

शहीद गंगालाल राष्ट्रिय हृदय केन्द्र
पदपूर्ति समिति

पद: ल्याव टेक्नोलोजिसेवा - प्राविधिक, समूह मेडिकल, उपसमूह - प्याथोलोजी) को
खुल्ला/आन्तरिकप्रतियोगितात्मक लिखित परीक्षाको कार्यक्रम ।

Full Marks: 100

Pass marks: 40

Time: 1 Hour

Objective Questions: 50 x 2 = 100

1. Hematology:
 - a. Cleaning of glass wares and safety precaution in the lab
 - b. Collection and preservation of different samples for the laboratory
 - c. Preparation of chemicals and stains for the hematological tests
 - d. Quality control in the laboratory
 - e. Formation and development of Erythrocytes, Leucocytes, Platelets
 - f. Principle and clinical procedure for hemoglobin estimation and its standard calibration curve
 - g. Total count of WBC, RBC, Platelets and Reticulocytes
 - h. ESR, PCV, BT, CT and calculation of hematological indices
 - i. Foetal hemoglobin estimation
 - j. Coomb's tests
 - k. Blood banking
 - l. Coagulation mechanism
 - m. Characteristics of Anemia, Leukaemia, Polycythemia
 - n. Principles and procedure of Osmotic fragility tests and Cytochemical stains
2. Bacteriology:
 - a. Different methods of sterilization and disinfection
 - b. Preparation of different media, chemicals and stains
 - c. Cultural procedure of different samples aerobically and anaerobically
 - d. Identification of bacteria and confirmative tests serologically and biochemically
 - e. Different staining methods of bacteria and their principles
 - f. T.B. Bacteriology and skin scraping for AFB
 - g. Water bacteriology
 - h. CSF and cavity fluids for culture
3. Virology
 - a. Definition of RNA and DNA viruses
 - b. Principle and methods of serological diagnostic for HIV and HBsAG
4. Parasitology
 - a. Life cycle of Protozoal parasites, Helminthic parasites, blood parasites (MP, MF and Leshmania)
 - b. Methods of identification of different parasites from stool samples by wet preparation, concentration methods, cultural methods
 - c. Methods of identification of blood parasites by staining method
 - d. Aldehyde test
5. Mycology
 - a. Superficial mycosis



- b. Procedure for skin scraping
- c. Examination and identification by wet preparation and germ tube test
6. Histology
 - a. Preparation of different types of fixatives and their uses
 - b. Methods of decalcification
 - c. Methods of processing of tissues to prepare paraffin block tissue
 - d. Description of different types of microtome, their principles and methods of cutting section from the paraffin block tissue
 - e. Preparation of routine and special histological stains and cytological stains.
 - f. Principles and methods of staining and mounting the tissue section on the glass slides
7. Immunology
 - a. Principle and procedure for the estimation of:
 - i. VDRL
 - ii. TPHA
 - iii. ASO
 - iv. Rheumatoid factor
 - v. Pregnancy test
 - vi. Brucella agglutination test
8. Biochemistry
 - a. Basic chemistry in general
 - b. preparation of normal and normal solutions
 - c. Beer's Law; principle and definition of color meter and spectrophotometer and its use
 - d. Preparation of different reagents required for biochemical estimation
 - e. Principle and procedure of different methods for the estimation of biochemical tests
 - f. Calculating the results from the findings as: sugar, urea, creatinine, uric acid, total bilirubin, direct bilirubin, SGPT, SGOT, alkaline phosphatase, cholesterol, triglyceroids, HDL cholesterol, LDL cholesterol, total protein, albumin and amylase
 - g. Principle and definition of flame photometer
 - h. Quality control
 - i. Cavity fluids: Estimation of protein, specific gravity and cell count
 - j. Routine chemical methods for protein, sugar and cells count in CSF
 - k. Routine urine analysis
 - l. Semen analysis
9. General introduction of SGNHC

द्रष्टव्यः

१. पाठ्यक्रममा रहेका एकाइहरू मध्येबाट नै प्रश्नहरू सोधिनेछ ।
२. गल्ती गरेको उत्तरका लागि २० प्रतिशत अंक कट्टा भैनेछ ।



