Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Renal Dialysis Technology Degree Examination – APRIL 2015

Time: Three Hours | Max. Marks: 100 Marks

APPLIED RENAL DIALYSIS TECHNOLOGY - I
(Revised Scheme)
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 x 10 = 20 Marks

1. What are various indications and contraindications of peritoneal & hemodialysis?
2. Describe in brief about physiology of peritoneal dialysis.
3. What is exit site? How do you manage exit site infection?

SHORT ESSAYS (Answer any Ten) 10 x 5 = 50 Marks

4. Hemodialysis is done in patients with severe metabolic acidosis. What is the danger of excessive correction of metabolic acidosis?
5. What is co-current HD & when it is indicated?
6. What are the various parameters checked prior to and during hemodialysis treatment sessions?
7. Write causes of high venous pressure in hemodialysis.
8. What are types of ultrafiltration failure?
9. What are the routine blood tests done monthly and 3 monthly in dialysis patient?
10. What are the various strategy to prevent hypotension during HD session?
11. What are the causes of headache in hemodialysis?
12. What are the problems associated with high blood flow rate>350/min in HD patient?
13. What is meant by priming? Write steps of priming.
14. What are the causes of metabolic alkalosis in dialysis patient?
15. When do you suspect massive pericardial effusion or cardiac tamponade in hemodialysis patient?

SHORT ANSWERS (Answer any Ten) 10 x 3 = 30 Marks

16. Name 3 emergency indications of hemodialysis.
17. What is ultrafiltration co-efficient?
18. Draw hemodialysis circuit.
19. Steps of hand washing
20. What is heparin induced thrombocytopenia (HIT)?
21. What is normal dialysate ‘K’ concentration?
22. What is home choice machine & what is its use?
23. Name two indications of plasmapheresis.
24. When do you suspect dialyzer leak?
25. What is conductivity?
26. What is thermal disinfection?
27. What is Renalin & its use?

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III year B.Sc. Renal Dialysis Technology Degree Examination – SEPTEMBER 2015

Time: Three Hours Max. Marks: 100 Marks

APPLIED RENAL DIALYSIS TECHNOLOGY – I (Revised Scheme)

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 x 10 = 20 Marks

1. Mention the various vascular access used for haemodialysis. Enumerate the commonly encountered complications of permanent vascular access.
2. Describe the various types of anticoagulation protocols in haemodialysis unit.
3. Describe principles of haemodialysis.

SHORT ESSAYS (Answer any Ten) 10 x 5 = 50 Marks

4. What are the various strategies to prevent hypotension during HD session?
5. Continuous ambulatory peritoneal dialysis
6. AV graft
7. Heparin free dialysis
8. Hollow fiber dialyzer
9. Exit site infection in CAPD
10. Composition of haemodialysis fluid
11. Steps to prevent AV fistula thrombosis post haemodialysis session
12. Restless leg syndrome
13. Adequacy of haemodialysis
14. What are the common laboratory tests done in haemodialysis patients?
15. Discuss the monitoring system in dialysate delivery system.

SHORT ANSWERS (Answer any Ten) 10 x 3 = 30 Marks

16. Mention the causes of head ache in haemodialysis.
17. Biocompatibility
18. Name the different PD fluids.
19. Mention the advantages and disadvantages of femoral catheter.
20. Mass transfer coefficient
21. Mention the indications of peritoneal dialysis.
22. What is meant by fiber bundle volume?
23. What is dry weight?
24. What is common causes of Type A reaction?
25. During peritonitis episode how well you plan CAPD prescriptions.
26. Name three organism causing vascular access infection.
27. Name some uremic toxins.

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III year B.Sc. Renal Dialysis Technology Degree Examination – SEPTEMBER 2015

Time: Three Hours | Max. Marks: 100 Marks

APPLIED RENAL DIALYSIS TECHNOLOGY - II

(Revised Scheme)

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. Discuss catheter related infection in hemodialysis, its treatment and steps to prevent infection of catheter.
2. Causes of hypertension in dialysis patient and how do you manage it.
3. Discuss bone diseases in dialysis and its management.

SHORT ESSAYS (Answer any Ten) 10 x 5 = 50 Marks

4. Indications of plasmapheresis in nephrology
5. Utility of telemedicine in dialysis
6. Nocturnal dialysis
7. Universal precaution in dialysis
8. What is hemoperfusion and name the conditions where it can be used?
9. Discuss Dialysis in failed transplant.
10. Discuss Reverse osmosis.
11. Discuss problems in doing dialysis in children in brief.
12. Discuss SCUF and Isolated UF.
13. Discuss predilution versus postdilution mode of CRRT.
14. Discuss Pyrogen reaction.
15. Discuss Automated peritoneal dialysis (APD) in brief.

SHORT ANSWERS (Answer any Ten) 10 x 3 = 30 Marks

16. Two manifestations of aluminum toxicity
17. Two dialysis measure to be modified in pregnant women with renal failure
18. Two complications of plasmapheresis
19. Two causes of anemia in dialysis patient
20. Two complication of erythropoietin
21. Two Disadvantages of reuse of dialyzer
22. Replacement solutions used in plasmapheresis
23. Name types of transporters as per Peritoneal equilibration test.
24. What is residual renal function?
25. Name Dextrose concentration in peritoneal dialysis.
26. Advantages of icodextrin
27. Mention two complications of acute peritoneal dialysis.

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Time: Three Hours Max. Marks: 100 Marks

APPLIED RENAL DIALYSIS TECHNOLOGY – II (Revised Scheme)

Q.P. CODE: 2919

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. List and describe in detail the water treatment modalities in hemodialysis.
2. Discuss in detail anticoagulation in hemodialysis. Add a note on heparin free dialysis.
3. Discuss contraindications and complications of Continuous Ambulatory Peritoneal Dialysis (CAPD) in brief.

SHORT ESSAYS (Answer any Ten) 10 x 5 = 50 Marks

4. Sequential dialysis
5. Hemodialysis in a patient with advanced liver disease
6. Muscle cramps in hemodialysis
7. Adequacy in hemodialysis
8. Dialysis in an ICU patient with hypotension
9. Tunnel infection in CAPD
10. Icodextrin in CAPD
11. Metabolic problems in CAPD
12. Tidal peritoneal dialysis
13. Advantages and problems of pre-pump replacement in CRRT
14. Sodium modeling in hemodialysis
15. Dialyser reactions

SHORT ANSWERS (Answer any Ten) 10 x 3 = 30 Marks

16. Advantages of dialyzer reuse
17. Diet in a CAPD patient
18. Safety monitors and alarms in the blood circuit during hemodialysis
19. What is automated peritoneal dialysis?
20. What is break in period in CAPD?
21. What is KoA of dialyzer?
22. Indications for Plasmapheresis
23. Antidote for heparin and its neutralizing dose
24. What is transmembrane pressure?
25. What is volumetric ultrafiltration control in hemodialysis?
26. Importance of surface area of dialyzer in hemodialysis
27. Prevention of Hepatitis B in hemodialysis unit

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