

**Syllabus for the preliminary test for the recruitment on the post of**  
**Paediatrician, Class I (Employees State Insurance Scheme)**  
**Advt No-18/2021-22**

**Marks – 200**

**Questions - 200**

**Medium - English**

**1. Basic Sciences**

Principles of inheritance, chromosomal disorders, single gene disorders, multifactorial/polygenic disorders, genetic diagnosis and prenatal diagnosis, pedigree drawing, Embryogenesis or different organ system especially heart, genitourinary system, gastrointestinal tract Applied anatomy and functions of different organ systems, Physiology of micturition and defecation; placental physiology; foetal and neonatal circulation; regulation of temperature, blood pressure, acid base balance, fluid electrolyte balance and calcium metabolism, Vitamins and their functions, Haematopoiesis, haemostasis, bilirubin metabolism, Growth and development at different ages, growth charts; puberty and its regulation, Nutrition, requirements and sources of various nutrients, Pharmacokinetics of common drugs, microbial agents and their epidemiology, Basic immunology, ethical and medico-legal issues.

**2. Growth and development**

Principles of growth and development, normal growth and development, abnormal growth and development, sexual maturation and its disturbances, failure to thrive and short stature, Autism.

**3. Neonatology**

Perinatal care , low birth weight, care in the labor room and resuscitation, new-born feeding, prematurity, respiratory distress, common transient phenomena, apnoea, infections, anaemia and bleeding disorders, jaundice, gastrointestinal disorders, neurologic disorders, malformations, renal disorders, understanding of perinatal medicine, thermoregulation and its disorders.

**4. Nutrition**

maternal nutritional disorders, nutrition for the low birth weight impact on foetal outcome, breast feeding, infant feeding including, vitamin and mineral deficiencies, complementary feeding, protein energy malnutrition, obesity, adolescent nutrition, parenteral and enteral nutrition, nutritional management of systemic illness (GI, hepatic, renal illness).

## **5. Cardiovascular**

Congenital heart diseases, rheumatic fever and rheumatic heart (cyanotic and a cyanotic) disease, infective endocarditis, arrhythmia, disease of myocardium, diseases of pericardium (cardiomyopathy, myocarditis), systemic hypertension.

## **6. Respiratory**

Congenital and acquired disorders of nose, infections of upper respiratory tract tonsils and adenoids, obstructive sleep apnoea, congenital anomalies of lower respiratory tract acute upper airway obstruction, foreign body in larynx trachea & bronchus, subglottic stenosis (acute, chronic) asthma, pneumonia, bronchiolitis, aspiration pneumonia, GER, recurrent, interstitial pneumonia, supportive lung disease, atelectasis, lung cysts, mediastinal mass, diseases of pleura.

## **7. Gastrointestinal and liver disease**

Disease of oral cavity, disorders of deglutition and oesophagus, peptic ulcer disease, congenital pyloric stenosis, intestinal obstruction, acute & chronic pancreatic disorders, malabsorption syndrome, acute, persistent and chronic diarrhoea, irritable bowel syndrome, inflammatory bowel disease, Hirsch sprung disease, anorectal malformations, hepatitis, hepatic failure, chronic liver disease, and Budd-Chiari syndrome, metabolic diseases of liver, cirrhosis and portal hypertension.

## **8. Nephrology and Urologic disorders**

Acute and chronic glomerulonephritis, nephrotic syndrome, haemolytic uremic syndrome, urinary tract infection, VUR and renal scarring, involvement in systemic diseases, renal tubular disorders, neurogenic bladder, voiding dysfunction, congenital and hereditary renal disorders, renal and bladder stones, posterior urethral valves, hydro nephrosis, undescended testis, hernia, hydrocele, Wilms tumour.

## **9. Neurologic disorders**

Seizure and non-seizure paroxysmal events, epilepsy, epileptic syndromes, meningitis, encephalitis, brain abscess, febrile encephalopathies, Guillain-Barre syndrome, neurocysticercosis and other neuroinfestations, HIV encephalopathy, SSPE, cerebral palsy, neurometabolic disorders, neurodegenerative disorders, neuromuscular disorders, mental

retardation, learning disabilities, muscular dystrophies, acute flaccid paralysis and AFP surveillance, malformations, movement disorders, Tumours.

