

# अधिकत भारतीय आयूर्विज्ञान संस्थान ऋषिकेश (उत्तराख्वण्ड)

# ALL INDIA INSTITUTE OF MEDICAL SCIENCES RISHIKESH (UTTARAKHAND)

(An autonomous organization under the Ministry of Health & Family Welfare, Govt. of India)

# परीक्षा विभाग (Examination Section)

#AIIMSRISH/Exam/23/1191

# Date: 10 Oct. 2023 **Examination Notice**

Subject:- Scheme of Examination and Indicative Syllabus for CBT Recruitment Exams for the posts Medico Social Worker, Technical Officer (Technical Supervisor), Vocational Counsellor, TB and Chest Diseases Health Assistant, Electrocardiograph Technical Assistant, Health Educator (Social Psychologist), Pharma Chemist/Chemical Examiner, Lab Technician, Dark Room Assistant, Assistant Laundry Supervisor, Security Cum Fire Jamadar, Dispensing Attendants, and Dissection Hall Attendant-reg.

All the candidates who have applied or are applying for the posts of *Medico Social Worker, Technical Officer* (Technical Supervisor), Vocation Counsellor, TB and Chest Diseases Health Assistant, Electrocardiograph Technical Assistant, Health Educator (Social Psychologist), Pharma Chemist/Chemical Examiner, Lab Technician, Dark Room Assistant, Assistant Laundry Supervisor, Security Cum Fire Jamadar, Dispensing Attendants, and Dissection Hall Attendant against the **re-open notices dated 13**th September-2023 of AIIMS Rishikesh; are hereby informed that:-

The scheme & pattern of the recruitment examination for the said posts will be as follows: -

S.N.	Activity/ Description	Details
1	Date of Examination	TBD
2	Date of uploading admit cards	TBD
3	Venue of Exams.	TBD
4	Time duration of Examination	03 Hours (180 Minutes)
5	Type of Examination	Computer Based Test (CBT)
6	Number of Question Papers	Single (01) QP for each post
7	Scheme of Examination	<ul> <li>CBT multiple choice questions with four answer options and one of these four options will be the correct answer.</li> <li>There will be only one question paper for each post. The question paper will consist of 200 questions (MCQs) and the maximum marks will be 200.</li> <li>Each question will carry 01 (One) Marks for every correct answer.</li> <li>There will be 0.25 negative marks for each wrong answered question.</li> </ul>
8	Minimum Qualifying marks	The qualifying marks in the Recruitment Examination will be <b>50%</b> for UR category candidates, <b>45%</b> for <b>OBC</b> category candidates and <b>40%</b> for <b>SC</b> & <b>ST</b> category candidates.
9	Resolution of Tie Case	In cases where more than one candidate secures equal marks, tie will be resolved:  (i) First by using date of birth with older candidates placed higher.  (ii) If not resolved by (i) or in cases with same marks and same date of birth: number wrong answers/negative marks will be used wherein those with less wrong answers/negative marks will be placed higher.

 Candidates are advised to visit the website of AIIMS Rishikesh regularly for all updates/corrigendum/ Addendum regarding the examination/recruitment process for the above posts. They are also advised to regularly check their registered email for information sent by AIIMS regarding the examination.

- For any query or suggestion, candidates may send email to <code>helpdesk\_exam@aiimsrishikesh.edu.in</code>
- Post-wise indicative syllabus for the examination is given herewith in Annexure-A

**Examination Section AIIMS Rishikesh** 





# अधिकत भारतीय आसूर्विज्ञान संस्थान ऋषिकेश (उत्तराखनण्ड)

# ALL INDIA INSTITUTE OF MEDICAL SCIENCES RISHIKESH (UTTARAKHAND)

(An autonomous organization under the Ministry of Health & Family Welfare, Govt. of India)

# परीक्षा विभाग (Examination Section)

# Syllabus for recruitment Examination

# Post Name:-

### **Medico Social Worker**

### Pattern of examination:-

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

	Proposed Scheme of Examination	No. of Questions
A.	General Intelligence & Reasoning	15
В.	General Awareness	15
C.	Quantitative Aptitude	15
D.	English Language and Comprehension	15
E.	Post-Specific based on Domain Knowledge Area/Cadre for the post of Medico Social Worker	140

# **Indicative Syllabus**

- A. General Intelligence & Reasoning:- It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other sub-topics, if any.
- **B.** General Awareness:- Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude:- The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- **D. English Language and Comprehension:-** Candidates ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10<sup>th</sup> standard level.

