RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

SYLLABUS OF COMPETITIVE EXAMINATION FOR THE POST OF ASSISTANT PROFESSOR (Board Speciality) GENERAL MEDICINE MEDICAL EDUCATION DEPARTMENT

I. BASICS OF MEDICINE

- Decision making in Clinical medicine.
- Safety and quality of Health Care.
- Promoting good health.
- Ethical issues in Clinical Medicine.
- Principles of Clinical Pharmacology.
- Pharmacogenomics.
- Therapeutics & good prescription.
- Integrative Health Practices.
- Information Technology in Health Care.
- Lifestyle diseases.

II. INFECTIOUS DISEASES

- Clinical syndromes- Community acquired infections.
- Health associated infections.
- Diseases caused by Gram positive Bacteria.
- Diseases caused by Gram Negative Bacteria.
- Mycobacterial Diseases.
- Fungal Diseases and their Treatment.
- Spirochetal Diseases.
- Rickettsial Diseases- Chlamydia/Mycoplasma.
- Therapy for Bacterial Diseases.
- Miscellaneous Bacterial infections.

III. INFECTIOUS DISEASES

- Infection due to DNA virus.
- Infection due to RNA virus.
- Infection due to Immuno deficiency virus.
- Protozoal Infection.
- Helminthic Infestation.
- Arthropod & Rodent Borne Diseases.
- Principles of Infectious Disease.

- Sexually Transmitted Disease.
- Infections due to Human Immunodeficiency virus & other Retro Virus.
- Evaluation of Pyrexia of unknown origin.

IV. GERIATIC & WOMEN HEALTH CARE

- Biology of ageing.
- Medical Disorders of Pregnancy.
- Palliative and End of Life care.
- Practice of Family Medicine.
- Clinical Problems associated with ageing process.
- Geriatric Giants.
- Disorder during Adolescence.
- Sarcopenic Obesity.
- Fraility in Elderly.
- Women & Leadership in Medicine.

V. DISORDERS OF CARDIOVASCULAR SYSTEM

- Approach to Patient of Cardiovascular Diseases.
- Heart Failure.
- Valvular Heart Diseases.
- Congenital Heart Diseases.
- Peripheral Vascular Diseases & Hypertension.
- Coronary Heart Diseases.
- Noninvasive cardiac Imaging.
- Brady arrhythmias.
- Tachy arrhythmias.
- Cardiomyopathy & myocarditis.

VI. RESPIRATORY SYSTEM

- Approach to Patient with Respiratory Diseases.
- Occupational & Environmental Lung Diseases.
- COPD & Asthma.
- Interstitial Lung Diseases.
- Diseases of Pleura & Mediastinum.
- Disorders of Ventilation.
- Sleep Apnoea.
- Lung Transplant.
- Diagnostic Procedures in Respiratory Diseases.
- Hypersensitivity Pneumonias.
- Bronchiectasis & Cystic Fibrosis.

VII. CRITICAL CARE MEDICINE

- Approach to Patient with Critical Illness and Clinical procedures.
- Acute Respiratory Distress Syndrome.
- Respiratory Failure.
- Mechanical Ventilatory Support.
- Shock & Management.
- Cardiac Arrest & Sudden Cardiac Death.
- Coma.
- Hypertensive Crisis.
- Acid Base Disorder.
- Fluid & Electrolyte Balance.

VIII. DISORDER OF KIDNEY & URINARY TRACT

- Acute Kidney Injury.
- Chronic Kidney Disease.
- Dialysis.
- Renal Transplant.
- Glomerular Disease.
- Tubulo interstitial Disease.
- Vascular Injury to Kidney.
- Diabetes Insipidus.
- Renal Tubular Acidosis.
- Bone & Mineral Metabolism.

IX. DISORDER OF G.I. SYSTEM

- Approach to G.I. Disease & Liver Disease.
- G.I. Endoscopy.
- Disease of Stomach & Esophagus.
- Disorder of Absorption.
- Inflammatory Bowel Diseases.
- Irritable Bowel Syndrome.
- Viral Hepatitis & Toxic Hepatitis.
- Evaluation of Liver Function.
- Alcoholic Liver Disease.
- Non Alcoholic Fatty Liver Disease.

