Advertise no: SVSU/2020/Estt./T/008

Syllabus for the post of Skill Assistant Professor

Section A: - **Skill Aptitude Test (Common for All)** **50 Marks**

Syllabus: - **Annexure I**

Section B: - **Domain Test** **(For the Applied Post)** **50 Marks**

Syllabus: -

For Section-B					
Sr.	***Subject***	***Syllabus***	***Sr.***	***Subject***	***Syllabus***
1	*Mechanical Engineering*	*Latest GATE Syllabus*	*13*	*Psychology*	*Latest NET Syllabus*
2	*Civil Engineering*	*Latest GATE Syllabus*	*14*	*Physical Education*	*Latest NET Syllabus*
3	*Computer Science Engineering*	*Latest GATE Syllabus*	*15.*	*Political Science*	*Latest NET Syllabus*
4	*Electronics Engineering*	*Latest GATE Syllabus*	*16.*	*Music*	*Latest NET Syllabus*
5	*Electrical Engineering*	*Latest GATE Syllabus*	*17.*	*Medical laboratory Technology*	***Annexure IV***
6	*Physics*	*Latest NET Syllabus*	*18.*	*Management*	*Latest NET Syllabus*
7	*Mathematics*	*Latest NET Syllabus*	*19.*	*Commerce*	*Latest NET Syllabus*
8	*English*	*Latest NET Syllabus*	*20.*	*Statistics*	*Latest NET Syllabus*
9	*Environmental Studies*	*Latest NET Syllabus*	*21*	*Economics*	*Latest NET Syllabus*
10	*Chemistry*	*Latest NET Syllabus*	*22*	*Hotel Management*	*Latest NET Syllabus of Hospitality & Tourism Management*
11	*Remote Sensing/ Geographic Information System (GIS)*	***Annexure II***	*23*	*Agriculture Science*	*Latest NET Syllabus*
12	*Public Health*	***Annexure III***	*25*	*Food Technology*	*Latest NET Syllabus*

ANNEUXRE-I

Skill Aptitude Test

Section-A 50 Marks

The syllabus for part A: teaching / training aptitude in skilling related to Technical and Vocational Education Training (TVET).

Introduction:

Frameworks of skill based learning/teaching; Role of a trainer in skilling environment, pedagogy/andragogy curriculum development and effective delivery; workshops, entrepreneurship and placement, soft skills classroom and seminar management. The aptitude of the candidate to steer industry engagement, using various educational tools, case study methods, skill assessment method, developing curricula for various levels, exposure of online tools, teaching & training and research exposure.

Model of Learning: - The six views of learning to promote skilling (The Behaviourist View, The Cognitive View, The Developmental; View, The Humanist View, The Cybernetic View, The Constructivist View).

Knowledge, Skill and Attitude: - A Classification Schema for Skilled Performance (Dimension 1: The Domains of Performance, Dimension 2: The Reproductive/Productive Scale, Distinction between Factual knowledge and conceptual knowledge, The Structuring of Knowledge in the Mind)

Quantitative statistics: - Data gathering, Hypothesis testing, Result Presentation and application tools of Basic Statistical Analysis and variance (Measures of Central Tendency, Measures of Variability, Correlation)

Instruction Design: - Broad Levels of decision Making with instruction designing on skilling (Course level, Lesson level, Instructional event level, Learning step level), The Control of Instructing, Prescriptive and Student Controlled systems, IT Enabled Intelligent Systems like LMS etc. Organising Course Materials: - Lecture notes, View graphs, Free run videos, Web based lecture notes, Interactive CBT, MOOCs.

Knowledge and Skill: - Knowledge management, Comparison of Expositive & Experiential strategies, teaching methodologies for the teaching of knowledge & skills, selecting strategies for delivering and implementation of chosen strategy. Methods specific to the objectives of sub-category; the content and the students, Identifying critical sub-skills, research temperament.

Evaluation Design: - Methods of Evaluation, Computer aided evaluation, Courseware organisation cis a vis evaluation and course/quality audit. Measuring Quality and Productivity in Educational Organisation, Accreditation, Costing of Educational Services, perspective Quality Circle and participatory Quality Improvement, Total Quality Management – basic principles.

