

आरक्षण तालिका

पोस्ट कोड - 089 सीधी भर्ती - रेडियोग्राफिक टेक्नीशियन/रेडियोग्राफर - कुल 05 पद

| सक्र. | श्रेणी | निल | | भूतपूर्व सैनिक | | योग | द्वियांग |
|-------|------------------------|-----|-------|----------------|-------|-----|----------|
| | | ओपन | महिला | ओपन | महिला | | |
| 1. | अनारक्षित (UR) | 02 | 01 | 00 | 00 | 03 | निरंक |
| 2. | ई.डब्लू.एस. | 00 | 00 | 00 | 00 | 00 | |
| 3. | अनुसूचित जाति (SC) | 00 | 00 | 00 | 00 | 00 | |
| 4. | अनुसूचित जनजाति (ST) | 01 | 00 | 00 | 00 | 01 | |
| 5. | अन्य पिछड़ा वर्ग (OBC) | 01 | 00 | 00 | 00 | 01 | |
| | योग | 04 | 01 | 00 | 00 | 05 | |

वेतनमान - सातवे वेतनमान में वेतन लेबल 7 न्यूनतम वेतन 28700/- का 70 प्रतिशत तथा समय-समय पर शासन द्वारा देय भत्ते ।

शैक्षणिक योग्यता -

1. बायोलॉजी, केमिस्ट्री तथा फिसिक्स में 10+2 प्रणाली में उपरोक्त विषयों सहित 12 वीं परीक्षा उत्तीर्ण ।
2. मान्यता प्राप्त संस्थान से सम्बंधित विषय डिग्री/डिप्लोमा /प्रमाण पत्र ।
3. मध्यप्रदेश सह चिकित्सीय परिषद् का जीवित पंजीयन प्रमाण पत्र ।

पोस्ट कोड - 090 सीधी भर्ती - रेडियोग्राफिक टेक्नीशियन/रेडियोग्राफर - कुल 01 पद (संविदा कर्मचारियों हेतु 20 प्रतिशत आरक्षित)

| सक्र. | श्रेणी | निल | | भूतपूर्व सैनिक | | योग | द्वियांग |
|-------|------------------------|-----|-------|----------------|-------|-----|----------|
| | | ओपन | महिला | ओपन | महिला | | |
| 1. | अनारक्षित (UR) | 01 | 00 | 00 | 00 | 01 | निरंक |
| 2. | ई.डब्लू.एस. | 00 | 00 | 00 | 00 | 00 | |
| 3. | अनुसूचित जाति (SC) | 00 | 00 | 00 | 00 | 00 | |
| 4. | अनुसूचित जनजाति (ST) | 00 | 00 | 00 | 00 | 00 | |
| 5. | अन्य पिछड़ा वर्ग (OBC) | 00 | 00 | 00 | 00 | 00 | |
| | योग | 01 | 00 | 00 | 00 | 01 | |

वेतनमान - सातवे वेतनमान में वेतन लेबल 7 न्यूनतम वेतन 28700/- का 70 प्रतिशत तथा समय-समय पर शासन द्वारा देय भत्ते ।

शैक्षणिक योग्यता -

1. बायोलॉजी, केमिस्ट्री तथा फिसिक्स में 10+2 प्रणाली में उपरोक्त विषयों सहित 12 वीं परीक्षा उत्तीर्ण ।
2. मान्यता प्राप्त संस्थान से सम्बंधित विषय डिग्री/डिप्लोमा /प्रमाण पत्र ।
3. मध्यप्रदेश सह चिकित्सीय परिषद् का जीवित पंजीयन प्रमाण पत्र ।

पोस्ट कोड - 047 सीधी भर्ती - डिसेक्शन हॉल अटेंडेंट - कुल 04 पद

| सक्र. | श्रेणी | निल | | भूतपूर्व सैनिक | | योग | द्वियांग |
|-------|------------------------|-----|-------|----------------|-------|-----|----------|
| | | ओपन | महिला | ओपन | महिला | | |
| 1. | अनारक्षित (UR) | 02 | 00 | 00 | 00 | 02 | निरंक |
| 2. | ई.डब्ल्यू.एस. | 00 | 00 | 00 | 00 | 00 | |
| 3. | अनुसूचित जाति (SC) | 00 | 00 | 00 | 00 | 00 | |
| 4. | अनुसूचित जनजाति (ST) | 02 | 00 | 00 | 00 | 02 | |
| 5. | अन्य पिछड़ा वर्ग (OBC) | 00 | 00 | 00 | 00 | 00 | |
| | योग | 04 | 00 | 00 | 00 | 04 | |

