त्रिपुरा विश्वविद्यालय TRIPURA UNIVERSITY

(केन्द्रीय विश्वविद्यालय / A Central University) सूर्यमणिनगर, अगरतला / Suryamaninagar, Agartala

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Date: 04.10.2021

NOTIFICATION

The Syllabus/Scheme of Examinations for recruitment of the Non-Teaching and other Academic Posts of Tripura University as approved by the Dean's Committee in its meeting held on 04.10.2021 is hereby notified for general information.

(Dr. Deepak Sharma)
Registrar

Copy to:

1. Tripura University website for wide circulation

2. P.S. to the Vice-Chancellor for kind information of the Hon'ble Vice-Chancellor, Tripura University



Scheme of Examination for the posts included in the CRR (As applicable).

1 Administrative/Ministerial Services

1.1 Scheme of Examination for recruitment to the post of Deputy Registrar, Deputy Finance Officer and Deputy Controller of Examinations:

The following shall be the scheme of examination, personality test and its syllabus for recruitment to the post of Deputy Registrar, Deputy Finance Officer and Deputy Controller of Examinations by direct recruitment:

A. Scheme of the Examination:

- The minimum qualifying marks to be secured in Paper I shall be 40%. The answer scripts of the candidates for the descriptive test shall be evaluated only in respect of those candidates who secure the minimum qualifying marks in Paper I. The candidates who secure minimum 50% marks in Paper II shall be called for the skill test/interview, wherever applicable.
- The marks allocated for the skill test, wherever applicable, shall be 50; and the minimum qualifying marks in the skill test shall be 25. The merit list of the candidates shall be drawn based on the performance in Paper I (Objective Type Test) and Paper II (Descriptive test) and Interview (wherever applicable) subject to qualifying the skill test, wherever applicable.

Written Test			Interview/ Personality Test
MCQ Type Paper I	Time: 3 hours	Max. marks allowed: 100 marks	Max. marks allowed: 50 marks
Descriptive Type Paper II	Time: 3 hours	Max. marks allowed: 100 marks	
Total Marks (100 + 100 + 50)			250 marks

B. Syllabus:

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

General English, General Studies, General Awareness etc.

(b) Paper II: Descriptive Type

Constitution of India, Central Universities Act & Statutes, 2009, General Financial Rules and Purchase Procedure, UGC Regulations governing the service conditions of the teachers, CCS (Conduct) Rules, CCS (Leave) Rules, CS (Medical Attendance) Rules, CCS (LTC) Rules, Reservation and Concessions to SCs/STs/OBCs/PWDs/EWSs, CCS (Joining Time) Rules, CCS (T.A.) Rules, CCS (Pension)



Rules/National Pension Scheme, General Rules on Pay and Allowances, File routing processes in University system, University Examination System etc.

New Education Policy (NEP), 2020

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

(c) Interview/ Personality Test:

Candidates who qualify in the Written Test will be called for interview/personality test. The interview/personality test shall be conducted for assessing the knowledge of the candidate in the relevant field, experience, extra-curricular activities, general awareness/knowledge, communication skills and overall personality etc.



1.2 Scheme of Examination for recruitment to the post of Assistant Registrar, Assistant Finance Officer and Assistant Controller of Examinations:

The following shall be the scheme of examination, personality test and its syllabus for recruitment to the post of Assistant Registrar, Assistant Finance Officer and Assistant Controller of Examinations by direct recruitment:

A. Scheme of the Examination:

- The minimum qualifying marks to be secured in Paper I shall be 40%. The answer scripts of the candidates for the descriptive test shall be evaluated only in respect of those candidates who secure the minimum qualifying marks in Paper I. The candidates who secure minimum 50% marks in Paper II shall be called for the skill test/interview, wherever applicable.
- The marks allocated for the skill test, wherever applicable, shall be 50; and the minimum qualifying marks in the skill test shall be 25. The merit list of the candidates shall be drawn based on the performance in Paper I (Objective Type Test) and Paper II (Descriptive test) and Interview (wherever applicable) subject to qualifying the skill test, wherever applicable.

	Written T	est	Interview/ Personality Test
MCQ Type Paper I	Time: 3 hours	Max. marks allowed: 100 marks	Max. marks allowed: 50 marks
Descriptive Type Paper II	Time: 3 hours	Max. marks allowed: 100 marks	
Total Marks (100 + 100 + 50)			250 marks

B. Syllabus:

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

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.



(b) Paper II: Descriptive Type

Knowledge and awareness on University education system in India, Tripura University Act & Statute, 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, UGC Regulations governing the service conditions of the teachers, Reservation and Concessions to SCs/STs/OBCs/PWDs/EWSs, University Examination System etc.

General Financial Rules and F.R. & S.R.

New Education Policy (NEP), 2020

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

Writing skills in Official /Demi Official letters, Noting, Drafting etc.

(c) Interview/ Personality Test:

Candidates who qualify in the Written Test will be called for interview/personality test. The interview/personality test shall be conducted for assessing the knowledge of the candidate in the relevant field, experience, extra-curricular activities, general awareness/knowledge, communication skills and overall personality etc.



1.3 Scheme of Examination for Direct Recruitment to the post of Section Officer

The following shall be the scheme of examination and its syllabus for recruitment to the post of Section Officer by direct recruitment:

A. Scheme of the Examination:

Written Test			
MCQ Type Paper I Time: 3 hours Max. marks allowed: 100 marks			
Descriptive Type Paper II	Time: 3 hours	Max. marks allowed: 100 marks	
Total Marks (100+100)		200 marks	

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type)

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper - II: Descriptive Type

Basic knowledge of the University administration/examinations, Knowledge and application of Office Procedures, Tripura University Act & Statutes, Rules & Regulations (viz. appointments, deputation, dismissal, suspension, retirement, pay, travelling allowances, leave rules, DA, DR, HRA, Retirement and pensionary benefits, Financial Rules (Finance & Accounts/ Purchase etc. and any other supplementary rules).

Writing skills in Official /Demi Official letters, Noting, Drafting etc.



1.4 Scheme of Examination for Direct Recruitment to the post of Assistant

The following shall be the scheme of examination and its syllabus for recruitment to the post of Assistant by direct recruitment:

A. Scheme of the Examination:

Written Test			
MCQ Type	Time: 3 hours	Max. marks allowed: 100 marks	
Paper I			
Descriptive Type	Time: 3 hours	Max. marks allowed: 100 marks	
Paper II			
Skill Test			
Skill Test (Computer Proficiency Test)	Time (To be	Max. marks allowed: 50 marks	
	decided later)		
Total Marks (100+100+50)	_	250 marks	

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type)

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper - II: Descriptive Type

Basic knowledge of the University administration/examinations, Knowledge and application of Office Procedures, Tripura University Act & Statutes, Rules & Regulations (viz. appointments, deputation, dismissal, suspension, retirement, pay, travelling allowances, leave rules, DA, DR, HRA, Retirement and pensionary benefits, Financial Rules (Finance & Accounts/ Purchase etc. and any other supplementary rules).

Writing skills in Official /Demi Official letters, Noting, Drafting etc.



(c) Skill Test: Computer Proficiency Test

Candidates who qualify in the Written Test will be called for Computer Proficiency Test to be taken on computer. Questions will be designed to test the candidate's typing skill, knowledge of Microsoft Office, Spreadsheet and Computer Applications for everyday office work including usage of internet.