ANNEUXRE-II

CRITERIA FOR SELECTION TO THE POST OF REMOTE SENSING/ GEOGRAPHIC INFORMATION SYSTEM (GIS)

Section-A **50 Marks**

Domain Knowledge

Unit-I: Principles of Remote Sensing and GPS: Definition of Remote Sensing: advantages and limitations, Electro-Magnetic Radiation (EMR)- spectrum properties, wavelength regions and their applications, Interaction of EMR with matter, radiance, reflectance, Spectral signature and its response for Soil, Vegetation and Water. Photo interpretation techniques, Fundamentals and elements of visual photo interpretation, Satellite image vs. Aerial photo interpretation, Digital and analog methods of Image Interpretation, Concepts of digital image and its characteristics, Spectral, Spatial, Radiometric and Temporal resolution. Evolution of Indian Space Programme, Introduction to Weather, Communication and Earth Observation satellites systems. Introduction of Global Positioning System, Control Segment, Space Segments, User Segment, GPS signals and data, Geopositioning – Basic concepts; GNSS, Basics geodesy, Geoid/ datum/Ellipsoid-definition and basic concepts, Application of Geodesy. Satellite Geometry, Satellite signals and its strength, Number of satellites, Effects of Multi path, Ionosphere, Troposphere, Methods-Static & Rapid static, Kinematic-Real time kinematic, Survey: DGPS data processing

Unit-II. Digital Image Processing: System design considerations, Sources of image degradation, Radiometric and Geometric error, Types of atmospheric correction: absolute atmospheric correction and relative atmospheric correction, Interpolation methods. Look-up Tables (LUT) and Image display, Spatial profile and Spectral profile, Contrast stretching: Linear and non-linear methods. Frequency component, low pass filter: Image smoothing, edge-preserving median filter, High passes filtering: Edge enhancement and Edge detection, Gradient filters, Directional and non-directional filtering, Band ratio, Types of vegetation indices. Concept of pattern recognition, Multi-spectral pattern recognition, Spectral discrimination, Unsupervised classification methods, Supervised classification techniques, Accuracy Assessment: User and Producer accuracy, Kappa accuracy. Artificial intelligence, Fuzzy logic, neural networks, Image Fusion, Object Oriented Classification, Hyper spectral remote sensing: atmospheric correction, Data reduction techniques, texture analysis and mineral & vegetation mapping.

Unit-III. Fundamentals of Geographic Information Sciences and Digital Cartography: Basic concepts about spatial information: Brief history and definition of GIS, Manual mapping Vs GIS mapping, Variables- Points, Lines and Areas, Network and Surface, Component of GIS, Fundamentals of data storage: entities or Fields, Introduction to database system: Definition, Purpose, Schema, Relationship and primary/secondary/composite key. Introduction to spatial data input. Spatial and Non spatial data base, spatial data model, Geodatabase, Introduction to Post gres, Spatial representation of data, Spatial relationship, Spatial Indexing methods. Public access to geographic information data; Digital libraries, National & Global Standard - NSDI, GSDI; Global geospatial portals, OGC. SQL, Logical, Boolean, Arithmetical operation and function, Topological relationships; Overlay operations Feature base topological function –buffer, Eliminate, dissolve, Layer based overlay analysis clip, erase, split, identity, union and intersection, Network analysis.

Unit-IV. Basics of Geostats: Meaning and objectives of measures of central tendency, different measure viz. arithmetic mean, median, mode, geometric mean and harmonic mean. Measure of variation viz. range, quartile deviation means deviation and standard deviation, co-efficient of variation and skewness, Histograms, Distributions and density. Meaning of correlation, types of correlation – positive and negative correlation, simple, partial and multiple correlation, methods of studying correlation; scatter diagram. Introduction to regression, lines of regression, co-efficient of regression, coefficient of determination, standard error of estimate. Existing statistical models, comparison and significance of different statistical technique, application of Geostats to satellite imagery.

Unit-V. Applications of Remote Sensing: Emergence of Remote Sensing technology in application areas, Understanding potentials of Remote Sensing in allied sectors, recent trends in Remote Sensing applications. Remote sensing in mapping Land use / land cover classification and monitoring, Crop forecasting, Forest resources management, soil taxonomy and degradation, groundwater modelling, Water quality Monitoring, Snow covers mapping and modelling approaches. Concept of climate and weather, Climatic classification, Adaptation and vulnerability, mapping of landslide, Floods, Cyclones, Forest fire and Drought. Mapping urban land use, Urban sprawl, Site selection for urban development, Urban Information System, Urban master plans, Urban green spaces, 3 D city modelling, SMART city. Selection of disposal sites for industrial and municipal wastes, Solid waste management, Environmental Impact Assessment (EIA).