- E. Post-Specific based on Domain Knowledge Area/Cadre for the post of Medico Social Worker:-
- Framework:- Social Welfare:- The concept of Social Welfare, Social Welfare:- Concept, need and Objectives; Philosophy of Social Welfare and Social work, Social welfare in historical, perspective Changing concepts and practices of social welfare in. relation to social, economic and industrial development, Changing political philosophy and its impact on social welfare, Social Welfare and related terms- (1) Social Development (2) Social Planning and social administration (3) Social reform (4) Social Security (5) Social Policy (6) Social Action (7) Social justice (8)Social and welfare services (9) Social legislation (10) Human Rights. Professional Social work an Introduction. The concept of professional social work-alignment of scientific and humanitarian motives for promoting social welfare.
- Framework:- Social Welfare:- The basic principles and values of professional social work and their relationship to the values of Indian Society, Evolution of professional social work in UK, USA. Evolution of Professional Social work in India. Social work as a profession. Nature and characteristics of a profession. The basic values and Principles of professional social work. Professional status of Social work in India. Code of ethics for social workers Methods of Social Work. Primary Methods of Social work. Secondary methods of Social work. Integrated approach of social work Interface between Professional and voluntary social work.

- Psychology and Mental Health Fundamentals:- Mental Health & Psychology. Psychology: Definitions and Fields. Mental Health: Meaning, Definitions, Characteristics. Normal & Abnormal Behaviour:- Meaning, Characteristics. Human Development:- Heredity and Environment. Meaning, Definition and scope of Mental Hygiene. Characteristics and Importance of Mental Hygiene. Aims of Mental Hygiene. Principles of Mental Hygiene. Programme of Mental Hygiene.
- Developmental Sociology:- Developmental Stages. Developmental Stages I:- Prenatal, Infancy. Developmental Stages II:- Babyhood. Childhood. Developmental Stages III:- Puberty. Adolescence, Adulthood. Developmental Stages III:- Middle age, Old age. Personality Development:- 1. Psycho-Sexual development theory:- Sigmund Freud 2. Psycho-Social development theory:- Erick Erickson 3. Defence Mechanism 4. Perspectives of Psychopathology. Unit Social Psychology. Nature and scope of social psychology. Attitude:- nature and measurement of attitude prejudice and discrimination Communication:- concept, methods, skills in communication, major obstacles. Mass communication, public opinion propaganda, fashion, social facilitation crowd behaviour.
- Sociology:- Theoretical Perspective:- Conceptual & Theoretical Perspectives to Understand Society:- 1. Society:- Nature, Approaches, Functions, Theories of Society (Evolutionary, Cyclical, Conflict and Systems theories). 2. Social Group:- Concept & Characteristics of Primary Group, Secondary Group, Reference Group. 3. Social Institutions:- Family, Marriage, Kinship, Property (Present trends). 4. Culture:- Concept of Culture, Traditions, Customs, Values and Norms Social System and Social Process of Contemporary Society 1. Social System & Sub system:- Structure & Function, Classification of System. 2. Social Structures:- Status & Role. 3. Social Process:- Meaning and kinds of Social Interaction, Socialization, Cooperation, Conflict, Assimilation, Social control.
- Sociology:- Polity & Economy:- 1. State:- Elements, Role and Functions. 2. Democratic government & process. 3. The nature of economic development, Classification of Developing Countries, 4. Meaning of Globalization, Liberalization, Privatization. Social Stratification and Social Change in Contemporary Society:- 1. Social Stratification:- Caste, Caste & Democracy, Tribes. 2. Social Change:- Concept, Factors, Western theories. 3. Theories of Social Change in India:-Sanskritization, Westernization, Modernization, Secularization.
- Problems of Contemporary Indian Society:- 1. Social Problem:- Concept, Factors, Theories. 2. Poverty:- Causes, Factors, Extent, Consequences, Theories, Measures, Impact on society. 3. Population Explosion:- Causes, Factors, Extent, Consequences, Measures, Impact on society. 4. Unemployment:- Causes, Factors, Extent, Consequences, Theories, Measures, Impact on society. 4. Environment pollution:- Causes, Factors, Extent, Consequences, Theories, Measures, Impact on society. 5. Malnutrition:- Causes, Factors, Extent, Consequences, Theories, Measures, Impact on society. 6.Positive and negative impact of Social Media (Internet, Face Book, Social Media, Television, Cinema, Mobile etc.).
- Social Work Research & Statistics:- Research:- Nature & Concept. Nature and Characteristics of Scientific method and Social Phenomenon. Meaning and definition of Research. Nature scope and importance of research. Types and Concepts used in Research. Types of research:- Historical, Descriptive, Analytical, Experimental, Interdisciplinary, Participative, action and evaluative research. Concepts used in research:- Variables, Attributes, Universe, Sample, Hypothesis, matching, Measurement. Problem Formulation and Hypothesis Testing Problem formulation:- Identifying probable issues for research, selecting specific research issue, formulation of objectives, clarifying the objective. Concepts and relevance of Hypothesis formulation and testing:- Level of Significance, Degree of Freedom, Type 1 Type 2 Error.
- Social Work Research & Statistics:- Methods of tools of data collection:- Observation and Interview Schedule, Questionnaire, and secondary methods of data collection. Sampling design:- Probability and nonprobability Data processing and analysis, interpretation and report writing Research Design Research design:- Concept, Meaning and importance of research Design Types of Research Design:- Experimental Design:- After only, Before-After, Ex-post facto experimental Design Non Experimental Design:- Exploratory, Descriptive and Diagnostic Understanding Concepts of Group Work.
- · Working with Individuals
- Groups and Social works:- Understanding Concepts of Group Work Concept of Group and its importance in human life cycle, Types of Groups Concept, Social Group Work as a method of Social Work 1. Theories and Models in Social Group Work 2. Values and Distinctive Principles of Social Group Work 3. Role of Group Worker 4. Social Group Work in Different fields 5. Group Work in Institutional settings 6. Understanding Individual in the Group Process and Group as a Totality Social Group Work Process and Programmes 1 Steps or Process of Group Formation 2. Stages / Phases in Group Development 3. Factors affecting Group Development and Role of Social Worker in different Stages of Group Development 4. Concept and Importance of Programme in Group Work Practice 5. Programme Planning, Development and Implementation Process Skills, Techniques, Recording and Evaluation in Social Group Work 1. Skills of Group Worker- For Group Development, Programme Planning, and Programme Implementation 2. Recording in Group Work-Principles and Types of Recording, Techniques of Recording Observation, Sociogram. 3. Evaluation in Group Work-Importance of Continuous evaluation in Group Work, Types and Methods of Evaluation Group Process and Dynamics 1. Social processes in group work 2. Leadership and its development in group work process 3. Communication in Group 4. Group Dynamics:- Group Bond, Group-Conflict, Confrontation, Apathy and Group Control.
- Working with Community
- Personal and Professional Growth
- Social Work Practice with Vulnerable, Marginalized and Under Privileged Sections of the Society.
- Management of Service Organization
- Social Legislation
- Social Movements and Social Action
- Social Welfare Administration
- Organizational Behaviour and Organizational Development
- Human Resource Management and Development
- Labour Legislations and Employee Welfare
- Social work intervention in Health care
- Child and Family Centred Social Work