शहीद गंगालाल राष्ट्रिय हृदय केन्द्र पदपुर्ति समिति

पद: वरिष्ठ स्वास्थ्य सहायक (सेवा- प्राविधिक, समूह मेडिकल, उप-समूह- मेडिकल को
खुल्ला/आन्तरिकप्रतियोगितात्मक लिखित परीक्षाको षाकम ।

Full Marks: 100

Pass marks: 40

Time: 1 Hour

Objective Questions: 50 x 2 = 100

1. Introduction National policy, Planning, Strategies and Implementation status of Public Health Programmes in Nepal
 - a. Family Planning, Safe Motherhood
 - b. Control of Diarrhoeal Diseases (CDD), Acute Respiratory Diseases (ARI), Nutrition, National Program on Immunization a& Integrated Management of Childhood illness IMCI)
 - c. Malaria, Kala-azar, Japanese Encephalitis, Filaria
 - d. Human Immuno Deficiency Virus (HIV)/Acquired Immuno Deficiency Syndrome (AIDS) and Sexually Transmitted Diseases (STD) Control
 - e. Tuberculosis and Leprosy Control
 - f. Health Education, Information and communication
2. Planning and Management
 - a. Community Health Diagnosis & Health Profile
 - b. Micro Planning of Health Programme
 - c. Supervision, Monitoring and Evaluation of Health Programmes
 - d. Health Management Information System (HMIS)
 - e. Planning and Management of Camps
 - f. Cold Chain Management
 - g. Health Training Management in different settings
 - h. Logistic Management
3. Organizational structure and functions
 - a. Ministry of health, Department of Health Services (DoHS), Reginal Health Directorate (RHD)
 - b. District Health Office (DHO), District Public Health Office (DPHO)
 - c. Primary Health Care Center (PHCC), Health Post (HP) Sub Health Post (SHP)
4. Community Mobilization & Local Governance
 - a. Female community health volunteers (FCHV) and Mother's Groups
 - b. Primary health care outreach clinic
 - c. Mobilization of local health leaders and committees
 - d. Decentralized management of health services
5. Epidemiology and Disease Control
 - a. Definition, scope, causes of disease and infection



- d. Clinical features, complications and management of acute tonsillitis, pharyngitis and laryngitis
13. Oral Health and Mental Health
- a. Dental plaques and calculus, dental caries, periodontitis, periodontal pockets and abscess, importance and maintenance of oral hygiene
 - b. Psychosis, Neurosis and Mental retardation
14. Reproductive Health Problems and Interventions
- a. Male and female reproductive system, mechanism of menstruation, conception, evolution, vaginal discharge, management of per vaginal bleeding, post menopausal bleeding, uterine prolapsed, pelvic inflammatory disease; causes, sign, symptoms and complication of ectopic pregnancy, management of engorgement of mastitis and breast abscess
 - b. Management of normal labor and early diagnosis and referral of complicated pregnancy, labor puerperium
 - c. Safe abortions, permanent and temporary contraceptives
15. Acts and Regulations
- a. Health Service Act, 2053 and Regulation, 2055
 - b. Health Professional Council Act, 2053 and Regulation, 2056
16. A brief introduction of Shahid Gangalal National Heart Centre

द्रष्टव्यः

१. पाठ्यक्रममा रहेका एकाइहरु मध्येबाट नै प्रश्नहरु सोधिनेछ ।
२. गल्ती गरेको उत्तरका लागि २० प्रतिशत अंक कट्टा गरिने छ ।



शहीद गंगालाल राष्ट्रिय हृदय केन्द्र
पदपूर्ति समिति

पद: वरिष्ठ/ल्याव टेक्निसियन(सेवा- प्राविधिक, समूह- मेडिकल, उपसमूह- प्याथोलोजी) को
खुल्ला/आन्तरिकप्रतियोगितात्मक लिखित परीक्षाको आरम्भ ।

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Time: 1 Hour

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- Methods of identification of blood parasites by staining method
- Aldehyde test

5. Mycology



- a. Superficial mycosis
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 - d. Preparation of different reagents required for biochemical estimation
 - e. Principle and procedure of different methods for the estimation of biochemical tests
 - f. Calculating the results from the finds as: sugar, urea, creatinine, uric acid, total bilirubin, direct bilirubin, SGPT, SGOT, alkaline phosphatase, cholesterol, triglyceroids, HDL cholesterol, LDL cholesterol, total protein, albumin and amylase
 - g. Principle and definition of flame photometer
 - h. Quality control
 - i. Cavity fluids: Estimation of protein, specific gravity and cell count
 - j. Routine chemical methods for protein, sugar and cells count in CSF
 - k. Routine urine analysis
 - l. Semen analysis
9. General introduction of SGNHC