Advances in Geospatial Technology: Electromagnetic spectrum of microwave region, Airborne and Space borne radar systems (SLAR, SAR) parameters, Introduction to LiDAR Remote Sensing and Technology Laser altimetry. Advanced Digital Photogrammetry, Ortho photo Generation, Unmanned Aerial Vehicle (UAV Mapping). Web mapping, web page basics, geospatial web services, web mapping–static and interactive web mapping Adding and rendering map layers to a web GIS. symbolizing layers. Building and enabling map services on the GIS server, Web Map Servers- WMS, Web Feature Servers. Web Map servers and Data servers, Configuration, layering, design of interfaces, Quality of Service and Security Issues in the Development of Web GIS - Performance, Security, Scalability. Introduction to open source GIS software's such as QGIS and its applications. Introduction to various sensors and IoT. Defining GEO-IoT, Integration of IoT with GIS, application of GEO-IoT.

Geostats for spatial and spatio-temporal data: Spatial variations and sampling plans, spatio-temporal reference parameters, Introduction to geo-stats, implications of applying geo-stats, geostatistical mapping, Types of models. Selecting the right spatial prediction technique, example of regression krigging, spatial prediction of categorical variables, geostatistical simulations, fields of applications, probability maps. Usage of R software for statistical computing, libraries required for running simulation, reading KML files to R, exporting raster and vector maps to KML. Sampling optimization algorithms, exploratory data analysis: sampling design, automated mapping. R package required for implementing point patterns, density estimation using kernel smoothing and covariates, point pattern analysis.

ANNEUXRE-III

CRITERIA FOR SELECTION TO THE POST OF PUBLIC HEALTH

Section-A **50 Marks**

Domain Knowledge

Unit-I. Fundamentals of Management and Organization Behaviours: Concept, nature, process and significance of management; Managerial levels, skills, functions and roles; Management Vs. Administration; Contingency Management theories by - F. W. Taylor, Henry Fayal and Elton Mayo. Level of Management- Functions of Management; Centralization – decentralization Organization structures - Line & Staff – functions, Leading and Staffing; Controlling – Definition, Nature, Importance, Steps, Techniques.

Behaviour - Definition, Scope, Importance, Concepts of Organization Behaviour; Motivation- Definition, Theories of motivation, Mc Gregor, A.H. Maslow, Herzberg Learning- Meaning & Theories.

Conflict – Definition, Traditional Vs Modern view of conflict Types of conflict- intra personal, interpersonal, organizational;
Leadership –Definition, Importance, qualities of leaders, types of leaders – autocratic, democratic, free – rein; Personality- Attributes of personality, Type, Ego state, Johari window. Time Management
Modern Management Techniques.

Unit-II. Health Informatics & Health Technology: Scope and history of health information technology, electronic medical records (EMRs), overview of healthcare delivery, clinical workflow analysis. Advancements in field of health IT, data collection and transmission by the help of technology, use of mobile phones and smart bands. Introduction to healthcare, ethics, challenges, standards & future, important healthcare/medical laws in India medical professional. Redesign, security, privacy, and confidentiality of patient data, as well as mandatory policies regarding data handling and reporting.

Unit-III. Medical Tourism & Health Insurance: Introduction to healthcare and medical tourism, ethics, challenges, standards. Future of medical tourism important healthcare/medical laws in India medical professional. Health Insurance, Contract, various laws of Insurance, fundamentals of health insurance. Social health insurance, Voluntary health insurance, Third party administrators, Community health insurance, Government insurance schemes, Indian healthcare case laws. Challenges in health insurance, limitations of various schemes, Future of health insurance in India.

Unit-IV. Public Health & National Health Mission: Definition of public health/ associated terms, Health system in India and other allied sectors, Burden of Disease, understanding how to measure health and burden of disease, framework to explain public health approaches: Determinants of health, Health Promotion. Definition of public health/ associated terms, Health system in India and other allied sectors, Burden of Disease, understanding how to measure health and burden of disease, framework to explain public health approaches: Determinants of health, Health Promotion. Health Care Delivery System in India, Organization of services, Role of various sectors: Public and private; modern and traditional, Role of Civil Society, National Health Programmes, Evaluation of a health programme, NHM. Determinants of Health – Biological, Behavioural, Socio-economic, Cultural, Environmental, Geographical etc. Introduction to National Health Policy – 1983 & 2002, National Population Policy – 2005, National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM), National Public Health Programs.

