SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

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

August – 2018 Examination

B.Sc. Renal Dialysis Technology (RDT)

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

Applied Anatomy & Physiology 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 Anatomy (50 Marks) **Q.P Code : RDT301CC**

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

- 1. Explain Kidney under the subheadings of location, parts, coverings and anterior relations (of both right and left kidney) (1+2+3+4=10 marks)
- 2. Describe the prostate gland under the following headings.
 - 1. External features 2. Lobes 3. Structure 4. Applied aspects.

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

- 3. Brachial artery origin, branches, relations and termination.
- 4. Great saphenous vein- Formation, tributaries, termination and clinical importance.
- 5. Lesser sac of peritoneum.
- 6. Development of kidney with anomalies.
- 7. Blood supply of kidney.

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

- 8. List three cells of juxtaglomerular apparatus.
- 9. Trigone of Urinary bladder.
- 10 Name the subdivisions of male urethra.
- 11. Boundaries of epiploic foramen.
- 12. Tributaries of left renal vein.
- 13. Draw a neat labeled diagram of nephron.
- 14. Name any four branches of Femoral artery.

Section - B

Applied Physiology (50 Marks)

Q.P Code: RDT302CC

(Use separate answer booklet for Section-B)

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

1. Describe the mechanism of urine formation.

2. Describe the structure of nephron. List the differences between cortical and medullary nephron.

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

- 3. Autoregulation of renal blood flow.
- 4. Define renal clearance .Explain standard urea clearance.
- 5. Describe the renal tubular handling of sodium.
- 6. Describe be the Intrinsic pathway of coagulation.
- 7. Renal handling of Glucose.

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

- 8. Renal glycosuria.
- 9. Define Polyurea/ Anuria/ Oliguria.
- 10 Tubuloglomerular feedback.
- 11. Name three hormones secreted by the kidneys.
- 12. Normal clotting times and list two causes for increase in clotting time.
- 13. Hemophilia.
- 14. Acute nephritis.

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B.Sc. Allied Health Sciences Second Year Semester-III (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 : RDT304CC

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

LONG ESSAY

2 X 10 = 20 Marks

- 1. Define nephrotic syndrome. What are its causes? Discuss complications of nephrotic syndrome.
- 2. Describe etiopathogenesis, clinical features and management of IgA Nephropathy.

SHORT ESSAY (Answer any Six)

6X 5 = 30 Marks

- 3. Define acute renal failure. Mention causes of acute renal failure.
- 4. Define Nephritic syndrome. Name four causes of nephritic syndrome.
- 5. How do you classify UTI? What factors underlie complicated urinary tract infection?
- 6. Define chronic kidney disease? What are the stages of chronic kidney disease?
- 7. Describe briefly about dietary management of chronic kidney disease.
- 8. Describe briefly about storage and preservation of food.
- 9. Prevention of food adulteration act.
- 10. Describe principles of Plasmapheresis.

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

- 11. Define superstition. Name two adversities borne out of superstition.
- 12. Describe briefly about composition of Family.
- 13. Name three diseases borne out of food habits.
- 14. Name three indications for initiation of dialysis in acute renal failure.
- 15. Name three antibiotics used in the treatment of UTI.
- 16. Name three organisms causing urinary tract infection.
- 17. Define microscopic hematuria and microalbuminuria.
- 18. Microbiologic contamination of food.
- 19. Name three causes of chronic kidney disease.
- 20. Mention three factors influencing food habits.
- 21. Phosphorus rich diet.
- 22 Define Bioimpedance, discuss its importance.

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B.Sc. Allied Health Sciences Second Year Semester-III (CBCS Scheme) 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: RDT303CC

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

LONG ESSAY $1 \times 10 = 10 \text{ Marks}$

1. Classify drugs used in hypertension. Explain mechanism of action, uses and adverse effects of angiotensin converting enzyme (ACE) inhibitors.

SHORT ESSAY (Answer any Three)

3X 5 = 15 Marks

- 2. Explain the pharmacological actions and uses of vitamin D.
- 3. Mention the phosphate binders and write their clinical uses.
- 4. Explain the basis and advantages of dialysis in the management of drug poisoning.
- 5. Explain mechanism of action, uses and adverse effects of furosemide.

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

- 6. Mention three indications for intravenous (IV) fluids in patients with dialysis.
- 7. Write the indications for Parenteral Iron therapy.
- 8. Write three indications for Erythropoietin.
- 9. Name three antihypertensive drugs that can be used safety in patients with chronic kidney disease (CKD).
- 10. Uses of Folic acid.
- 11. Name three vasopressors.