द्रष्टव्यः

१. पाठ्यक्रममा रहेका एकाइहरु मध्येबाट नै प्रश्नहरु सोधिनेछ ।
२. गल्ती गरेको उत्तरका लागि २० प्रतिशत अंक कट्टा गरिने छ ।



शहीद गंगालाल राष्ट्रिय हृदय केन्द्र
पदपूर्ति समिति

पद: वरिष्ठ/स्टाफ नर्स(सेवा- प्राविधिक, समूह मेडिकल, उपसमूह- नर्सिङ्ग कोखुल्ला/आन्तरिक
प्रतियोगितात्मक लिखित परीक्षाको षाकम ।

Full Marks: 100

Pass marks: 40

Time: 1 Hour

Objective Questions: 50 x 2 = 100

1. Fundamentals of Nursing:
 - a. Basic needs of clients
 - b. The nursing process
 - c. common nursing procedures used in hospital
 - d. Stress and coping mechanism
 - e. First aid treatment
 - f. Administration of drugs
 - g. Infection prevention
 - h. Methods of collecting different specimen for routine and culture test
2. Applied Science
 - a. Anatomy and Physiology of all body systems and organs
 - b. Body mechanisms, friction, gravity, Newton's law, force, transfer of heat, fluid and electrolyte, osmosis, diffusion, acid base balance, rehydration therapy , common investigation and its significance, microbiology, infection diseases, common drugs, its action and side effects.
3. Medical/Surgical Nursing
 - a. Developmental tasks, application of nursing process, common diagnostic procedures
 - b. Nursing management of common disease conditions including pre and post operative care, accidents, injuries, spinal cord injury, meningitis, encephalitis, tetanus, epilepsy, bronchitis, asthma, pulmonary TB, pleuritis, common cold, rhinitis, atelectasis, peptic ulcer, intestinal hernias, hydrocele, bladder stones, pyelonephritis, urinary tract infection (UTI), renal stone, acute and chronic renal failure, uremia
 - c. Congestive Heart Failure (CHF), angina, anaemia, leukaemia, myocardial infarction, gangrene, diabetes mellitus, diabetes incipides, hypertension, fracture, dislocation, osteomyelitis
 - d. Care of patient with common sensory disorders and nursing management
4. Community Health Nursing
 - a. Concepts of primary health care
 - b. Epidemiological concepts and approaches
 - c. Nutrition, deficiency diseases and management
 - d. Immunization
 - e. Communicable diseases and management
 - f. Health indicators
 - g. Family planning



5. Uses and main side effects of common cardiac drugs
6. Nursing care of Gynaecological Problems
 - a. Disorder of uterine bleeding
 - b. Cystocele and rectocele
 - c. Uterine prolaps
 - d. Vesico Vaginal Fistula
 - e. STD/HIV/AIDS
 - f. Infertility
7. Pediatric Nursing
 - a. Major developmental characteristics and milestones
 - b. Promoting optimum development of children
 - c. Adolescent changes and problems
 - d. Six major killer diseases
 - e. Common health problems in children and their nursing management
 - f. Common health hazards in children in Nepal and their prevention
 - g. Congenital disorders/disabilities
 - h. Role of nurses in reduction of mortality rate of children
 - i. Nursing care of critically ill children
8. Mental Health
 - a. Management of clients with mental disorders
 - b. Characteristics of mentally ill patient
 - c. Classification of metal disorders
9. Leadership and Management in Nursing Planning
 - a. Management process: Supervision, motivation, implementation and evaluation
 - b. Leadership style
 - c. Organizational structure of Government health services
 - d. National health planning and concept of national health system
 - e. Policies, rules and regulations in management of different level of hospitals and health centers
 - f. Communication process
 - g. Care of patient with common sensory disorders and nursing management
10. General introduction of SGNHC

द्रष्टव्य

१. पाठ्यक्रममा रहेका एकाइहरु मध्येबाट नै प्रश्नहरु सोधिनेछ ।
२. गल्ती गरेको उत्तरका लागि २० प्रतिशत अंक कट्टा गरिने छ ।