वेतनमान - 4440-7440+1300/- ग्रेड पे

शैक्षणिक योग्यता -

1. बायोलॉजी, केमिस्ट्री तथा फिसिक्स में 10+2 प्रणाली में उपरोक्त विषयों सहित 12 वी परीक्षा उत्तीर्ण |

पोस्ट कोड - 048 सीधी भर्ती - टेक्नीशियन असिस्टेंट - कुल 21 पद

| सक्र. | श्रेणी | निल | | भूतपूर्व सैनिक | | योग | द्वियांग |
|-------|------------------------|-----|-------|----------------|-------|-----|----------|
| | | ओपन | महिला | ओपन | महिला | | |
| 1. | अनारक्षित (UR) | 05 | 02 | 01 | 00 | 08 | निरंक |
| 2. | ई.डब्ल्यू.एस. | 00 | 00 | 00 | 00 | 00 | |
| 3. | अनुसूचित जाति (SC) | 01 | 00 | 00 | 00 | 01 | |
| 4. | अनुसूचित जनजाति (ST) | 05 | 03 | 01 | 00 | 09 | |
| 5. | अन्य पिछड़ा वर्ग (OBC) | 02 | 01 | 00 | 00 | 03 | |
| | योग | 13 | 06 | 02 | 00 | 21 | |

वेतनमान - 5200-20,200+1900/- ग्रेड पे

शैक्षणिक योग्यता -

1. बायोलॉजी, केमिस्ट्री तथा फिसिक्स में 10+2 प्रणाली में उपरोक्त विषयों सहित 12 वी परीक्षा उत्तीर्ण |
2. लैब अटेंडेंट के पद पर 05 वर्ष का कार्यानुभव |

पोस्ट कोड - 049 सीधी भर्ती - टेक्नीशियन असिस्टेंट - कुल 05 पद (संविदा कर्मचारियों हेतु 20 प्रतिशत आरक्षित)

| सक्र. | श्रेणी | निल | | भूतपूर्व सैनिक | | योग | द्वियांग |
|-------|------------------------|-----|-------|----------------|-------|-----|----------|
| | | ओपन | महिला | ओपन | महिला | | |
| 1. | अनारक्षित (UR) | 01 | 01 | 00 | 00 | 02 | निरंक |
| 2. | ई.डब्ल्यू.एस. | 00 | 00 | 00 | 00 | 00 | |
| 3. | अनुसूचित जाति (SC) | 01 | 00 | 00 | 00 | 01 | |
| 4. | अनुसूचित जनजाति (ST) | 02 | 00 | 00 | 00 | 02 | |
| 5. | अन्य पिछड़ा वर्ग (OBC) | 00 | 00 | 00 | 00 | 00 | |
| | योग | 04 | 01 | 00 | 00 | 05 | |

वेतनमान - 5200-20,200+1900/- ग्रेड पे

शैक्षणिक योग्यता -

1. बायोलॉजी, केमिस्ट्री तथा फिसिक्स में 10+2 प्रणाली में उपरोक्त विषयों सहित 12 वी परीक्षा उत्तीर्ण |
2. लैब अटेंडेंट के पद पर 05 वर्ष का कार्यानुभव |

तकनीकी ट्रेड पर आधारित पाठ्यक्रम (SYLLABUS)

लेब असिस्टेंट/प्रयोगशाला सहायक (औषधि)

(A) Physics

Unit and dimensions, dimensional analysis, S.I. Units, Motion in two dimensions Cases of uniform velocity and uniform acceleration, General relation between position and velocity, Uniform circular motion, Force and inertia. Newton's Laws of motion. Conservation of momentum and energy. Static and kinetic friction. Work energy and power collisions, potential energy, gravitational potential energy and its angular conversion to kinetic energy. Potential energy of a spring, Rigid body rotation and conservation of its momentum. Moment of inertia, theorems of parallel and perpendicular axis. (Moment of inertia of uniform ring, disc, thin rod and cylinder only).

Acceleration due to gravity and its variation, Universal law of gravitation, geostationary satellites, escape velocity.

