

**THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY**

[AHS 0423]

APRIL 2023

Sub. Code: 1321

**B.Sc. DIALYSIS TECHNOLOGY  
THIRD YEAR (Regulation 2010-2011 onwards)  
PAPER I – DIALYSIS TECHNOLOGY**

*Q.P. Code: 801321*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:**

**(30 x 1 = 30)**

1. What are the types of Vascular accesses for Hemodialysis? Give the advantages and disadvantages of Arterio-Venous Fistula versus Arterio-Venous Graft.
2. Define Continuous Renal Replacement Therapy (CRRT). What are the indications for CRRT? List the different types and the differences between them. Draw and explain the typical CRRT circuit.
3. Explain the anticoagulation techniques used in Hemodialysis.

**II. Write notes on:**

**(8 x 5= 40)**

1. Alarms in the hemodialysis circuit. What is normal venous pressure? What are the causes of high venous pressure alarms?
2. Write briefly on online haemodiafiltration.
3. Diagnosis and management of CAPD peritonitis.
4. What are the causes and consequences of hypotension during dialysis? Write briefly on the steps to manage hypotension during dialysis.
5. Write briefly on dialysis prescription in patients with AKI detailing the principles behind it.
6. Write briefly on the different types of dialyzer membranes.
7. Carbon filter in water purification.
8. First use syndrome in haemodialysis.

**III. Write answer on:**

**(10 x 3 = 30)**

1. Complications of central venous catheterization.
2. Tests for dialyzer performance after reuse.
3. Post dialysis evaluation of a patient undergoing acute hemodialysis.
4. Complications of plasmapheresis.
5. Types of AV fistula cannulation.
6. Define Hyponatremia and classify.
7. What are all the steps in dialyzer reprocessing?
8. Write about pre dialysis patient assessment.
9. What are all the possible contaminants in source water?
10. Causes of intra-dialytic hypertension.

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