## **10. Haematology & Oncology**

Deficiency anaemias, haemolytic anaemias, aplastic anaemia, pancytopenia, thrombocytopenia, disorders of haemostasis, blood component therapy, transfusion related infections, bone marrow transplant/stem cell transplant, acute and chronic leukaemia, myelodysplastic syndrome, Lymphoma, neuroblastoma, hypercoagulable states.

## **11. Endocrinology**

Hypopituitarism/hypopituitarism, diabetes insipidus, pubertal disorders, hypo- and hyperthyroids, adrenal insufficiency, Cushing's syndrome, adrenogenital syndromes, diabetes mellitus, hypoglycaemia, short stature, gonadal dysfunction and intersexuality, obesity.

## **12. Infections**

Bacterial (including tuberculosis), viral (including HIV), fungal, parasitic, rickettsial, mycoplasma, protozoal and parasitic, nosocomial infections, control of epidemics and infection prevention, safe disposal of infective material.

## **13. Emergency and Critical Care**

Emergency care of shock, cardio-respiratory arrest, respiratory failure, acute renal failure, status epilepticus, acute severe asthma, fluid and electrolyte disturbances, acid-base disturbances, poisoning, accidents, scorpion and snake bites.

## **14. Immunology and Rheumatology**

Arthritis (acute and chronic), vasculitides, immunodeficiency syndromes, systemic lupus erythematosus.

## **15. ENT**

Acute and chronic otitis media, hearing loss, post-diphtheritic palatal palsy, acute/chronic tonsillitis/adenoids, allergic rhinitis/sinusitis, foreign body.

## **16. Skin Diseases**

Exanthemata's illnesses, vascular lesions, pigment disorders, vesicobullous disorders, infections, Steven-Johnson syndrome, atopic, seborrheic dermatitis, drug rash, alopecia, ichthyosis.

### **17. Eye problems**

Refraction & accommodation, partial/total loss of vision, cataract, night blindness, strabismus, conjunctival and corneal disorders, disorders of retina, including tumours.

### **18. Behavioural and Developmental disorders**

Rumination, pica, enuresis, encopresis, sleep disorders, habit disorders, breath holding spells, anxiety disorders, mood disorders, temper tantrums, attention deficit hyperactivity disorders, autism.

### **19. Social/Community Paediatrics**

National health programs related to child health, IMNCI, Vaccines: constituents, efficacy, storage, contraindications and adverse reactions, rationale and methodology of pulse polio immunization, child labor, abuse, neglect, adoption, disability and rehabilitation, rights of the child, National policy of child health and population juvenile delinquency, Principles of prevention, control of infections (food, water, soil, vector borne), Investigation of an epidemic.

### **20. Orthopaedics**

Major congenital orthopaedic deformities, bone and joint infections, common bone tumours.

### **21. Approach to Clinical Problems**

- **Growth and development:** precocious and delayed puberty, developmental delay, impaired learning
- **Neonatology:** low birth weight new-born, sick new-born
- **Nutrition:** lactation management and complementary, protein energy malnutrition feeding (underweight, wasting, stunting), failure to thrive and micronutrient deficiencies
- **Cardiovascular:** Murmur, cyanosis, congestive heart failure, systemic hypertension arrhythmia, shock
- **GIT and Liver:** Acute diarrhoea, persistent and chronic diarrhoea, abdominal pain and distension, ascites, vomiting, constipation, gastrointestinal bleeding, jaundice, hepatosplenomegaly, hepatic failure and encephalopathy

- **Respiratory:** Cough/chronic cough, haemoptysis, wheezy child, respiratory distress
- **Infections:** acute onset pyrexia, prolonged pyrexia with and, recurrent infections without localizing signs, nosocomial infections, fever with exanthema
- **Renal:** Haematuria/dysuria, bladder/bowel incontinence, voiding dysfunctions, renal failure (acute and chronic), hypertension
- **Haematology and Oncology:** anaemia, bleeding
- **Neurology:** limping child, convulsions, paraplegia, quadriplegia, cerebral palsy, macrocephaly and microcephaly, floppy infant, acute flaccid paralysis, headache
- **Endocrine:** thyroid swelling, ambiguous genitalia, obesity, short stature
- **Miscellaneous:** skin rash, lymphadenopathy, epistaxis, proptosis, arthralgia, arthritis

**22. Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002.**

**23. Current Trends and Recent Advancements in the field of Paediatrics.**