Hooke's law, Young's modulus, shear and bulk modulus, surface energy and surface tension, kinetic theory of gases, gas laws, kinetic energy and temperature. Specific heats at constant volume and constant pressure. mechanical equivalent of heat, isothermal and adiabatic processes.

Heat conduction in one dimension, convection and radiation, Stefan's Law and Newton's law of cooling Periodic motion, Simple harmonic motion, Oscillations due to spring, Wave motion principle of superposition; Progressive and stationary waves, Beats and Doppler effect.

Wave nature of light, Interference, Young's double slit experiment, Velocity of light and Doppler's effect in light. Reflection, refraction, total internal reflection, curved mirrors, Lenses, mirror and lens formulae. Dispersion in prism, absorption and emission spectra.

The human eye, defects of vision, magnification and resolving power of telescope and microscope "e" and "e/m" for an electron, Einstein's photoelectric equation, photocells. Bohr model of the atom, Hydrogen spectrum, Composition of nucleus, atomic masses and isotopes, radioactivity, laws of radio active decay, decay constant, half life and mean life,

Mass-energy relation, fission. X-Ray: Properties and uses.

Elementary ideas of conductor, semi-conductor and insulator, intrinsic and extrinsic semi conductors, np Junction as a rectifier.

Bar magnet, lines of force, torque on a bar magnet due to magnetic field, earth's magnetic field, tangent galvanometer, vibration magnetometer.

Coulomb's law of electrostatic, dielectric constant, electric field and potential due to a point charge, dipole, dipole field, Gauss's law in a simple geometrics. Electrostatic potential, capacitance, parallel plate and spherical capacitors capacitors in series and parallel, energy of a capacitor.

Electric current, Ohm's law, Kirchhoff's laws, resistances in series and parallel temperature dependence of resistance. Wheatstone bridge, potentiometer. Measurement of voltages and currents. Electric power, heating effects of currents, chemical effects and law of electrolysis, thermoelectricity. Biot Savart law.

Magnetic fields due to a straight wire circular loop and solenoid. Force on a moving charge in a magnetic field (Lorentz force), Magnetic moment of a current loop, effect of a uniform magnetic field of a current loop, forces between two currents, moving coil, galvanometer, ammeter and voltmeter.

1738

(B) Chemistry

General and Physical Chemistry

Structure of Atom : Constitution of nucleus : Bohr's atom model : quantum numbers Aufbau principle, electronic configuration of elements (upto-Kr) : de-Broglie relation, shapes of orbitals. Chemical Bond : Electrovalent, covalent and coordinate bonds, hybridization (sp) : hydrogen bond: shapes of molecules (VSEPR theory) : bond polarity, resonance, Elements of VBT MOT.

Solutions: Modes of expressing concentrations of solutions: Types of solutions, Raoult's law of colligative properties, non-ideal solution, abnormal molecular weights.

Solid State: Crystal lattices, unit cells, Structure of ionic compounds: close packed structure Ionic radii, imperfections (Point defects): Properties of solids. Nuclear Chemistry: Radio active radiations: half-life, radioactive decay, group displacement structure and properties of nucleus: Nuclear reaction, disintegration series, artificial transmutation: isotopes and their uses, Radio carbon dating.

Chemical Equilibrium: Chemical equilibrium, Law of mass action: K_p and K_c : Le Chatelier principle and its application. Ionic Equilibria in solutions, Solubility product, common ion effect, theories of acids and base hydrolysis of salts: pH : buffers.

Thermochemistry and Thermodynamics: Energy changes during a chemical reaction: intrinsic energy enthalpy, first law of thermodynamics: Hess's law, Heats of reactions: Second law of thermodynamics: entropy: free energy; spontaneity of a chemical reaction; free energy change and chemical equilibrium; free energy as energy available for useful work. Chemical kinetics, Rate of a reaction, factors affecting the rate, rate constant, rate expression, order of reaction, first order rate constant expression and characteristics, Arrhenous equation.

Electrochemistry: Oxidation, Oxidation number and ion-electron methods. Electrolytic conduction. Faraday's laws; voltaic cell, electrode potentials, electromotive force, Gibb's energy and cell potentials. Nernst equation, commercial cells, fuel cell, electrochemical theory of corrosion. Surface chemistry, Colloids and Catalysis; Adsorption, Colloids (types preparation and properties), Emulsions, Micelles, Catalysis: Types and characteristics.