- Medical and Psychiatric Social Work
- Urban, Rural and Tribal Community Development
- Social Change and Sustainable Development
- Basic Computer applications

# Post Name:- Technical Officer (Technical Supervisor)

### Pattern of examination:-

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

	Proposed Scheme of Examination	No. of Questions
A. G	General Intelligence & Reasoning	15
B. G	General Awareness	15
C. Q	Quantitative Aptitude	15
D. E	Inglish Language and Comprehension	15
E. B	Basic Computers	20
F. P	Post-Specific based on Domain Knowledge Area/Cadre for the post of Technical Officer	120
(1	Technical Supervisor)	

### **Indicative Syllabus**

- A. General Intelligence & Reasoning:- It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other sub-topics, if any.
- **B. General Awareness:-** Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude:- The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- **D. English Language and Comprehension:-** Candidates ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10th standard level.

- E. Basic Computers:
  - a) General Computer Processing ability in MS-Office like Word Processing, Excel, PowerPoint, etc. & Operating Systems.
  - b) Professional Software/Hardware System relevant to the Post.
  - c) Any other Computer/IT related questions.
- F. Post-Specific based on Domain Knowledge Area/Cadre for the post {For B.Sc./Diploma (Medical Lab Technology) Candidates}:-
  - General Anatomy
  - General Physiology
  - General Biochemistry
  - General Pharmacology
  - General Microbiology
  - Immunology
  - Applied Bacteriology, Virology and Mycology
  - · Haematology and Blood Banking
  - Community Medicine
  - Clinical Biochemistry
  - Histopathology and Cytology

OR

F. Post-Specific based on Domain Knowledge Area/Cadre for the post {For B.Sc./Diploma (O.T. Techniques) Candidates}:-

- Principles of Anaesthesia and Basic Anaesthesia Techniques
- Principles of Sterilisation and CSSD
- Anaesthesia Machines, Ventilators, Defibrillators, Cylinders, Gas Pipelines and Scavenging Systems.
- Principles of Electro Cautery, OT Tables, Operating Room Equipment, Laparoscopic Equipment.
- Medical Ethics applied to Anaesthesia and Surgery.
- Pharmacology of Anaesthesia Drugs, Critical care concepts and basic and advanced life supports.

