SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

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

February – 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. Illustrate the anterior and posterior relations of right and left kidney.
- 2. Describe the axillary artery under the following headings: extent, course, branches and applied anatomy.

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

- 3. Relations of kidney.
- 4. Male urethra.
- 5. Blood supply and nerve supply of urinary bladder.
- 6. Course and relations of ureter.
- 7. Femoral artery Extension, course and branches.

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

- 8. Enumerate the branches of popliteal artery.
- 9. Name the coverings of kidney.
- 10 Name the structures passing through the prostate gland.
- 11. Femoral canal.
- 12. Name the tributaries of femoral vein.
- 13. Name 3 types of abdominal hernias.
- 14. Name the parts and constrictions of ureter.

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 intrinsic and extrinsic pathway of coagulation. Add a note on bleeding disorders.
- 2. Describe the mechanism of urine formation. Discuss the role of tubular reabsorption in urine formation.

SHORT ESSAY (Answer any three)

 $3 \times 5 = 15 \text{ Marks}$

- 3. Clearance concept method for GFR estimation.
- 4. Regulation of renal circulation.
- 5. Which are the hormones produced by kidneys? Write a note on Vitamin D.
- 6. Renal handling of glucose.
- 7. Renal handling of water.

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

- 8. Normal values of major serum electrolytes.
- 9. Draw a neat label diagram of nephron.
- 10 Three functions of angiotensin II.
- 11. Values of Renal threshold and tubular maximum for glucose.
- 12. Actions of ADH on kidneys.
- 13. Diuretics.
- 14. Aldosterone.

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B.Sc. Allied Health Sciences Second Year Semester-III (CBCS Scheme) February – 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 diuretics. Mention the mechanism of action, dosage, side effects and contraindications of loop diuretics.

SHORT ESSAY (Answer any Three)

3X 5 = 15 Marks

- 2. Explain mechanism of action therapeutic uses and adverse effects of angiotensin converting enzyme (ACE) inhibitors.
- 3. Explain management of hemodialysis induced hypotension.
- 4. Intravenous fluid therapy with special emphasis in renal diseases.
- 5. Explain the factors determining drug dialysability with examples.

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

- 6. Erythropoietin dose and duration of therapy in dialysis induced anemia.
- 7. Therapeutic uses of Folic acid.
- 8. Mention three vasopressors.
- 9. Name three analgesics safely used in renal failure.
- 10. Drugs used in the treatment of anaemia.
- 11. Mention phosphate binders with their clinical uses.

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

February – 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. Discuss aetiopathogenesis of Nephrotic syndrome and its treatment.
- 2. Define Chronic Kidney Disease (CKD). Mention the stages of CKD and causes of CKD.

SHORT ESSAY (Answer any Six)

6X 5 = 30 Marks

- 3. Food patterns and its relation to health.
- 4. Mention the causes of primary and secondary Nephrotic syndrome.
- 5. Acute Glomerulonephritis- Clinical features and management.
- 6. Define Acute kidney Injury and write a note on RIFLE criteria.
- 7. Urinary tract Infection- Clinical features and management.
- 8. Renal Replacement Therapy for CKD Stage 5.
- 9. Obstructive Uropathy and its management.
- 10. Dietary management in renal disease patients.

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

- 11. Asymptomatic Bacteriuria.
- 12. Hormones produced by the kidney.
- 13. Name three organisms causing Urinary Tract Infection.
- 14. Vitamin D and Kidney.
- 15. Parathyroid Hormone.
- 16. Erythropoietin.
- 17. Prevention of Food Adulteration.
- 18. Mention the Normal Values of Serum Albumin, Serum Calcium and Serum Phosphorus.
- 19. Active Urinary Sediment.
- 20. Name three Iron Preparations used Intravenously.
- 21. Autosomal Dominant Polycystic Kidney Disease (ADPKD).
- 22 Horse Shoe Kidney.

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