शहीद गंगालाल राष्ट्रिय हृदय केन्द्र
पदपूर्ति समिति

पद: सिस्टर (सेवा- प्राविधिक, समूह- मेडिकल, उपसमूह- नर्सिङ्ग कोखुल्ला/आन्तरिक
प्रतियोगितात्मक लिखित परीक्षाको षाकम ।

Full Marks: 100

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Objective Questions: 50 x 2 = 100

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 - a. Basic needs of clients
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 - c. common nursing procedures used in hospital
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 - c. Congestive Heart Failure (CHF), angina, anaemia, leukaemia, myocardial infarction, gangrene, diabetes mellitus, diabetes incipides, hypertension, fracture, dislocation, osteomyelitis
 - d. Care of patient with common sensory disorders and nursing management
4. Community Health Nursing
 - a. Concepts of primary health care
 - b. Epidemiological concepts and approaches
 - c. Nutrition, deficiency diseases and management
 - d. Immunization
 - e. Communicable diseases and management
 - f. Health indicators
 - g. Family planning



5. Nursing care of Gynaecological Problems
 - a. Disorder of uterine bleeding
 - b. Cystocele and rectocele
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 - c. Adolescent changes and problems
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 - f. Common health hazards in children in Nepal and their prevention
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 - h. Role of nurses in reduction of mortality rate of children
 - i. Nursing care of critically ill children
7. Mental Health
 - a. Management of clients with mental disorders
 - b. Characteristics of mentally ill patient
 - c. Classification of metal disorders
8. Leadership and Management in Nursing Planning
 - a. Management process: Supervision, motivation, implementation and evaluation
 - b. Leadership style
 - c. Organizational structure of Government health services
 - d. National health planning and concept of national health system
 - e. Policies, rules and regulations in management of different level of hospitals and health centers
 - f. Communication process
 - g. Care of patient with common sensory disorders and nursing management
9. Nursing Drug Care
 - a. Common side effects of commonly used drugs in cardiac diseases
 - b. Special Nursing Care during administration of common cardiac drugs
10. General introduction of SGNHC

द्रष्टव्यः

१. पाठ्यक्रममा रहेका एकाइहरु मध्येबाट नै प्रश्नहरु सोधिनेछ ।
२. गल्ती गरेको उत्तरका लागि २० प्रतिशत अंक कट्टा गरिने छ ।



शहीद गंगालाल राष्ट्रिय हृदय केन्द्र
पदपुर्ति समिति

पद: रजिष्ट्रार, रेडियोलोजीवा - प्राविधिक, समूह मेडिकल, उप-समूह - रेडियोलोजीको
खुल्ला/आन्तरिकप्रतियोगितात्मक लिखित परीक्षाको षाकम ।

Full Marks: 100

Pass marks: 40

Time: 1 Hour

Objective Questions: 50 x 2 = 100

1. Basic Science

- a. Respiratory system.
- b. Cardiovascular system
- c. Genito urinary system
- d. Cross sectional anatomy
- e. Central Nervous system

2. Radiation physics

- a. Electromagnetic radiation & its properties
- b. Radiation measurement and units
- c. Production and properties of X-ray
- d. Interaction of Radiation with matter
- e. Properties of X-ray film, film processing
- f. Intensifying and fluorescent screens
- g. X-ray absorption on the radiographic image
- h. Grid & filter
- i. Principles of Fluoroscopy
- j. Principle of Diagnostic ultrasound
- k. Principle of CT
- l. Principle of MRI
- m. Radiation Hazards and its effects

3. Radiology

- a. Cardiovascular
 - i. Normal heart and pericardium, pericardial disease, tumors of heart
 - ii. Pulmonary circulation
 - iii. Acquired heart diseases
 - iv. Congenital heart disease
- b. Respiratory
 - i. Normal chest
 - ii. tumors of the lung
 - iii. Inflammatory diseases of the lung, pleura
 - iv. Chest trauma



- v. Chest children
- c. Gastrointestinal tract and abdomen
 - i. Acute abdomen
- d. Urogenital Tracts
 - i. Renal vascular diseases
- e. Diseases related to ENT, Eye, Teeth and soft tissues
 - i. Central Nervous system: Stroke, Brain tumors
- f. Bone & Joints
 - i. Bone tumors
- 4. Radiological procedures
 - a. Urinary tract
 - i. IVU
 - ii. MCU
 - iii. RGP and RGU
 - b. Reproductive system – HSG
 - c. Vascular system
 - i. Angiography
 - ii. Venography
 - d. Interventional procedures
- 5. General introduction of Shahid Gangalal National Heart Centre