# Post Name:- Vocation Counsellor

### Pattern of examination:-

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

	Proposed Scheme of Examination	No. of Questions
A.	General Intelligence & Reasoning	20
В.	General Awareness	20
C.	Quantitative Aptitude	10
D.	English Language and Comprehension	20
E.	Basic Computers	10
F.	Subject knowledge for the post of Vocation Counsellor	120

### **Indicative Syllabus**

- A. General Intelligence & Reasoning:- It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other sub-topics, if any.
- **B.** General Awareness:- Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude:- The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- **D. English Language and Comprehension:-** Candidates ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10<sup>th</sup> standard level.

# E. Basic Computers: -

- a) General Computer Processing ability in MS-Office like Word Processing, Excel, PowerPoint, etc. & Operating Systems.
- b) Professional Software/Hardware System relevant to the Post.
- c) Any other Computer/IT related questions.

### F. Post-Specific based on Domain Knowledge Area/Cadre for the post of Vocation Counsellor:-

- Nature and concept of guidance, types of guidance:- Nature and scope of guidance. Concept, definition, basic assumptions and principles of guidance. Importance of understanding the individual, Barriers to understanding, Aids in understanding, measurement and application of self-understanding, Guidance movement in India. Educational Guidance: Nature, Pupil personnel work, pupil appraisal information, Role of teacher, Preparation and training, School curriculum and guidance, Vocational guidance: Nature, study of occupations, occupational information, Theories of occupational choices, Job placement and Satisfaction. Personal Guidance: Nature of emotional problem, adjustment problems of adolescents and delinquents: prevention and treatment.
- Information and techniques essential for effective guidance:- Achievement and aptitude tests, Personality and interest inventories, School records and reports Occupational information: Collection, Classification and dissemination. Individual and Group guidance. Organization of guidance programmer: Types and basic procedures.
- Stages of human development and areas of guidance:- Characteristics of different stages of development (Physical, Cognitive, Emotional, Social and Moral). Problems of childhood and adolescence. Problems of adulthood and aged. Role of teacher in providing guidance services.
- Meaning & types of counselling:- Meaning, Historical development and Importance of Counseling Individual and Group Counselling Emerging Trends in Counselling.
- Approaches of counselling:- Approaches of Counseling: Directive, Non directive, and Elective. Qualities and Professional Ethics of a Counsellor.

- Areas of counselling (Counselling skills):- Counseling Families Concerning Children, Counseling with Parents, Counseling the Delinquent, Marriage Counseling, Premarital Counseling, Counseling the Handicapped, Career Counseling, and Adolescent Counseling. Role of Counselor in developing Good Mental Health. Building Trust: Listening, Attending, Observing, Building Rapport, Demonstrating Empathy. Specialized Concerns in Counseling: Substance Abuse, Drug Addiction; HIV AIDS; Child Abuse (Trauma); Internet and Technological Abuse.
- Counseling for exceptional children and adolescents. Types, needs and problems of special children: Importance of counseling of students with different abilities and their parents, family and peers.
- Identification and diagnosis of problem areas:- Identification of personal, Social & academic problems of children (5-12 year) at elementary level Identification of academic, social & vocational needs & problems of adolescents (13 to 18 years) at secondary level. Diagnosis of Problem areas, stress as a cause of Mental, Emotional, Physical, Social behavior and academic problems.
- Intervention programmes:- Individual and group counseling of children and adolescents for emotional, social, behavioral and academic problems. Relaxation strategies, yoga & meditation therapies for children and adolescents for reducing stress and other related problems.
- Career development:- meaning and historical development of career counselling. Concept of career development. Different stages of career development. Emerging career options in present context. Bases of career development vocational development: reports of various educational commissions and committees. Identifying and analyzing career choices and career talents. Need for career education in schools. Present conditions and career education changing economic conditions of society and the job market. Psycho-social conditions of the individuals. Advancement of technology and survival skills. Problems pertaining to work, family, education and leisure. Career choice and decision making career maturity: concepts and factors. Empowering students in career decision making (strategies) matching career talents with career decision making. Guidance for developing life goals & choices pillars of education and life skills need for life skills education. Importance of life skills for growing minds. Components of life skills. Importance of emotional, social and thinking skills. Concept of four pillars of education: learning to know, learning to do, learning to live together, and learning to be.

## Post Name:- TB and Chest Diseases Health Assistant

### Pattern of examination:-

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

	Proposed Scheme of Examination	No. of Questions
A.	General Intelligence & Reasoning	15
В.	General Awareness	15
C.	Quantitative Aptitude	15
D.	English Language and Comprehension	15
E.	Post-Specific based on Domain Knowledge Area/Cadre for the post of TB and Chest Diseases	140
	Health Assistant	

# **Indicative Syllabus**

- A. General Intelligence & Reasoning:- It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other subtopics, if any.
- **B. General Awareness:-** Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude:- The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- **D.** English Language and Comprehension: Candidates ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10th standard level.

