

**RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER**  
**SYLLABUS FOR SCREENING TEST FOR THE POST OF**  
**ASSISTANT PROFESSOR - PAEDIATRICS**  
**MEDICAL EDUCATION DEPARTMENT, RAJASTHAN**

**1. Growth and development:**

- Principles of growth and development
- Normal growth and development in childhood and adolescence
- Normal newborn
- Sexual maturation and its disturbance
- Adolescent problems

**2. Neonatology:**

- Perinatal care
- Care in the labor room and neonatal resuscitation
- Prematurity
- Common transient phenomena
- Low birth weight
- Newborn feeding
- Human Milk Banking
- Respiratory distress
- Apnea
- Antenatal diagnosis and fetal therapy
- Infections
- Jaundice
- Neurologic disorders
- Thermoregulation and its disorders including Kangaroo mother care
- Anemia and bleeding disorders
- Gastrointestinal disorders
- Malformations
- Inborn error of metabolism and Newborn screening

**3. Nutrition:**

- Maternal nutritional disorders impact on fetal outcome
- Infant feeding including complementary feeding
- Protein energy malnutrition and severe & acute malnutrition
- Adolescent nutrition
- Nutritional management of systemic illness (celiac disease, hepatobiliary disorders, nephrotic syndrome)
- Nutrition for the low birth weight
- Breast feeding
- Vitamin and mineral deficiencies
- Obesity and metabolic syndromes
- Parenteral and enteral nutrition in neonates and children
- Hyperlipidemia in children

**4. Cardiovascular:**

- Congenital heart diseases (cyanotic and acyanotic)
- Infective endocarditis
- Disease of myocardium (cardiomyopathy, myocarditis)
- Rheumatic Fever and rheumatic heart disease

- Arrhythmia
- Diseases of pericardium
- Systemic hypertension
- Heart failure and its management
- Basics of ECG and Echocardiography

## **5. Respiratory:**

- Congenital and acquired disorders of nose
- Tonsils and adenoids
- Congenital anomalies of upper and lower respiratory tract
- Foreign body in larynx trachea & bronchus
- Trauma to larynx
- Neoplasm of larynx and trachea
- Bronchitis
- aspiration pneumonia
- Acute pneumonia
- Suppurative lung disease
- Atelectasis
- Emphysema and hyper-inflation
- Pulmonary edema
- Infections of upper respiratory tract
- Obstructive sleep apnea
- Acute inflammatory upper airway obstruction
- Subglottic stenosis (acute and chronic)
- Bronchiolitis
- GER
- Recurrent and interstitial pneumonia
- Lung cysts
- Bronchial asthma
- Bronchiectasis
- Pleural effusion
- Mediastinal mass
- Pulmonary leaks
- Cystic fibrosis
- Pulmonary function test

## **6. Gastrointestinal and liver disease:**

- Disease of Oral cavity
- Disorders of deglutition and esophagus
- H. pylori infection and Peptic ulcer disease
- Congenital pyloric stenosis
- Malabsorption syndrome and celiac disease
- Irritable bowel syndrome
- Hirschsprung's disease
- Hepatitis
- Chronic liver disease
- Budd-chiari syndrome
- Cirrhosis and portal hypertension
- Peptic ulcer disease
- Foreign body of oesophagus and stomach
- Intestinal obstruction
- Acute, Persistent and chronic diarrhea

- Inflammatory bowel disease
- Anorectal malformations
- Hepatic failure
- Wilson's disease
- Metabolic diseases of liver
- Liver transplant
- Protein losing enteropathy
- Infantile cholestasis
- Liver abscess

## **7. Nephrologic & Urologic disorders:**

- Acute and chronic glomerulonephritis
- Hemolytic uremic syndrome
- VUR and renal scarring
- Renal tubular disorders
- Congenital and hereditary renal disorders
- Posterior urethral valves
- Undescended testis
- Nephrotic syndrome
- Urinary tract infection
- Renal involvement in systemic diseases
- Renal and bladder stones
- Hydronephrosis, voiding dysfunction
- Wilm's tumor
- Renal transplant
- Acute and chronic renal failure
- Peritoneal dialysis, Hemodialysis and Continuous renal replacement therapy