Inorganic Chemistry :

Principles of metallurgical-operations : Furnaces, ore concentration, extraction, purification metallurgies of Na, Al, Fe, Cu, Ag, Zn and Pb and their properties.

Chemical periodicity : s, p, d and f-block elements, periodic Table: periodicity : atomic and ionic radii valency, ionization energy, electron affinity electronegativity, metallic character.

Comparative study of elements: Comparative study of the following families of elements: (i) alkali metals (ii) Alkaline earth metals (iii) Nitrogen family (iv) Oxygen family (v) Halogens (vi) Noble gases.

Transition metals: Electronic configuration of 3d-metal ions, oxidation states, other general characteristic properties, Potassium permanganate, Potassium dichromate.

Co-ordination compounds : Simple nomenclature, bonding and stability, classification and bonding in organometallics.

Chemical analysis: Chemistry involved is simple inorganic qualitative analysis: calculations based on acid-base titrimetry.

Organic Chemistry :

Calculation of empirical and molecular formula of organic compounds, Nomenclature of organic compounds, common functional groups isomerism structure and shapes of alkanes, alkanes and benzene.

Preparation properties and uses of alkynes, alkyl, benzene, petroleum, cracking octane number, gasoline additives.

Nomenclature, Physical chemical properties, correlation of physical properties with structure properties and uses of haloalkanes, halobenzenes, alcohols and phenols: General ideas of some polyhalogen compounds viz., dichloroethanes, dichloroethers, chloroform, carbon tetrachloride D.D.T., benzene hexachloride.

Nomenclature, methods of preparation, Chemical properties correlations of physical properties with structures and uses of ethers, aldehydes, ketones, carboxylic acids and their derivatives,

Brief account of the chemistry of Cyanides, isocyanides, amines and nitro compounds.

Polymers : Classification : Preparation and uses of common natural and synthetic polymers. Biomolecules : Classification, Structures and biological importance of carbohydrates amino acids, peptides, proteins and enzymes, nucleic acids and lipids.

(C) Botany

Structural organization of cell, cell theory. Light and Electron Microscopic view of cell. Structure and functions of cell organelles : Nucleus Mitochondria, Chloroplast Endoplasmic reticulum, Golgi complex lysosome, microbodies microfilaments Ribosomes, Centrioles and Plasmids, Eukaryotic Chromosome (Morphology) cell and plasma membrane, Difference between plant and animal cell. Division, cell cycle significance of mitosis and meiosis.

Mendel's Laws of inheritance, Monohybrid and dihybrid cross; linkage and crossing over of genetic material DNA replication, genetic code transcription, transcription and gene regulation. Difference between Prokaryote and Eukaryotes : Structure reproduction and economic importance of viruses Mycoplasma, Bacteriophage, Cyanobacteria (Nostoc) and Bacteria.

Five Kingdom classification, Binomial Nomenclature, External morphology and life cycle of Spirogyra mucedo, Funaria Selaginella and pinus.

Elementary knowledge of microsporogenesis megasporogenesis. Fertilization endosperm and embryo development in Angiosperms.

Tissues and tissues systems, meristematic and permanent tissue, Mineral nutrition essential elements and their functions: uptake of minerals transport of water and solutes. Transpiration Photosynthesis and Respiration: Importance, mechanism and factors affecting these processes: Photorespiration.

Enzymes and growth hormones with reference to their classification. Chemical nature, mode of action, importance. Elementary idea of photoperiodism and phytochrome.

Ecosystem - Structures and function, Major ecosystems i.e. lake and Forest; Food chain, Food web and energy flow, Ecological crisis- Role of man in polluting Environment - Air, Water and Soil.

Role of plants in human welfare: A general knowledge of plant products of economic value- Drugs, Fibers, Cereals.

Wheat and Rice, Pulse (gram), Oil seeds (Ground nut), Sugarcane, Coal and petroleum. Food preservation-methods and importance. Principle of plant breeding and its role in improvement of crops. Biotechnology; scope and importance in Agriculture and industrial manufacture of cheese. Yoghurt, Alcohol Antibiotics.

(D) Zoology

Multicellularity - Structure and Function of Animal Life :

Structure and function of Animal tissues Epithelial, Connective Muscular, Skeletal and Nerve. Histology of mammalian organs - Stomach, Intestine, Liver, Kidney, Lung, Testes and Ovary. Structure and Physiology of different organ systems of Human body. Skin, Digestive system, Respiratory system, Circulatory system.