- E. Post-Specific based on Domain Knowledge Area/Cadre for the post of Subject knowledge for the post of TB and Chest Diseases Health Assistant: -
  - Human Anatomy & Physiology
  - Nutrition and Biochemistry
  - Fundamentals of Nursing including First Aid
  - Computer in Nursing
  - Psychology
  - Pharmacology
  - Pathology
  - Microbiology
  - Sociology
  - Child Health Nursing
  - Mental Health Nursing
  - Obs. & Gyne.
  - Nursing Management including Drug Inventory
  - Community Health nursing including Environmental Hygiene
  - Medical Surgical Nursing
  - Nursing Education
  - Nursing Administration

# Post Name:- Electrocardiograph Technical Assistant

### Pattern of examination:-

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

	Proposed Scheme of Examination	No. of Questions
Α.	General Intelligence & Reasoning	15
B.	General Awareness	15
C.	Quantitative Aptitude	15
D.	English Language and Comprehension	15
E.	Post-Specific based on Domain Knowledge Area/Cadre for the post of Electrocardiograph	140
	Technical Assistant	

### **Indicative Syllabus**

- A. General Intelligence & Reasoning: It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other subtopics, if any.
- **B.** General Awareness: Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude: The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram. Frequency polygon, Bar diagram & Pie Chart.
- **D.** English Language and Comprehension: Candidates ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10<sup>th</sup> standard level.

- E. Post-Specific based on Domain Knowledge Area/Cadre for the post of Subject knowledge for the post of Electrocardiograph Technical Assistant: -
  - Basic Anatomy & Physiology of Heart
  - Basic Principles of: Elementary Physics
    - Galvanometer
    - o Einthoven's Principles
    - Standard 12 lead ECG
    - Electrical Axis
  - Normal Electrocardiogram
  - ECG Equipment details
  - Pitfalls of ECG recordings
  - Maintenance of ECG machine
  - Defibrillators, Central Monitor and Bedside Monitor: O Use
    - Maintenance

- Stress ECG [Treadmill Test]
- Holter Monitoring
- Interpretation of life threatening arrhythmiss & ECG of Myocardial Infarction.
- First Aid management of cardiac emergencies
- Practical Training in ICCU and non-invasive diagnostic laboratory

# Post Name:- Health Educator (Social Psychologist)

### Pattern of examination: -

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

	Proposed Scheme of Examination	No. of Questions
A.	General Intelligence & Reasoning	15
В.	General Awareness	15
C.	Quantitative Aptitude	15
D.	English Language and Comprehension	15
E.	Post-Specific based on Domain Knowledge Area/Cadre for the post of Health Educator	140
	(Social Psychologist).	

### **Indicative Syllabus**

- A. General Intelligence & Reasoning: It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other sub-topics, if any.
- **B.** General Awareness: Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude: The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- **D.** English Language and Comprehension: Candidates ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10<sup>th</sup> standard level.

E. Post-Specific based on Domain Knowledge Area/Cadre for the post of Health Educator (Social Psychologist): 1.Basic Psychology

Psychophysics and Perception

Signal detection theory, subliminal perception and related factors, information processing approach to perception, culture and perception, perceptual styles. Ecological perspective on perception.

# Perceptual Processes

- Approaches to the Study of Perception: Gestalt and physiological approaches.
- Perceptual Organization: Gestalt, Figure and Ground, Laws of Organization.
- Perceptual Constancy: Size, Shape and Brightness, Illusion; Perception of Depth and Movements.
- Role of motivation and learning inperception

# Motivation Basic

Motivational Concepts: Instincts, needs, drives, incentives, motivational cycle.

- · Approaches to the Study of Motivation:
- Psychoanalytical, ethological, S R Cognitive, humanistic.
- · Biological Motives: Hunger, thirst, sleep and sex.
- · Social Motives: Achievement, affiliation, approval Exploratory behavior and curiosity.

Motivation and Emotion Physiological correlates of emotions.

 Theories of emotions: James – Lange, Canon – Bard, Schechter and Singer. Conflicts: Sources and types.

# 2. Social Psychology

- · Current trends in Social Psychology.
- · Historical Background: Growth of social psychology, Methods of social psychology.
- Theoretical perspective: Cognitive dissonance, Social comparison, Attribution, Field Psychoanalytic, Symbolic interactions, Socio-biology.
- Social cognition.
- · Person perception, impression management.
- Role of Stereotypes in person Perception types of influence process.
- · Social Influence Processes:
- Leadership Attitude:
  - o Nature and Characteristics, Development and change.
  - o Theories of attitude change.
- · Pro social behavior, aggression and violence. Nature, Characteristics, Determinants, Theories.

# 3. Research Methodology-1

Research Methodology

- · Types of psychological research.
- Methods of Psychological Research: Experimental, Quasi experimental, case studies, field studies and cross – cultural studies.
- Variables: Nature and types.