1.5 Scheme of Examination for Direct Recruitment to the post of Upper Division Clerk (UDC)

The following shall be the scheme of examination and its syllabus for recruitment to the post of Upper Division Clerk (UDC) by direct recruitment:

A. Scheme of the Examination:

W	ritten Test		
MCQ Type Paper I	Time: 3 hours	Max. marks allowed: 100 marks	
Descriptive Type Paper II	Time: 3 hours	Max. marks allowed: 100 marks	
Skill Test			
Skill Test (Computer Proficiency Test)	Time (To be decided later)	Max. marks allowed: 50 marks	
Total Marks (100+100+50))	250 marks	

B. Syllabus:

(a) Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper-II: Descriptive Type

Basic knowledge of the University administration/examinations, Knowledge and application of Office Procedures, Rules & Regulations (viz. appointments, deputation, dismissal, suspension, retirement, pay, travelling allowances, leave rules, DA, DR, HRA, Retirement and pensionary benefits, Financial Rules (Finance & Accounts/ Purchase etc. and any other supplementary rules).

Writing skills in Official /Demi Official letters, Noting, Drafting etc.



(c) Skill Test: Computer Proficiency Test

Candidates who qualify in the Written Test will be called for Computer Proficiency Test to be taken on computer. Questions will be designed to test the candidate's typing skill, knowledge of Microsoft Office, Spreadsheet and Computer Applications for everyday office work including usage of internet.



1.6 Scheme of Examination for Direct Recruitment to the post of Lower Division Clerk (LDC)

The following shall be the scheme of examination and its syllabus for recruitment to the post Lower Division Clerk (LDC) by direct recruitment:

A. Scheme of the Examination:

Written Test			
MCQ Type	Time: 3 hours	Max. marks allowed: 100 marks	
Skill Test			
Skill Test (Computer Proficiency Test)	Time (To be	Max. marks allowed: 50 marks	
	decided later)		
Total Marks		150 marks	

B. Syllabus:

(a) Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Skill Test: Computer Proficiency Test

Candidates who qualify in the Written Test will be called for Computer Proficiency Test to be taken on computer. Questions will be designed to test the candidate's typing skill, knowledge of Microsoft Office, Spreadsheet and Computer Applications for everyday office work including usage of internet.



1.7 Scheme of Examination for Direct Recruitment for the post of Multi Tasking Staff (MTS)

The following shall be the scheme of examination and its syllabus for recruitment to the post Multi Tasking Staff (MTS) by direct recruitment.

A. Scheme of the Examination:

Written Test				
MCQ Type	Time: 3 hours	Max. marks allowed: 100 marks		
Skill Test				
Skill Test (Basic working knowledge with office	Time (To be	Max. marks allowed: 50 marks		
equipments)	decided later)			
Total Marks		150 marks		

B. Syllabus:

(a) Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Skill Test:

Basic working knowledge with office equipments.



2 Secretarial Services

2 Scheme of Examination for Direct Recruitment for the Posts of Private Secretary, Personal Assistant and Stenographer

The following shall be the scheme of examination and its syllabus for recruitment to the post of Private Secretary, Personal Assistant and Stenographer by direct recruitment

A. Scheme of the Examination:

Written Test				
MCQ Type Paper I	Time: 3 hours	Max. marks allowed: 100 marks		
Descriptive Type Paper II	Time: 3 hours	Max. marks allowed: 100 marks		
Skill Test				
Skill Test	Time (To be decided later)	Max. marks allowed: 50 marks		
Total Marks (100+100+50)		250 marks		

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper - II: Descriptive Type

Basic knowledge pertaining to functional, procedural aspect of the work profile of the post concerned. Situation Test analysis, where the candidates reaction would be sought on a given situation test case. Writing skills in Official /Demi Official Letters, Noting, Drafting etc.

(c) Skill Test: Stenography Test/Shorthand/Computer Test

Candidates who qualify in the Written Test will be called for Skill Test.



3 Library Services:

3.1 Scheme of Examination for recruitment to the post of Deputy Librarian:

The following shall be the Scheme of Examination, personality test and its syllabus for recruitment to the post of Deputy Librarian by direct recruitment:

A. Scheme of the Examination:

- The minimum qualifying marks to be secured in Paper I shall be 40%. The answer scripts of the candidates for the descriptive test shall be evaluated only in respect of those candidates who secure the minimum qualifying marks in Paper I. The candidates who secure minimum 50% marks in Paper II shall be called for the skill test/interview, wherever applicable.
- The marks allocated for the skill test, wherever applicable, shall be 50; and the minimum qualifying marks in the skill test shall be 25. The merit list of the candidates shall be drawn based on the performance in Paper I (Objective Type Test) and Paper II (Descriptive test) and Interview (wherever applicable) subject to qualifying the skill test, wherever applicable.

	Written Test		Interview/
			Personality Test
MCQ Type Paper I	Time: 3 hours	Max. marks allowed: 100 marks	Max. marks allowed: 50 marks
Descriptive Type Paper II	Time: 3 hours	Max. marks allowed: 100 marks	
Total Marks (100 + 100 + 50)			250 marks

B. Syllabus:

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

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.



(b) Paper II: Descriptive Type

May refer to UGC NET syllabus for Library and Information science.

(c) Interview/ Personality Test:

Candidates who qualify in the Written Test will be called for interview/personality test. The interview/personality test shall be conducted for assessing the knowledge of the candidate in the relevant field, experience, extra-curricular activities, general awareness/knowledge, communication skills and overall personality etc.



3.2 Scheme of Examination for recruitment to the post of Assistant Librarian:

The following shall be the Scheme of Examination, personality test and its syllabus for recruitment to the post of Assistant Librarian by direct recruitment:

A. Scheme of the Examination:

- The minimum qualifying marks to be secured in Paper I shall be 40%. The answer scripts of the candidates for the descriptive test shall be evaluated only in respect of those candidates who secure the minimum qualifying marks in Paper I. The candidates who secure minimum 50% marks in Paper II shall be called for the skill test/interview, wherever applicable.
- The marks allocated for the skill test, wherever applicable, shall be 50; and the minimum qualifying marks in the skill test shall be 25. The merit list of the candidates shall be drawn based on the performance in Paper I (Objective Type Test) and Paper II (Descriptive test) and Interview (wherever applicable) subject to qualifying the skill test, wherever applicable.

	Written Test		Interview/
			Personality Test
MCQ Type	Time: 3 hours	Max. marks allowed: 100	Max. marks allowed: 50
Paper I		marks	marks
Descriptive Type	Time: 3 hours	Max. marks allowed: 100	
Paper II		marks	
Total Marks (100 + 100 + 50)			250 marks

B. Syllabus:

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

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper II: Descriptive Type

May refer to UGC NET syllabus for Library and Information science.



(c) Interview/ Personality Test:

Candidates who qualify in the Written Test will be called for interview/personality test. The interview/personality test shall be conducted for assessing the knowledge of the candidate in the relevant field, experience, extra-curricular activities, general awareness/knowledge, communication skills and overall personality etc.



