

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Renal Dialysis Technology Degree Examination – 27-Oct-2025

Time: Three Hours

Max. Marks: 100 Marks

APPLIED RENAL DIALYSIS TECHNOLOGY – I (RS2)

Q.P. CODE: 2918

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. What are the acute and long-term complications of hemodialysis? How do you manage muscle cramps during hemodialysis?
2. What is dialysis adequacy? How do you assess hemodialysis, peritoneal dialysis and CRRT adequacy?
3. Mention all types of vascular access for hemodialysis. Explain access recirculation and method to assess recirculation.

SHORT ESSAYS (Answer any Ten)

10 x 5 = 50 Marks

4. Principles of peritoneal dialysis.
5. Explain the history of dialysis.
6. Role of air detector in dialysis machine. How to prevent and manage air embolism?
7. Long term complications of arterio venous access.
8. Anticoagulants used during hemodialysis.
9. Explain different treatment modalities available in APD machines.
10. Explain about Peritoneal equilibration test.
11. What are the difference between ladder techniques?
12. Explain the structure of dialyser and interpret the dialyser specifications.
13. Mechanical complications of peritoneal dialysis.
14. Peritonitis in PD patients, pathogenesis, diagnosis and management.
15. Metabolic complications of peritoneal dialysis.

SHORT ANSWERS (Answer any Ten)

10 x 3 = 30 Marks

16. Indications of sodium modeling.
17. Name some central venous catheter lock preparations.
18. Uses of amino acid containing peritoneal dialysis fluid.
19. What is "rule of six"?
20. Common sites for construction of arteriovenous fistula with diagram.
21. Molecular weight of urea, Vitamin B₁₂ and β_2 -Microglobulin.
22. Dialysis solution composition.
23. What are the signs of infected arteriovenous fistula?
24. Contraindications for peritoneal dialysis.
25. Advantages of Icodextrin.
26. Immediate Complications of central venous double lumen catheter insertion.
27. Advantages of Sequential ultrafiltration.