Techniques of Experimental manipulation control in experiment

Sources of bias. Ethical issues in psychological research,

Research Process: Consideration of research problem and hypothesis, Operationalization.

Sampling: probability and nonprobability sampling.

Research designs:

- Cross Sectional and Longitudinal Correlation, factorial, randomized block, matched group, quasi – experimental, Graceo Latin Square time series design
- Central tendencies, Dispersion, Normal Probability Curve, its properties and utility in inferential statistics, Null hypothesis, Type I and Type II errors, Levels of significance.
- · Method of collecting data:
  - o Observation, Questionnaire and Interview.
  - o Test & Scales

# 4. Research Methodology- 2

- Experimental Design: Single Factor, Randomized block, 2X2 factorial design, repeated measures (on one factor), ANOVA: one-way and two-way: Randomized and Repeated Measure Design. ANCOVA, Post ANOVA tests.
- Measures of relationships: bi-serial, point bi-serial, tetracoric and phi, Multiple and partial Correlations.
- Regression: simple and multiple,
- Factor Analysis: Assumptions, Methods Rotation and interpretation Use of computer in psychological researches, Research report writing.

# 5. Psychopathology

Concept of Psychopathology, Classification systems in psychopathology: W.H.O. (ICD-10) and multiracial systems (DSM- IVTR): Evaluation of classification system.

Theoretical background, approaches to psychopathology

(1)Psychodynamic.

(2) Behavioral.

(3) Cognitive.

(4) Phenomenological.

(5) Biological.

(6) Socio cultural; Diagnosis - purposes of diagnosis, reducing undesirable Variability: diagnostic system.

Anxiety disorder: Panic, Phobic, OCD, Post – Traumatic, GAD, somatoform disorders, Impulse control disorder, eating disorder, Sleep disorder, dissociative: Types, symptoms and management.

Psychotic disorders: Schizophrenia, Mood disorder. Personality disorder (cluster categories and problems), types & symptoms: Types, Symptoms and management. Substance related disorders. Mental Retardation and developmental disorders.

# 6. Basic Psychological Processes

Learning Process: Classical conditioning: Procedure, Phenomena and related issues.

Instrumental learning: Phenomena, Paradigms and theoretical issues.

Process, Escape Conditioning, Avoidance Conditioning, Generalization.

Reinforcement: Basic variables and schedules.

Experimental analysis of behaviour:Behaviour modification, shaping Discrimination learning., Neurophysiology of learning.

Verbal learning: Methods and materials, organizational processes.

Learning theories: Hull, Tolman, Skinner.

Cognitive approaches in learning: Latent learning, observational learning.

Memory and forgetting

- Memory Processes: Encoding, Storage, Retrieval.
- Stages of Memory: Sensory memory, Short-term Memory (STM) and Long term Memory (LTM).
- · Episodic and Semanticmemory.
- Theories of Forgetting: Interference, decay, retrieval

### 7. Cultural Psychology

- Group Dynamics and Group behaviour, Group effectiveness, and Group Cohesiveness: meanings, formation, decision making, problem solving and group level behaviours.
- · Leadership: Meaning and nature, function, styles and effectiveness.
- Social issues: Poverty, Caste, gender, population issues in India, Communal tension and harmony.
- Culture and Behaviour I: Culture and Cognition and emotion. Culture and Organisation.
- Culture and Behaviour II: Culture and Health. Culture and Personality.
- Social psychology: Health, Environment and Law.

# 8. Psychology nad Health Behaviour

Methods and Basic concepts

- Methods of Physiological psychology: Lesion and Brain Stimulation.
- Receptors, effectors and adjuster mechanisms.
- Neural impulse: Origin, conduction andmeasurement.
- · Sensory system: Vision and Audition.
- Human nervous system: Structure and functions.
- Sleep and waking: Stages of sleep, Disorders of sleep and Physiological mechanisms of sleep and waking.
- Drinking and its neural mechanism; hunger and its neural mechanism.
- Endocrine System: Chemical and glandular.
- · Approach to therapy (Psychoanalytic, Biological Behavioural, Behavioural medicine and spiritual therapy).
- Mental health promotion and maintenance, present issues and trends in health psychology

### 9. Basic Psychiatry 1

- · Disorders of consciousness, attention, motor behavior, orientation, experience of self, speech, thought, perception, emotion, and memory.
- Psychoses: Schizophrenia, affective disorders, delusional disorders and other forms of psychotic disorders types, clinical features, etiology and management.
- Disorders of personality and behavior: Specific personality disorders; mental & behavioral disorders due to psychoactive substance use; habit and impulse disorders; sexual disorders and dysfunctions - types, clinical features, etiology and management.
- · Organic mental disorders: Dementia, delirium and other related conditions with neuralgic and systemic disorders -types, clinical features, etiology and management

