606), PERSONAL ASSISTANT (Post Code: P0607), SOCIAL WORKER (Post Code: P0609), PHYSIOTHERAPIST (Post Code: P0610), X-RAY TECHNICIAN (Post Code: P0611), HORTICULTURIST (Post Code: P0612)

#### **A.** Scheme of the Examination:

	Type of Examination	Time:	Max. marks:
Paper-I	MCQ Type	2 hours*	300 marks
			(150 questions)
Paper-II	Descriptive Type	3 hours*	200 marks
Skill Test	Skills pertaining to subject	Time:	The test will be of 50 marks.
	matter of the concerned post	1/2 hrs.	To qualify the candidate
	would be assessed. (The manner		should obtain 25 marks.
	in which the skills are to be		This will however be only
	assessed may be determined by		be qualifying in nature.
	the examiner/ group of		
	examiners appointed for the		
	purpose)		
	Total Marks		500

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### **B.** Test components:

		DURATION	V: 2 hours
Paper-I	TEST COMPONENTS	NO. OF QUESTIONS	MARKS
(i)	Questions pertaining to specific area of the post concerned	50	100
(ii)	General Awareness	25	50
(iii)	Reasoning Ability	25	50
(iv)	Mathematical Ability	25	50
(v)	Test of Language English or Hindi	25	50
	TOTAL	150	300

	TEST COMPONENTS	DURATION: 3 hours
	TEST COMPONENTS	MARKS
Paper-II	Descriptive Type	200
	TOTAL	200

#### C. Syllabus:

#### Paper - I:

- (i) Questions pertaining to specific area of the post concerned: The questions will pertain to the specific area/skill of the post concerned. For instance for the post of Assistant Manager, questions will be asked from Hotel Management, for Legal Assistant questions on Law, for Engineer questions on Engineering etc.
- **General Awareness:** Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society. The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and her neighboring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations /Institutions, events etc.
- (iii) Reasoning Ability: The syllabus of General Intelligence includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship, concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.
- (iv) Mathematical Ability: The test of Arithmetical and Numerical Ability will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest, Mensuration, Time & Work, Time & Distance, Tables & Graphs, etc.

#### (v) Test of English/Hindi:

In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.

#### Paper - II:

**Descriptive Type:** The questions will be designed to test the ability of the candidate's knowledge and awareness on higher education system in India, its regulatory bodies and recent developments in the field and on the following subjects:

#### Topic Marks allocated

Basic knowledge pertaining to functional, procedural aspect of the work profile of the post concerned.

100 marks (10questions x 10 marks) Each question to be answered in 100 words

Situation Test analysis, where the candidates reaction would be sought on a given situation test case Knowledge of Computers with special reference to knowledge of word processing, data analysis packages

25 marks (200 words)

25 marks

50 marks (500 words)

#### D. Skill Test:

Essay

The skill test shall be qualifying in nature and no additional credits for the same shall be allocated.

#### Manner and mode for drawing final merit list:

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum qualifying marks for Paper I and Paper II separately shall be 45% for the unreserved postsand 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.
- 4. Answer script of Paper-II of a candidate would be evaluated only if the candidate qualifies in Paper-I.
- 5. There shall be negative marking for wrong answers in Paper I to the tune of  $1/4^{th}$  of marks allocated per question.
- 6. Merit list shall be drawn only for candidates who qualify Paper I, Paper II and skill test, separately. The Merit list shall be drawn on the basis of combined scores of Paper I and Paper II only.
- 7. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

## 4. Scheme of Examination for direct recruitment for the post of SENIOR TECHNICAL ASSISTANT (DEPARTMENTS) (Post Code: P0613)

The following shall be the scheme of examination, components of written test and its syllabus for the post of **SENIOR TECHNICAL ASSISTANT** 

#### A. Scheme of Examination:

Paper -I (MCQ)	Time:	Max. Marks:
Test of General Science and awareness	2 hrs.*	300 marks
(Level-Post graduate)		(150 questions)
Paper – II	Time:3 hrs.*	Max. Marks:
Subject specific laboratory based practical		150 marks
questions		
Skill Test	Time: 1 hr.	The test will be of 50
Skills pertaining to subject matter of the		marks. To qualify, the
concerned post would be assessed through a skill		candidate should obtain
test to be conducted by the concerned department		30 marks.
under the direct supervision of HOD/Dean of		This will, however, be
concerned Faculty.		only qualifying in nature.
The skill test shall be conducted in a manner		
which will elicit the ability of the candidate in		
handling various scientific/ humanities		
experiments/tests, as the case may be in a typical		
laboratory setup of the concerned department.		
This skill test is aimed to check the practical		
knowledge of the candidate in terms of various		
Do's and Don'ts in a laboratory related to		
various hazards, precautions etc.		
Total Marks (300+150)	11 77 1	450 marks

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

	TEST COMPONENTS		<b>DURATION: 2 hours</b>			
Paper – I			TEST COMPONENTS		NO. OF QUESTIONS	MARKS
(i)	General science		60	120		
(ii)	General awareness		20	40		
(iii)	Reasoning ability		20	40		
(iv)	Mathematical ability		30	60		
(v)	Test of Language English or Hindi		20	40		
		TOTAL	150	300		

#### B. Detailed Syllabus for Paper I:

(i) General science: Questions will be designed to test the knowledge of science, laboratory equipment and lab practice. The questions may be from all the spheres of science, however, emphasis would be on the field of science pertaining to the department for which the candidate is being assessed. In case of appointment in departments under the Faculty of Arts/Social Sciences/Mathematical Sciences questions pertaining to the subject matter of the concerned department may also be included.

For Senior Technical Assistant (Computer) the questions may be based on computer science and computer applications.

- (ii) General awareness: Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society. The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and her neighboring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations/Institutions, events etc.
- (iii) Reasoning ability: The syllabus of General Intelligence includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship, concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.
- (iv) Mathematical ability: The test of Arithmetical and Numerical Ability will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest, Mensuration, Time & Work, Time & Distance, Tables & Graphs, etc.
- (v) Test of Language English or Test of Language Hindi:

In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.

**C. Paper - II:** Subject specific laboratory based practical questions. The paper will cover the following areas:

Topic	Marks allocated
Subject specific laboratory based	Section 1 - MCQ
practical questions	100 marks (50 questions)
• Knowledge of Computers withspecial	Section 2 – Descriptive
reference to knowledge ofword	50 marks (5 questions)
processing, data analysis packages	

#### D. Skill Test:

The skill test shall be qualifying in nature and no additional credits for the same shall be allocated. This skill test is aimed to check the practical knowledge of the candidate in terms of various Do's and Don'ts in a laboratory related to various hazards, precautions etc.

#### Manner and mode for drawing final merit list:

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of examination/degree/diploma which is defined as the minimum eligibility for the respective post.
- 3. The minimum overall qualifying marks for Paper I and Paper II shall be 45% for the unreserved postsand 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.
- 4. Answer script of Paper-II of a candidate would be evaluated only if the candidate qualifies in Paper-I.
- 5. There shall be negative marking for wrong answers in MCQ based questions to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 6. Merit list shall be drawn only for candidates who qualify Paper I, Paper II and skill test, separately. The Merit list shall be drawn on the basis of combined scores of Paper I and Paper II only.
- 7. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

## 5. Scheme of Examination for Direct Recruitment to the post of JUNIOR ENGINEER (CIVIL)(Post Code: P0602)

The following shall be the scheme of Examination, components of written test and its syllabus etc. for recruitment to the post of **Junior Engineer (Civil)** by the direct recruitment:

#### A. Scheme of the Examination:

Written Test				
Paper – I	Time: 1 hours*	Max. marks allowed:		
MCQ Type		100 marks		
(Questions will be of Diploma or				
equivalent level)				
Paper-II	Time: 2 hours*	Max. marks		
Descriptive Type		Allowed: 100 marks		
(Questions will be of Diploma or				
equivalent level)				
Total Marks		200 marks		

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### Syllabus for the above papers will be as follows:

#### 1. Surveying

Fundamental concepts: Classification of Surveys; Chain Surveying; Compass Surveying; Levelling and Contouring; Theodolite Surveying; Tachometry; Curves; Introduction and fundamental concepts of electronic measuring instruments – EDM, Total Station, GIS &GPS

#### 2. Construction materials & Practice

Properties and uses of construction materials – Stones, Bricks, tiles, Sand, Cement, Timber, Plastics, Glass, Asbestos, Paints, Distempers, Enamels and Varnishes; Preparation of Cement Mortar For various works

Classification of Buildings as per NBC, Site investigation for foundation as per NBC – Trial Pit and auger boring, classification of foundations, construction of spread footing and well foundation; Stone and Brick masonry types and principles of construction; Doors and Windows – types fittings and fastenings, types and functions of Lintels, Sunshades and Roofs, Flooring – Construction and types of material; Types of Stairs; Scaffolding; Types of Plastering, Pointing painting and white / Colour Wash.