3.3 Scheme of Examination for recruitment to the post of Information Scientist:

The following shall be the Scheme of Examination, personality test and its syllabus for recruitment to the post of Information Scientist by direct recruitment:

A. Scheme of the Examination:

- The minimum qualifying marks to be secured in Paper I shall be 40%. The answer scripts of the candidates for the descriptive test shall be evaluated only in respect of those candidates who secure the minimum qualifying marks in Paper I. The candidates who secure minimum 50% marks in Paper II shall be called for the skill test/interview, wherever applicable.
- The marks allocated for the skill test, wherever applicable, shall be 50; and the minimum qualifying marks in the skill test shall be 25. The merit list of the candidates shall be drawn based on the performance in Paper I (Objective Type Test) and Paper II (Descriptive test) and Interview (wherever applicable) subject to qualifying the skill test, wherever applicable.

Written Test			Interview/
			Personality Test
MCQ Type Paper I	Time: 3 hours	Max. marks allowed: 100 marks	Max. marks allowed: 50 marks
Descriptive Type Paper II	Time: 3 hours	Max. marks allowed: 100 marks	
Total N	250 marks		

B. Syllabus:

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

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.



(b) Paper II: Descriptive Type

Information, Information Science, Information Society, Information as a Resource/Commodity, Information Transfer Cycle, Role of Information (In Planning, Management, Socio-Economic Development, Technology Transfer), Communication (Channel, Barriers), Intellectual Property Rights (Concept, Copyright, Censorship, Print and Non Print Media), Library and Information Policy at the National Level. Laws of Library Science, Library Resource Sharing and Networking, Library Movement, Library Legislation in India, Library Extension Services, Library and Information Science Education in India, Library and Information Profession, Library Association in India, UK and USA, ILA, IASLIC, IATLIS, SIS, LA, ASLIB, SLA, ALA, Library Association Organization at International Level, FID, IFLA, UNESCO.

Sources of Information (Primary, Secondary and Tertiary. Documentary and Non Documentary), Reference Sources {Encyclopedias, Dictionaries, Geographical Sources, Biographical sources, Year Books / Almanacs, Directories and Handbooks, Statistical (Salient features and evaluation)}, Bibliographical Sources {Bibliographies, Union Catalogue, Indexing and Abstracting Journals (Salient features and Evaluations)}, E-documents (e-books, e-journals), Databases {Bibliographic, Numeric and Full text (Evaluation)} Reference and Information Services, Referral Services, Bibliographic Service, Indexing and Abstracting Services, CAS, SDI, Digest Service, Trend Report, Online Services, Translation Services, Reprographic Services.

Library Automation, Areas of Library Automation, Planning Library Automation, Hardware and Software Selection for Automation, OPAC, Networks, ERNET, NICNET, DELNET, JANET, BLAISE, OCLC, INFLIBNET, Internet, Components of Internet, Internet Services (Browsing, Web Browsers, Search Engines, Meta Data Digital Object Identifier (DOI), National and International Information Systems, NISSAT, NASSDOC, INSDOC, DESIDOC, INIS, AGRIS, MEDLARS, INSPEC.

- (i) Types of Research (Basic, Applied, Interdisciplinary), Research Design, Scientific Method, Hypothesis, Data Collection, Sampling, Methods of Research (Historical, Descriptive, Case Study, Survey, Comparative and Experimental), Statistical Methods, Data Analysis, Report Writing, Research Methods in Library and Information Science and Services, Bibliometrics.
- (ii) Types of Libraries {National, Public, Academic, and Special (Objectives, structures and functions), Digital Libraries (Concept), Virtual Libraries (Concept), Types of Users, User Studies, User Education, Role of UGC in the Growth and Development of libraries and information centers in institutes of Higher Education in India.

Organization of Knowledge/Information, Modes of Formation of Subjects, Library Classification (Cannon and Principles), Library Classification Schemes (DDC, UDC, CC), Library Cataloguing (Cannons and Principles), Library Cataloguing Codes (CCC and AACR 2), Bibliographic Records, Intellectual Standards (ISBD, MARC and CCF), Indexing (Pre and Post co-ordinate), Vocabulary Control (Thesaurus and List of Subject Heading), Databases (Search Strategies and Boolean Operators), Knowledge Management (Principles, Functions and School of Thoughts), Planning, Organization Structure, Decision Making, System Study (Analysis, Evaluation and Design), Collection Development



(Books, Serials, non-books Material), Selection, Acquisition, Maintenance, ISBN, ISSN, Cataloguing-in-Publication (CIP), Human Resource Management, Manpower Planning, Job Analysis, Job Description, Selection, Recruitment, Motivation, Training and Development, Staff Manual, Leadership and Performance Evaluation, Delegation of Authority, Financial Management, Resource Generation, Types of Budgeting, Cost and Cost Benefit Analysis, PERT, CPM, Library Building and Equipments, Performance Evaluation of Libraries/Information Centers and Services, Marketing Information Product and Services, Total Quality Management (TQM).

Information Technology, Components of Information Technology, Impact of IT on Society, Computer Hardware, Computer Software, Storage Devices, Output / Input Devices, Computer

Networks, TCP/IP Model, Routing Protocols, SMTP (Simple Mail Transfer Protocol), Virtual

LAN (VLAN), VoIP (Voice over IP), Wireless Networks, WLAN, Wi-Fi, LAN Testing, Network Extension, Network Protection & Security Threats, Network Change Management, Proxy Server, Web Servers & File Servers, Operating System: Types, process management, Memory Management, Microsoft Windows & Linux Installation & Configuration.

Software Development Life Cycle, Requirement Analysis & Engineering, IT Project planning & Execution, Rational Unified Process, Unified Modeling Language, software Analysis & Design, Concepts of OOPs, Object Oriented Analysis and Design, Cost & Benefit Analysis, Software Change Management, Software Testing, IT Vendor Management, client/ server architecture, deployment of web based applications.

Static & Dynamic Web Development: HTML, Java Script, JSON, AJAX, XML, Web Servers: Tomcat, Apache, WAMP, IIS etc, Server side Programming Language-C#.net, Java, VB.net, PHP, Web Design Tools, Mail server, Browser Configuration, DNS & Web Hosting, Web services.

Database Management System- Database design (integrity constraints, normal forms), Data Base Models, Relational model (relational algebra, tuple calculus), Data Analysis, ER diagrams, Database tools: SQL, SQL Developer, Database Server- My SQL, Oracle, SQL Server Object Relational Mapping (ORM) Tools, Transactions and concurrency control. Learning Management System (LMS), Content Management System (CMS), Software Installation & Configuration.

(c) Interview/ Personality Test:

Candidates who qualify in the Written Test will be called for interview/personality test. The interview/personality test shall be conducted for assessing the knowledge of the candidate in the relevant field, experience, extra-curricular activities, general awareness/knowledge, communication skills and overall personality etc.

The applicant(s) should be ready to customise and install the open source software(s): Library Automation software, Content Management Software.



3.4 Scheme of Examination for Direct Recruitment to the post of Professional Assistant, Semi Professional Assistant and Library Assistant

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

A. Scheme of the Examination:

Written Test			
MCQ Type Paper I	Time: 3 hours	Max. marks allowed: 100	
		marks	
Descriptive Type Paper II	Time: 3 hours	Max. marks allowed: 100	
		marks	
Total Marks (100+100)		200 marks	

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

Library Aptitude.

(b) Paper - II: Descriptive Type

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.