### 10. Basic Psychiatry 2

- Behavioral, emotional and developmental disorders of childhood and adolescence: types, clinical features, etiology and management.
- Mental retardation: Classification, etiology and management.
- Neurobiology of mental disorders: Neurobiological theories of psychosis, mood disorders, suicide, anxiety disorders, substance use disorders and other emotional and behavioral
- Therapeutic approaches: Drugs, ECT, psychosurgery, psychotherapy and behavior therapy, preventive and rehabilitative strategies- half-way home, sheltered workshop, daycare, and institutionalization.
- Consultation-liaison psychiatry: Psychiatric consultation in general hospital; primary care
- Special populations/Specialties: Geriatric, terminally ill, HIV/AIDS, suicidal, abused, violent and noncooperative patients; psychiatric services in community, and following disaster/calamity.

### Post Name:- Pharma Chemist/Chemical Examiner

## Pattern of examination: -

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

	Proposed Scheme of Examination	No. of Questions
A.	General Intelligence & Reasoning	15
В.	General Awareness	15
C.	Quantitative Aptitude	15
D.	English Language and Comprehension	15
E.	Post-Specific based on Domain Knowledge Area/Cadre for the post of Pharma	140
	Chemist/Chemical Examiner	

# **Indicative Syllabus**

- A. General Intelligence & Reasoning: It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other sub-topics, if any.
- **B. General Awareness:** Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude: The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- **D. English Language and Comprehension: -** Candidates ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10<sup>th</sup> standard level.

- E. Post-Specific based on Domain Knowledge Area/Cadre for the post of Pharma Chemist/Chemical Examiner: -
  - Pharmaceutics
  - Pharmaceutical Chemistry
  - Pharmacognosy
  - Human Anatomy & Physiology
  - Social Pharmacy

- Pharmacology
- Community Pharmacy & Management
- Biochemistry & Clinical Pathology
- Pharmacotherapeutics
- Hospital & Clinical Pharmacy
- Pharmacy Law & Ethics

# Post Name:- Lab Technician

### Pattern of examination: -

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

	Proposed Scheme of Examination	No. of Questions
A.	General Intelligence & Reasoning	15
В.	General Awareness	15
C.	Quantitative Aptitude	15
D.	English Language and Comprehension	15
E.	Post-Specific based on Domain Knowledge Area/Cadre for the post of Lab Technician	140

### **Indicative Syllabus**

- A. General Intelligence & Reasoning: It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other subtopics, if any.
- **B. General Awareness:** Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude: The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- **D. English Language and Comprehension: -** Candidates ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10<sup>th</sup> standard level.

- E. Post-Specific based on Domain Knowledge Area/Cadre for the post of Lab Technician: -
  - General Anatomy
  - General Physiology
  - General Biochemistry
  - General Pharmacology
  - General Microbiology
  - Immunology
  - Applied Bacteriology, Virology and Mycology
  - Haematology and Blood Banking
  - Community Medicine
  - Clinical Biochemistry
  - Histopathology and Cytology

# Post Name:- Dark Room Assistant

### Pattern of examination: -

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

Proposed Scheme of Examination	
A. General Intelligence & Reasoning	15
B. General Awareness	15
C. Quantitative Aptitude	15
D. English Language and Comprehension	15
E. Post-Specific based on Domain Knowledge Area/Cadre for the post of Dark Room Assistant	140

### **Indicative Syllabus**

- A. General Intelligence & Reasoning: It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other sub-topics, if any.
- **B. General Awareness:** Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude: The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- **D. English Language and Comprehension: -** Candidates ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10<sup>th</sup> standard level.

- E. Post-Specific based on Domain Knowledge Area/Cadre for the post of Dark Room Assistant: -
  - Basic Sciences: General Anatomy, General Physiology, General Biochemistry, General Pathology, General Microbiology, General Biostatistics
  - Introduction to Radiography and Dark Room Procedure.
  - Medical Physics, Radiation Physics & Physics of Diagnostic Radiology, Radiographic Techniques & Radiographic Anatomy and Equipment.
  - Interaction of radiation with matter, Radiation measurements, quantities and units
  - Positioning Radiography, Contrast Procedure and Radio-diagnosis
  - Imaging Techniques, Image processing techniques and Special radiographic procedures
  - Radiographic Photography
  - Radiographic procedures and positioning
  - Computed tomography, Digital subtraction Angiography, Interventional radiology
  - Magnetic Resonance Imaging: Basic & Advanced MRI Imaging
  - Different Radiographic Techniques
  - Ultra Sound Imaging, Interventional Procedures & Angiography
  - Basic & Advanced CT Imaging
  - First Aid, Basic Nursing, Handling of Patients
  - Radiation Hazards, Protection Preventive Measures and Regulatory requirements in diagnostic radiology

# Post Name:- Assistant Laundry Supervisor

### Pattern of examination: -

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

	Proposed Scheme of Examination	No. of Questions
A.	General Intelligence & Reasoning	25
В.	General Awareness	25
C.	Quantitative Aptitude	25
D.	English Language and Comprehension	25
E.	Post-Specific based on Domain Knowledge Area/Cadre for the post of Assistant Laundry	100
	Supervisor	

### **Indicative Syllabus**

- A. General Intelligence & Reasoning: It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other sub-topics, if any.
- **B. General Awareness:** Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude: The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- **D. English Language and Comprehension: -** Candidates ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10<sup>th</sup> standard level.

