SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

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

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 related to Dialysis Technology (50 Marks)

Q.P Code: AHS-134

LONG ESSAY

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

- 1. Describe the prostate under the following headings.
 - a) Lobes b) Structures passing through it c) Venous drainage
- 2. Describe the femoral artery under the following headings. a) Origin b) Course c) Relations d) Branches

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

- 3. Greater Omentum.
- 4. Parts of the nephron.
- 5. Femoral Hernia.
- 6. Segmental arteries of the kidney.
- 7. Trigone of the bladder

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

- 8. Horse shoe kidney.
- 9. Median cubital vein.
- 10. Hepatorenal pouch.
- 11. Epiploic foramen.
- 12. Carotid body.
- 13 Hesselbach's triangle.
- 14. Coverings of kidney.

Section - B

Applied Physiology related to Dialysis Technology (50 Marks) **Q.P Code: AHS-135**

(Use separate answer booklet for Section-B)

 $\underline{LONG ESSAY}$ 2 X 10 = 20 Marks

- 1. Name the buffer system of the kidney. Explain the functioning of any one.
- 2. List the clotting factors. Explain extrinsic pathway for initiating blood clotting. Add a note on Hemophilia.

SHORT ESSAY (Answer any three)

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

- 3. Define glomerular filtration rate. Briefly explain the factors affecting it.
- 4. Explain creatinine clearance.
- 5. Name three hormones secreted by kidney. Explain any one hormone.
- 6. What is the role of antidiuretic hormone in urine formation? Explain its mechanism of action.
- 7. What is normal PH of urine? Explain post prandial alkaline tide.

SHORT ANSWERS (Answer any five)

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

- 8. What is glycosuria? What is renal threshold for glucose? Give normal value.
- 9. Explain the role of peritubular capillaries in urine formation.
- 10. Define and give normal values of BT and CT.
- 11. Draw a neat labeled diagram of glomerular membrane.
- 12. Explain why renal medulla is more prone to hypoxia.
- 13. What is the normal value for urea clearance? What does it indicate?
- 14. What is the basis behind the restricted sodium and water intake in chronic renal failure patient?

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

July-2017 Examination

B.Sc. Renal Dialysis Technology (RDT)

Time: 2.30 Hrs. Paper - II [Max. Marks: 80]

Pharmacology Related to Dialysis Technology O.P. Code: AHS-136

LONG ESSAY

2 X 10 = 20 Marks

- 1. Write briefly about erythropoietin, its uses and side effects.
- 2. Classify diuretic agents. Explain the pharmacological actions and side effects of furosemide.

SHORT ESSAY(Answer any Six)

6X 5 = 30 Marks

- 3. Adverse effects of thiazides.
- 4. Vasopressor agents.
- 5. Phosphate binders.
- 6. Write the side effects of parenteral Iron preparations.
- 7. IV fluids used during dialysis.
- 8. Complications seen during dialysis.
- 9. Pharmacological actions of calcium channel blockers.
- 10. Write about dialysable drugs.

SHORT ANSWERS(Answer any Ten)

10 X 3 = 30 Marks

- 11. Vitamin D.
- 12. Name three antihypertensive agents with doses.
- 13. Folic acid.
- 14. Mention three nephrotoxic drugs.
- 15. Oral antihistaminics.
- 16. Metoprolol.
- 17. Drugs used in hypotension.
- 18. Parathyroid hormone. Explain three pharmacological actions.
- 19. Name three drugs used during dialysis.
- 20. Vitamin B.
- 21. Contraindications of Alpha blockers.
- 22. Treatment of anaphylactic shock.

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

July 2017 Examination

B.Sc. Renal Dialysis Technology (RDT)

Time: 2.30 Hrs.

Paper - III

[Max. Marks: 80]

Concept of Renal Disease & its Management O.P. Code: AHS-137

LONG ESSAY

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

1. Describe management of acute kidney injury in a patient who has suffered crush injuries during a building collapse.

2. Discuss the etiopathogenesis and management of secondary nephrotic syndrome.

SHORT ESSAY (Answer any Six)

6X 5 = 30 Marks

- 3. Discuss the role of dietary factors in etiology of anemia.
- 4. Discuss measures taken to prepare patients of chronic kidney disease for renal replacement therapy.
- 5. Emphysematous pyelonephritis.
- 6. Renal complications during pregnancy.
- 7. Drugs causing renal failure.
- 8. Urinary findings in nephritic syndrome.
- 9. Complications of nephrotic syndrome.
- 10. Anti GBM disease and its management.

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

- 11. Define the terms oliguria, anuria and nocturia.
- 12. Pre emptive kidney transplantation.
- 13. DEXA scan.
- 14. Myths about kidney disease.
- 15. Cystatin C.
- 16. Essential fatty acids and PUFA.
- 17. Dietary factors affecting blood pressure.
- 18. Role of genetics in kidney disease.
- 19. Foods rich in potassium.
- 20. Fat soluble vitamins.
- 21. Methods of collecting urinary specimen.
- 22. Hepatorenal syndrome.

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