3.5 Scheme of Examination for Direct Recruitment to the post of Library Attendant

The following shall be the scheme of examination and its syllabus for recruitment to the post Library Attendant by the direct recruitment:

The following shall be the scheme of examination and its syllabus for the post of Laboratory Attendant and Animal Attendant by direct recruitment

A. Scheme of Examination:

Written Test			
MCQ Type	Time: 3 hours	Max. marks allowed: 100 marks	
Total Marks		100 marks	

B. Syllabus:

Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

Basic knowledge in library system.



4 Technical/Laboratory Services

III.4.1 Scheme of Examination for Direct Recruitment for the post of Senior Technical Assistant, Technical Assistant, Laboratory Assistant

The following shall be the scheme of examination and its syllabus for recruitment to the post of Senior Technical Assistant, Technical Assistant and Laboratory Assistant by direct recruitment

A. Scheme of Examination:

Written Test			
MCQ Type	Time: 3 hours	Max. marks allowed: 100	
Paper I		marks	
Descriptive Type	Time: 3 hours	Max. marks allowed: 100	
Paper II		marks	
Skill Test			
Skill Test	Time (To be	Max. marks allowed: 50 marks	
	decided later)		
Total Marks (100+100+50)		250 marks	

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper - II: Descriptive Type

The paper will cover the following areas:

Subject specific laboratory based practical questions of the concerned department. Knowledge of Computers with special reference to knowledge of word processing, data analysis package etc.



(c) Skill Test:

Candidates who qualify in the Written Test will be called for Skill Test. The Skill Test shall be conducted in a manner which will check the ability and practical knowledge of the candidate in handling various scientific experiments/tests, as the case may be and also to test the knowledge in terms of various Do's and Don'ts in a laboratory related to various hazards, precautions etc. in a typical laboratory setup of the concerned department.



4.2 Scheme of Examination for Direct Recruitment for the post of Laboratory Attendant and Animal Attendant

The following shall be the scheme of examination and its syllabus for recruitment to the post of Laboratory Attendant and Animal Attendant by direct recruitment

A. Scheme of Examination:

Written Test		
MCQ Type	Time: 3 hours	Max. marks allowed: 100 marks
Skill Test		
Skill Test	Time (To be	Max. marks allowed: 50 marks
	decided later)	
Total Marks		150 marks

B. Syllabus:

(a)Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Skill Test:

Basic working knowledge with laboratory equipments/ Basic knowledge in taking care of animals.



5 Engineering Services

5.1 Scheme of Examination for Direct Recruitment to the post of Assistant Engineer (Civil)

The following shall be the scheme of examination and its syllabus for recruitment to the post of Assistant Engineer (Civil) by the direct recruitment:

A. Scheme of the Examination:

Written Test			
Paper - I	Time: 3 hours	Max. marks allowed: 100 marks	
MCQ Type			
Paper-II	Time: 3 hours	Max. marks allowed: 100 marks	
(Descriptive Type)			
Total Marks (100+100)		200 marks	

B. Syllabus for the above papers (Paper-I & II) 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 pinjointed 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 properties-plasticity, cohesion, consolidation, compaction, permeability, compressibility, soil moisture content, specific gravity, density; Bearing capacity of soil.



5.2 Scheme of Examination for Direct Recruitment to the post of Assistant Engineer (Electrical)

The following shall be the scheme of examination and its syllabus for recruitment to the post of Assistant Engineer (Electrical) by the direct recruitment:

A. Scheme of the Examination:

Written Test			
Paper — I	Time: 3 hours	Max. marks allowed: 100 marks	
MCQ Type			
Paper-II	Time: 3 hours	Max. marks allowed: 100 marks	
Descriptive Type			
Total Marks (100+100)		200 marks	

B. Syllabus for the above papers (Paper-I & II) 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, Under-ground 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.



5.3 Scheme of Examination for Direct Recruitment to the post of Junior Engineer (Civil)

The following shall be the scheme of examination and its syllabus for recruitment to the post of Junior Engineer (Civil) by the direct recruitment:

A. Scheme of the Examination:

Written Test			
Paper-I	Time: 3 hours	Max. marks allowed: 100 marks	
MCQ Type			
Paper-II	Time: 3 hours	Max. marks allowed: 100 marks	
Descriptive Type			
Total Marks (100+100)		200 marks	

B. Syllabus for the above papers (Paper-I & II) 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 instrument - 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 pinjointed 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 properties-plasticity, cohesion, consolidation, compaction, permeability, compressibility, soil moisture content, specific gravity, density; Bearing capacity of soil.



5.4 Scheme of Examination for Direct Recruitment to the post of Junior Engineer (Electrical)

The following shall be the scheme of examination and its syllabus for recruitment to the post of Junior Engineer (Electrical) by the direct recruitment:

A. Scheme of the Examination:

Written Test		
Paper-I	Time: 3 hours	Max. marks allowed: 100 marks
MCQ Type		
Paper-II	Time: 3 hours	Max. marks allowed: 100 marks
Descriptive Type		
Total Marks (100+100)		200 marks

B. Syllabus for the above papers (Paper-I & II) 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, Under- ground 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.



5.5 Scheme of Examination for Direct Recruitment for the post of Electrician

The following shall be the scheme of examination and its syllabus for recruitment to the post of Electrician by the direct recruitment:

A. Scheme of Examination:

Written Test			
Paper I MCQ Type	Time: 3 hours	Max. marks allowed: 100 marks	
Skill Test/Trade Test			
Skill Test/Trade Test	Time: (To be decided later)	Max. marks allowed: 50 marks	
Total Marks (100+5	0)	150	

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(c) Skill Test/Trade Test:

Candidates who qualify in the Written Test will be called for Skill Test/Trade Test. The Skill Test/Trade Test shall be conducted in a manner which will check the ability and practical knowledge of the candidate in the relevant field, and also to test the knowledge in terms of various Do's and Don'ts related to various hazards, precautions etc.



5.6 Scheme of Examination for Direct Recruitment for the post of Pump Operator

The following shall be the scheme of examination and its syllabus for recruitment to the post of Pump Operator by the direct recruitment:

A. Scheme of Examination:

Written Test				
Paper I MCQ Type	Time: 3 hours	Max. marks allowed: 100 marks		
Skill Test/Trade Test				
Skill Test/Trade Test Time: Max. marks allowed: 50 (To be decided later) marks				
Total Marks		150		

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Skill Test/Trade Test:

Candidates who qualify in the Written Test will be called for Skill Test/Trade Test. The Skill Test/Trade Test shall be conducted in a manner which will check the ability and practical knowledge of the candidate in the relevant field, and also to test the knowledge in terms of various Do's and Don'ts related to various hazards, precautions etc.



6 Health and Medical Services

6.1 Scheme of Examination for Direct Recruitment to the post of Medical Officer

The following shall be the scheme of examination, personality test and its syllabus for recruitment to the post Medical Officer by direct recruitment:

A. Scheme of Examination:

- The minimum qualifying marks to be secured in Paper I shall be 40%. The answer scripts of the candidates for the descriptive test shall be evaluated only in respect of those candidates who secure the minimum qualifying marks in Paper I. The candidates who secure minimum 50% marks in Paper II shall be called for the skill test/interview, wherever applicable.
- The marks allocated for the skill test, wherever applicable, shall be 50; and the minimum qualifying marks in the skill test shall be 25. The merit list of the candidates shall be drawn based on the performance in Paper I (Objective Type Test) and Paper II (Descriptive test) and Interview (wherever applicable) subject to qualifying the skill test, wherever applicable.

