

Rajiv Gandhi University of Health Sciences, Karnataka
III Year B.Sc. Renal Dialysis Technology Degree Examination – 27-May-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. What is Online Hemodiafiltration? What are the difference between hemodialysis and online hemodiafiltration? What are the advantages of hemodiafiltration over hemodialysis?
2. Elaborate various extra-corporeal treatments available for management of poisoning. Explain hemoperfusion.
3. Write in detail about different modes of dialysis available for a hemodynamically unstable patient admitted in intensive care unit?

SHORT ESSAYS (Answer any Ten)

10 x 5 = 50 Marks

4. Indications of plasmapheresis.
5. Causes and management of Aluminium toxicity in hemodialysis patient.
6. Causes of anemia in dialysis and its management.
7. Explain indications and techniques to perform Molecular Adsorbent Recirculating System (MARS).
8. Explain technical aspects of dialysis in infants and children.
9. Explain Daily hemodialysis.
10. Automated peritoneal dialysis modalities.
11. Complications of plasmapheresis.
12. Infection control practice in dialysis, explain dialysis of HBsAg positive patient.
13. Discuss about Bone disease in dialysis patients.
14. Explain bacterial infections in dialysis patients.
15. Explain few water contaminants which can be harmful to dialysis patients.

SHORT ANSWERS (Answer any Ten)

10 x 3 = 30 Marks

16. How to prevent bacterial contaminations in dialysis water?
17. Explain the function of carbon filter in water treatment plant.
18. Monitoring and maintenance of sand filter in water treatment plant.
19. How to calculate plasma volume for plasmapheresis?
20. Molecular weight of Albumin and Normal value.
21. Water contaminants causes anemia in dialysis patients.
22. Name some chemical substances which are used for disinfection during dialyser reuse?
23. What methods are used for disinfection of RO water distribution system?
24. Advantages of dialyzer reuse.
25. Replacement fluids used during plasmapheresis.
26. What is the function of softener in water treatment plant?
27. Maximum allowed limit of endotoxin and bacterial count in ultrapure dialysis solution as per AAMI standards.