#### 3. Engineering Mechanics and Strength of materials

Forces- types of forces, Parallelogram, Triangle and Polygon Law of Forces, Lami's theorem; Centre of Gravity and moment of Inertia; Simple stresses and strains, Hooke's law –stress strain diagram, working strength elastic constants, Poisson's ratio, Relationship between elastic constants, compound rods, temperature stresses, strain energy, proof resilience, impact loading; Shear force and bending moment diagrams for simply supported, over hanging and cantilever beams, relation between intensity of loading, Shear force and bending moment; Theory of simple bending, modulus of section, moment of resistance, distribution of shear stress in rectangular, circular and I- Sections; Deflection in cantilever and simply supported beams subjected to simple loading; columns and struts - Euler's and Rankine's formulae, Slenderness ratio, simple built-up columns; Analysis of dam and retaining walls; Simple plane and pin-jointed trusses, Stresses by method of joints and method of sections.

#### 4. Hydraulics

Properties of fluids, fluid pressure and its measurement; Types of flows, energies in fluid motion, Bernoulli's theorem and its applications – venture metre, pitot tube; Orifice and mouthpiece; Notches and weirs; Flow through pipes, hydraulic gradient line and total energy line, laminar and turbulent flow in pipes – Reynolds number, measurement of velocity; open channels; Water turbines - classification, centrifugal and reciprocating pumps; layout of hydroelectric power plant.

#### 5. Quantity Surveying

Abstract estimate, detailed estimate – centerline and long & short wall method, various items of Civil Engineering works as per Indian Standards; General Specifications – earth work, brick / stone masonry in cement mortar, RCC, plastering in cement mortar, Floor finishes with ceramic tiles and marbles, white washing. Colour washing; Standard schedule of rates, lead and lift preparation of lead statement; Computation of earth work – Mid-ordinate, mean Sectional area, Trapezoidal method, Prismoidal Rule; Approximate estimate-Plinth area and cubic rate estimate.

#### **6.** Design of Structures (RCC and Steel)

RCC structures: Design philosophies- principles and concepts of working stress method

and limit state method, loads and permissible stresses, IS specification, analysis and design-rectangular beam, slab, T-beam, column, footing and stair case.

Steel Structures: Properties of steel section, loads and permissible stresses, IS specifications, Analysis and design- welded joints, beam, column, base tension member; Design of roof truss.

#### 7. Irrigation Engineering

Definition, Duty, delta, base period, rainfall and its measurement, factors affecting runoff methods of computing maximum flood discharge; Classification of head works, component parts of a weir and barrage, factors influencing selection of site –reservoirs and dams; Classification of canals, canal lining, cross drainage works; Soil erosion, water logging, soil water plant relationship; Necessity of irrigation – advantages and disadvantages, irrigation methods.

#### 8. Environmental Engineering

Basics of ecosystem, water supply scheme; Sources of water; Conveyance of water – pipes, joints and laying; Testing of water, drinking water standards; Treatment of water, Distribution of water; Water supply connection to a building.

Quantity of sewage, surface drains, design of sewers running half full, limiting velocities; laying of sewers, sewage, sewer appurtenances; Collection of sewage samples, characteristics of domestic and industrial sewage-BOD, COD; Sewage treatment, septic tank & soak pit, sewage disposal-dilution and sewage farming; House drainage arrangements in buildings; solid waste-collection and disposal; Air Pollution-sources, effects and controlling methods.

#### 9. Transportation Engineering

Alignment of roads-plain and hilly terrain, surveys; Cross section of road structure, width of pavement, Chamber, Gradient, Super elevation, Transition curves, horizontal and vertical alignment; Pavement making, traffic signs, traffic islands.

Types of soil, classification of soil-Textural IS Classification, physical propertiesplasticity, cohesion, consolidation, compaction, permeability, compressibility, soil moisture content, specific gravity, density; Bearing capacity of soil

#### **Manner and mode for drawing final merit list:**

- 1. The minimum qualifying marks for Paper I and Paper II separately shall be 45% for the unreserved postsand 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts.
- 2. Answer script of Paper-II of a candidate would be evaluated only if the candidate qualifies in Paper-I.
- 3. There shall be negative marking for wrong answers in Paper I to the tune of  $1/4^{th}$  of marks allocated per question.
- 4. The question paper shall be in English but the applicant will have the option to respond either in English or Hindi. However, the same medium of language must be used throughout.

- 5. Merit list shall be drawn only for candidates who qualify Paper I, Paper II and skill test, if any, separately. The Merit list shall be drawn on the basis of combined scores of the two papers.
- 6. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

## 6. Scheme of Examination for Direct Recruitment to the post of JUNIOR ENGINEER (ELECTRICAL)(Post Code: P0603)

The following shall be the scheme of Examination, components of written test and its syllabus etc. for recruitment to the post of **Junior Engineer (Electrical)** by the direct recruitment:

#### A. Scheme of the Examination:

Written Test			
Paper – I	Time:	1	Max. marks allowed:
MCQ Type	hours*		100 marks
(Questions will be of Diploma or equivalent level)			
Paper-II	Time:	2	Max. marks
Descriptive Type	hours*		Allowed: 100 marks
(Questions will be of Diploma or equivalent level)			
Total Marks			200 marks

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### Syllabus for the above papers will be as follows:

#### 1. Electrical Circuits

KVL, KCL, node and mesh analysis, star/delta transformation, electromagnetic induction, mutual induction, ac fundamentals, transient response of dc and ac networks, sinusoidal steady state analysis, resonance ideal current and voltage sources, Network theorems, two-port networks, three phase circuits, power measurement in 3-phase circuits.

#### 2. Electrical Measurements

Bridges and potentio meters, PMMC, moving coil, moving iron, dynamometer, induction type measuring instruments, measurement of voltage, current, power, energy, power factor, digital volt-meters, phase, frequency measurements, Q-meters, oscilloscopes

#### 3. Control Systems

Principles of feedback control systems, transfer function, block diagram reduction, signal flow graph, Mason's, gain formula, time response, steady state error, Routh, Nyquist criterion, Bode plot, root locus, compensation design

#### 4. Analog and digital electronics

Characteristics of p-n diode, Zener diode, BJT, FET, amplifiers, biasing, low frequency and high frequency equivalent circuits, frequency response, feedback amplifiers,

oscillators, combinational and sequential logic circuits, multiplexer, Schmitt trigger, A/D, D/A converters, basic of 8-bit, 16 bit microprocessors, architecture, programming, interfacing

#### 5. Electrical Machines

Single phase transformer, equivalent circuit, phasor diagram, tests, regulation, efficiency, 3-phase transformers, connections, parallel operation, auto transformer, DC machines: types, armature windings, characteristics of dc generators and motors, armature reaction, commutation, starting and speed control of dc motors

3-phase induction motors: principle of operation, types of characteristics, computation of performance, equivalent circuit, starting and speed control

Single phase induction motors: types, methods of starting, characteristics

Synchronous Machines: emf equation, armature reaction, equivalent circuit, regulation, parallel operation, load sharing, operation with infinite busbars, synchronous motor, synchronous condenser, V and Inverted V curves

#### **6.** Power Systems

Basic power generation concepts, transmission line models and performance, Underground cables, string insulators, corona, distribution systems, per unit quantities, bus impedance and admittance matrices, load flow studies, voltage control, power factor correction, economic operation, symmetrical components, fault analysis, principles of over current, differential, and distance protection, protection of alternators, protection of transformers, protection of transmission lines, protection from lightning, neutral grounding, circuit breakers, types and operation of CBs, system stability concept, swing curves, equal area criterion

#### 7. Utilization

Electric heating, resistance heating, induction heating, dielectric heating, Electric traction, lighting calculation, types of lamps and their working

#### 8. Power Electronics and Drives

SCR, IGBT, MOSFET, Static and dynamic characteristics, triggering circuits, phase control rectifier, bridge rectifiers, principles of dc-dc converters, inverters, basic principles and characteristics of adjustable speed dc and ac drives

#### Manner and mode for drawing final merit list:

- 1. The minimum qualifying marks for Paper I and Paper II separately shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts.
- 2. Answer script of Paper-II of a candidate would be evaluated only if the candidate qualifies in Paper-I.
- 3. There shall be negative marking for wrong answers in Paper I to the tune of 1/4<sup>th</sup> of marks allocated per question.