## **8. Neurologic disorders:**

- Seizure and non-seizure paroxysmal events
- Meningitis
- Brain abscess
- Acute encephalitis and febrile encephalopathies
- Neurocysticercosis and other neuroinfestation
- Pediatric Stroke
- Neurometabolic and neurodegenerative disorders
- Neuromuscular disorders
- Learning disabilities
- Acute flaccid paralysis and AFP surveillance
- Movement disorders of childhood
- Malformations
- Epilepsy and epileptic syndromes of childhood
- Coma
- Guillain Barre syndrome
- Cerebral palsy
- Mental retardation
- Ataxia
- CNS tumors
- Traumatic brain and spinal cord injury
- Acquired acute and chronic demyelinating disorders of Nervous system
- Hydrocephalus
- Neuroimaging
- Neuro-electrophysiology (EEG, EMG, Nerve conduction study, Evoked potentials)

## **9. Hematology & Oncology:**

- Deficiency anemias
- Aplastic anemia
- Thrombocytopenia
- Blood component therapy
- Bone marrow transplant/stem cell transplant
- Myelodysplastic syndrome
- Hodgkin and Non-Hodgkin's lymphoma
- Hypercoagulable states
- Hemolytic anemias
- Pancytopenia
- Transfusion related infections
- Acute and chronic leukemia
- Hodgkin disease
- Neuroblastoma
- Febrile neutropenia
- Disorders of Hemostasis
- Flow Cytometry
- Solid tumors of childhood

## **10. Endocrinology:**

- Hypopituitarism/hyperpituitarism
- Pubertal disorders
- Adrenal insufficiency
- Adrenogenital syndromes
- Hypoglycemia
- Gonadal dysfunction and intersexuality
- Diabetes insipidus
- Hypo-and hyper-thyroidism
- Cushing's syndrome
- Short stature
- Obesity
- Diabetes Mellitus

## **11. Infections:**

- Bacterial
- Fungal
- Rickettsial
- Protozoal and parasitic
- HIV
- Control of epidemics and infection prevention
- Viral
- Mycoplasma
- Tuberculosis
- Nosocomial infection
- Safe disposal of infective material
- Dengue
- Influenzae
- Malaria
- Childhood Immunization

## **12. Emergency & Critical Care:**

- Emergency care of shock
- Respiratory failure

- Status epilepticus
- Fluid and electrolyte disturbances and its therapy
- Poisoning
- Scorpion and snake bites
- Cardio-respiratory arrest
- Acute renal failure
- Acute severe asthma
- Acid base disturbances
- Accidents
- Ventilation (Invasive and Non-invasive)

### **13. Immunology & Rheumatology:**

- Arthritis (acute and chronic)
- T and B cell disorders
- Connective tissue disorders
- Immuno-deficiency syndromes
- Pediatric Autoimmune disorders

### **14. ENT:**

- Acute and chronic otitis media
- Post-diphtheritic palatal palsy
- Acute/chronic tonsillitis/adenoids
- Foreign body
- Conductive/sensorineural hearing loss
- Allergic rhinitis/sinusitis
- Cochlear implant

### **15. Skin Diseases:**

- Exanthematous illnesses
- Pigment disorders
- Infection:pyogenic
- Steven-johnson syndrome
- Seborrheic dermatitis
- Urticaria
- ichthyosis
- Vascular lesions
- Vesicobullous disorders
- Fungal and parasitic
- Eczema
- Drug rash
- Alopecia

### **16. Eye problems:**

- Refraction and accommodation
- Night blindness
- Strabismus
- Retinopathy of prematurity
- Optic atrophy
- Partial/total loss of vision cataract
- Chorioretinitis
- Conjunctival and corneal disorders
- Retinoblastoma
- Papilledema
- Cataract

## **17. Behavioral & Developmental disorders:**

- Rumination
- Enuresis
- Sleep disorders
- Breath holding spells
- Mood disorders
- Attention deficit hyperactivity disorders
- Pica
- Encopresis
- Habit disorders
- Anxiety disorders
- Temper tantrums
- Autism

## **18. Social pediatrics:**

- National health programs related to child health
- Child labor
- Disability and rehabilitation
- National policy of child health and population
- Child abuse and neglect
- Adoption
- Rights of the child
- Juvenile delinquency

## **19. Genetics:**

- Principles of inheritance
- Chromosomal disorders
- Multifactorial/polygenic disorders
- Prenatal diagnosis
- Pedigree drawing
- Single gene disorders
- Genetic diagnosis
- Molecular genetics

## **20. Orthopedics:**

- Major congenital orthopedic deformities
- Bone and joint infections: Pyogenic and Tubercular
- Rickets
- Common bone tumors

### **Note:- Pattern of Question paper**

- 1. Objective type paper**
- 2. Maximum marks 100**
- 3. Number of Questions: 100**
- 4. Duration of Paper: Two Hours**
- 5. All questions carry equal marks.**
- 6. There will be Negative marking.**

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