Written Test			Interview/
			Personality Test
MCQ Type	Time: 3 hours	Max. marks allowed: 100	Max. marks allowed:
Paper I		marks	50 marks
Descriptive Type	Time: 3 hours	Max. marks allowed: 100	
Paper II		marks	
Total Marks (100 + 100 + 50)			250 marks

B. Syllabus:

(a) Paper-I: Test of General Studies (MCQ Type)

- (i) General Medicine including the following: Cardiology, Respiratory diseases, Gastro-intestinal, Genito-Urinary, Neurology, Hematology, Metabolic disorders, Endocrinology, Infections/Communicable Diseases (Virus, Rickets, Bacterial, Spirochetal, Protozoan, Metazoan, Fungus), Nutrition/Growth, Diseases of the skin (Dermatology), Musculoskelatal System, Psychiatry, Emergency Medicine, Common Poisoning, Snake bite, Tropical Medicine, Critical Care Medicine, Patho physiological basis of diseases, Vaccines preventable diseases and Non vaccines preventable diseases, Vitamin deficiency diseases, Psychiatry (Depression, psychosis, anxiety, bipolar diseases and Schizoprenia).
- (ii) Paediatrics including the following: Common childhood emergencies, Basic new born care, Normal developmental milestones, Accidents and poisonings in children, Birth defects and counseling including autism, Immunization in children, Recognizing children with special needs and management, and National programs related to child health.



(b) Paper-II: Descriptive Type

(i) Surgery (Surgery including ENT, Ophthalmology, Traumatology and Orthopaedics)

- (I) General Surgery: Wounds, Infections, Tumours, Lymphati, Blood vessels, Cysts/sinuses, Head and neck, Breast, Alimentary tract (Oesophagus, Stomach, Intestines, Anus), Liver, Bile, Pancreas, Spleen, Peritoneum, Abdominal wall, Abdominal injuries
- (II) Urological Surgery, Neuro Surgery, Otorhinolaryngology E.N.T., Thoracic surgery, Orthopedic surgery, Ophthalmology Anesthesiology, Traumatology, Diagnosis and management of common surgical ailments, Pre-operative and post operative care of surgical patients, Medicolegal and ethical issues of surgery, Wound healing, Fluid and electrolyte management in surgery, Shock patho-physiology and management.

(ii) Gynaecology & Obstetrics

- (a) Obstetrics: Ante-natal conditions, Intra-natal conditions, Post-natal conditions, Management of normal labours or complicated labour
- **(b) Gynaecology:** Applied anatomy, Applied physiology of menstruation and fertilization, Infections in genital tract, Neoplasma in the genital tract, Displacement of the uterus, Normal delivery and safe delivery practices, High risk pregnancy and management, Abortions, Intra Uterine growth retardation, Medicolegal examination in Gynaecology & Obstetrics including Rape.
- (c) Family Planning: Conventional contraceptives, U.D. and oral pills, Operative procedure, sterilization and organization of programs in the urban and rural surroundings, Medical Termination of Pregnancy
- (iii) Preventive Social And Community Medicine: Social and Community Medicine, Concept of Health, Disease and Preventive Medicine, Health Administration and Planning, General Epidemiology, Demography and Health, Statistics, Communicable Diseases, Environmental Health, Nutrition and Health, Non-communicable diseases, Occupational Health, Genetics and Health, International Health, Medical Sociology and Health Education, Maternal and Child Health, National Programs, Management of common health problems, Ability to monitor national health programs, Knowledge of maternal and child wellness, Ability to recognize, investigate, report, plan and manage community health problems including malnutrition and emergencies.

(c) Interview/Personality Test

Candidates who qualify in the Written Test will be called for interview/personality test. The interview/personality test shall be conducted for assessing the knowledge of the candidate in the relevant field, experience, extra-curricular activities, general awareness/knowledge, communication skills and overall personality etc.



6.2 Scheme of Examination for Direct Recruitment to the post of Nursing Officer

The following shall be the scheme of examination and its syllabus for recruitment to the post Nursing Officer by direct recruitment:

A. Scheme of Examination:

Written Test			
MCQ Type	Time: 3 hours	Max. marks allowed: 100	
Paper I		marks	
Descriptive Type	Time: 3 hours	Max. marks allowed: 100	
Paper II		marks	
Skill Test			
Skill Test	Time (To be	Max. marks allowed: 50 marks	
	decided later)		
Total Marks (100+100+50)		250 marks	

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper-II: Descriptive Type

Fundamentals of Nursing: Introduction to Nursing, Basic Nursing care and needs of a patient, Assessment of patient, Therapeutic nursing care, Nursing care of patient/client, Pharmacology

Anatomy and Physiology: Introduction to anatomical terms, Organization of body cells, organs, tissues, etc. Cardio-vascular systems, Skeletal systems, Muscular systems

Microbiology: Introduction and Scope of Microbiology, Laboratory Techniques, Micro-organisms, Infection and its transmission, Immunity

Psychology: Introduction, Learning, Observation, Intelligence, Personality, Psychology of Human Behaviour



Sociology: Concept, Scope, and Nature of Sociology, The Community, The Individual, The Family, The Society, Economy

First Aid: Importance of First-Aid, Community Emergencies, First-Aid in emergency situations

Personal Hygiene: Concept of Health, Physical Health, Maintenance of Health, Mental Health

Medical-Surgical Nursing I: Introduction, Nursing Assessment, Altered Immune Response, Clinical Pharmacology, Patho Physiological Mechanism of Disease

Community Health Nursing – II: Health System in India, Vital health statistics, Healthcare services in India, Health planning in India, Specialized Community health services

Communicable Diseases: Assessment, Review of infection, how it spreads, and its control, Management of various infectious diseases, Reparation, care, and administration of antisera and vaccines, Isolation-review of epidemiology and control measures

Ear, Nose, and Throat: Assessment of the functions of ear, nose, and throat, Management of disorders and diseases of ear, nose, and throat, Disorders and diseases of the ear, nose, and throat.

Oncology: Nursing Management of Patients with abnormal cell growth, Detection and prevention, Classification of cancer

Mental Health and Psychiatric Nursing: Introduction, History of Psychiatric, Mental Disorders, Community Health Nursing, Mental Health Assessment, Community Mental Health, Psychiatric Nursing Management

Midwifery and Gynaecological Nursing: Introduction, Reproductive System, Complications of pregnancy and its management, Nursing Management of pregnant women, Nursing Management of women in Labour

Paediatric Nursing: The concept in child healthcare, The Newborn, The Healthy child, Welfare of children, Children with various disorders and diseases

Computer Education: Basic Knowledge of Computer in the relevant field

(c) Skill Test:

Practical Skills in the field of nursing.



6.3 Scheme of Examination for Direct Recruitment to the post of Pharmacist

The following shall be the scheme of examination and its syllabus for recruitment to the post Pharmacist by direct recruitment:

A. Scheme of Examination:

Written Test			
Paper - I	Time: 3 hours	Max. marks allowed: 100 marks	
MCQ Type			
Paper-II	Time: 3 hours	Max. marks allowed: 100 marks	
(Descriptive Type)			
Total Marks (100+100)		200 marks	

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper-II: Descriptive Type

Pharmaceutics: Introduction of different dosage forms, Metrology, Packaging of pharmaceuticals, Size separation, Mixing and Homogenization, Clarification and Filtration, Extraction and Galenicals, Distillation, Introduction to drying process, Sterilization, Aseptic techniques, Processing of Tablets, Processing of Capsules, Study of immunological products.