द्रष्टव्यः

१. पाठ्यक्रममा रहेका एकाइहरु मध्येबाट नै प्रश्नहरु सोधिनेछ ।
२. गल्ती गरेको उत्तरका लागि २० प्रतिशत अंक कट्टा गरिने छ ।



शहीद गंगालाल राष्ट्रिय हृदय केन्द्र
पदपूर्ति समिति

पद: रेडियोग्राफी टेक्नोलोजिस्टा - प्राविधिक, समूह मेडिकल, उपसमूह - रेडियोजी) को
खुला/आन्तरिक प्रतियोगितात्मक लिखित परीक्षाको कार्यक्रम ।

Full Marks: 100

Pass marks: 40

Time: 1 Hour

Objective Questions: 50 x 2 = 100

1. Specific Objective
 - a. Introduction to radiographic technique
 - b. Routine radiography technique for upper limb
 - c. Routine radiographic technique for thoracic cage and its contents
 - d. Routine technique for spine
2. Radiography Technique
 - a. Radiographic investigation of Gastro-intestinal tract using contrast media
 - i. Barium Swallow
 - ii. Barium Meal
 - iii. Barium Follow through
 - iv. Ba-enema
 - v. Small bowel enema
3. Investigation of urinary tract and hysterosalpinogram
 - a. Intravenous Urogram (IVU)
 - b. Micturating cystogram
 - c. Retrograde Pyelogram
4. Radiographic procedure of the Biliary tract
 - a. Oral cholecystography (OCG)
 - b. Intravenous cholangiography (IVC)
 - c. Percutaneous transhepatic cholangiography and drainage (PTC and PTCD)
 - d. Endoscopic retrograde cholangio pancreatography (ERCP)
 - e. Operative cholangiography
 - f. T. Tube cholangiography
5. Photographic process: define x-ray film
6. Film Processing
7. Cassette and intensifying screens
8. Identify early x-ray tubes and its development
9. Control of Scattered radiation
10. Portable and Mobile x-ray unit
11. Electricity & X-ray apparatus
 - a. Static electricity
 - b. Elementary electron theory, electric charge & potential (simple explanation only), capacity & capacitor, parallel plate only, dielectric concept only, here factors which affect the capacitance of the capacitor, charging & discharging of a capacitor, series & parallel connection of the capacitor & simple problems
12. Electricity & x-ray apparatus



- a. Static Electricity
 - b. Current Electricity
 - c. Thermionic emission tubes & valves
13. Radiation Physics
14. X-Rays
- a. Historical background
 - b. X-ray tube
 - c. Mechanism of x-ray production
 - d. Properties of x-rays, intensity & quality of x-rays, continuous and characteristics etc.
 - e. X-ray tube voltage control and indication
 - f. Exposure controls, contracts and timers
 - g. X-ray tube current control and filament supply, mA compensation, generator regulation
15. Cardiovascular system
- a. Blood vessels, arteries, veins, and capillaries
 - b. Different parts of heart and its function
 - c. Cardiac cycle
 - d. systemic circulation
 - e. Coronary circulation
 - f. Inferior venacava (IVC) & Superior venacava (SVC)
16. Respiratory system
- a. Respiration, alveolar respiration
 - b. Lungs and Pleura
 - c. Organs of the respiratory system, respiratory passages (Nose, Pharynx, Larynx, Trachea, Bronchioles, Alveoli)
17. Nervous System
- a. Neuron and nerve cells
 - b. Central nervous system and brain
 - c. Parts of ventricles of the brain and their extent
 - d. The cerebrospinal fluid
 - e. Midbrain and brain stem
 - f. Peripheral nervous system
 - g. Autonomic nervous system
 - h. Cranial nerves, spinal nerves
18. Interaction of radiation with matter
- a. Thompson scattering
 - b. Photoelectric interaction
 - c. Compton scattering
 - d. Pair production
 - e. Transmission of a homogenous and heterogenous x-ray beam through matter
 - f. Effects of filtration
 - g. Relative amount of scatter from an x-ray beam during the passage through matter
 - h. Effects of collimation
19. Radiation detection and measurement
- a. Principle of measurement
 - b. Ionization chamber, electrometer
 - c. Scintillation counter