Unit-V. Epidemiology and National Health Program: Definitions, Basic concepts and overview of terms in use, Natural history of a disease, Steps in natural history of a disease, Application of natural history in disease control, Levels of prevention for specific diseases, Modes of intervention in public health,

Overview of descriptive epidemiology, Time place and person, Descriptive designs, Measurement of disease frequency, Person-time exposure, Cumulative Incidence, Incidence density, Point prevalence, Period prevalence, Rate and proportion. Epidemiological study designs Overview of study designs Descriptive studies Ecological studies, Analytical studies, Disease surveillance, Remerging and emerging diseases and containment measures/ controls. Objectives for Randomized control trials:

1. Understand the design features of randomized controlled clinical trials.
2. Understand strengths and limitations of a randomized clinical trial.
3. Understand the use of random allocation and blinding in RCTs.
4. Be able to identify the most suitable study design to use to investigate a given exposure/disease relationship.

Evolution of National Health Programmes, various national health programmes, Evaluation of a health programme, their role and effectiveness.

Unit-VI. Quality Assurance in Healthcare CODE: Introduction of Quality Assurance, Principles of Quality assurance, Dimensions of Quality, Overview of Quality Access and Equity/Approach. Tools of Quality, health inequalities in India: challenges for policy - Interstate variations- Urban rural differentials. QA triangle & Quality circle, standards of quality, Socio-cultural and gender issues in ensuring equity for health care. Quality improvement Program (NABH, NABL & JCI), Operational guidelines on quality assurance by NHM for programs Kayakalp etc. Quality assurances in public sector hospital; accreditation of Sub centres, PHCs, CHS, DH experiences of World Bank.

Unit-VII. Survey Design Methods, Health Communication and Promotions: Pre survey formative research Conduct of surveys Quality control and assurance in surveys Survey data analysis Ethical issues in surveys Sampling and sample size calculations Tool development. Identify appropriate research designs for a range of questions in health Describe the steps involved in planning and conducting a research project Evaluate the strengths and weaknesses of various data collection methods. Communication: Process, Types, Barriers to effective communication; Health communication and health promotion: Functions of Heath Communication, distinguish health-related behaviour by health-related needs; Behaviour change communication vs. Risk communication; Social and cultural factors affecting the health of populations: Socio-economic and demographic factors Individual, interpersonal and community behaviour; Social Marketing, Community engagement and Participatory Models, Behaviour change communication. Introduction to health promotion, Foundations for health promotion, Social determinants and health promotion, Communication strategies for health promotion and Overview of current national health policies, national health program their health promotion strategies. Steps in Planning, Strategy Development and Implementation; Mass communication strategies for health promotion, Entertainment Education & Infotainment; Technology and Health Communications. Drunken driving: social and personal responsibilities and control measures, Stigmatization of health conditions, Behavioural issues in children and teens: substance abuse, suicide patterns, TV and other media as influencers of healthy/non healthy lifestyle, Setting based approach – Ottawa charter. Developing messages; Effectively communication to the masses; Targeted and target-free communication approaches; Examples and practices in communication. Use of ICT and E-health platforms; Rationale and use of ICT platforms, Discussion of ongoing efforts, understanding implementation strategies, Group exercise using case studies from India and other countries.

Unit-VIII. Healthcare systems and Urban health: Introduction to Health Systems and the building blocks of a Health System, Overview of urbanization and development challenges in India. Urban health problems, indicators, prevention, socio-economic disparities and interventions. Understanding the individual components: Part 1 Human Resources in Health, Understanding the individual components: Part 2 Service Delivery: Health care at low cost. Introduction to Health Sector Reforms, Health problems in special groups – Urban Migrants, Urban poverty and magnitude of under nutrition, Health indicators in urban India, Urbanization and chronic diseases. First Referral Units, Existing urban health programs and policies in India. Government Health care delivery structure in urban areas. Review National urban renewal mission**,** 12^{th} five-year plan and challenges in addressing urban health issues in India Class presentations.