- 4. The question paper shall be in English but the applicant will have the option to respond either in English or Hindi. However, the same medium of language must be used throughout.
- 5. Merit list shall be drawn only for candidates who qualify Paper I, Paper II and skill test, if any, separately. The Merit list shall be drawn on the basis of combined scores of the two papers.
- 6. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

## 7. Scheme of Examination for direct recruitment to the post of SENIOR ASSISTANT (Post Code: P0605)

The following shall be the Scheme of Examination, components of written test and its syllabus for recruitment to the post of **Senior Assistant** by direct recruitment:

#### A. Scheme of the Examination:

	Written Test	
Paper – I	Time: 2 hours*	Max. marks:
MCQ Type		300 marks (150 questions)
Paper-II	Time: 3 hours*	Max. marks:
Descriptive Type		200 marks
Total Marks		500 marks

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### **B.** Test components:

		<b>DURATION: 2 hours</b>		
Paper-I	TEST COMPONENTS	NO. OF QUESTIONS	MARKS	
(i)	General awareness	30	60	
(ii)	Reasoning ability	40	80	
(iii)	Mathematical ability	40	80	
(iv)	Test of Language English or Hindi	40	80	
	TOTAL	150	300	

	TEST COMPONENTS	DURATION: 3hours	
Paper-II		MARKS	
1 aper-11	Descriptive Type	200	
	TOTAL	200	

#### C. Syllabus:

#### Paper - I:

- General Awareness: Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society. The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and its neighbouring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations /Institutions, events etc.
- **Reasoning Ability**: The syllabus includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship, concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.
- (iii) Mathematical Ability: The test will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest, Mensuration, Time & Work, Time & Distance, Tables & Graphs, etc.

#### (iv) Test of English or Hindi:

In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.

#### Paper - II:

**Descriptive Type:** The questions will be designed to test the ability of the candidate's knowledge and awareness about the subjects detailed below:

Topic	Marks allocated	
Basic knowledge of the Constitution of India and	30 marks (3 questions x 10 marks) Each	
working of its political system	question to be answered in 100 words	
Basic knowledge of the administration in institutions of	20 marks (2 questions x 10 marks)	
Higher Education	Each question to be answered in 100 words	
Knowledge and application of Office Procedures,	30 marks (3 questions x 10 marks)	
Rules & Regulations	Each question to be answered in 100 words	
English/Hindi with special reference to skill in	20 marks (2 questions x 10 marks)	
noting/drafting	Each question to be answered in 100 words	
Situation Test essay, where the candidates reaction	25 marks (200 words)	
would be sought on a given situation test case		
Knowledge of Computers with special reference to	25 marks	
knowledge of word processing, data analysis packages		
Essay	50 marks (500 words)	

#### Manner and mode for drawing final merit list:

(S.No.25 at the end of this section may also be referred).

- 1. The question paper would be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination, which is defined as the minimum eligibility for the respective post.
- 3. The minimum qualifying marks for Paper I and Paper II separately shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts.
- 4. Answer script of Paper-II of a candidate would be evaluated, only if the candidate qualifies in Paper-I.
- 5. There shall be negative marking for wrong answers in Paper I to the tune of  $1/4^{th}$  of marks allocated per question.
- 6. Merit list shall be drawn only for candidates who qualify both the Papers I and II separately. The Merit list shall be drawn on the basis of combined scores of both the papers.
- 7. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

## 8. Scheme of Examination for direct recruitment to the post of Professional Assistant (Post Code: P0608)

The following shall be the scheme of examination, components of written test and its syllabus for recruitment to the post of Professional Assistant by direct recruitment:

#### A. Scheme of the Examination:

Paper -I (MCQ)	Time: 2 hrs.*	Max. Marks:
Library Aptitude, General Awareness etc.		300 marks
(150 questions)		(150 questions)
Paper – II	Time: 3 hrs.*	Max. Marks:
Library System etc.		150 marks

Skill Test Skills pertaining to subject matter of the concerned post would be assessed through a skill test to be conducted by the concerned department/institution under the direct supervision of University Librarian.  The skill test shall be conducted in a manner to check the practical knowledge of the candidate in handling various processes associated with	Time: 1 hrs.	The test will be of 50 marks. To qualify the candidate should obtain 25 marks. This will however be only qualifying in nature.
in handling various processes associated with Library's functioning.		450
Total Marks (300+150)		450 marks

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

		DURATION: 2 hours	
Paper – I	TEST COMPONENTS	NO. OF QUESTIONS	MARKS
(i)	Library Aptitude	50	100
(ii)	General Awareness	25	50
(iii)	Reasoning Ability	25	50
(iv)	Mathematical Ability	25	50
(v)	Test of Language English or Hindi	25	50
	TOTAL	150	300

#### B. Detailed Syllabus for Paper I:

- (i) Library Aptitude: Questions will be designed to test the knowledge and awareness on Library Information Science and recent development in the field of Library Science. The questions may be from all the spheres of library science.
- (ii) General Awareness: Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society. The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and her neighboring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations /Institutions, events etc.
- **Reasoning Ability**: The syllabus of General Intelligence includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship, concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.
- (iv) Mathematical Ability: The test of Arithmetical and Numerical Ability will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest, Mensuration, Time & Work, Time &

Distance, Tables & Graphs, etc.

- (v) Test of Language English or Test of Language Hindi: In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.
- C. Paper II: The questions will be designed to test the ability of the candidate's knowledge and awareness on Library and Information Science and recent development in the field and on the following subjects.

#### **Topic**

- Knowledge and application of Library and Information Science Procedures, rules Regulations.
- Knowledge of Computers with special reference to knowledge of Library Software Packages of Word Processing, Data Analysis Packages.

Marks allocated
Section 1 - MCQ
100 marks (50 questions)
Section 2 - Descriptive

50 marks (5 questions)

#### D. Skill Test:

The skill test shall be qualifying in nature and no additional credits for the same shall be allocated.

The skill test shall be conducted in a manner to check the practical knowledge of the candidate in handling various processes associated with Library's functioning.

The candidates may be tested for his/her skills in:

- Search in electronic data bases(online)
- Knowledge of specialized, open source application software for libraries like Digital Library Software etc.
- knowledge of any Indian/Foreign language as opted by the candidate from the list given below:

Arabic, Persian, Urdu, Sindhi, Tamil, Telugu, Malyalam, Kannad, Odiya, Bengali, Assamese, Chinese, Japanese, Korean, French, German, Spanish and Russian.

#### Manner and mode for drawing final merit list:

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum overall qualifying marks for Paper I and Paper II shall be 45% for the unreserved postsand 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.