- d. Gieger-muller counter
 - e. Thimble chamber
 - f. Condenser chamber
20. Radiation protection
- a. Introduction
 - b. Objective and principle of radiation protection
 - c. Radiation and radiation units
 - d. Personnel monitoring
 - e. Protective materials
 - f. ICRP recommendations on dose limits
21. General introduction of SGNHC

द्रष्टव्यः

१. पाठ्यक्रममा रहेका एकाइहरु मध्येबाट नै प्रश्नहरु सोधिनेछ ।
२. गल्ती गरेको उत्तरका लागि २० प्रतिशत अंक कट्टा गरिने छ ।



शहीद गंगालाल राष्ट्रिय हृदय केन्द्र
पदपूर्ति समिति

पद: वरिष्ठ रेडियोग्राफी टेक्नोलोजिस्ट - प्राविधिक, समूह- मेडिकल, उपसमूह- रेडियोजी) को
खुल्ला/आन्तरिकप्रतियोगितात्मक लिखित परीक्षाको आरम्भ ।

Full Marks: 100

Pass marks: 40

Time: 1 Hour

Objective Questions: 50 x 2 = 100

1. Specific Objective
 - a. Introduction to radiographic technique
 - b. Routine radiography technique for upper limb
 - c. Routine radiographic technique for thoracic cage and its contents
 - d. Routine technique for spine
2. Radiography Technique
 - a. Radiographic investigation of Gastro-intestinal tract using contrast media
 - i. Barium Swallow
 - ii. Barium Meal
 - iii. Barium Follow through
 - iv. Ba-enema
 - v. Small bowel enema
3. Investigation of urinary tract and hysterosalpinogram
 - a. Intravenous Urogram (IVU)
 - b. Micturating cystogram
 - c. Retrograde Pyelogram
4. Radiographic procedure of the Biliary tract
 - a. Oral cholecystography (OCG)
 - b. Intravenous cholangiography (IVC)
 - c. Percutaneous transhepatic cholangiography and drainage (PTC and PTCD)
 - d. Endoscopic retrograde cholangio pancreatography (ERCP)
 - e. Operative cholangiography
 - f. T. Tube cholangiography
5. Photographic process: define x-ray film
6. Film Processing
7. Cassette and intensifying screens
8. Identify early x-ray tubes and its development
9. Control of Scattered radiation
10. Portable and Mobile x-ray unit
11. Electricity & X-ray apparatus
 - a. Static electricity
 - b. Elementary electron theory, electric charge & potential (simple explanation only), capacity & capacitor, parallel plate only, dielectric concept only, here factors which affect the capacitance of the capacitor, charging & discharging of a capacitor, series & parallel connection of the capacitor & simple problems
12. Electricity & x-ray apparatus
 - a. Static Electricity



- b. Current Electricity
 - c. Thermionic emission tubes & valves
- 13. Radiation Physics
- 14. X-Rays
 - a. Historical background
 - b. X-ray tube
 - c. Mechanism of x-ray production
 - d. Properties of x-rays, intensity & quality of x-rays, continuous and characteristics etc.
 - e. X-ray tube voltage control and indication
 - f. Exposure controls, contracts and timers
 - g. X-ray tube current control and filament supply, mA compensation, generator regulation
- 15. Cardiovascular system
 - a. Blood vessels, arteries, veins, and capillaries
 - b. Different parts of heart and its function
 - c. Cardiac cycle
 - d. systemic circulation
 - e. Coronary circulation
 - f. Inferior venacava (IVC) & Superior venacava (SVC)
- 16. Respiratory system
 - a. Respiration, alveolar respiration
 - b. Lungs and Pleura
 - c. Organs of the respiratory system, respiratory passages (Nose, Pharynx, Larynx, Trachea, Bronchioles, Alveoli)
- 17. Nervous System
 - a. Neuron and nerve cells
 - b. Central nervous system and brain
 - c. Parts of ventricles of the brain and their extent
 - d. The cerebrospinal fluid
 - e. Midbrain and brain stem
 - f. Peripheral nervous system
 - g. Autonomic nervous system
 - h. Cranial nerves, spinal nerves
- 18. Interaction of radiation with matter
 - a. Thompson scattering
 - b. Photoelectric interaction
 - c. Compton scattering
 - d. Pair production
 - e. Transmission of a homogenous and heterogenous x-ray beam through matter
 - f. Effects of filtration
 - g. Relative amount of scatter from an x-ray beam during the passage through matter
 - h. Effects of collimation
- 19. Radiation detection and measurement
 - a. Principle of measurement
 - b. Ionization chamber, electrometer
 - c. Scintillation counter
 - d. Geiger-muller counter



