Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Renal Dialysis Technology Degree Examination – OCT-2019

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. Discuss about the various types of vascular access used in hemodialysis.
2. Peritonitis-Diagnosis, investigation and treatment
3. Discuss the principles of Hemodialysis.

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

4. Withdrawal Criteria of Dialysis
5. Peritoneal Dialysis Catheters
6. Long term complications of AV access
7. Acute complications of hemodialysis
8. Peritoneal Equilibration Test (PET)
9. Laboratory Investigations in patients on long term Hemodialysis. Mention normal value and significance
10. Exit site and tunnel infection in PD patients
11. Long term complications of Hemodialysis
12. Vaccination in Hemodialysis patients
13. Adequacy of Dialysis
14. Physiology of peritoneal Dialysis
15. Explain different anti coagulation techniques used in Hemodialysis.

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

16. Restless leg Syndrome
17. Who is the Father of Hemodialysis? Write few lines on history of Dialysis
18. Co-current Dialysis indications
19. Steps of AV Fistula Cannulation
20. Equilibrated Kt/U
21. Universal Precautions In Hemodialysis of Unit
22. Diet in Hemodialysis patients
23. Darbepoetin Alfa-Dose and Route of Administration
24. Name three Intravenous Iron Preparations used in hemodialysis patients
25. What is REDY dialysis?
26. Dialysis Disequilibrium Syndrome
27. Urgent Indications of Dialysis

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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. Describe water treatment plant. Illustrate with diagram.
2. Describe advantages, disadvantages and steps of dialyzer reuse.
3. How do you dialyze 3rd trimester pregnant patient?

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

4. What is problem of using ACE inhibitor drugs in hemodialysis patient? Which membrane reacts with it?
5. How do you manage sudden cardiac arrest in HD?
6. What is air embolism?
7. Name few causes of death in dialysis patient.
8. Patient undergoing dialysis suddenly becomes unresponsive. What parameters do you check immediately?
9. What are common causes of non-compliance of dialysis schedule?
10. What is dialysis amyloid?
11. Name few non-access related infections in dialysis patients.
12. What are common causes of hypertension in HD patients?
13. Common complications of Erythropoietin
14. What are the non-dietary causes of hyperkalemia?
15. What nutritional parameters do you monitor in HD patient?

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

16. Three causes of malnutrition in HD patients.
17. Write 3 disadvantages of CAPD.
18. Write 2 non-renal indications of HD.
19. What is normal phosphorus intake per day of average Indian adult?
20. Name 2 drugs removed by hemoperfusion.
21. How do you test whether priming is adequate?
22. What is length of double lumen catheter?
23. How much heparin is required to lock arterial & venous end of permcath?
24. What is citrasteril?
25. What is fibre bundle volume?
26. What is Argatroban?
27. What is sodium profiling?

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Renal Dialysis Technology Degree Examination – APRIL-2019

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. Explain principles of dialysis, factors affecting clearance and elaborate Urea Kinetic Modeling.
2. Explain apparatus for peritoneal dialysis (PD) and mechanical complications of PD.
3. Long term complications of veno-venous access, focus on infections management and preventions of catheter related blood stream infections

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

4. Long-term complications of AV access
5. Mention the different locations for haemodialysis catheter insertion and its advantages and disadvantages.
6. Briefly explain the history of dialysis.
7. Strategy to prevent hypotension during haemodialysis
8. Disequilibrium syndrome causes and prevention
9. Explain hydraulic system in dialysis machine with diagram, use of volumetric ultrafiltration controller in haemodialysis machine.
10. Explain Peritoneal Equilibration Test (PET).
11. Explain anatomy and physiology of peritoneal dialysis.
12. Explain about post operative care and maturation in AVF and AVG.
13. Single needle dialysis, explain how it works.
14. Heparin associated complications
15. Prevention and management of fluid overload in Peritoneal Dialysis patients

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

16. Reason for avoiding intradialytic food ingestion in hypotension prone patients
17. Mention volume of PD catheter and transfer set assembly.
18. Contents of PD fluid
19. Sequential ultrafiltration
20. Reasons for low Kt/V value than prescribed
21. Sites for AVF creation
22. Tidal peritoneal dialysis
23. Online clearance monitor
24. Equilibrated Kt/V
25. Cardiopulmonary recirculation
26. Mention three poorly diffusible solutes and its molecular weight.
27. Convective transport

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