- 4. Answer script of Paper-II of a candidate would be evaluated only if the candidate qualifies in Paper-I.
- 5. There shall be negative marking for wrong answers in Paper I to the tune of  $1/4^{th}$  of marks allocated per question.
- 6. Merit list shall be drawn only for candidates who qualify Paper I, Paper II and skill test, if any, separately. The Merit list shall be drawn on the basis of combined scores of Paper I and Paper II only.
- 7. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.
- 9. Scheme of Examination for direct recruitment to the post of ASSISTANT ARCHIVIST (Post Code: P0501), SPORTS COACH (Post Code: P0502), PHARMACIST (Post Code: P0504), TECHNICAL ASSISTANT (HEALTH CENTRE) (Post Code: P0506), STATISTICAL ASSISTANT (Post Code: P0507)

Objective Type (Paper I)	Time:	Max. Marks:
Multiple Choice Questions pertaining to the	3 hrs.*	300 marks (150 questions)
subject matter of the concerned post. The		
questions will be upto the level of		
Graduation.		
Skill Assessment	Time:	The test will be of 50 marks. To
Skills pertaining to subject matter of the	1/2 hrs.	qualify the candidate should
concerned post would be assessed. (The		obtain 25 marks.
manner in which the skills are to be assessed		This will however be only be
may be determined by the examiner/ group		qualifying in nature.
of examiners appointed for the purpose)		
Total Marks		300

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### Manner and mode for drawing final merit list:

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the language. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum qualifying marks for Paper I shall be 45% for the unreserved postsand 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.

- 4. There shall be negative marking for wrong answers in Paper I to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 5. Merit list shall be drawn only for candidates who qualify for Paper I and Skill Test separately. The Merit list shall be drawn on the basis of scores of Paper I only.
- 6. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

## 10. Scheme of Examination for direct recruitment to the post of SEMI PROFESSIONAL ASSISTANT(Post Code: P0503)

The following shall be the scheme of Examination, components of written test and its syllabus etc. for recruitment to the post of Semi Professional Assistant by direct recruitment.

#### A. Scheme of the Examination:

Written Test			
Paper -I (MCQ)	Time: 2 hrs.*	Max. Marks:	
Library Aptitude, General Awareness etc.		300 marks	
(150 questions)		(150 questions)	
Paper – II	Time: 3 hrs.*	Max. Marks:	
Library Operations etc.		150 marks	
Total Marks (300+150)		450 marks	

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

		<b>DURATION: 2 hours</b>	
Paper – I	TEST COMPONENTS	NO. OF QUESTIONS	MARKS
(i)	Library Aptitude	50	100
(ii)	General Awareness	25	50
(iii)	Reasoning Ability	25	50
(iv)	Mathematics Ability	25	50
(v)	Test of Language English or Hindi	25	50
	TOTAL	150	300

#### B. Detailed Syllabus for Paper I:

- (i) Library Aptitude: Questions will be designed to test the knowledge and awareness on Library Information Science and recent development in the field of Library Science. The questions may be from all the spheres of library science.
- (ii) General Awareness: Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society.

The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and her neighboring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations /Institutions, events etc.

- (iii) Reasoning Ability: The syllabus of General Intelligence includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship, concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.
- (iv) Mathematical Ability: The test of Arithmetical and Numerical Ability will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest, Mensuration, Time & Work, Time & Distance, Tables & Graphs, etc.
- (v) Test of Language English or Test of Language Hindi: In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.
- **C. Paper II**: The questions will be designed to test the ability of the candidate's knowledge and awareness on Library and Information Science and recent development in the field and on the following subjects.

Topic	Marks allocated
• Knowledge and application of Library and Information	Section 1 - MCQ
Science Procedures, rules & Regulations.	100 marks (50 questions)
• Knowledge of Computers with special reference to	<b>Section 2</b> - Descriptive
knowledge of Library Software Packages of Word	50 marks (5 questions)
Processing, Data Analysis Packages.	

#### Manner and mode for drawing final merit list:

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum overall qualifying marks for Paper I and Paper II shall be 45% for the unreserved postsand 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts.
- 4. Answer script of Paper-II of a candidate would be evaluated only if the candidate qualifies in Paper-I.

- 5. There shall be negative marking for wrong answers in Paper I to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 6. Merit list shall be drawn only for candidates who qualify Paper I and Paper II, separately. The Merit list shall be drawn on the basis of combined scores of the two papers.
- 7. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

## 11. Scheme of Examination for direct recruitment for the post of TECHNICAL ASSISTANT (DEPARTMENTS) (Post Code: P0508) and TECHNICAL ASSISTANT (COMPUTERS) (Post Code: P0505)

The following shall be the scheme of examination, components of written test and its syllabus etc. for the post of **Technical Assistant** 

#### A. Scheme of Examination:

Written Test		
Paper -I (MCQ)	Time: 2 hrs.*	Max. Marks:300 marks
Test of General Science and awareness		(150 questions)
(Level-Post graduate)		
Paper – II	Time: 3 hrs.*	Max. Marks: 150 marks
Subject specific laboratory based practical questions		
Skill Test	Time:1 hr.	The test will be of 50 marks.
Skills pertaining to subject matter of the		To qualify, the candidate
concerned post would be assessed through a skill		should obtain 30 marks.
test to be conducted by the concerned department		This will, however, be only
under the direct supervision of HOD/Dean of		qualifying in nature.
concerned Faculty.		
The skill test shall be conducted in a manner		
which will elicit the ability of the candidate in		
handling various scientific/ humanities		
experiments/tests, as the case may be in a typical		
laboratory setup of the concerned department.		
This skill test is aimed to check the practical		
knowledge of the candidate in terms of various		
Do's and Don'ts in a laboratory related to		
various hazards, precautions etc.		
Total Marks (300+150)		450 marks

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

		DURATION: 2 hours	
Paper – I	TEST COMPONENTS	NO. OF QUESTIONS	MARKS
(i)	General Science	60	120
(ii)	General Awareness	20	40
(iii)	Reasoning Ability	20	40
(iv)	Arithmetical & Numerical Ability	30	60
(v)	Test of Language English or Hindi	20	40
	TOTAL	150	300

#### В. **Detailed Syllabus for Paper I:**

**(i)** General Science: Questions will be designed to test the knowledge of science, laboratory equipment and lab practice. The questions may be from all the spheres of science, however, emphasis would be on the field of science pertaining to the department for which the candidate is being assessed. In case of appointment in departments under the Faculty of Arts/Social Sciences/Mathematical Sciences questions pertaining to the subject matter of the concerned department may also be included.

For Technical Assistant (Computer) the questions may be based on computer science and computer applications.

- (ii) General Awareness: Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society. The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and its neighboring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations /Institutions, events etc.
- (iii) Reasoning Ability: The syllabus of General Intelligence includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship, concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.
- (iv) Mathematical Ability: The test of Arithmetical and Numerical Ability will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest, Mensuration, Time & Work, Time & Distance, Tables & Graphs, etc.
- Test of Language English or Test of Language Hindi: **(v)**

In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.

#### **C. Paper - II:** Subject specific laboratory based practical questions.

Topic	Marks allocated
Subject specific laboratory based	Section 1 - MCQ
practical questions	100 marks (50 questions)
Knowledge of Computers with	Section 2 – Descriptive
special reference to knowledge of	50 marks (5 questions)
word processing, data analysis packages	

#### D. Skill Test:

The skill test shall be qualifying in nature and no additional credits for the same shall be allocated.

This skill test is aimed to check the practical knowledge of the candidate in terms of various Do's and Don'ts in a laboratory related to various hazards, precautions etc.

