SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Second Year Semester-IV (CBCS Scheme)

August – 2018 Examination

B.Sc. Renal Dialysis Technology (RDT)

Time: 3 Hrs. Paper – I [Max. Marks: 100]

Applied Pathology & Microbiology related to Dialysis Technology

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

(Use separate answer booklet for Section A & B)

Section - A

Applied Pathology (50 Marks) **Q.P Code : RDT401CC**

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

- 1. Describe the types of end stage renal disease. Discuss the etiopathogenesis and morphology of end stage renal disease.
- 2. Mention the types of renal vascular disorders. Discuss the pathogenesis and morphology of malignant nephrosclerosis.

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

- 3. Mention causes and morphology of acute tubular necrosis.
- 4. Minimal change disease.
- 5. Causes and lab-diagnosis of nephrotic syndrome.
- 6. Pathology of chronic pyelonephritis.
- 7. Discuss the etio pathogenesis and morphology of post streptococcal glomerulonephritis.

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

- 8. Mention the types of developmental anomalies of the kidney.
- 9. Pathology of dialysis associated cystic disease of kidney.
- 10. Causes of obstructive uropathy.
- 11. Causes of renal infarcts.
- 12. Sclerosing peritonitis.
- 13. Types of thrombotic micro angiopathies.
- 14. Kimmelstein Wilson syndrome

Section - B

Applied Microbiology (50 Marks)

Q.P Code: RDT402CC (Use separate answer booklet for Section-B)

LONG ESSAY 2 X 10 = 20 Marks

1. Define opportunistic infections. Write the pathogenesis and laboratory diagnosis of infections by

2. Explain the pathogenesis and laboratory diagnosis of Hepatitis B viral infection.

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Standard Precautions.

Candida.

- 4. Laboratory diagnosis of HIV infection.
- 5. Pyelonephritis: Pathogenesis and Laboratory diagnosis.
- 6. Sample collection for blood culture.
- 7. Hepatitis C virus: Pathogenesis and laboratory diagnosis.

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

- 8. Management of blood spill.
- 9. Pathogenesis of peritonitis in peritoneal dialysis patient.
- 10. Name three bacteria causing urinary tract infection.
- 11. Microbiological testing of dialysis water.
- 12. Cytomegalovirus infections in renal transplant recipients.
- 13. Role of vaccines in transplant patients.
- 14. Mention three different methods of urine collection in suspected UTI.

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August 2018 Examination

B.Sc. Renal Dialysis Technology (RDT)

Time: 2 Hrs. Paper - II [Max. Marks: 40]

Pharmacology related to Dialysis Technology O.P Code: RDT403CC

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

$\underline{\text{LONG ESSAY}} \qquad \qquad 1 \text{ X } 10 = 10 \text{ Marks}$

1. Classify anticoagulants. Explain mechanism of action, therapeutic uses and adverse effects of Heparin.

SHORT ESSAY(Answer any Three)

3X 5 = 15 Marks

- 2. Mention five antiplatelet agents. Write their mechanism of action.
- 3. Potassium exchange resins- examples, indications and adverse effects.
- 4. Mention the types and indications of haemodialysis concentrates.
- 5. Mention four disinfectants. Write three conditions where disinfectants are used.

SHORT ANSWERS(Answer any five)

5 X 3 = 15 Marks

- 6. Three differences between haemodialysis and peritoneal dialysis.
- 7. Explain the mechanism of action and one use of hydrogen peroxide.
- 8. Explain the mechanism of action and one use of protamine sulphate.
- 9. Mention composition of peritoneal dialysate.
- 10. Advantages of low molecular weight heparin over heparin.
- 11. Explain the mechanism of action and one use of Iodophores.

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B.Sc. Allied Health Sciences Second Year Semester-IV CBCS Scheme

August – 2018 Examination

B.Sc. Renal Dialysis Technology (RDT)

Time: 2.30 Hrs. [Max. Marks: 80]

Paper - III

Concept of Renal Disease and its Management Q.P Code: RDT404CC

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

LONG ESSAY

2 X 10 = 20 Marks

- 1. Describe definition, etiopathogenesis and clinical manifestations of Renovascular. Hypertension.
- 2. Describe Pathogenesis, clinical manifestations and general treatment of Nephrolithiasis.

SHORT ESSAY(Answer any Six)

6X 5 = 30 Marks

- 3. Risk factors for preeclapsia.
- 4. Congenital Nephritic Syndrome of Finnish Type.
- 5. Nephrocalcinosis.
- 6. How do you diagnose a case of Urinary Tract Obstruction?
- 7. High turnover Renal bone disease.
- 8. Monitoring and Treatment of Malnutrition in Dialysis patients.
- 9. Methods to purify Ground Water for Drinking purpose.
- 10. Role of Fat soluble Vitamins in Dialysis patients.

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

- 11. Three drugs used to Treat preeclampsia.
- 12. Three causes of hematuria.
- 13. Three causes of nephritic Syndrome.
- 14. Three indications for parathyroidectomy.
- 15. Three water contaminants causing Anemia in dialysis patients.
- 16. Three water soluble vitamins.
- 17. Treatment of Hypokalemia.
- 18. Normal serum levels of PTH, calcium and Vitamin D.
- 19. Three Erythropoietin stimulating agents.
- 20. Percentage of distribution of proteins, carbohydrates and fat in healthy adult food.
- 21. How water is distributed in our body?
- 22 Dry weight.

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