X. RHEUMATOLOGY

- Immune System in Health & Disease.
- $\bullet \quad Anaphylaxis-Urticaria\ / Angio edema.$
- Autoimmune Disorders.

- SLE & Antiphospholipid syndrome.
- Spondyloarthitides.
- Vasculitis Syndrome.
- Inflammatory myopathies.
- Scleroderma & related disorders.
- Rheumatoid Arthritis.
- Disorder of Joint and adjacent tissues.

XI. ENDOCRINOLOGY

- Approach to Endocrine Disorders.
- Disorders of Neurohypophysis.
- Pituitary Disorders.
- Thyroid and Parathyroid gland Disorders.
- Adrenal Gland Disorders.
- Autoimmune Polyendocrine Syndrome.
- Disorder of Sex Development.
- Disorder of Male Reproductive System.
- Disorder of Female Reproductive System.
- Menopause & Postmenopausal Hormone Therapy.

XII. DIABETUIM MELLITUS & METABOLIC SYNDROME

- Pancreatitis (Acute and Chronic)
- Obesity
- Metabolic Syndrome
- Diabetes Mellitus Diagnoses & Classification
- Gestational Diabetes Mellitus
- Management and Therapies of DM
- Complication of DM
- Lipoprotein Metabolism
- Disorder of Intermediary Metabolism
- Hypoglycemia

XIII. NEUROLOGY-I

- Approach to Diseases of Nervous System.
- Neuro Imaging.
- Seizures & Epilepsy.
- Cerebrovascular Accidents.
- Migraine & other Headaches.
- Alzheimer's Diseases & Dementias.
- Parkinson's Diseases.

- Movement disorders.
- Motor Neuron Diseases.
- Multiple Sclerosis.

XIV. NEUROLOGY-II

- Autonomic Nervous System.
- Diseases of Cranial Nerves.
- Diseases of Spinal Cord.
- Infection in Neurology.
- Peripheral Neuropathies.
- Neuro Muscular Junction Disorders.
- Muscle Diseases.
- Chronic Fatigue Syndrome.
- Psychiatric Disorders.
- Drugs & Alcohol Dependance.

XV. HEAMATOLOGY

- Stem Cells & Transplant.
- Hypoproliferative & Nutritional Anaemia.
- Hemoglobinopathies & Hereditary Anaemia.
- Bone marrow Failure & Myelodysplasia.
- Polycythemia Vera & Myeloproliferative Disorders.
- Transfusion Biology.
- Coagulation Disorders.
- Arterial & Venous Thrombosis.
- Antiplatelates, Anticoagulant & Fibrinolytic Drugs.
- Haemolytic Anaemia.

XVI. ONCOLOGY

- Acute Leukemias.
- Chronic Leukemias.
- Lymphomas.
- Plasma Cell Disorders.
- Oncology Emergencies.
- Principles of Cancer Therapies.
- Solid Tumors.
- Paraneoplastic Syndrome.
- Carcinoma of Unknown Primary.
- Cancer Genetics.

XVII. POISONING, ENVIRONMENTAL & GENETIC DISEASES

- Heavy Metal Poisoning & Drug overdose.
- Medical Terrorism.
- Snake Bite.
- Altitude Illnesses.
- Thermoregulatory Disorders.
- Fetal Origin of adult Diseases.
- Organophosphorus, Celphos & Other Poisoning.
- Radiation Hazards.
- Microbial Genome & Infectious Diseases.
- Practice of Genetics in Clinical Medicine.

XVIII. RECENT ADVANCES & MISCELLANEOUS

- Adult Immunization.
- Sports & Travel Medicine.
- Diet in Medical Disorders.
- Research Methodology & Ethics of Clinical Research.
- Exercise & Yoga in Health Diseases.
- Medical Evaluation of Surgical Patients.
- Role of Epigenetics in Disease & Treatment.
- Role of Circadian Biology in Health & Diseases.
- Emerging Neuro therapeutic Technologies.
- Telomere Diseases & Other Recent Advances.

Pattern of Question Papers:

- 1. Objective Type Paper
- 2. Maximum Marks: 150
- 3. Number of Questions: 150
- 4. Duration of Paper: 2.30 Hours
- 5. All Questions carry equal marks
- 6. There will be Negative Marking

(For every wrong answer one-third of the marks prescribed for that Particular question shall be deducted.)