Prescriptions, Incompatibilities in prescriptions, Posology, Dispensed Medications, Powders, Liquid oral Dosage forms: Monophasic, Biphasic Liquid Dosage Forms: Suspensions, Emulsions, Semi-Solid Dosage Forms: Ointments, Pastes, Jellies, Dental and cosmetic preparations, Sterile Dosage forms: Parenteral dosage forms, Sterility testing, Ophthalmic products.

Pharmaceutical Chemistry: Acids, bases and buffers, Antioxidants, Gastrointestinal agents, Topical Agents, Antimicrobials and Astringents, Dental Products, Respiratory stimulants, Expectorants and Emetics, Antidotes, Major Intra and Extra cellular electrolytes, Inorganic official compounds, Radio



pharmaceuticals and contrast media, Quality control of Drugs and pharmaceuticals, Identification tests for cations and anions.

Introduction to the nomenclature of organic chemical systems, The chemistry of pharmaceutical organic compounds (Antiseptics and Disinfectants, Sulphonamides, Antileprotic Drugs, Antitubercular Drugs, Antimoebic and Anthelmintic Drugs, Antibiotic, Antifungal agent, Antimalarial Drugs, Tranquilizers, Hypnotics, General, Anaesthetics, Antidepressant Drugs, Adrenergic drugs, Adrenergic antagonist, Cholinergic Antagonists, Diuretic Drugs, Cardiovascular Drugs, Hypoglycemie Agents, Coagulants and Anti coagulants, Local Anesthetics, Analgesics and Antipyretics, Non-steriodal anti-inflammatory agents, Anticonvulsants, cardiac glycosides, Antiarrhythmic, Antihypertensives & Vitamins, Steroidal Drugs, Anti-Neoplastic Drugs.

Pharmacognosy: Definition, history and scope of Pharmacognosy, Various systems of classification of drugs and natural origin, Adulteration and drug evaluation, Brief outline of alkaloids, terpenoids, glycosides, volatile oils, tannins and resins, Occurrence, distribution, organoleptic evaluation, chemical constituents including tests wherever applicable and therapeutic efficacy of various drugs, Pharmaceutical aids, Miscellaneous drugs.

Biochemistry & Clinical Pathology: Introduction to biochemistry, Carbohydrates, Lipids, Vitamins, Enzymes, Therapeutics, Introduction to Pathology of blood and urine. Lymphocytes and platelets, their role in health and disease, Erythrocytes.

Human Anatomy & Physiology: Scope of Anatomy and physiology, Elementary tissues, Skeletal System, Cardiovascular System, Respiratory system, Urinary System, Muscular System, Central Nervous System, Sensory Organs, Digestive System, Endocrine System, Reproductive system.

Health Education & community pharmacy: Concept of health, Nutrition and health, First aid, Environment and health, Fundamental principles of microbiology, Communicable diseases, Respiratory infections, Intestinal infection, Arthropod borne infections, Surface infection, Sexually transmitted diseases, Non-communicable diseases, Epidemiology.

Pharmacology & Toxicology: Introduction to pharmacology, Routes of administration of drugs, General mechanism of drugs action, Drugs acting on the central Nervous system, Drugs acting on respiratory system, Autocoids, Cardio vascular drugs, Drugs affecting renal function, Hormones and hormone antagonists, Drugs acting on digestive system, Chemotherapy of microbial diseases, Disinfectants and antiseptics.

Pharmaceutical Jurisprudence: Origin and nature of pharmaceutical legislation in India, Principles and significance of professional Ethics, All Pharmacy & Drug Acts.

Hospital & Clinical Pharmacy:

Part-I: Hospital Pharmacy-Hospital and Hospital Pharmacy, Drug Distribution system in Hospitals, Manufacturing, Sterile manufacture, Non-sterile P.T.C. (Pharmacy Therapeutic Committee), Hospital Formulary system, Drug Information service, Surgical dressing.

Part II: Clinical Pharmacy- Introduction to Clinical pharmacy practice, Modern dispensing aspects, Common daily terminology used in the practice of Medicine. Disease, manifestation and pathophysiology, Physiological parameters with their significance. Drug Interactions, Adverse Drug Reaction, Drugs in Clinical Toxicity, Drug dependences, Bio-availability of drugs.

Computer Education: Basic Knowledge of Computer in the relevant field.



6.4 Scheme of Examination for Direct Recruitment for the post of Medical Laboratory Attendant

The following shall be the scheme of examination and its syllabus for recruitment to the post of Medical Laboratory Attendant by direct recruitment

A. Scheme of Examination:

Written Test			
MCQ Type	Time: 3 hours	Max. marks allowed: 100 marks	
Total Marks		100 marks	

B. Syllabus:

(a) Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

Basic knowledge with Medical Laboratory equipment/ Basic Medical Aids.



7 Managerial Services

7.1 Scheme of Examination for Direct Recruitment for the post of Manager and Assistant Manager

The following shall be the scheme of examination and its syllabus for recruitment to the post of Manager and Assistant Manager by direct recruitment:

A. Scheme of Examination:

Written Test			
MCQ Type	Time: 3 hours	Max. marks allowed: 100	
Paper I		marks	
Descriptive Type	Time: 3 hours	Max. marks allowed: 100	
Paper II		marks	
Total Marks (100+100)		200 marks	

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper - II: Descriptive Type

Basic knowledge pertaining to functional, procedural aspect of the work profile of the post concerned. Situation Test analysis, where the candidates reaction would be sought on a given situation test case.



7.2 Scheme of Examination for Direct Recruitment for the post of Cook

The following shall be the scheme of examination and its syllabus for recruitment to the post of Cook by direct recruitment:

A. Scheme of Examination:

Written Test			
MCQ Type	Time: 3 hours	Max. marks allowed: 100	
Paper I		marks	
Skill/Trade Test			
Skill Test/Trade Test	Time (to be decided	Max. marks allowed: 50 marks	
	later)		
Total Marks		150 marks	

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Skill Test/Trade Test:

The Skill Test/Trade Test is aimed to assess the following skills:

- 1. Ability to cook different varieties of Vegetarian and Non-vegetarian food items both of South Indian and/or North Indian style/ Magalia Western Style etc.
- 2. Ability to manage supplies.
- 3. Knife skill & hygiene.



7.3 Scheme of Examination for Direct Recruitment for the post of Kitchen Attendant

The following shall be the scheme of examination and its syllabus for recruitment to the post of Kitchen Attendant by direct recruitment:

A. Scheme of the Examination:

Written Test				
MCQ Type Time: 3 hours Max. marks allowed: 100 marks				
Total Marks 100 marks				

B. Syllabus:

Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

Basic knowledge in Guest House Service and kitchen.