Skeleton, Joints, Muscles on the basis of movement receptors. Endocrine system with special reference to various Endocrine glands of man and hormonal coordination. Vitamins & minerals (source and disorders due to deficiencies).

1740

Developmental Biology and Genetics:

Female reproductive cycles in mammals. Gametogenesis alongwith structure of sperm and ovum. Types of eggs, Fertilization, cleavage types of cleavage and blastula. Development of mammals upto three germinal layers. Foetal membranestructure and functions. Growth, repair and ageing, aminocentesis. - Chromosomes, Types of chromosome, Human karyotype and chromosomal abnormalities and syndromes, Hormonal, Chromosomal and Genic Balance theory of sex determination, Sex linkage and sex linked inheritance in Man.

Blood Group and their significance, Blood Bank.

Tissue culture, Genetic Engineering (Brief idea). Mutation, gene mutation.

Human population, natality, Mortality, Sex ratio, Population explosion, dynamics of human life with respect to food supply, housing, health and standard of living, impact of population problems and their control.

Taxonomy Evolution and Economic Zoology:

Classification - Binomial and trinomial nomenclature, Basic features of classification, Classification of different animal phyla upto classes with characters and suitable examples. Origin of life, Theories of organic evolution-Darwin Lamarck, Synthetic Evidence of organic evolution, Human Evolution. Economic Zoology/Sericulture, Apiculture, Lac culture, Poultry, Fishery and Pearl industry. Protozoan disease in relation to man. Insect carrying diseases in relation to man. Cancer-types of cancer and cancer cell. Communicable diseases (Hepatitis, AIDS) STD, Immune Response, Vaccines and antisera allergies. Smoking, alcoholism and drug addiction, symptoms and control. Wild conservation.

Pesticides - Uses, advantages and hazards.



1741

SYLLABUS

Radiographer / X-Ray Technician / Radiographer Technician/ Radiographic Technician

Anatomy and Physiology of Human Body

Introduction to the body as a whole. The cells, Tissues, Epithelium: Simple: Compound, Connective Tissues, Muscles, Cell regeneration, Membranes: mucous, serous, synovial Osteology (including whole skeleton, bones and joints) Development of bone (osteogenesis): cells involved Types and function of bone, Types of joints and various movement. **Axial Skeleton: Skull, Vertebral Column, Appendicular skeleton, Healing of bones.** The respiratory system: **Organs, Functions, Pharynx Larynx – Functions, lungs: lobes, lobules, pleura.**

Radiographic, Photography

Photographic process, Photographic emulsions, Film materials in x-ray department. History, structure of an x-ray film, single sided films, types of films, Spectral sensitivity of film material, graininess of film material, speed and contrast of photographic material, **Sensitometry:** photographic density, characteristic curve features of the characteristic curve, **The storage of film materials and radiograph:** Storage of unprocessed films, storing of radiographs, **Intensifying screens and cassettes. Luminescence:** fluorescence and phosphorescence. Construction of an intensifying screen, The fluorescent materials. Types of intensifying screens. Intensification factor. The influence of KV, scattered radiation. Detail, sharpness and speed, size of the crystals, reciprocity failure, Cassette design, care of cassettes, mounting of intensifying screens, Care of intensifying screens, tests to check screen film contact and light leakage, **Film processing:** Development: The nature of development, manual, automatic. The PH scale, The constitution of developing solutions and properties of development chemicals, The development time, factors in the use of a developer. Developers in processing systems, **Film processing:** fixing and role of a fixing solution. Constitution of the fixing solutions and properties of the Constituents, Fixers used in automatic processors. Factors affecting the use of the fixer, Regeneration of fixing solution. Silver recovery and its various methods, Rinsing, washing and drying. Objects of rinsing and washing, methods employed. Methods of drying films, Preparation of solutions and making stock solution, **Processing equipment: , Dark room: , Systems for daylight film handling , The radiographic image ,** Unsharpness in the radiographic image. Various factors contributing towards unsharpness, The presentation of the Radiograph. Identification markers and orientation. Documentary preparation, **Viewing accessories,** Light images and their recording, **Fluorography: , Subtraction: ,** Common film faults due to manufacturing as well as due to chemical processing, Management of the quality of the Radiographic image.