Health-Statistics & Data Analytics (SPSS): History, Scope & Characteristics of Statistics Data Tabulation and Frequency Distribution Data Presentation-Bar charts, Pie Charts, Histograms, Boxplot, Measures of Central Tendency, Measures of Dispersion, Skewness and Index Numbers. Concept of Event, Sample space, types of events, Laws of Probability, Probability Distributions –Normal and Standard Normal. Sampling, Fundamental Various types of Sampling and Applications, Point Estimation, Confidence Interval, Testing of hypothesis: Parametric and Nonparametric (for e.g. z-test, t-test, Chi-squared test, ANNOVA). Correlation analysis, Best-Fit Line, Time Series Analysis (Introductory part). Linear regression, Logistic regression, Poisson regression, Cox proportional hazards regression.

Research Methodology for Healthcare: Nature and Scope of Research- Conceptual Foundations; Over view of the research process; Introduction to the concepts and procedures of research in detail. Uses of research in public health, Formulation of research problems, writing research questions. Review of Literature - Literature review and its importance in research; theoretical framework for reviewing the literature; linking what it is proposed to examine and what has already been studied, Writing Research Proposal – Contents of Research Proposal, Measurement Procedures, Structure if the Report, Problems and Limitations Format and contents, Rationale of Research. 16 Hours Hypothesis Testing - What is a hypothesis? Characteristics of a good hypothesis; Null and alternate hypothesis, level of significance, decision rules, Type 1 & Type 2 errors and one tailed and two tailed tests; Hypothesis testing procedure; Choosing the statistical method; Types of tests; Basic tests on small and large samples; Applications based on Ztest, t-test, Chisquare tests, Applications based on Non-parametric tests, ANOVA (F-Test), Multiple Regression Analysis Unit VI: Report Writing, 5 Hours Research Report Writing - Basic requirements of report writing and report format; meeting the necessary assessment criteria; Citations-In- text citation and referencing, Bibliography; Impact Factor of the Journal. Data Collection Methods - Types of data – Primary data versus Secondary data; Methods of data collection-Survey methods {Focus Group Discussions (FGDs), In depth Interview, key in formant interviews, transact walk} Questionnaires, Personal Interview, Telephonic Survey, Electronic Media) Measurement and Scaling - Measurement –Types of data; Criteria for good measurement; Types of Measurement Scales; Attitude and Behavioural Scales. Research Design: Various approaches and Strategies - Main research approaches; Research Designs based on the nature of the problem/investigation; Techniques of data collection; Concepts of Validity and Reliability; Ethical issues implied in the research design Sampling Methods - Need for Sampling; Sample designing process; Sampling Techniques; Non-probability versus Probability Sampling Techniques.

Planning, Supervision, Supply Chain Management and Evaluation of Public Health Program: **Planning in health, planning at various levels- SC, PHC, Block, District.** Development of SCM concepts and Definitions – key decision areas – strategic; Supply Chain Management

and Key components, External Drivers of Change. Dimensions of Logistics – The Macro perspective and the macro dimension – Logistic system analysis. Manufacturing management – make or buy decision – capacity management – Materials Management – choice of sources – procurement planning. Choice of Market – network design – warehouse designed operation and distribution planning – transportation – packaging, Demand forecasting – inventory planning – planning of stocking facilities – warehouse location allocation. Manufacturer to beneficiaries, reverse cold chain, VLMS, e-VIN – inventory norms; Channels of Distribution – Customer Service Strategy: Identification of Service needs, cost of services**.** Introduction to M&E. Difference between Monitoring and Evaluation Understanding M&E Plans, Conceptual and Logical Frameworks M&E framework – Relation between M&E framework and Logical Framework Case studies on M&E**.** Developing Objectives and indicators for M&E. Quantitative and qualitative indicators - Characteristics of indicators Linking indicators to Plans Types of data sources for Monitoring and Evaluation Collection and quality of data The how to do an evaluation. The Evaluation Question, The Terms of Reference, The aftermath of an evaluation.

