Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – MAR/APR 2017

Time: Three Hours Max. Marks: 80 Marks

CONCEPT OF RENAL DISEASES – (RS)

Q.P. CODE: 1247

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. Write "RIFLE" classification of Acute Kidney Injury. How do you manage a case of Acute Kidney Injury?
2. Name the primary glomerular diseases causing nephrotic syndrome. Write in brief the pathogenesis of edema in nephrotic syndrome.
3. What are the causes of chronic kidney diseases? Classify the stages of chronic kidney disease according to glomerular filtration rate.

SHORT ESSAYS (Answer any Six) 6 x 5 = 30 Marks

4. Investigations in a suspected case of post infectious glomerulonephritis
5. Renal changes in pregnancy
6. Autosomal recessive polycystic kidney disease
7. Chronic kidney disease – mineral bone disease
8. Asymptomatic bacteriuria
9. Causes of obstructive uropathy
10. Triple phosphate stones
11. Uremic pericarditis

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

12. Hepatitis B virus in hemodialysis – prevention
13. Mention clinical features of Alport's syndrome
14. Wilm's tumour
15 Phosphate binders in chronic kidney disease
16. Complications seen in untreated nephrotic syndrome
17. Why high protein diet is restricted in chronic kidney disease – stage II–IV?
18. Management of Hyperkalemia
19. Uremic bleed – what are the causes?
20. What are the symptoms of lower urinary tract obstruction?
21. Name a few causes of proteinuria.
22. Name a few causes of secondary hypertension.
23. Asymptomatic urinary abnormalities

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II Year B.Sc. Renal Dialysis Technology Degree Examination – MAR/APR 2017

Time: Three Hours Max. Marks: 80 Marks

PHARMACOLOGY RELATED TO HAEMO AND PERITONEAL DIALYSIS – (RS)

Q.P. CODE: 1248

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. Classify Vitamins. Write in detail about vitamin D and mention its therapeutic importance.
2. Classify antihypertensive drugs. Write in detail about calcium channel blockers.
3. Classify anticoagulants. Write the mechanism of action, uses and adverse effects of low molecular weight heparins.

SHORT ESSAYS (Answer any Six) 6 x 5 = 30 Marks

4. Parenteral Iron preparations
5. Phenobarbitone
6. Furosemide
7. Atenolol
8. Dopamine
9. Protamine sulphate
10. Haemodialysis concentrates
11. Sodium Nitroprusside

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

12. Name one use and one adverse effect of Prazosin
13. Name three Phosphate binders.
14. Name Thiazide diuretics. Write two adverse effects.
15. Write three uses of Losartan.
16. Write the uses of Folic acid.
17. Name three Plasma expanders.
18. Hydrogen peroxide
19. Uses of erythropoietin
20. Potassium exchange resins
21. Write the uses of Vitamin A.
22. Mannitol
23. Name three dialyzable drugs.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – APRIL 2017

Time: 3 Hours Max. Marks: 40 Marks

Applied Anatomy

Q.P. Code : 1249

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

(Note : Both QP Codes 1249 and 1250 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) 1 x 10 = 10 Marks

1. Describe the gross anatomy of the ureter under the following headings:
   a. Origin, Course and Termination
   b. Relations
   c. Normal constrictions
   d. Applied anatomy
2. Describe the gross anatomy of the Kidney under the following headings:
   a. Surfaces and borders
   b. Relations
   c. Blood supply
   d. Coverings

SHORT ESSAYS (Answer any Three) 3 x 5 = 15 Marks

3. Juxta glomerular apparatus
4. Histology of prostate gland
5. Metanephros
6. Urethral sphincters

SHORT ANSWERS (Answer any Five) 5 x 3 = 15 Marks

7. Allantoic diverticulum and its remnants
8. Course of the brachial artery
9. Median cubital vein
10. Polycystic kidney
11. Lesser omentum
12. Femoral vein

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Renal Dialysis Technology Degree Examination – APRIL 2017

Time: 3 Hours Max. Marks: 40 Marks

Physiology

Q.P. Code: 1250

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 1249 and 1250 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) 1 x 10 = 10 Marks

1. Describe the role of Loop of Henle and Vasa Recta in urine formation.
2. What is metabolic acidosis? What is the role of kidney in metabolic acidosis? What are its clinical features?

SHORT ESSAYS (Answer any Three) 3 x 5 = 15 Marks

3. Explain the Counter current exchanger with a neat labelled diagram.
4. Explain auto regulation of renal blood flow.
5. Describe how glucose is handled by the kidney.
6. Explain how kidney handles potassium in Hyperkalemia.

SHORT ANSWERS (Answer any Five) 5 x 3 = 15 Marks

7. Draw a neat labelled diagram of Glomerular capillary membrane.
8. List any three hormones produced by the kidney. Explain one function of each.
9. List the differences between Cortical and Juxta Medullary Nephrons.
10. What is the normal value of Activated Partial Thromboplastin Time (APTT)? What does it signify?
11. Mention three peculiarities of renal circulation.
12. Explain Glomerulotubular feedback mechanism.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Renal Dialysis Technology) Degree Examination – APRIL 2017

Time: 3 Hours Max. Marks: 50 Marks

Applied Pathology

Q.P. Code: 1351

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 1351 and 1352 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) 1 x 10 = 10 Marks

1. List the causes of acute glomerulonephritis. Discuss the laboratory diagnosis of acute glomerulonephritis. Add a note on its pathogenesis.
2. List the causes of urinary tract infections. Discuss the predisposing factors and its pathogenesis.

SHORT ESSAYS (Answer any Five) 5 x 5 = 25 Marks

3. Renal calculi
4. Chronic pyelonephritis
5. Pathology of kidney in Diabetes Mellitus
6. Polycystic conditions of kidney
7. Bacterial peritonitis
8. Causes of end stage renal disease

SHORT ANSWERS (Answer any Five) 5 x 3 = 15 Marks

9. Causes of granular contracted kidney
10. List three dialysis induced changes in the kidney.
11. Urinary findings in chronic glomerulonephritis
12. Three drugs causing interstitial nephritis
13. Three causes of acute renal failure
14. Three congenital anomalies of urinary system

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Renal Dialysis Technology) Degree Examination – APRIL 2017

Time: 3 Hours | Max. Marks: 50 Marks

Microbiology

Q.P. Code : 1352

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

(Note : Both QP Codes 1351 and 1352 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) 1 x 10 = 10 Marks

1. What are opportunistic infections? Enumerate the common fungal opportunistic infections in a patient with Chronic renal disease. Discuss the laboratory diagnosis of these fungal infections.
2. Name the Hepatotrophic viruses. Discuss the modes of transmission and laboratory diagnosis of a case of Hepatitis B virus infection.

SHORT ESSAYS (Answer any Five) 5 x 5 = 25 Marks

3. Standard Precautions
4. Enumerate the common vascular access sites. Enumerate the signs and symptoms of an access site infection.
5. Vaccination against Hepatitis B virus infection
6. Laboratory diagnosis of a suspected case of Urinary tract infection
7. Technique of collecting Blood for culture
8. Life cycle of Toxoplasma gondii

SHORT ANSWERS (Answer any Five) 5 x 3 = 15 Marks

9. Draw a neat, labeled diagram of Human immunodeficiency virus.
10. Name three species of the fungus Aspergillus.
11. Hepatitis E virus
12. ELISA test
13. Name Three pathogens causing urinary tract infection and three media they grow on.
14. Segregation of infected waste in the Dialysis unit

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