- e. Thimble chamber
 - f. Condenser chamber
20. Radiation protection
- a. Introduction
 - b. Objective and principle of radiation protection
 - c. Radiation and radiation units
 - d. Personnel monitoring
 - e. Protective materials
 - f. ICRP recommendations on dose limits
21. General introduction of SGNHC

द्रष्टव्यः

१. पाठ्यक्रममा रहेका एकाइहरु मध्येबाट नै प्रश्नहरु सोधिनेछ ।
२. गल्ती गरेको उत्तरका लागि २० प्रतिशत अंक कट्टा गरिने छ ।



शहीद गंगालाल राष्ट्रिय हृदय केन्द्र पदपूर्ति समिति

पद: प्रशासन उपसहायक (सेवा- प्रशासन समूह- प्रशासन उप-समूह- प्रशासन को
खुल्ला/आन्तरिकप्रतियोगितात्मक लिखित परीक्षाको पाठ्यक्रम ।

Full Marks: 100

Pass marks: 40

Time: 2 Hours

Objective Questions: 25 x 2 = 50

Short Questions: 8 x 5 = 40

Long Question: 1 x 10 = 10

प्रथमपत्र : सामान्यज्ञान तथा सामाजिक अध्ययन

१. सामान्य ज्ञान

- १.१ नेपालको भौगोलिक, इतिहासिक, आर्थिक, सामाजिक, सांस्कृतिक र राजनैतिक अवस्था सम्बन्धी सामान्य जानकारी ।
- १.२ सार्क मुलुक सम्बन्धी सामान्य जानकारी ।

२. सामाजिक अध्ययन

- २.१ नेपालको प्राकृतिक तथा राजनैतिक विभाजन र प्रत्येक भागका विशेषताहरु ।
- २.२ नेपालको इतिहास पृथ्वीनारायण शाहदेखि हालसम्म ।
- २.३ बहुदलीय लोकतान्त्रिक संसदीय व्यवस्थाको महत्व र विशेषताहरु ।
- २.४ नेपालको चालु पञ्चवर्षीय योजनाको सामान्य जानकारी ।
- २.५ नेपालको सरकारी बजेट प्रणाली ।
- २.६ नेपाल राष्ट्र बैंकका प्रमुख कार्यहरु ।
- २.७ वातावरण प्रदुषण, शहरीकरण र जनसंख्या वृद्धि : कारण र निवारण
- २.८ सामाजिक सुधार(मुलुक ऐन) र आर्थिक सुधार(सुधामुसुधार) ।
- २.९ शहीद गंगालाल राष्ट्रिय हृदय केन्द्र सम्बन्धी जानकारी ।

द्वितीयपत्र : सेवा सम्बन्धी

१. कार्यालय कार्यविधि : दर्ता, चलानी, फाइलिङ्ग, पत्र व्यवहार, टिप्पणी, जनसम्पर्क
२. स्थानीय विकास मन्त्रालय, अर्थ मन्त्रालय र गृह मन्त्रालयको काम, कर्तव्यको साधारण जानकारी ।
३. बैंक नगदी किताव, बजेट सिट, गोश्वारा भौचर सम्बन्धी साधारण जानकारी ।
४. जिन्सी सेस्ताको साधारण ज्ञानदाखिला रिपोर्ट, म.ले.प. फाराम नं. ४६, खर्च नहुने खाता, म.ले.प. फाराम नं. ४७ र खर्च हुने खाता, म.ले.प. फाराम नं. ५२
५. नेपालको संविधान, २०७२ को सामान्य जानकारी
६. स्थानीय प्रशासन ऐन २०२८
७. भ्रष्टाचार निवारण ऐन २०५९
८. स्थानीय स्वायत्त शासन ऐन २०५५(भाग १, २ र ५)
९. निजामती सेवा ऐन २०४९ तथा निजामति सेवा नियमावली २०५१(नियुक्ति, आचरण, विदा तथा सजाय सम्बन्धी जानकारी)
१०. शहीद गंगालाल राष्ट्रिय हृदय केन्द्र सम्बन्धी जानकारी ।

