Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Renal Dialysis Technology Degree Examination - 30-May-2024

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)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Discuss about various types of vascular access used in dialysis patients.
- 2. Explain the causes, peritonitis diagnosis, management and prevention of the same.
- 3. Enumerate acute complications of hemodialysis. What is intradialytic hypotension? Discuss about causes management and prevention of intradialytic hypotension.

SHORT ESSAYS (Answer any Ten)

 $10 \times 5 = 50 \text{ Marks}$

- 4. Compare hemodialysis and peritoneal dialysis.
- 5. Define dialysis adequacy. Explain Kt/V & URR.
- 6. Discuss withdrawal criteria in acute dialysis setting.
- 7. Discuss the factors affecting diffusion in hemodialysis.
- 8. Explain mechanical and metabolic complications of peritoneal dialysis.
- 9. With a neat labelled diagram, explain Hollow Fibre Dialyzer and blood lines used for hemodialysis.
- 10. Explain different Osmotic agents used in peritoneal dialysis solutions and its advantages and disadvantages.
- 11. Explain indications for dialysis.
- 12. Discuss history of dialysis.
- 13. Describe anticoagulation technique used during hemodialysis.
- 14. Explain peritoneal equilibration test (PET).
- 15. Write briefly about long term complications of hemodialysis.

SHORT ANSWERS (Answer any Ten)

 $10 \times 3 = 30 \text{ Marks}$

- 16. Define clearance in hemodialysis.
- 17. What are the normal values of serum creatinine, serum potassium and Blood Urea Nitrogen (BUN)?
- 18. Define osmosis.
- 19. Explain the procedure for Allen test.
- 20. Importance of counter-current and co-current flow configuration during dialysis.
- 21. Name three drugs used to treat catheter related blood stream infection.
- 22. What is reflection coefficient in peritoneal dialysis?
- 23. List steps of AV fistula cannulation.
- 24. What are the immediate complications of dialysis catheter insertion?
- 25. List three symptoms of steal syndrome.
- 26. Explain biocompatibility.
- 27. Define ultrafiltration coefficient.