Communicable and Non- communicable disease Public & Health Nutrition: General overview of communicable diseases, impact of communicable diseases on developing countries. Virulence factors, mode of action of toxins, cellular basis of disease Microbial subversion of host defence mechanisms anti-microbial agents, mode of action, genetic basis of drug resistance, multi-drug resistance. Common infections respiratory: Tuberculosis, leprosy, ARI's including pneumonia, measles, mumps, rubella Intestinal: Diarrhea, typhoid, polio, hepatitis, worm infestations Contact: STDs and AIDS. Vector borne: Plague, rabies, malaria and filaria, JE, dengue Disease prevention and control Malnutrition and infection, Health aspects of Disaster Management Definition, types and management. Overview and introduction to NCDs Epidemiology of NCDs, risk factors, prevention and management: general strategies, new approaches and policies of NCDs. NCDs programs of WHO and Government of India. Some important NCDs: Following diseases will be covered for Etiology, Pathophysiology, Epidemiology, Prevention and Control. -Asthma, Cancer, Cardiovascular diseases, Chronic, rheumatic diseases, Diabetes, Tobacco use. Concept of Mental Health Burden of Mental diseases: Depression, Schizophrenia, Alzheimer's, Parkinson's, Senile dementia, Suicides Substance Abuse National Mental Health Programme Emerging & re-emerging diseases Role of Voluntary organizations, self-help groups. Concept of different food groups, Recommended Dietary Allowances. Concept of different food groups, Recommended Dietary Allowances. Nutrition in Pregnancy and Lactation, Nutrition in infants, Nutrition in preschool & school children. Nutrition during adolescence, Nutrition during adulthood &Nutrition during old age. Relation of nutrition to development in terms of socio economic, industrial and agricultural development and consequences of malnutrition, Assessment of nutritional status, Nutrition Intervention programmes in India.

Unit-IX Health Economics & Health Finance CODE: Key concepts of economics, micro and macroeconomics, Strategizing and prioritizing within scarce resources (decision making), Determinants of demand, supply and costs of production. Concepts of efficiency, effectiveness, equity, elasticity of demand, costing, production marginal cost analysis, and opportunity cost, Universal health coverage and role of health care financing. Principles and application of economic evaluation in healthcare including Cost Benefit Analysis (CBA) and Cost Effective Analysis (CEA), The application of benefit cost analysis to public health and family planning projects, value of output-loss due to no. of sick days. Economics of health Programme: - For nutrition, diet and population control, economics of abuse of tobacco and

alcohol, Environmental influences of health and its economic impact, economics of breast feeding. A review of per capita private and public expenditure on health services over time and in different parts of the country. An analysis of the sources of (public) finance for health. The need for a general health insurance due to failure of private health insurance markets. The need for a social health insurance for the poor, disabled and the aged. A comparative analysis of alternative payment systems such as health insurance. Global (especially US, UK, Canada, China, Sri-Lanka and Thailand) and Indian Scenario, Stakeholder Analysis.

Unit-X Demography and Population Sciences: Definitions, Scope and nature, importance of the study, Historical review, difference and similarities between Demography and Population Sciences. Methods of Demographic Data Collection: Primary and Secondary sources of data collection, Procedures, Uses, Strengths and weakness of census, vital statistics, sample survey, duel reporting system – SRS, Data from national health program/disease surveillance, hospital statistics, police records, remand homes etc. Sex composition, factors affecting sex composition, Age structure Population pyramids, impact of various demographic processes on the age structure. Comparison – developed and developing countries. Demographic transition Fertility: Determinants: Social economic, political, natural fertility levels and trends in India and world, Measures of fertility, Impact of level of fertility on reproductive health, selected theories of fertility, policies about fertility control. Measures of mortality, Causes of Death: epidemiological perspective, Infant & neonatal mortality rates, maternal mortality, disease wise mortality, Trends of Mortality in India, differentials in mortality in developed and developing countries. General terms and concepts, internal migration, measures of migration, Differential migration, International migration, Migration in India. Urban challenge of health and environment. Population Growth and Problems: Population growth, reasons for sudden growth in population, problems emerging out of that. Rural-urban distribution of growth pattern, population growth and related problems. Health planning in terms of Family planning, Health services, Vital processes. Policies and programmes influencing demographic processes in the context in India's population. Demographic Dividend-Concept, scope and applications.

ANNEUXRE-IV

CRITERIA FOR SELECTION TO THE POST OF MEDICAL LABORATORY TECHNOLOGY

Section-A 50 Marks

Domain Knowledge

Knowledge at the post-graduation level in following broad areas

1. Human Anatomy & Physiology
2. Clinical Biochemistry
3. Clinical Pathology
4. Clinical Microbiology
5. Physiology & Nutrition
6. Biostatistics & Hospital Management
7. Clinical Haematology
8. Advance Instrumentation &Maintenance
9. Lab Management
10. Blood Transfusion & immune haematology
11. Diagnostic Microbiology
12. Basic Cellular Pathology & Allied Technology
13. Biomolecules
14. Cellular pathology
15. Metabolism
16. Enzymology
17. Clinical Molecular Biology
18. Clinical Immunology
19. Medical Laboratory Techniques