8 Statistical Services:

8. Scheme of Examination for Direct Recruitment for the post of Statistical Officer and Statistical Assistant

The following shall be the scheme of examination and its syllabus for recruitment to the post of Statistical Officer and Statistical Assistant by direct recruitment:

A. Scheme of the Examination:

Written Test			
Paper - I	Time: 3 hours	Max. marks allowed: 100 marks	
MCQ Type			
Paper-II	Time: 3 hours	Max. marks allowed: 100 marks	
(Descriptive Type)		marks	
Total Marks (100+100)		200 marks	

B. Syllabus:

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

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper II: Descriptive Type

Statistics: Probability, Statistical Methods, Statistical Inference, Sampling Theory and Design of Experiments.

Economics: Money, Banking and Public Finance, International Economics, Broad Fiscal Monetary, Industrial Trade and Agricultural Policies –Objectives, Major problems, their dimensions, nature and broad causes, Economic Planning in India, Growth in income and employment, Indian Economics, General Economics, Micro – Economics, Macro – Economics, Main Features, Geographic size Endowment of Natural Resources, Population Growth and Development.



Mathematics: Algebra, Vector Spaces and Matrices, Geometry and Vectors, Calculus, Ordinary Differential Equations, Mechanics, Elements of Computer Programming

Computer Science: Introduction to Computers, Basic Computer Organization, Computer Programming, Data Structures, Operation System, Databases

Commerce: Cost and Management Accounting, Financial Accounting, Auditing & Business Laws, Business Organization and Management, Business Economics and Financial Services.



9 Information & Communication Technology Services:

9.1 Scheme of Examination for Direct Recruitment for the post of Sr. System Analyst, System Analyst

The following shall be the scheme of examination, personality test and its syllabus for recruitment to the post of Sr. System Analyst, System Analyst by direct recruitment:

- The minimum qualifying marks to be secured in Paper I shall be 40%. The answer scripts of the candidates for the descriptive test shall be evaluated only in respect of those candidates who secure the minimum qualifying marks in Paper I. The candidates who secure minimum 50% marks in Paper II shall be called for the skill test/interview, wherever applicable.
- The marks allocated for the skill test, wherever applicable, shall be 50; and the minimum qualifying marks in the skill test shall be 25. The merit list of the candidates shall be drawn based on the performance in Paper I (Objective Type Test) and Paper II (Descriptive test) and Interview (wherever applicable) subject to qualifying the skill test, wherever applicable.

A. Scheme of the Examination:

Written Test		Interview/	
			Personality Test
MCQ Type	Time: 3 hours	Max. marks allowed: 100	Max. marks allowed: 50
Paper I		marks	marks
Descriptive Type	Time: 3 hours	Max. marks allowed: 100	
Paper II		marks	
Total Marks (100 + 100 + 50)			250 marks

B. Syllabus:

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

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.



(b) Paper II: Descriptive Type

Computer Networks & Operating System:

Computer Networks, TCP/IP Model, Routing Protocols, SMTP (Simple Mail Transfer Protocol), Virtual LAN (VLAN), VoIP (Voice over IP), Operating System: Types, Process Management, Memory Management, Microsoft Windows & Linux Installation & Configuration, Wireless Networks, WLAN, Wi-Fi, LAN Testing, Network Extension, Network Protection & Security Threats, Network Change Management, LAN Proxy Server, Web Servers & File Server.

Internet & Web Technologies:

Static and dynamic web development, HTML, Java Script, JSON, AJAX, XML, Web Servers: Tomcat, Apache, WAMP, IIS etc. Server Programming Language- C#.net, Java, VB.Net, PHP, Web Design Tools, Mail server, Browser, Configuration, DNS & Web Hosting, Web services.

IT Project Management:

Software Development Life Cycle, Requirement Analysis & Engineering, IT Project planning & Execution, Rational Unified Process, Unified Modeling Language, software Analysis & Design, Concepts of OOPs, Object Oriented Analysis and Design, Cost & Benefit Analysis, Software Change Management, IT Vendor Management, client/ server architecture, deployment of web based applications, Software testing.

Database Management System & tools:

Learning Management System (LMS), Content Management System (CMS), Software Installation & Configuration. Database Management System- Database design (integrity constraints, normal forms), Data Base Models, Relational model (relational algebra, tuple calculus), Data Analysis, ER diagrams, Database tools: SQL, SQL Developer, Database Server- My SQL, Oracle, SQL Server Object Relational Mapping (ORM) Tools, Transactions and concurrency control.

Customization and installation of the open source software(s).

(c) Interview/ Personality Test:

Candidates who qualify in the Written Test will be called for interview/personality test. The interview/personality test shall be conducted for assessing the knowledge of the candidate in the relevant field, experience, extra-curricular activities, general awareness/knowledge, communication skills and overall personality etc.



9.2 Scheme of Examination for Direct Recruitment for the post of Senior Technical Assistant (ICT)

The following shall be the scheme of examination and its syllabus for the post of Senior Technical Assistant (ICT)

A. Scheme of Examination:

Written Test			
MCQ Type	Time: 3 hours	Max. marks allowed: 100	
Paper I		marks	
Descriptive Type	Time: 3 hours	Max. marks allowed: 100	
Paper II		marks	
Skill Test			
Skill Test (Laboratory/Computer Test)	Time (To be	Max. marks allowed: 50 marks	
	decided later)		
Total Marks (100+100+50)		250 marks	

B. Syllabus:

(a) Paper - I: Test of General Studies (MCQ Type):

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper - II: Descriptive Type

The paper will cover the following areas:

Subject specific laboratory based practical questions of the concerned department. Knowledge of Computers with special reference to knowledge of word processing, data analysis package etc.

(c) Skill Test:

Candidates who qualify in the Written Test will be called for Skill Test. The Skill Test shall be conducted in a manner which will check the ability and practical knowledge of the candidate in the relevant field.



10 Official Language Cell:

10.1 Scheme of Examination for Direct Recruitment for the post of Hindi Officer

The following shall be the scheme of examination, personality test and its syllabus for the post of Hindi Officer by direct recruitment:

- The minimum qualifying marks to be secured in Paper I shall be 40%. The answer scripts of the candidates for the descriptive test shall be evaluated only in respect of those candidates who secure the minimum qualifying marks in Paper I. The candidates who secure minimum 50% marks in Paper II shall be called for the skill test/interview, wherever applicable.
- The marks allocated for the skill test, wherever applicable, shall be 50; and the minimum qualifying marks in the skill test shall be 25. The merit list of the candidates shall be drawn based on the performance in Paper I (Objective Type Test) and Paper II (Descriptive test) and Interview (wherever applicable) subject to qualifying the skill test, wherever applicable.

A. Scheme of the Examination:

Written Test			Interview/
			Personality Test
MCQ Type	Time: 3 hours	Max. marks allowed: 100	Max. marks allowed:
Paper I		marks	50 marks
Descriptive Type	Time: 3 hours	Max. marks allowed: 100	
Paper II		marks	
Total Marks (100 + 100 + 50)			250 marks

B. Syllabus:

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

General English/Hindi: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.



(b) Paper II: Descriptive Type

Knowledge and awareness on University education system in India, Tripura University Act & Statute, Official language Act, Provisions, Policy, Incentives, Imparting of Hindi training, Translation of paragraph from English to Hindi & vice versa.

Committees, Inspection, Annual targets for Hindi implementation, Chronology of Hindi as an official language in India, Knowledge of Hindi softwares, etc., and Administrative Knowledge.

New Education Policy (NEP), 2020

Passage/Essay Writing/Report Writing/Paragraph Writing/Letter Writing.