#### **Manner and mode for drawing final merit list:**

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum overall qualifying marks for Paper I and Paper II shall be 45% for the unreserved postsand 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.
- 4. Answer script of Paper-II of a candidate would be evaluated only if, the candidate qualifies in Paper-I.
- 5. There shall be negative marking for wrong answers in MCQ based questions to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 6. Merit list shall be drawn only for candidates who qualify Paper I, Paper II and skill test, separately. The Merit list shall be drawn on the basis of combined scores of Paper I and Paper II only.
- 7. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

# 12. Scheme of Examination for direct recruitment to the post of SANITARY INSPECTOR(Post Code: P0401), STENOGRAPHER (Post Code: P0411), WORKS ASSISTANT (Post Code: P0412), ASSISTANT (STORE) (Post Code: P0413), SALESMAN, DHMI (Post Code: P0414)

Objective Type (Paper I)	Time:	Max. Marks:
Multiple Choice Questions pertaining to the	3 hours*	300 marks (150 questions)
subject matter of the concerned post. The		
questions will be upto the level of 12 <sup>th</sup> Class/		
Senior Secondary.		
Skill Assessment	Time:	The test will be of 50
Skills pertaining to subject matter of the concerned	1/2 hrs.	marks. To qualify the
post would be assessed. (The manner in which the		candidate should obtain 25
skills are to be assessed may be determined by the		marks.
examiner/ group of examiners appointed for the		This will however be only
purpose)		be qualifying in nature.
Total Marks	_	300

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### **Manner and mode for drawing final merit list:**

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the language. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum qualifying marks for Paper I shall be 45% for the unreserved postsand 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.
- 4. There shall be negative marking for wrong answers in Paper I to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 5. Merit list shall be drawn only for candidates who qualify for Paper I and Skill Test separately. The Merit list shall be drawn on the basis of scores of Paper I only.
- 6. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

#### **13.** Scheme of Examination for direct recruitment to the post of TABLA ACCOMPANISTS (Post Code: P0402) and PAKHAWAJ PLAYER (Post Code: P0403)

Components of scheme of Examination			
Written Examination	Time: 1.5 hours*	Max. Marks allowed: 150 marks	
(Paper I)		Section 1 - MCQ	
		100 marks (50 questions)	
		Section 2 – Descriptive	
		50 marks (5 questions)	
Skill Assessment	Time: 1/2 hrs.	The test will be of 50 marks. To qualify	
		the candidate should obtain 25 marks.	
		This will however be only be qualifying	
		in nature.	
Total Marks	(150)	150	

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### Syllabus for the above papers will be as follows:

#### Written Examination:

- Brief history of Gharanas of Tabla&Pakhawaj.
- 2. Brief history of Tabla&Pakhawaj.
- Write the varnas (Bol) of Tabla&Pakhawai. 3.
- Write in notation with Thah, Dugun&Chaugun of Jhaptal and Dhamar. 4.
- Write in notation of Kayada, Rela, Palta, Tihai and ChakradarTukra/ Param in 5. Jhaptal/ Dhamar.
- Write in notation with Thah, Dugun&Chaugun of Teental/Chautal. 6.
- 7. Brief introduction of RupakTala/ TivraTala.
- 8. Write in Notation with Thah, Dugun&Chaugun of Dadra and Keharva.
- Write in notation of Kayada, Rela, Palta, Tihai and ChakradaTukra/ Paran in 9 Teental/Chautal.
- Write an essay on Vocal and Instrumental Music. 10.
- Brief introduction of Ektala/Chautala. 11.

#### **Skill Assessment:**

- 1. Demonstration of theka of Jhaptala / Dhamar in Thah, Dugun and Chaugun by the hand beats.
- Basic Bols (varnas) of Tabla/ Pakhawaj. 2.
- Two advance Kayadas / Relas with Paltas & Tihai, two simple tukras / Parans, two 3. chakradartukras / Paransin Jhaptala / Dhamar.
- Theka of Teentala / Chautaal with Thah, Dugun, Chaugun and keep the theka by 4. hand beats.
- 5. Playing knowledge of Ektala and Rupak in barabarkilaya / Chautala & Teevra.
- Knowledge of four Kayadas / Relas, Paltas and Tihai, One Simple and Chakradar 6. Tukra / Paran in Teentala / Chautaal.
- One Kayada each of 'Tirkitataka' and 'Dhirkit' in Teentala/Chautaal. 7.
- 8. Four variation in Keherwa and Dadra Tala.
- 9. Elementary knowledge of Keherwa and Dadra Talas/Tivra&Sooltala.
- Tuning of Tabla/Pakhawaj. 10.
- 11. Basic knowledge of vocal and instrumental accompaniment.

12. Elementary knowledge of tuning of Tabla/ Pakhawaj.

#### Manner and mode for drawing final merit list:

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the language. However, the same medium of language must be used throughout.
- 2. The questions in the written test will of the level of examination/degree/diploma which is defined as the minimum eligibility for the respective post.
- 3. The minimum qualifying marks for Paper I shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test
- 4. There shall be no negative marking for wrong answers.
- 5. Merit list shall be drawn only for candidates who qualify for Paper I and Skill Test separately. The Merit list shall be drawn on the basis of scores of Paper I.
- 6. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.
- 14. Scheme of Examination for direct recruitment to the post of SARANGI ACCOMPANISTS (Post Code: P0404), VIOLIN ACCOMPANISTS (Post Code: P0405), TANPURA ACCOMPANISTS (Post Code: P0408),

Components of scheme of Examination			
Written Examination	Time: 1.5	Max. Marks allowed: 150 marks	
(Paper I)	hours*	Section 1 - MCQ	
		100 marks (50 questions)	
		Section 2 – Descriptive	
		50 marks (5 questions)	
Skill Assessment	Time: 1/2 hrs. The test will be of 50 marks. To qualify th		
		candidate should obtain 25 marks.	
		This will however be only be qualifying in	
		nature.	
Total Marks	(150)	150	

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### Syllabus for the above papers will be as follows:

#### **Written Examination:**

- 1. Basic knowledge of the structure and tuning of Tanpura/Sarangi/Violin.
- 2. Knowledge of the notation systems laid down by Pt. Vishnu DigamberPaluskar and Pt. V.N. Bhatkhande.
- 3. Definition of Vadi, Samvadi, Anuvadi, Vivadi, Alap.
- 4. An outline of the history of Indian Music, origin and development of Dhrupad, Khyal&Thumri.
- 5. Definition of the following: Sangeet, Nada, Swara, Shuddha, Vikrit (Komal, Teevra), Saptak (Mandra, Madhya, Tara), Aaroha, Avaroha, Raga, Laya, Tala, Sama, Tali, Khali, Matras, Avartana.
- 6. Description of the following Gharanas Gwalior, Agra, Jaipur and KiranaGharanas.
- 7. Description of the Ragas prescribed in the course.
- 8. Notation writing of a ChhotaKhayal/ Drut Gat.

#### **Skill Assessment:**

- 1. Proficiency in any one of the following instruments:
  - (i) Tanpura
- (ii) Sarangi
- (iii) Violin
- 2. Eight Tala-baddhaAlankaras set to different Chhandas.
- 3. Aaroha, Avaroha, Pakad, VilambitKhayal&DrutKhayal, Vilambit&Drut gat in the following Ragas: Yaman, Bhairav, Bhupali with elaborations in few Todas.
- 4. The recitation of Thekas of Teen Taal, Keharwa, Dadra and Jhaptal, taal keeping with hand beats.

#### **Manner and mode for drawing final merit list:**

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the language. However, the same medium of language must be used throughout.
- 2. The questions in the written test will of the level of examination/degree/diploma which is defined as the minimum eligibility for the respective post.
- 3. The minimum qualifying marks for Paper I shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.
- 4. There shall be no negative marking for wrong answers.
- 5. Merit list shall be drawn only for candidates who qualify for Paper I and Skill Test separately. The Merit list shall be drawn on the basis of scores of Paper I.
- 6. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.

- b) In case of further bunching/bracketing of candidates, candidate senior in age.
- c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

## 15. Scheme of Examination for direct recruitment to the post of MRIDANGAM ACCOMPANISTS (Post Code: P0406)

Written Examination	Time:	Max. Marks allowed: 150 marks	
(Paper I)	1.5	Section 1 - MCQ	
	hours*	100 marks (50 questions)	
		Section 2 – Descriptive	
		50 marks (5 questions)	
Skill Assessment	Time:	The test will be of 50 marks. To qualify the	
	1/2 hrs.	candidate should obtain 25 marks.	
		This will however be only be qualifying in nature.	
Total Marks (150)		150	

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### Syllabus for the above papers will be as follows:

#### **Written Examination:**

- 1. Technical terminology –Elementary knowledge of all important terms used in practical lessons taught in SEC I-Tattakaram, Chapu, Meettu, Toppi, Varu, Choru.
- 2. Understanding the concept of Tala, Laya, Gati
- 3. Understanding of different parts of the instrument.
- 4. Understanding of basic notation system.
- 5. Technical terminology all terms used in the practical lessons taught in SEC II Mohra, Pharan, Korvai, Arudi, Jaati, Gati.
- 6. SulaadiSaptaTalas with Jaatibhedas
- 7. Contribution of Palghat Mani Iyer&PalaniSubramanyaIyer.
- 8. Understanding of basic notation system.
- 9. Elementary knowledge of tuning of Mridangam.