द्रष्टव्य:

१. पाठ्यक्रममा रहेका एकाइहरु मध्येबाट नै प्रश्नहरु सोधिनेछ ।
२. गल्ती गरेको उत्तरका लागि २० प्रतिशत अंक कट्टा गरिने छ ।



शहीद गंगालाल राष्ट्रिय हृदय केन्द्र पदपूर्ति समिति

पद: लेखा उपसहायक (सेवा- प्रशासन समूह- आर्थिक प्रशासन उप-समूह- आर्थिक प्रशासनको
खुल्ला/आन्तरिकप्रतियोगितात्मक लिखित परीक्षाको षाकम ।

Full Marks: 100

Pass marks: 40

Time: 2 Hours

Objective Questions: 25 x 2 = 50

Short Questions: 8 x 5 = 40

Long Question: 1 x 10 = 10

प्रथमपत्र : सामान्यज्ञान तथा सामाजिक अध्ययन

१. सामान्य ज्ञान

- १.१ नेपालको भौगोलिक, ऐतिहासिक, आर्थिक, सामाजिक, सांस्कृतिक र राजनैतिक अवस्था सम्बन्धी सामान्य जानकारी ।
- १.२ सार्क मुलुक सम्बन्धी सामान्य जानकारी ।

२. सामाजिक अध्ययन

- २.१ नेपालको प्राकृतिक तथा राजनैतिक विभाजन र प्रत्येक भागका विशेषताहरु
- २.२ नेपालको इतिहास पृथ्वीनारायण शाहदेखि हालसम्म ।
- २.३ बहुदलीय लोकतान्त्रिक संसदीय व्यवस्थाको महत्व र विशेषताहरु ।
- २.४ नेपालको चालु पञ्चवर्षीय योजनाको सामान्य जानकारी ।
- २.५ नेपालको सरकारी बजेट प्रणाली ।
- २.६ नेपाल राष्ट्र बैंकका प्रमुख कार्यहरु ।
- २.७ वातावरण ऋषण, शहरीकरण र जनसंख्या वृद्धि : कारण र निवारण
- २.८ सामाजिक सुधार(मुलुक ऐन) र आर्थिक सुधामुसुधार) ।
- २.९ शहीद गंगालाल राष्ट्रिय हृदय केन्द्र सम्बन्धी जानकारी ।

द्वितीयपत्र : सेवा सम्बन्धी

१. लेखा र लेखा परीक्षणको अर्थ, उद्देश्य र महत्व
२. सरकारी बजेटको अर्थ महत्व
३. जिन्सी सेस्ता सम्बन्धी ज्ञान
४. म.ले.प.फा नं.५(बैंक नगदी किताब), वबजेट हिसाब), १०(गोश्वारा भौचर), २२पेशकी लेजर)
५. कोष तथा लेखा नियन्त्रक कार्यालयको काम, कर्तव्य
६. नेपालकोसंविधान, २०७२ को सामान्य जानकारी
७. लेखा परीक्षण ऐन २०४८
८. भ्रष्टाचार निवारण ऐन २०५९
९. निजामती सेवा ऐन, २०४९ र नियमावली २०५०(तलब भत्ता, उपदान, निवृत्तिभरण र आचरण)
१०. आर्थिक कार्यविधि नियमावली, २०६४(परिच्छेद ४ बजेट तथा कार्यक्रम सम्बन्धी व्यवस्था, परिच्छेद ५ बजेट निकासी र सरकारी रकम खर्च गर्ने तरिका, परिच्छेद ७ लिलाम विक्रि सम्बन्धी व्यवस्था, परिच्छेद १३ विविध)
११. भ्रमण खर्च नियमावली, २०६४
१२. शहीद गंगालाल राष्ट्रिय हृदय केन्द्र सम्बन्धी जानकारी ।

द्रष्टव्य:

१. पाठ्यक्रममा रहेका एकाइहरु मध्येबाट नै प्रश्नहरु सोधिनेछ ।
२. गल्ती गरेको उत्तरका लागि २० प्रतिशत अंक कट्टा गरिने छ ।

