Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Renal Dialysis Technology Degree Examination – 27-Oct-2026

Time: Three Hours **Max. Marks: 100**

Applied Dialysis Technology – Paper -I (RS-3)

Q.P. CODE: 3305

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Discuss different types of anticoagulation used in hemodialysis. Add a note on heparin free dialysis
2. What is meant by dialysis withdrawal and what is the current recommendation for dialysis withdrawal?

   OR

   Explain exit site infection, tunnel infection and peritonitis management in peritoneal dialysis patients

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Enlist the laboratory investigation regularly done in patients on maintainance hemodialysis. Mention the normal values and its significance
4. Explain dialyser – types, parts, flux, efficiency – technical / clinical considerations. Add a note on dialyser reuse
5. Explain peritoneal equilibration test different types, procedure and interpretation of results

   OR

   Summarise acute and chronic catheters of peritoneal dialysis with diagrams
6. Analyse monitoring devices and safety alarms of hemodialysis machines
7. Explain the causes, prevention and management of intradialytic hypotension
8. Explain use of Icodextrin in peritoneal dialysis
9. Methods of AVF cannulation techniques
10. Define diffusion, osmosis and ultrafiltration. Explain the concept of solvent drag

    OR

    Explain tidal peritoneal dialysis and its indications
11. What is hemolysis and how do you identify the same during hemodialysis? List causes of intra dialytic hemolysis and its management
12. What are the signs of clotting in extra corporeal circuit? Explain

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Note on dialysate composition in conventional hemodialysis
14. Explain rule of six for AV fistulas
15. What is fibre bundle volume?

    OR

    Explain dialysate delivery system in hemodialysis machines
16. Define relapsing, recurrent and repeat peritonitis in the context of peritoneal dialysis
17. What is the importance of bypass valve in hemodialysis circuit?
18. What is the technique of sequential dialysis?
19. How to improve the longevity of AV fistula?
20. Name three sits of creation of AV fistula

    OR

    List advantages of peritoneal dialysis over hemodialysis
21. List advantages and disadvantages of AV grafts
22. Elaborate on heparin induced thrombocytopenia (HIT)

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