ELEMENTARY RADIATION PHYSICS

Structure of matter and principles of machines, electricity and electromagnetism applied in radiological instruments. Physics principles in design and working of x-ray tube technology. Construction and working principles of transformers and autotransformers used in x-ray circuits. Measurement of voltage special KV meters. Measurement of tube current in milli and microamperes. Principles of thermionic emission and rectification in x-ray technology. High voltage D.C. circuits in imaging and therapy tube circuits. Electrical hazards and safety x-ray tube rating in imaging and therapy x-ray tubes and thermal safety. Introduction to intensity of radiation in general and its variation by distance. Introduction to electromagnetic spectrum, definition of wavelength and its quantum relationship with peak kilovoltage. Physical principles of radiation and optical field coverage and the factor affecting the field projected on patient during x-ray imaging and radiotherapy exponential and trigonometric functions used in radiological calculations.

Radiography Techniques

Skeletal system: Radiography techniques for x-ray of: (a) Upper limb with special reference to joint. (b) Lower limb which includes all the bones with special reference to joint. femur and metatarsals,

1. An Architecture for Physiological Function
 - Development, ultra structure and Anatomy of Respiratory tract and Lungs.
 - Embryology of lungs, heart, mediastinum and diaphragm.
 - Development anomalies
 - Surgical and endoscopic and applied Anatomy of chest and neck including Lymphatic drainage.
 - Radiographic Anatomy (plain skiagram, CT, MRI, Ultrasound etc.)
2. Physiological Principles
 - Control of Ventilation and role of peripheral and central Chemoreceptors & pulmonary mechanics.
 - Ventilation, pulmonary Blood Flow, Gas Exchange, Blood Gas Transport and assessment of pulmonary functions.
 - Non-respiratory immunological and endocrine functions of lung.
 - Inhalation kinetics and its implication in aerosol therapy, sputum induction etc.
 - Acid-base and electrolyte balance.
3. Approach to the Patient with Respiratory signs and symptoms
 - Basic signs and symptoms of lung diseases
 - Pathogenesis, evaluation of dysnoea and abnormal breathing patterns.
 - Pulmonary manifestations of systemic diseases.
4. Diagnostic Procedures
 - Trache Bronchial Secretion/Transbronchial Aspirations
 - Bronchoscopy and related Procedures
 - Radiographic Evaluation of the Chest and Computer Tomography and MRI
 - Gram's stain, Zeihl-Neelsen stain for AFB, Fluorescent Microscopy, fungus Stain, Gomori stain for p. carini.
 - Immunological Tests including Mantoux.
 - Polymerase chain reaction, D. N. A. probe, Bactec tests.
 - Thoracocentesis, Biopsy FNAC/FNAB
 - Spirometry, ABG, Diffusion studies
5. Mycobacterial diseases of the Lungs
 - Epidemiology, Microbiology and Prevention of Tuberculosis
 - Pathogenesis of Pulmonary Tuberculosis and clinical Manifestations and diagnosis of Mycobacterial Disease
 - Diseases caused by Mycobacteria other than Mycobacterium Tuberculosis
 - Treatment of Mycobacterial Diseases of the Lungs caused by Mycobacterium Tuberculosis
 - RNTCP
 - Treatmetn of pulmonary tuberculosis in hepatic renal and endocrine disorders and in pregnancy.
 - Multidrug resistant tuberculosis

Aerobic- Organisms and Anaerobic Organisms and Anaerobic infections of the Pleura

- Unusual Bacterial Pneumonia including viral or rickettsial
- Community Acquired Pneumonia
- Bronchiectasis

14. Cancer of the lungs

- Biology of the lung cancer, small cell and non small cell
- Epidemiology, Pathology, Natural History and Clinical Picture of the Carcinoma of the Lung.
- Diagnostic Approach of Pulmonary Nodules
- Small Cell Lung Cancer
- Medical Management and Surgical Treatment of Non-small Cell Lung Cancer and Paraneoplastic syndrome
- Radiation Therapy in the Management of the Carcinoma of the Lung
- Benign and malignant Neoplasms of the Lung other than Bronchogenic Carcinoma and thymic and neuro fibromatous tumors, Neoplasms of the Pleura, Chest Wall and diaphragm
- Prevention of Neoplasia

15. Diseases of the Mediastinum

- Non-neoplastic disorders of the Mediastinum
- Primary Neoplasms and cysts of the Mediastinum