- E. Post-Specific based on Domain Knowledge Area/Cadre for the post of Assistant Laundry Supervisor: -
  - On and Off Premise Laundry, advantages and disadvantages
  - Flow process chart in laundry
  - Stages in the laundry process
  - Laundry equipment
  - Location, layout and planning of laundry
  - Stain removal: agents and method
  - Alternative laundry procedures

# Post Name:- Security Cum Fire Jamadar (Group-C)

### Pattern of examination: -

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

Proposed Scheme of Examination	No. of Questions
A. General Intelligence & Reasoning	50
B. General Awareness	50
C. Quantitative Aptitude	50
D. English Language and Comprehension	50

### **Indicative Syllabus**

- A. General Intelligence & Reasoning: It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other sub-topics, if any.
- **B. General Awareness:** Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude: The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- **D. English Language and Comprehension: -** Candidates ability to understand correct English, his basic comprehension and writing ability, etc. would be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10<sup>th</sup> standard level.

# Post Name:- Dispensing Attendants

### Pattern of examination: -

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

	Proposed Scheme of Examination	No. of Questions
Α.	General Intelligence & Reasoning	15
В.	General Awareness	15
C.	Quantitative Aptitude	15
D.	Basic English Knowledge	15
E.	Post-Specific based on Domain Knowledge Area/Cadre for the post of Dispensing Attendants	140

### **Indicative Syllabus**

- A. General Intelligence & Reasoning: It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other sub-topics, if any.
- **B. General Awareness:** Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude: The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- D. Basic English Knowledge: The ability of the candidates to understand correct English and its usage will be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10<sup>th</sup> standard level.

- E. Post-Specific based on Domain Knowledge Area/Cadre for the post of Pharma Chemist/Chemical Examiner: -
  - Pharmaceutics
  - Pharmaceutical Chemistry
  - Pharmacognosy
  - Human Anatomy & Physiology
  - Social Pharmacy

- Pharmacology
- Community Pharmacy & Management
- Biochemistry & Clinical Pathology
- Pharmacotherapeutics
- Hospital & Clinical Pharmacy
- Pharmacy Law & Ethics

# Post Name:- Dissection Hall Attendant

### Pattern of examination: -

- CBT Multiple Choice Questions with four answer options.
- Total 200 questions.
- 01 mark for each correctly answered question
- Negative 0.25 marks for each wrong answered question.

Proposed Scheme of Examination	No. of Questions
A. General Intelligence & Reasoning	50
B. General Awareness	50
C. Quantitative Aptitude	50
D. Basic English Knowledge	50

### **Indicative Syllabus**

- A. General Intelligence & Reasoning: It would include question of both verbal and non- verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Series, Number Series, Figural Series, problem Solving, Word Building, Coding & decoding Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing interfaces, Punched hole/pattern -folding & unfolding, Figural Pattern -folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small& Capital letter/number coding, decoding and classification, Embedded Figures, Critical thinking Emotional Intelligence, Social Intelligence, other sub-topics, if any.
- **B. General Awareness:** Question in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Question will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person, the test will also include questions related to India and its neighbouring countries especially pertaining History, Cultural, Geography, Economic Scene, General Policy & scientific Research.
- C. Quantitative Aptitude: The questions will be designed to test the ability of appropriate use of number and number sense of the candidates. The scope of the test will be computation of whole number, decimals, fractions and relationship between numbers, Percentage. Ratio and Proportion, square roots, Average, Interest, profit and loss, Discounts, Partnership Business, Mixture and allegation, Time and Distance, Time and work, Basic algebraic identities of school algebra & Elementary surds, Graphs of linear Equations, Triangle and its various kind of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angels subtended by chords of circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular of square base Trigonometric ratio, Degree and Radian Measures, Standard Identities Complementary angle, Heights and Distance Histogram, Frequency polygon, Bar diagram & Pie Chart.
- D. Basic English Knowledge: Candidates' ability to understand basic English and use it in conversation will be tested.

The questions in Part A, B, & D will be of level commensurate with the essential qualification and questions in Part C will be of 10<sup>th</sup> standard level.