(c) Interview/ Personality Test:

The interview/personality test shall be conducted for assessing the knowledge of the candidate in the relevant field, experience, extra-curricular activities, general awareness/knowledge, communication skills and overall personality etc.



10.2 Scheme of Examination for Direct Recruitment for the post of Linguistic Officer

The following shall be the scheme of examination and its syllabus for recruitment to the post of Linguistic Officer by direct recruitment:

A. Scheme of the Examination:

Written Test		
Paper - I	Time: 3 hours	Max. marks allowed: 100 marks
MCQ Type		
Paper-II	Time: 3 hours	Max. marks allowed: 100 marks
(Descriptive Type)		
Total Marks (100+100)		200 marks

B. Syllabus:

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

General English/Hindi: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper II: Descriptive Type

To be notified later.



10.3 Scheme of Examination for Direct Recruitment for the post of Hindi Translation Officer

The following shall be the scheme of examination and its syllabus for recruitment to the post of Hindi Translation Officer by direct recruitment:

A. Scheme of the Examination:

Written Test		
Paper - I	Time: 3 hours	Max. marks allowed: 100 marks
MCQ Type		
Paper-II	Time: 3 hours	Max. marks allowed: 100 marks
(Descriptive Type)		
Total Marks (100+100)		200 marks

B. Syllabus:

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

General English/Hindi: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper II: Descriptive Type

The paper will cover the following areas:

Official language Act, Provisions, Policy, Incentives, Imparting of Hindi training, Translation of paragraph from English to Hindi & vice versa.

Chronology of Hindi as an official language in India, Knowledge of Hindi softwares, etc., and Basic Administrative Knowledge.

Passage/Essay Writing/Report Writing/Paragraph Writing/Letter Writing.



10.4 Scheme of Examination for Direct Recruitment to the post of Hindi Typist

The following shall be the scheme of examination and its syllabus for recruitment to the post of Hindi Typist by direct recruitment:

A. Scheme of the Examination:

Written Test			
MCQ Type	Time: 3 hours	Max. marks allowed: 100 marks	
Skill Test			
Skill Test (Computer Proficiency Test)	Time (To be	Max. marks allowed: 50 marks	
	decided later)		
Total Marks		150 marks	

B. Syllabus:

(a) Test of General Studies (MCQ Type):

General English/Hindi: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Skill Test: Computer Proficiency Test

Candidates who qualify in the Written Test will be called for Computer Proficiency Test to be taken on computer. Questions will be designed to test the candidate's knowledge of Translation of paragraph from English to Hindi & vice versa, Knowledge of Hindi Softwares, Microsoft Office, Spreadsheet and Computer Applications, usage of internet for everyday office work.



11 Sports/Games Services

11.1 Scheme of Examination for recruitment to the post of Assistant Director of Physical Education:

The following shall be the Scheme of Examination, personality test and its syllabus for recruitment to the post of Assistant Director of Physical Education by direct recruitment:

- The minimum qualifying marks to be secured in Paper I shall be 40%. The answer scripts of the candidates for the descriptive test shall be evaluated only in respect of those candidates who secure the minimum qualifying marks in Paper I. The candidates who secure minimum 50% marks in Paper II shall be called for the skill test/interview, wherever applicable.
- The marks allocated for the skill test, wherever applicable, shall be 50; and the minimum qualifying marks in the skill test shall be 25. The merit list of the candidates shall be drawn based on the performance in Paper I (Objective Type Test) and Paper II (Descriptive test) and Interview (wherever applicable) subject to qualifying the skill test, wherever applicable.

A. Scheme of the Examination:

	Written Test		Interview/
			Personality Test
MCQ Type	Time: 3 hours	Max. marks allowed: 100	
Paper I		marks	marks
Descriptive Type Paper II	Time: 3 hours	Max. marks allowed: 100 marks	
Tota	al Marks (100 + 100 +	50)	250 marks

B. Syllabus:

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

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.



(b) Paper II: Descriptive Type

May refer to UGC NET syllabus for Physical Education.

(c) Interview/ Personality Test:

Candidates who qualify in the Written Test will be called for interview/personality test. The interview/personality test shall be conducted for assessing the knowledge of the candidate in the relevant field, experience, extra-curricular activities, general awareness/knowledge, communication skills and overall personality etc.



11.2 Scheme of Examination for Direct Recruitment to the post of Coach

The following shall be the scheme of examination and its syllabus for recruitment to the post of Coach by direct recruitment:

A. Scheme of the Examination:

Written Test		
MCQ Type	Time: 3 hours	Max. marks allowed: 100 marks
Skill Test		
Skill Test	Time (To be	Max. marks allowed: 50 marks
	decided later)	
Total Marks		150 marks

B. Syllabus:

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

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Skill Test:

Depending upon the nature of posts.



12 Security Services

12 Scheme of Examination for Direct Recruitment to the post of Security Officer and Security Inspector

The following shall be the scheme of examination and its syllabus for recruitment to the post of Security Officer and Security Inspector by direct recruitment:

A. Scheme of the Examination:

Written Test		
Paper - I	Time: 3 hours	Max. marks allowed: 100 marks
MCQ Type		
Paper-II	Time: 3 hours	Max. marks allowed: 100 marks
(Descriptive Type)		
Total Marks (10	0+100)	200 marks

B. Syllabus:

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

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Paper II: Descriptive Type

Knowledge of disaster management techniques, Knowledge of Security & Fire Technology Systems - Equipment & Devices, Proper handling of licensed weapons, Training and management of security personnel deployed for University security, Anti-terrorist & Anti Sabotage devise & drills, Decorum and discipline of security staff, Important Ingredients of Recording FIR, Protocol norms for Independence Day and Republic Day celebrations, Security check points and strategies for fool proof entry and exit system, Smooth transportation/movement within the campus, Administering over all discipline in the campus, Knowledge of common Indian Penal Code (IPC), Other areas relevant to the post.



13 Transport Services

13 Scheme of Examination for Direct Recruitment to the post of Driver

The following shall be the scheme of examination and its syllabus for recruitment to the post of Driver by direct recruitment:

A. Scheme of the Examination:

Written Test			
MCQ Type	Time: 3 hours	Max. marks allowed: 100 marks	
Skill Test/Trade Test			
Skill Test/ Trade Test	Time (To be decided later)	Max. marks allowed: 50 marks	
Total Marks		150 marks	

B. Syllabus:

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

General English: Questions on synonyms, antonyms, idiomatic use of words and phrases, common errors, parts of speech, analysis of sentences, direct and indirect speech etc.

General Studies: General Science (General appreciation and understanding of science including matters of everyday observation and experience), Current Affairs, Indian National Movement (Nature and character of the nineteenth century resurgence, growth of nationalism and attainment of Independence), Indian Polity and Economy (Country's Political System, Constitution of India, Panchayati Raj, Social Systems and Economics developments in India), Reasoning Ability (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.), Mathematical Ability (Number System, 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.), Basic knowledge of Computer etc.

(b) Skill Test/ Trade Test:

- 1. Ability to drive with ease in different road conditions.
- 2. Knowledge of Traffic Regulation.
- 3. Knowledge of Petrol & Diesel Engine working and ability to locate faults and rectify minor running defects.
- 4. Ability to clear carburettor/injector, plug, etc.