16. Disorders of the Pleura

- Pleural Dynamics and Effusions
- Non neoplastic and Neoplastic Pleural Effusions
- Pneumothorax
- Pyothorax and Broncho-pleural; fistula
- Pleural thickening, fibrosis and calcification

17. Acute Respiratory Failure

- Acute Respiratory failure: Introduction and Overview
- Adult Respiratory Distress Syndrome: Clinical Features, Pathogenesis, Sequential Morphological changes and Management
- Acute Respiratory failure in the patient with Obstructive Airways Disease
- Respiratory Muscles and clinical Implications of Respiratory Muscle Fatigue
- Oxygen Therapy
- Mechanical ventilation




पुरुष स्टाफ नर्स/महिला स्टाफ नर्स/ नर्सिंग सिस्टर/मेट्रन हेतु पाठ्यक्रम :-

1. ANATOMY AND PHYSIOLOGY

- a- Structure and function of cell, tissue, Skeletal System, joints and muscles of body
- b- Structure and function of various system of human body for exc. Nervous System Circulatory, Respirator System, Excretory system, Reproductive system, Endocrine system. And Digestive system of human body.
- c- Sensory organs.

2. NUTRITION AND BIOCHEMISTRY

- a- Macro nutrient and Micro nutrient.
- b- Cookery rules and Preservation of nutrients.
- c- Role of nurse in nutrition programme

3. MICROBIOLOGY

- a- Types of immunity
- b- Immunization
- c- Hyper sensitivity and auto Immunity
- d- Control and Destruction of Microbes:-
 - Sterilization
 - Disinfection
 - Chemotherapy and Antibiotics
 - Pasteurization
 - Medical and Surgical Asepsis
 - Bio safety and Waste management

4. NURSING FOUNDATION

- a- concept of health, nursing profession, hospital policy, nursing process, documentation, Recording, reporting health assessment, and meeting general and special need of patients .care of terminally ill patients.

5. PSYCHOLOGY

- a- Personality development. Motivation and emotional process.
- b- psychological assessment and mental health and hygiene.

6. COMMUNITY HEALTH NURSING

- a- Health determinants, Epidemiology and nursing management of common communicable diseases and non-communicable diseases, population explosion and its control.
- b- Health policy and planning, national health and family welfare programme, health agencies, role and responsibility of community health nurse

7. MEDICAL SURGICAL NURSING

- a- Common signs, symptoms, and nursing management of medical and surgical systemic
- b- disorders of human body.

- c- nursing management of pre and post-operative patients.
- d- nursing management of communicable and non-communicable diseases
- e- nursing management of patients in emergency and disaster situation.
- f- nursing management of geriatric client
- g- General clinical investigation
- h- Oncology Nursing
- i- Fluid and electrolytes balance and Imbalanced

8. CHILD HEALTH NURSING

- a- modern concept of child health nursing, IMNCI, management of behavioral and social
- b- problem of children, care of new born and new born resuscitation, KMC

9. MIDWIFERY AND OBSTETRICAL NURSING

- a- concept of midwifery and obstetrical nursing.
- b- assessment and management of antenatal, intra-natal, and postnatal period.
- c- assessment and management of normal neonates' high-risk pregnancy, abnormal Labour.
- d- Drugs used in obstetric nursing, Family welfare programme.

10. MENTAL HEALTH NURSING

- a- Principals and concept of mental health nursing, Assessment of mental health nursing,
- b- nursing management of client with psychotic and neurotic disorder, legal issue in mental health nursing.

11. NURSING RESEARCH AND STATISTICS

- a- Research approach, design, sampling review of literature, and statistical analysis

12. MANAGEMENT OF NURSING SERVICES AND EDUCATION

- a- skill of communication, inter personal relationship and human relation
- b- Guidance and counselling, use of A V Aids, various method of class room and clinical
- c- teaching, use of IEC material
- d- Assessment of knowledge skill and attitude and OSCE
- e- Management of nursing services in the hospital and community, in service education,
- f- management of nursing institution and professional advancement, budget planning .

13. SOCIOLOGY

- a- Relationship between individual and society
- b- Social group, social changes, social control problems and different culture.
- c- Population, family and marriage and types of community in India.

14. NURSING ADMINISTRATION AND WARD MANAGEMENT

- a- Administration and management process
- b- Administration of Hospital department, Units, Wards
- c- Management of equipment supply
- d- Cost and financing of Health care

Vital statistics