#### **Skill Assessment:**

- 1. Basic technique of holding the instrument, sitting posture and fingering techniques.
- 2. Knowledge of syllables (Ta, Thi, Thom, Nam, Chapu, Din and Da) and their playing style.
- 3. Pathavarisaikal Elementary exercises in three speeds- slow, medium, fast.
- 4. Thattakaram (Chollukkattu) and its importance in learning Mridangam.
- 5. Different places in producing the syllables of playing Mridangam such as chapu, Meetu, Toppi etc.
- 6. Understanding the concept of tala and Laya.
- 7. Understanding of different parts of the instrument.
- 8. Basic knowledge of Laya, Gati&SulaadiSaptaTalas with Jaatibhedas.
- 9. Elementary knowledge of tuning of Mridangam.
- 10. Acquaintance of playing Adi/ RupakaTalam.
- 11. Ability to play Paran, Mohra, Korvai, Arudi.
- 12. Contribution of Palghat Mani Iyer&PalaniSubramanyaIyer.

- 13. Understanding of basic notation system.
- 14. Ability to tune one's own instrument.

#### Manner and mode for drawing final merit list:

(S.No.25 at the end of this section may also be referred).

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the language. However, the same medium of language must be used throughout.
- 2. The questions in the written test will of the level of examination/degree/diploma which is defined as the minimum eligibility for the respective post.
- 3. The minimum qualifying marks for Paper I shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.
- 4. There shall be no negative marking for wrong answers.
- 5. Merit list shall be drawn only for candidates who qualify for Paper I and Skill Test separately. The Merit list shall be drawn on the basis of scores of Paper I.
- 6. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

## 16. Scheme of Examination for direct recruitment to the post of HARMONIUM ACCOMPANISTS (Post Code: P0407)

Components of scheme of Examination			
Written Examination	Time:	Max. Marks allowed: 150 marks	
(Paper I)	1.5 hrs*	Section 1 - MCQ	
		100 marks (50 questions)	
		Section 2 – Descriptive	
		50 marks (5 questions)	
Skill Assessment	Time:	The test will be of 50 marks. To qualify the	
	1/2 hrs.	candidate should obtain 25 marks.	
		This will however be only be qualifying in nature.	
Total Marks (150)		150	

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### Syllabus for the above papers will be as follows:

#### **Written Examination:**

- 1. Brief History of Harmonium.
- 2. Write ten advance Alankars.
- 3. Drawing sketch of Harmonium with its various parts.
- 4. Definition of That, Raga, Tala, Naad and its characteristics, Harmony and Melody.
- 5. Write ten Alankars with finger techniques.
- 6. Definition of Swar, Saptak, Vadi, Samvadi, Pakad.
- 7. Description of Ragas prescribed.
- 8. Write notation of a fast Gat/ Bandish in prescribed Ragas.
- 9. Notation of Talas with Dugun&Chaugun.

#### **Skill Assessment:**

- 1. Elementary Knowledge of Harmonium, its various parts and various types of Harmoniums and finger techniques.
- 2. Structural details of Harmonium.
- 3. Ability to play & write (10) ten Alankars of shuddha&vikritswaras.
- 4. Ability to write a notation of any fast composition in Bhatkhande's notation system.
- 5. 15 general alankars with finger techniques in above mentioned ragas.
- 6. Ability to play fast/Drut compositions with alaap and atleast 10 tanas in one of the following ragas:
  - a) AlhaiyaBilawalb) Bihage) Bhupali
  - c) Malkauns f) Bhairav
- 7. Elementary knowledge of shuddha and vikritswaras, saptak, vadi, samvadi, pakad.
- 8. Ability to play a dhun in Raga Kafi or Khamaj.
- 9. Elementary knowledge of Chautala, Jhaptala, Dadra, Teentaal, Ektal&Keherwa.

#### **Manner and mode for drawing final merit list:**

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the language. However, the same medium of language must be used throughout.
- 2. The questions in the written test will of the level of examination/degree/diploma which is defined as the minimum eligibility for the respective post.
- 3. The minimum qualifying marks for Paper I shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.
- 4. There shall be no negative marking for wrong answers.
- 5. Merit list shall be drawn only for candidates who qualify for Paper I and Skill Test separately. The Merit list shall be drawn on the basis of scores of Paper I.
- 6. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:

- candidate having more marks a) in aggregate in examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
- In case of further bunching/bracketing of candidates, candidate senior b) in age.
- In case option at (a) and (b) is exhausted, it will be decided through c) draw of lots.

#### **17.** Scheme of Examination for direct recruitment to the post of LABORATORY **ASSISTANT(Post Code: P0409)**

The following shall be the scheme of examination, components of written test and its syllabus for the post of Laboratory Assistant

#### **Scheme of Examination:** A.

Written Test			
Paper – I (MCQ)	Time: 2 hrs.*	Max. Marks:	
General Science & Awareness		300 marks	
(150 questions)		(150 questions)	
Paper – II	Time: 3 hrs.*	Max. Marks:	
Subject specific laboratory based		150 marks	
practical questions			
Skill Test	Time: 1 hr.	The test will be of 50 marks.	
Skills pertaining to subject matter of the		To qualify the candidate	
concerned post would be assessed		should obtain 30 marks.	
through a skill test to be conducted by the		This will, however, be only	
concerned department under the direct		qualifying in nature.	
supervision of HOD/Dean of concerned			
Faculty.			
The skill test shall be conducted in a manner which will elicit the ability of the candidate in handling various scientific/ humanities experiments/tests, as the case may be in a typical laboratory setup of the concerned department. This skill test is aimed to check the practical knowledge of the candidate in terms of various Do's and Don'ts in a laboratory related to various hazards, precautions etc.			
Total Marks (300+150)		450 marks	

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

		DURATION: 2 hours		
Paper – I	TEST COMPONENTS	NO. OF QUESTIONS	MARKS	
(i)	General Science	60	120	
(ii)	General Awareness	20	40	
(iii)	Reasoning Ability	20	40	
(iv)	Mathematical Ability	30	60	
(v)	Test of Language English or	20	40	
	Hindi			
	TOTAL	150	300	

#### В. **Detailed Syllabus for Paper I:**

- **(i)** General Science: Questions will be designed to test the knowledge of science, laboratory equipment and lab practice. The questions may be from all the spheres of science, however, emphasis would be on the field of science pertaining to the department for which the candidate is being assessed. In case of appointment in departments under the Faculty of Arts/Social Sciences/Mathematical Sciences questions pertaining to the subject matter of the concerned department may also be included.
- (ii) General Awareness: Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society. The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and her neighboring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations /Institutions, events etc.
- (iii) Reasoning Ability: The syllabus of General Intelligence includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship, concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.
- (iv) Mathematical Ability: The test of Arithmetical and Numerical Ability will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest, Mensuration, Time & Work, Time & Distance, Tables & Graphs, etc.
- **(v) Test of Language English or Test of Language Hindi:**

In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.

#### **C. Paper - II:** Subject specific laboratory based practical questions.

The paper will cover the following areas:

	Topic	Marks allocated
•	Subject specific laboratory based practical	
	questions	100 marks (50 questions)
•	Knowledge of Computers with special	<b>Section 2</b> – Descriptive
	reference to knowledge of word	50 marks (5 questions)
	processing, data analysis packages	

#### D. Skill Test:

The skill test shall be qualifying in nature and no additional credits for the same shall be allocated.

This skill test is aimed to check the practical knowledge of the candidate in terms of various Do's and Don'ts in a laboratory related to various hazards, precautions etc.

