

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Renal Dialysis Technology Degree Examination – 29-Oct-2025

Time: Three Hours

Max. Marks: 100 Marks

APPLIED RENAL DIALYSIS TECHNOLOGY – II (RS2)

Q.P. CODE: 2919

Your answer should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Explain various psychosocial issues in patients undergoing renal replacement therapies.
2. Explain water treatment system used for hemodialysis. Illustrate with diagram.
3. Explain infections that occur in a patient undergoing hemodialysis and peritoneal dialysis.

SHORT ESSAYS (Answer any Ten)

10 x 5 = 50 Marks

4. With the help of schematic representation explain peritoneal dialysis regimens.
5. Explain online hemodiafiltration and technical requirements for online hemodiafiltration.
6. Describe vascular access options for paediatric hemodialysis. Explain best vascular access for paediatric patients.
7. Discuss cardiovascular issues in dialysis patients.
8. Explain MARS.
9. Write a note on replacement fluids used in plasmapheresis.
10. Discuss manual reprocessing steps.
11. Describe nocturnal hemodialysis.
12. Discuss dialysis in post transplant patients with acute failure.
13. Causes of anemia in dialysis patients and its management.
14. Discuss the uses of telemedicine in dialysis practice.
15. Discuss pathophysiology of bone disease in renal failure patients and add a note on Osteitis Fibrosa.

SHORT ANSWERS (Answer any Ten)

10 x 3 = 30 Marks

16. List three causes of malnutrition in hemodialysis patients.
17. Write a note on isolated ultrafiltration.
18. Describe restless leg syndrome.
19. Explain three disadvantages of dialyzer reprocessing.
20. Mention three indications for continuous renal replacement therapy.
21. List three drugs removed by hemoperfusion.
22. How to calculate blood volume in infants and children?
23. List three complications of aluminium toxicity.
24. Causes for hypotension during plasmapheresis and its management.
25. List three causes of hyperkalemia in patients on maintenance hemodialysis.
26. Define Osteomalacia.
27. Difference between pre-dilution and post-dilution in CRRT.
