# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Renal Dialysis Technology Degree Examination - 03-Jun-2024

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)

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

- 1. What is continuous renal replacement therapy (CRRT)? What are the types of CRRT? What are the indications of CRRT?
- 2. List various extra-corporeal treatment available for management of poisoning. Explain hemoperfusion.
- 3. What is plasmapheresis? Elaborate on the procedure and indications for plasmapheresis.

#### **SHORT ESSAYS (Answer any Ten)**

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

- 4. Precautions for dialysis of HBsAg positive patients.
- 5. Explain hemodiafiltration.
- 6. Sustained low efficiency dialysis (SLED) indications and prescriptions.
- 7. Explain Molecular Adsorbent Recirculating System (MARS) with diagram.
- 8. Causes and management of anemia during dialysis.
- 9. Explain the advantages of technical consideration of Nocturnal hemodialysis.
- 10. Explain different modalities of peritoneal dialysis.
- 11. Psychosocial issues in dialysis patient.
- 12. Management and prevention of Aluminium toxicity in dialysis patients.
- 13. Discuss about Phosphate binders used in dialysis patients.
- 14. Dialysis a pregnant patient with renal failure.
- 15. Difference between direct feed and indirect feed in RO water distribution system. How to disinfect water distribution system.

#### **SHORT ANSWERS (Answer any Ten)**

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

- 16. Adynamic bone disease.
- 17. Advantages of telemedicine in dialysis practices.
- 18. What is the function of carbon filter in water treatment plant?
- 19. Precautions while using Deionizer in water treatment plant.
- 20. How to calculate blood volume in pediatric patients.
- 21. Allowed range of Chlorine and Chloramine in water for hemodialysis as per AAMI standards.
- 22. Name some chemical substances which are used for disinfection during dialyser reuse?
- 23. Disadvantages of dialyzer reuse.
- 24. Differences between low flux and high flux dialyzer.
- 25. Mention three replacement fluids used during plasmapheresis.
- 26. Write three examples of dialyser used for infants and children and its priming volume.
- 27. Maximum allowed limit of endotoxin and bacterial contaminations in ultrapure dialysis solution as per AAMI.