

PUBLIC SERVICE COMMISSION, WEST BENGAL

161-A, S. P. Mukherjee Road, Kolkata-700026

Scheme & Syllabus for Preliminary Screening Test for recruitment to the post of Dialysis Technician Grade-III in the Directorate of E.S.I. (M.B.) Scheme under the Labour Department, Govt. of W.B. (Advt. No. 15/2019)

Scheme:

Preliminary Screening Test will be objective type (MCQ) in 4 different series, viz., A, B, C & D.

- Number of questions: 100, each carrying 1 mark.
- Full marks: 100
- Duration: 1 hour 30 minutes.

N.B.: There will be negative marking for wrong answers as per norms.

Syllabus:

Anatomy & Physiology

(normal kidney structure and functions)

Derangement of kidney functions

(aetiology, clinical manifestation, diagnosis of acute and chronic renal failure)

Dialysis - the concept

(Brief history, definition, mechanism)

Components of Dialysis

(Access, blood flow, anticoagulant, dialysate)

Hemodialysis – Basics

(Blood circuit: tubing, pump, dialyzer, flow rate, dialysate circuit, concentrates,

Delivery systems, flow rate)

Anticoagulation

(Heparin, alternatives to Heparin, regional no anticoagulation)

Vascular access

(Temporary, Permanent)

Dialysis water and water treatment

Standard and quality requirements, AAMI Standard

Dialysis and Dialyzer

(including reuse), Serological safety, Safety measures during reprocessing , Dialyzer reprocessing machine

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Hemodialysis machine

Basic Instrumentation

Monitors and Alarms

- Limit violation of conductivity
- Blood Leak
- Air Leak
- Transmembrane Pressure
- management of alarming clinical situations

Complications of Hemodialysis

- Access related complication
- Dialyzer related complication
- Dialysate related complication
- Anticoagulant related complication
- Machine/Blood Pump associated complication
- Special type of complication
- Management of complications
- Maintenance of hygiene in Dialysis unit
- Access – core
- Anticoagulation

Doses of Hemodialysis

- Duration, index, clearance
- Middle molecules, Urea reduction ratio
- Urea kinetic modeling, Dialysis adequacy

Continuous Dialysis

- Continuous arteriovenous hemofiltration
- Continuous venovenous hemofiltration
- Continuous hemodiafiltration
- Continuous slow hemodialysis
- Component, access, tubing, filter, replacement, fluid Anticoagulation, flow rate.

Peritoneal Dialysis

- History, Peritoneal physiology, kinetics technique, catheter, dialysate fluid, insertion procedure, drainage, complication. Continuous peritoneal dialysis procedure, dose.