#### Manner and mode for drawing final merit list:

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum overall qualifying marks for Paper I and Paper II shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.
- 4. Answer script of Paper-II of a candidate would be evaluated only if the candidate qualifies in Paper-I.
- 5. There shall be negative marking for wrong answers in MCQ based questions to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 6. Merit list shall be drawn only for candidates who qualify Paper I, Paper II and skill test, separately. The Merit list shall be drawn on the basis of combined scores of Paper I and Paper II only.
- 7. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

#### Scheme of Examination for direct recruitment to **18.** post of ASSISTANT the (**Post Code: P0410**)

The following shall be the scheme of Examination, components of written test and its syllabus for recruitment to the post of **Assistant** by direct recruitment:

#### Α. **Scheme of the Examination:**

Written Test				
	Type of Examination Time: Max. marks allowed:			
Paper-I MCQ Type 2 hours*		300 marks (150 questions)		
Paper-II	Paper-II Descriptive Type 2 hours*		150	
Total Marks			450	

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

#### В. **Test components**:

		DURATION: 2 hours	
Paper-I	TEST COMPONENTS	NO. OF QUESTIONS	MARKS
(i) General awareness 30		60	
(ii) Reasoning ability		40	80
(iii)	Mathematical ability	40	80
(iv)	Test of Language English or Hindi	40	80
	TOTAL	150	300

	TEST COMPONENTS	DURATION: 2 hours
Donor II	TEST COMI ONENTS	MARKS
Paper-II	Descriptive Type	150
	TOTAL	150

#### C. **Syllabus:**

#### Paper - I:

- (i) General Awareness: Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society. The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and its neighboring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations /Institutions, events etc.
- (ii) **Reasoning Ability**: The syllabus includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual discrimination, observation, relationship, concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.
- (iii) **Mathematical Ability:** The test will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest,

Mensuration, Time & Work, Time & Distance, Tables & Graphs, etc.

#### (iv) Test of English or Hindi:

In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.

#### Paper - II:

**Descriptive Type:** The questions will be designed to test the ability of the candidate's knowledge and awareness about the subjects detailed below:

Topic	Marks allocated
Basic knowledge of the Constitution of	30 marks (3 questions x 10 marks)
India and working of its political system	Each question to be answered in 100 words
Basic knowledge of the administration in	20 marks (2 questions x 10 marks)
institutions of Higher Education	Each question to be answered in 100 words
Knowledge and application of Office	30 marks (3 questions x 10 marks)
Procedures, Rules & Regulations	Each question to be answered in 100 words
English/Hindi with special reference to	20 marks (2 questions x 10 marks)
skill in noting/drafting	Each question to be answered in 100 words
Situation Test essay, where the candidate's	25 marks (200 words)
reaction would be sought on a given	
situation test case	
Knowledge of Computers with special	25 marks
reference to knowledge of word processing,	
data analysis packages	

#### Manner and mode for drawing final merit list:

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/ examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum qualifying marks for Paper I and Paper II separately shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PWBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts.
- 4. Answer script of Paper-II of a candidate would be evaluated, only if the candidate qualifies in Paper-I.
- 5. There shall be negative marking for wrong answers in Paper I to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 6. Merit list shall be drawn only for candidates who qualify both the Paper I and Paper II separately. The Merit list shall be drawn on the basis of combined scores of the two papers.
- 7. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum

- eligibility for the respective post will be given preference.
- b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
- c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

# 19. Scheme of Examination for direct recruitment to the post of LIBRARY ASSISTANT (Post Code: P0301)

The following shall be the scheme of Examination, components of written test and its syllabus for recruitment to the post of Library Assistant by the direct recruitment:

#### A. Scheme of Examination:

Written Test				
Paper -I (MCQ)	Time: 2 hrs.*	Max. Marks:		
Library Aptitude, General Awareness etc.		300 marks		
(150 questions)		(150 questions)		
Paper – II	Time: 3 hrs.*	Max. Marks:		
Library Automation & Library Awareness		150 marks		
Total Marks (300+150) 450 marks				

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

		<b>DURATION: 2 hours</b>	
Paper – I	TEST COMPONENTS	NO. OF QUESTIONS	MARKS
(i)	Library Aptitude	50	100
(ii)	General Awareness	25	50
(iii)	Reasoning Ability	25	50
(iv)	Mathematical Ability	25	50
(v)	Test of Language English or Hindi	25	50
	TOTAL	150	300

#### B. Detailed Syllabus for Paper I:

- (i) **Library Aptitude:** Questions will be designed to test the knowledge and awareness on Library Information Science and recent development in the field of Library Science. The questions may be from all the spheres of library science.
- (ii) General Awareness: Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society. The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and her neighboring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations /Institutions, events etc.
- (iii) Reasoning Ability: The syllabus of General Intelligence includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship,

concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.

- (iv) Mathematical Ability: The test of Arithmetical and Numerical Ability will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest, Mensuration, Time & Work, Time & Distance, Tables & Graphs, etc.
- (v) Test of Language English or Test of Language Hindi: In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.

## **C. Paper - II:** Library Automation & Library Awareness.

The questions will be designed to test the ability of the candidate's knowledge and awareness on Library and Information Science and recent development in the field and on the following subjects.

	Topic	Marks allocated
•	Knowledge and application of Library and	Section 1 - MCQ
	Information Science Procedures, rules &	100 marks (50 questions)
	Regulations.	Section 2 – Descriptive
•	Knowledge of Computers with special reference to	50 marks (5 questions)
	knowledge of Library Software Packages of Word	
	Processing, Data Analysis Packages.	

#### Manner and mode for drawing final merit list:

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum overall qualifying marks for Paper I and Paper II shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts.
- 4. Answer script of Paper-II of a candidate would be evaluated only if the candidate qualifies in Paper-I.
- 5. There shall be negative marking for wrong answers in Paper I to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 6. Merit list shall be drawn only for candidates who qualify Paper I and Paper II, separately. The Merit list shall be drawn on the basis of combined scores of the two papers.
- 7. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:

- a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
- b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
- c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

# 20. Scheme of Examination for direct recruitment to the post of JUNIOR ASSISTANT (Post Code: P0201) and JUNIOR ASSISTANT(STORE) (Post Code: P0203)

The following shall be the scheme of Examination, components of written test and its syllabus for recruitment to the post of **Junior Assistant and equivalent** by direct recruitment:

#### **A.** Scheme of the Examination:

Written Test			
Type of Examination Time:* Max marks:			
Paper-IMCQ Type3 hours200 (200 questions)			200 (200 questions)
Paper-II Essay & Comprehension test 1.5 hour 100			100
Total Marks 300			

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

## **B.** Test components:

		DURATION: 3 hours	
Paper-I	TEST COMPONENTS	NO. OF QUESTIONS	MARKS
(i)	General awareness	50	50
(ii)	(ii) Reasoning ability		50
(iii)	Mathematical ability	50	50
(iv)	(iv) Language English or Hindi 50		50
	TOTAL	200	200

	TEST COMPONENTS	DURATION:1.5 hour
Danam II		MARKS
Paper-II	Essay, comprehension & letter writing	100
	TOTAL	100

	TEST COMPONENTS	DETAILS
SKILL TEST	On spot typing test	Qualifying speed shall be at least 35 words per minute in English or 30 words per minute in Hindi, which will be tested on a computer (PC).*

<sup>\*</sup>PwBD candidates for whom complete exemption for type test is provided as per guidelines issued by Central Government, will be exempt from the skill test.

#### C. Syllabus:

#### Paper I:

- (i) General Awareness: Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society. The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and her neighboring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations /Institutions, events etc.
- **Reasoning Ability**: The syllabus includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship, concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.
- (iii) Mathematical Ability: The test will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest, Mensuration, Time & Work, Time & Distance, Tables & Graphs, etc.

#### (iv) Test of English or Hindi:

In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.

#### Paper – II:

**Essay, comprehension & letter writing:** This test is meant for testing the applicability and correct usage of the language, where the candidates would be assessed through essay writing, comprehension and letter writing, situation test analysis etc.

#### **Skill Test:**

The typing test shall be a skill test, which shall be qualifying in nature and no additional credits for the same shall be allocated.

## **Manner and mode for drawing final merit list:**

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the language. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum qualifying marks for Paper I and Paper II separately shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the

- advertised posts for the purpose of shortlisting the candidates for skill test.
- 4. Answer script of Paper-II of a candidate would be evaluated only if the candidate qualifies in Paper-I.
- 5. There shall be negative marking for wrong answers in Paper I to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 6. Merit list shall be drawn only for candidates who qualify Paper I, Paper II and skill test, separately. The Merit list shall be drawn on the basis of combined scores of Paper I and Paper II only.
- 7. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.
- 21. Scheme of Examination for direct recruitment to the post of TELEPHONE OPERATOR (Post Code: P0202), JUNIOR WORK ASSISTANT (ENGINEERING SERVICE) (Relevant trade Wireman, Mason, Carpenter, etc.) (Post Code: P0204), HEALTH ATTENDANT (Post Code: P0102) and ENGINEERING ATTENDANT (Electric Khalasi, Beldar) (Post Code: P0104)

#### **Scheme of Examination:**

Objective Type (Paper I)  Multiple Choice Questions pertaining to the subject matter of the concerned post. The questions will be upto the level of 10 <sup>th</sup> Class/Secondary.	Time: 3 hrs.*	Max. Marks: 300 marks (150 questions)
Skill Assessment Skills pertaining to subject matter of the concerned post would be assessed. (The manner in which the skills are to be assessed may be determined by the examiner/ group of examiners appointed for the purpose)	Time: 1/2 hrs.	The test will be of 50 marks. To qualify the candidate should obtain 25 marks.  This will however be only be qualifying in nature.
Total Marks		300

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

### **Manner and mode for drawing final merit list:**

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the language. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.

- 3. The minimum qualifying marks for Paper I shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.
- 4. There shall be negative marking for wrong answers in Paper I to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 5. Merit list shall be drawn only for candidates who qualify for Paper I and Skill Test separately. The Merit list shall be drawn on the basis of scores of Paper I only.
- 6. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

# 22. Scheme of Examination for direct recruitment to the post of LIBRARY ATTENDANT (Post Code: P0101)

The following shall be the scheme of Examination, components of written test and its syllabus for recruitment to the post of **Library Attendant** by the direct recruitment:

#### A. Scheme of Examination:

Written Test				
Objective Type (MCQ) Library Aptitude, General Awareness etc. (150 questions)	Time: 3 hrs.*	Max. Marks: 300 marks		
Total Marks		300 marks		

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

Objective		DURATION: 3 hours	
Type	TEST COMPONENTS	NO. OF	MARKS
(MCQ)		QUESTIONS	
(i)	Library Aptitude	50	100
(ii)	General Awareness	25	50
(iii)	Reasoning Ability	25	50
(iv)	Mathematical Ability	25	50
(v)	Test of Language English or Hindi	25	50
	TOTAL	150	300

#### **B.** Detailed Syllabus:

(i) Library Aptitude: Questions will be designed to test the knowledge and awareness on Library Information Science and recent development in the field of Library Science. The questions may be from all the spheres of library science.

- (ii) General Awareness: Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society. The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and her neighboring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations /Institutions, events etc.
- (iii) Reasoning Ability: The syllabus of General Intelligence includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship, concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.
- (iv) Mathematical Ability: The test of Arithmetical and Numerical Ability will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest, Mensuration, Time & Work, Time & Distance, Tables & Graphs, etc.
- (v) Test of Language English or Test of Language Hindi: In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.

### **Manner and mode for drawing final merit list:**

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum overall qualifying marks for the written test shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts.
- 4. There shall be negative marking for wrong answers in written test to the tune of 1/4<sup>th</sup> of marks allocated per question.
- 5. Merit list shall be drawn only for candidates who qualify written test.
- 6. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

## 23. Scheme of Examination for direct recruitment to the post of LABORATORY ATTENDANT (Post Code: P0103)

The following shall be the scheme of examination, components of written test and its syllabus for the post of **Laboratory Attendant** 

#### A. Scheme of Examination:

Written Test				
Objective Type (MCQ)	Time: 3 hrs.*	Max. Marks:		
General Science and Awareness		300 marks		
(150 questions)				
Total Marks		300 marks		

<sup>\*15</sup> minutes extra per hour would be given to Visually Handicapped, Cerebral Palsy candidates or similarly placed candidates from PwBD category.

Ohioativa		DURATION: 3 hours	
Objective Type (MCQ)	TEST COMPONENTS	NO. OF QUESTIONS	MARKS
(i)	General Science	60	120
(ii)	General Awareness	20	40
(iii)	Reasoning Ability	20	40
(iv)	Mathematical Ability	30	60
(v)	Test of Language English or Hindi	20	40
	TOTAL	150	300

#### B. Detailed Syllabus:

(i) General Science: Questions will be designed to test the knowledge of science, laboratory equipment and lab practice. The questions may be from all the spheres of science, however, emphasis would be on the field of science pertaining to the department for which the candidate is being assessed. In case of appointment in departments under the Faculty of Arts/Social Sciences/Mathematical Sciences questions pertaining to the subject matter of the concerned department may also be included.

For Computer Laboratory Attendant the questions may be based on computer science and computer applications.

- (ii) General Awareness: Questions will be designed to test the ability of the candidate's General Awareness of the environment and its relevance to the society. The questions will also be designed to test knowledge of the current events and of such matters of everyday observation as may be expected of an educated person. The test will include questions relating to India and her neighboring countries, especially pertaining to History, Indian Polity & Constitution, Art & Culture, Geography, Economics, General Policy, Science & Scientific Research, National/International Organizations /Institutions, events etc.
- (iii) Reasoning Ability: The syllabus of General Intelligence includes questions of both verbal and non-verbal types. Test may include questions on analogies, similarities, differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship, concepts, arithmetical reasoning, verbal and figure classification, arithmetical number series etc.

- (iv) Mathematical Ability: The test of Arithmetical and Numerical Ability will cover Number System including questions on Simplification, Decimals, Fractions, L.C.M., H.C.F., Ratio & Proportion, Percentage, Average, Profit & Loss, Discount, Simple & Compound Interest, Mensuration, Time & Work, Time & Distance, Tables & Graphs, etc.
- (v) Test of Language English or Test of Language Hindi: In addition to the testing of candidate's understanding of the English or Hindi Languages, its Vocabulary, Grammar, Sentence Structure, Synonyms, Antonyms and its correct usage etc. would also be tested.

## **Manner and mode for drawing final merit list:**

(S.No.25 at the end of this section may also be referred).

- 1. The question paper should be bilingual (English and Hindi) and the applicant will have the option to respond in either of the languages. However, the same medium of language must be used throughout.
- 2. The questions in the written test will be of the level of degree/diploma/examination which is defined as the minimum eligibility for the respective post.
- 3. The minimum overall qualifying marks for written test shall be 45% for the unreserved posts and 40% for the posts reserved for OBC category and 35% for the posts reserved for SC/ST/ PwBD category. If the number of candidates qualifying is more than 30 times the advertised posts, the merit list would be restricted to 30 times the advertised posts for the purpose of shortlisting the candidates for skill test.
- 4. There shall be negative marking for wrong answers in MCQ based questions to the tune of  $1/4^{th}$  of marks allocated per question.
- 5. Merit list shall be drawn only for candidates who qualify written test.
- 6. In case of bunching/bracketing of candidates in the results of the written test, the priority/merit list would be decided as follows:
  - a) The candidate having more marks in aggregate in the examination/degree/diploma which is defined as the minimum eligibility for the respective post will be given preference.
  - b) In case of further bunching/bracketing of candidates, candidate senior in age will be given preference.
  - c) In case option at (a) and (b) is exhausted, it will be decided through draw of lots.

# 24. ADDITIONAL CREDITS(MARKS) FOR APPLICANTS WORKING ON CONTRACT/DAILY WAGES/AD-HOC BASIS IN THE UNIVERSITY OF DELHI OR ITS COLLEGES

Credits (Marks) on the following basis shall be added to the final merit list with respect to the candidates working on contract/daily wages/ad-hoc basis in the University or its Colleges.

- One mark for each completed year with a cap of a maximum of 10 marks.
- For giving marks, period of more than 6 months service (each month counted as having 30 days) or 181 days will be counted as one year while no credit will be given for service put in for 6 months, i.e., less than 180 days.
- In other words, the applicant would get a maximum of 10 marks, which would be added to their total score, even if she/he has put in service of more than 10 years of service.
- The extra credit given would, however, be capped so as not to exceed the maximum score